

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

### **Contributors**

Pretoria (South Africa). Health Department.

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CITY COUNCIL OF PRETORIA



FORTY-SEVENTH

# Annual Report

OF THE

## Medical Officer of Health

FOR THE

YEAR 1950-1951

WALLACHS' PTA.—6234—28/4/52





CITY COUNCIL OF PRETORIA

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FORTY-SEVENTH

# Annual Report

OF THE

## Medical Officer of Health

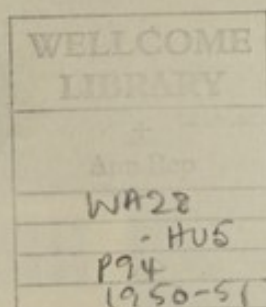
FOR THE

YEAR 1950-1951



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## INTRODUCTORY LETTER

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YOUR WORSHIP THE MAYOR,

and MEMBERS OF THE CITY COUNCIL, PRETORIA.

I have the honour to present to you the Forty-seventh Annual Report of the City of Pretoria.

The Report deals with important health matters which came under the jurisdiction of the City Health Department, and is in compliance with the Public Health Act No. 36 of 1919.

A statistical review of the birth rates, death rates and incidence of disease rates shows that a high standard of health has been maintained throughout the year.

The growth of the attendances at the various clinics indicates that our health educational work is bearing fruit.

There is an increase in the tuberculosis rate, particularly amongst non-Europeans. This is to a great extent due to the unsatisfactory housing conditions and the lack of hospital accommodation for the isolation of open cases.

The problem of tuberculosis should be tackled in such a way as to prevent the disease rather than to have to concentrate on the isolation of known cases. Until, however, we are in a position to provide sufficient housing for all sections of the population, we will not be able to do preventive work satisfactorily. Whatever measures we adopt, there can be no doubt that priority no. 1 at the moment is sufficient hospital accommodation for open cases.

Pretoria is fortunate in that the increase in the rate and the incidence of the disease has been low when compared with other parts of the Union of South Africa.

If, however, this problem is not satisfactorily tackled now, it will get out of hand. We have stressed this for many years and we have pointed out the urgent necessity for additional hospital accommodation. We are accommodating a large number of tuberculosis patients at our Isolation Hospital as can be seen from the report. This hospital, however, was never intended for tuberculosis patients and the result is that patients suffering from other acute infectious diseases can often not be taken up.

The problem of tuberculosis is a nation-wide one and cannot be tackled by this Local Authority alone.

There has been an increase in the incidence of diphtheria amongst Europeans and non-Europeans and amongst local and imported cases.

The illness has also been more severe this year than previously and a large number of cases were very seriously ill. This is a disturbing factor particularly because diphtheria is so easily preventable by an immunisation which is harmless and which causes very little constitutional disturbance. It is admitted that immunisation is not one hundred per cent protective, but only very few patients who have been immunised contract the disease and in our cases amongst these who had been immunised previously, there were no deaths and no serious cases.

It is true that more parents are bringing their children to our clinics and to their private doctors for immunisation, but the numbers are still far too small. In countries where immunisation has been practised on a large scale, the disease has practically been eliminated.

We have been doing a great deal of propaganda work trying to get parents to have their children immunised, and we will continue to do so with even greater emphasis, but the final responsibility rests with the parents. I am not in favour of making diphtheria immunisation compulsory but parents must realise what a great responsibility rests upon them if they neglect to have their children protected.

Our typhoid rate is somewhat high and this is fully discussed in the report. It is, however, very satisfactory to record that with the new drug Chloromycetin, we are now able to effect a cure in a very short time and patients who are brought under treatment at an early stage in the disease, have normal temperatures within four or five days and complications do not set in. This has probably been one of the greatest advances in the treatment of acute infectious disease in the last few years.

Of 91 typhoid cases notified only four died of the illness, and these were patients who were brought in for treatment when they were almost moribund.

The section dealing with the Abattoir reflects the meat supply position and the difficulties connected therewith.

I am very pleased to report that during the course of the year the Council agreed to the establishment of a poultry abattoir. This is a new development in Municipal health control. How very necessary it has been can be seen from the fact that 469 birds were condemned. We do not know what part slaughtered poultry can play in the spread of infections to human beings but there can be no doubt that from every angle ante- and post-mortem examination of all poultry is highly desirable. I trust that the Council will continue with the poultry abattoir.

I wish to thank your Worship the Mayor and members of the City Council, and in particular the members of the Health Committee for the assistance and support which they gave me during the year.

I am grateful for the help which I received from the public, heads and sub-heads of other departments.

I thank the staff for their loyal, efficient and enthusiastic support.

My thanks to the Press for their assistance and for their wholehearted co-operation cannot be sufficiently emphasised. Whenever it has been necessary to call the attention of the public to an important health matter the Press gave me every assistance.

As I have mentioned in previous reports, the public of Pretoria owes a debt to the Press for the help which they have extended in promoting health services in the city.

H. NELSON,  
Medical Officer of Health

## PUBLIC HEALTH COMMITTEE.

Councillor J. M. Preller (Chairman).  
 Councillor F. H. le Roux (Vice-Chairman).  
 Councillor Mrs. B. J. Brummer.  
 Councillor V. H. Rudd.  
 Councillor J. C. Fourie (Alternate J. P. Coetzer).

## STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 30TH JUNE, 1951.

|                                                                                                                                                                    |                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| H. NELSON, M.A., M.D., Ch.B., B.A.O.,<br>D.P.H., D.T.M., F.R.S.I. . . . .                                                                                          | Medical Officer of Health.                                          |
| T. LOTTER, M.B., Ch.B., L.R.C.P. & S.,<br>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.,<br>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.                                    |
| A. A. E. DE KLERK, M.B., Ch.B. . . . .                                                                                                                             | Assistant Medical Officer (Child and Maternal Health).              |
| I. P. MARAIS, B.Sc., Agric. B.V.Sc. . . . .                                                                                                                        | Dr. Med. Vet. (Manager Abattoir)                                    |
| 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<br>and Other Foods, Cert. of Agric. Dairying<br>Natal . . . . .                                                       | Chief Health Inspector.                                             |
| L. E. THOMAS, Cert. R.S.I., Cert. Meat and<br>Other Foods, Cert. Trop. Hyg., Adv., Know-<br>ledge, San. Eng. Building Construction and<br>Drawing (Adv.) . . . . . | Assistant Chief Health Inspector.                                   |
| W. G. FUNSTON, Cert. R.S.I., Cert. Meat and<br>Other Foods, Trop. Hyg. . . . .                                                                                     | Assistant Chief Health Inspector.                                   |
| J. L. COETZEE, Cert. Meat and Other Foods . . . . .                                                                                                                | Assistant Chief Health Inspector, (Abattoir).                       |
| *H. M. DE VAAL, B.Sc. (Appl. and Industr.<br>Chem.) M.S.A. Chem. I., M. Inst. S.P. . . . .                                                                         | Chief Chemist and Analyst.                                          |
| *P. R. LOEWENSTEIN, B.Sc. (Eng.) M.S.A.<br>Chem. I., A.M. Inst. S.P. . . . .                                                                                       | Assistant Chemist and Analyst.                                      |
| *A. L. GOLDBERG, B.Sc., (Eng.) M.S.A. Chem.<br>A.M. Inst. S.P., M.R.S.I. . . . .                                                                                   | Chemist, Grade II.                                                  |
| *N. P. LE M. NICOLLE, B.Sc., M.S.A. Chem. I.,<br>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 Department the remainder of the time they carry out duties for the City Engineer's Department.

## SUPERVISING HEALTH INSPECTORS.

K. C. J. LUCOUW, Cert. R.S.I.  
 A. VELTHUYSEN, Cert. R.S.I.  
 J. S. R. MARAIS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.  
 N. VORSTER, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.  
 W. SCOTT, Cert. R.S.I. Meat and Other Foods (Abattoir).

## SENIOR HEALTH INSPECTORS.

D. W. BURGESS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.  
 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.  
 O. A. BERGMAN, Cert. R.S.I. Meat and Other Foods, Trop. Hyg.

## HEALTH INSPECTORS.

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 (Abattoir).  
 J. C. THERON, Cert. R.S.I., Meat and Other Foods (Abattoir).  
 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.  
 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., Meat and Other Foods, (Abattoir).  
 J. H. LEACH, Cert. R.S.I., Meat and Other Foods.  
 J. KRUGER, Cert. R.S.I., Meat and Other Foods.  
 W. N. ODENDAAL, Cert. R.S.I., Meat and Other Foods.  
 E. C. KUNITZ, Cert. R.S.I.  
 A. C. ENGELBRECHT, 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.

## Second Grade Clerk:

M. ROSSOUW.

## Record Clerks:

I. M. MALLET (Miss), C. J. FOURIE (Miss).

## Junior Clerks:

F. K. VERDOORN, H. N. PIETERSE, D. J. R. HATTINGH.

## Typists:

D. R. WELTHAGEN, M. E. J. THOMSON, S. A. FLEMMING, G. H. VLIELAND,  
 P. J. ALEXANDER.

## HOUSING AND SLUM ELIMINATION.

## Administrative Officer:

E. J. JAMMINE, Cert. R.S.I., Meat and Other Foods, Adv. Knowledge, Trop. Hyg.

Woman Housing Manager: K. S. MARTIN, Diploma Social Administration; Florence  
 Nightingale Foundation Council Diploma for Public Health, Cert. Gen. Nursing and  
 Midwif., Certificate for Tropical Diseases, Certificate Mental Hygiene.

Assistant Manager: G. F. PIENAAR, Lower Secondary Teacher's Cert., Univ. of Cape  
 Town. R.S.I., Certificate of Competency for Housing Managers, (Octavia Hill Train-  
 ing).

Assistant Manager: J. B. COLMAN, R.S.I., Certificate of Competency for Housing Man-  
 agers, (Octavia Hill Training.)

Assistant Manager: W. A. YATES, B.A. (S.S.) Certificate of Competency for Housing  
 Managers, (Octavia Hill Training.)

Assistant Manager: N. G. CROSS, B.A. (S.S.), Certificate of Competency for Housing  
 Managers, (Octavia Hill Training.)

Clerk: R. WEBB (Mrs.)

Housing Assistant: L. MALHERBE (Miss).

Typists: E. J. VILJOEN (Mrs.)

Handymen: P. J. CRONJE, G. M. J. DE KOCK and S. F. HOLDER.

## 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, (Senior), Cert. S.A. Medical Council (Gen. & 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.  
 A. S. SCHULTZ, Cert. S.A. Medical Council (Gen. & 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. & 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, Health Visitors Certificate (Holland), Social Worker Diploma (Holland), Nursing Diploma (Holland).  
 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. M. PRUNS, Cert. S.A. Medical Council (Gen. and Midwif.), Cert. R.S.I. Health Visitor and School Nurse, Mothercraft.  
 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, Mothercraft.  
 W. J. VOLSCHENK, Cert. S.A. Medical Council (Gen.) Cert. R.S.I. Health Visitor and School Nurse.  
 C. E. VAN NIEKERK, Cert. S.A. Medical Council (Gen. and Midwif.), Cert. R.S.I. Health Visitor and School Nurse, Mothercraft.  
 J. B. VAN R. VAN OUDTSHOORN, Cert. S.A. Medical Council (Gen. and Midwif.), Cert. R.S.I. Health Visitor and School Nurse, Mothercraft.  
 V. J. LOYNES, Cert. S.A. Medical Council (Gen. and Midwif.), Cert. R.S.I. Health Visitor and School Nurse, Mothercraft.  
 S. J. DE VILLIERS, Cert. S.A. Medical Council (Gen. and Midwif.), Mothercraft.

## NON-EUROPEAN NURSES.

- SALMINA HUMA, Cert. S.A. Medical 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 MOGALE, Cert. Midwifery.  
 DEBORAH RAMSKIN, Cert. Midwifery.  
 EUPHEN NDUNA, Cert. S.A. Medical Council (Gen. and Midwif.)  
 GRACE MSIMANG, Cert. Midwife.  
 SUSAN MOFOLO, Cert. S.A. Medical Council (Gen. and Midwif.)  
 ROSA SIBANYONI, Cert. S.A. Medical Council (Gen. and Midwif.)  
 HELEN MAMETSE, Cert. S.A. Medical Council, (Gen. and Midwif.).

## CLINIC ASSISTANT.

C. J. DREYER.

## NON-EUROPEAN CLINIC ORDERLIES.

- |                  |                  |
|------------------|------------------|
| JACOB MOHOLO.    | WALTER MATABOGE. |
| JOSEPH MONTOEDI. | HENRY SETHEKGE.  |
| DANIEL MARABA.   |                  |

## PUBLIC CONVENIENCE ATTENDANTS.

TEN EUROPEANS.

FOUR NON-EUROPEANS.

## POUNDMASTERS.

L. J. BOTHA.

C. W. SHORT.

## CARETAKER.

J. HINDLEY.



# CITY COUNCIL OF PRETORIA

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## FORTY-SEVENTH ANNUAL REPORT

### OF THE

## MEDICAL OFFICER OF HEALTH

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#### CLIMATIC DATA.

**Latitude:** 25 degrees, 44 Minutes, 3 seconds South.

**Longitude:** 1 hours, 52 Minutes, 48 seconds East.

**Mean Altitude:** 4,480 feet.

**Temperature:** (Statistics kindly supplied by the Director, Weather Bureau, Pretoria.)

|                 | Air Temperatures (°F) |                     |                                   |                                   | Mean Relative Humidity at |            | Rainfall. |       |
|-----------------|-----------------------|---------------------|-----------------------------------|-----------------------------------|---------------------------|------------|-----------|-------|
|                 | Mean<br>Max.<br>°F.   | Mean<br>Min.<br>°F. | Highest<br>Reading<br>°F.<br>Max. | Lowest<br>Reading.<br>°F.<br>Min. | 8a.m.<br>%                | 2p.m.<br>% | Inches.   | Days. |
| <b>1950:</b>    |                       |                     |                                   |                                   |                           |            |           |       |
| July .. ..      | 67.3                  | 39.8                | 74.1                              | 29.0                              | 75                        | 37         | 0.00      | 0     |
| August .. ..    | 68.9                  | 42.7                | 78.1                              | 31.4                              | 71                        | 39         | 0.00      | 0     |
| September .. .. | 79.2                  | 51.5                | 88.8                              | 41.5                              | 62                        | 35         | 0.18      | 3     |
| October .. ..   | 80.2                  | 51.1                | 90.0                              | 37.2                              | 50                        | 28         | 0.81      | 4     |
| November .. ..  | 81.0                  | 57.0                | 89.1                              | 50.9                              | 68                        | 36         | 3.72      | 14    |
| December .. ..  | 79.9                  | 60.6                | 86.6                              | 51.9                              | 76                        | 54         | 9.19      | 14    |
| <b>1951:</b>    |                       |                     |                                   |                                   |                           |            |           |       |
| January .. ..   | 79.6                  | 57.1                | 88.8                              | 49.0                              | 72                        | 48         | 3.32      | 9     |
| February .. ..  | 82.0                  | 59.3                | 87.7                              | 50.9                              | 68                        | 45         | 3.27      | 16    |
| March .. ..     | 79.2                  | 57.4                | 85.9                              | 52.2                              | 77                        | 47         | 1.59      | 13    |
| April .. ..     | 75.3                  | 51.4                | 82.1                              | 37.5                              | 79                        | 44         | 2.93      | 13    |
| May .. ..       | 67.1                  | 44.1                | 78.0                              | 33.8                              | 81                        | 44         | 2.99      | 8     |
| June .. ..      | 63.5                  | 33.4                | 70.8                              | 26.3                              | 79                        | 34         | 0.01      | 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.

#### ANNUAL RATEABLE VALUES.

|                   | 1950/51            |
|-------------------|--------------------|
| Land .. .. .      | £22,985,370        |
| Buildings .. .. . | 46,891,406         |
|                   | <u>£69,876,776</u> |

The values of unrateable land and buildings were £7,143,194 and £10,456,964 respectively.

The total values therefore were:—

|                   | 1950/51            |
|-------------------|--------------------|
| Land .. .. .      | £30,128,564        |
| Buildings .. .. . | 57,348,370         |
|                   | <u>£87,476,934</u> |

For the year under review the rates imposed were 7d. per £ on land and 1½d. per £ on buildings, in the Pretoria area and 8½d. on land only in the area of the former Hercules Municipality.

## POPULATION.

|                    |         |
|--------------------|---------|
| European .. .. .   | 129,218 |
| Native .. .. .     | 88,187  |
| Asiatic .. .. .    | 5,236   |
| Eurafrican .. .. . | 4,711   |

The population figures from the 1951 census for the various races have kindly been supplied by the Director of Census, to whom, as well as members of the staff of the Department of Census and Statistics, we are grateful for statistical information so willingly given whenever it is sought.

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

|                                                                       | European. | Native. | Asiatic. | Eur-africans. | Total Non-Europeans. | All Races. |
|-----------------------------------------------------------------------|-----------|---------|----------|---------------|----------------------|------------|
| Population .. .. .                                                    | 129,218   | 88,187  | 5,236    | 4,711         | 98,134               | 227,352    |
| Birth Rates .. .. .                                                   | 26.97     | 28.07   | 43.93    | 39.69         | 29.47                | 28.05      |
| Death Rates .. .. .                                                   | 6.08      | 11.67   | 8.02     | 12.52         | 11.51                | 8.42       |
| Infantile Mortality per 1,000 live births .. .. .                     | 28.98     | 151.51  | 43.48    | 58.82         | 136.93               | 77.94      |
| Percentage of Illegitimate to live births .. .. .                     | 1.46      | 33.29   | 4.78     | 27.27         | 30.64                | 14.69      |
| Death Rate from Tuberculosis (Pulmonary) per 1,000 population .. .. . | 0.11      | 1.21    | 0.19     | 2.12          | 1.20                 | 0.59       |
| Death rate from Tuberculosis, all forms, per 1,000 population .. .. . | 0.15      | 1.54    | 0.19     | 2.33          | 1.51                 | 0.73       |

## BIRTHS.

The following births were registered in Pretoria during the year (figures for 1949-1950 in brackets):—

|                                                      | European.        | Native.          | Asiatic.     | Eur-african. | Total Non-European. | All Races.       |
|------------------------------------------------------|------------------|------------------|--------------|--------------|---------------------|------------------|
| Local Births .. .. .                                 | 3,485<br>(3,370) | 2,475<br>(2,363) | 230<br>(265) | 187<br>(176) | 2,892<br>(2,804)    | 6,377<br>(6,174) |
| Births where mothers not residents of Pretoria ..    | 932<br>(927)     |                  |              |              | 786<br>(605)        | 1,718<br>(1,532) |
| Illegitimate births (included in local births) .. .. | 11<br>(31)       | 824<br>(1,030)   | 11<br>(5)    | 51<br>(66)   | 886<br>(1,101)      | 937<br>(1,132)   |
| Stillbirths .. .. .                                  | 44<br>(39)       |                  |              |              | 88<br>(119)         | 132<br>(158)     |

## BIRTH RATES.

|                          |               |
|--------------------------|---------------|
| European .. .. .         | 26.97 (25.53) |
| Native .. .. .           | 28.07 (23.56) |
| Asiatic .. .. .          | 43.93 (47.32) |
| Eurafrican .. .. .       | 39.69 (42.93) |
| All non-European .. .. . | 29.47 (25.49) |
| All Races .. .. .        | 28.05 (25.51) |

The birth rate of 26.97 for Europeans shows a slight increase.

## Non-Europeans:

The birth rate for natives shows a decided increase. This chiefly due to the better notification.

The birth rates for both Eurafricans and Asiatics show a decrease. As the populations of both these races are not very large, slight fluctuations affect the rates.

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

|                    |                          |
|--------------------|--------------------------|
| European .. .. .   | 20.89 (19.73) per 1,000. |
| Asiatic .. .. .    | 35.91 (38.04) per 1,000. |
| Eurafrican .. .. . | 27.17 (25.85) per 1,000. |

## DEATHS.

(Figures for 1949-1950 in brackets).

|                                                        | European.               | Native.  | Asiatic. | Eur-<br>african. | Total<br>Non-<br>Europeans. | All-<br>Races.          |
|--------------------------------------------------------|-------------------------|----------|----------|------------------|-----------------------------|-------------------------|
| Local deaths (all ages) . . . .                        | 785                     | 1,029    | 42       | 59               | 1,130                       | 1,915                   |
| Deaths of persons not being<br>local residents . . . . | 368<br>(359)            | —        | —        | —                | 719<br>(609)                | 1,087<br>(968)          |
|                                                        | <u>1,153</u><br>(1,124) | <u>—</u> | <u>—</u> | <u>—</u>         | <u>1,849</u><br>(1,805)     | <u>3,002</u><br>(2,929) |

The „non-local” deaths occurred at:—

|                         | Pretoria and<br>Other Hospitals | Mental<br>Hospital. | Leper<br>Institution. | Prisons. | Visitors. |
|-------------------------|---------------------------------|---------------------|-----------------------|----------|-----------|
| Europeans . . . . .     | 292 (310)                       | 61 (30)             | 4 (4)                 | 3 (1)    | 8 (14)    |
| Non-Europeans . . . . . | 555 (474)                       | 43 (50)             | 55 (31)               | 44 (29)  | 22 (25)   |

## DEATH RATES.

|                            |       |         |
|----------------------------|-------|---------|
| European . . . . .         | 6·08  | (5·80)  |
| Native . . . . .           | 11·67 | (10·71) |
| Asiatic . . . . .          | 8·02  | (9·29)  |
| Eurafrican . . . . .       | 12·52 | (17·07) |
| All Non-European . . . . . | 11·51 | (10·87) |
| Total All Races . . . . .  | 8·42  | (8·10)  |

The death rate for Europeans shows a slight increase.

## Non-Europeans:

The death rate for natives of 11·67 shows an increase on the previous few years. This is due to the incorporation of Lady Selborne, where the health conditions are not as good as those of Pretoria.

The death rates for Asiatics and Eurafricans show a decrease and these rates, like the birth rates, are usually affected by slight increases or decreases in the total numbers because of the smallness of the relevant populations.

## INFANTILE MORTALITY.

(Figures for 1949-1950 in brackets).

|                                                                                                                                                                     | European         | Native.   | Asiatic. | Eur-<br>african. | Total<br>Non-<br>Europeans. | All<br>Races.    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------|----------|------------------|-----------------------------|------------------|
| Local deaths . . . . .                                                                                                                                              | 101 (109)        | 375 (430) | 10 (20)  | 11 (15)          | 396 (465)                   | 497 (574)        |
| Deaths of infants whose<br>mothers had come to the<br>City for confinement, or<br>infants who were brought<br>in suffering from the ill-<br>ness which caused death | 39 (48)          |           |          |                  | 148 (127)                   | 187 (175)        |
|                                                                                                                                                                     | <u>140 (157)</u> |           |          |                  | <u>544 (592)</u>            | <u>684 (749)</u> |

## INFANTILE MORTALITY RATES.

|                            |        |          |
|----------------------------|--------|----------|
| European . . . . .         | 28·98  | (32·34)  |
| Native . . . . .           | 151·51 | (181·97) |
| Asiatic . . . . .          | 43·48  | (75·47)  |
| Eurafrican . . . . .       | 58·82  | (85·23)  |
| All Non-European . . . . . | 136·93 | (165·83) |
| All Races . . . . .        | 77·94  | (92·97)  |

It is gratifying to note that there has been a definite decrease in the Infantile Mortality Rate for Europeans.

This year's rate of 28·98 is the second lowest on record. The work of the Child Welfare Section of the Department is to a large extent responsible for this.

**Non-Europeans:**

The Infantile Mortality Rate of 151·51 for 1950/51 is also the second lowest recorded. This is also the fruits of the work of our Child Welfare Section.

We can however not be satisfied as so many natives still live under overcrowded and unhealthy conditions.

When Lady Selborne which is part of the newly-incorporated Hercules area, receives a proper Municipal water supply, it is hoped that the number of Infantile Deaths due to intestinal diseases will drop. The general sanitary conditions of the area are very unsatisfactory and it is difficult to control infectious diseases.

Many of the natives have moved from slums in Marabastad to Atteridgeville where housing and sanitation are good. This will tend to further improve the Infantile Mortality Rate.

The rate of 43·48 for Asiatics is also the second lowest on record.

The rate of 58·82 for Eurafrians is the lowest ever recorded.

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

|                                    | 1950-51.       | 1949-50.        |
|------------------------------------|----------------|-----------------|
| Congenital causes .. .. .          | 7 (Rate 2·01)  | 8 (Rate 2·37)   |
| Diarrhoeal diseases .. .. .        | 7 (Rate 2·01)  | 13 (Rate 3·86)  |
| Bronchitis & Pneumonia .. .. .     | 10 (Rate 2·87) | 18 (Rate 5·34)  |
| Infectious diseases .. .. .        | 3 (Rate 0·86)  | 1 (Rate 0·30)   |
| Other causes .. .. .               | 28 (Rate 8·03) | 19 (Rate 5·64)  |
| Prematurity .. .. .                | 30 (Rate 8·61) | 35 (Rate 10·39) |
| Injury at birth .. .. .            | 16 (Rate 4·59) | 15 (Rate 4·45)  |
| <b>Total Infant Deaths .. .. .</b> | <b>101</b>     | <b>109</b>      |

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

|                                                 | 1950-51    | 1949-50    |
|-------------------------------------------------|------------|------------|
| Congenital causes .. .. .                       | 24         | 49         |
| Diarrhoeal Diseases .. .. .                     | 92         | 124        |
| Bronchitis & Pneumonia .. .. .                  | 124        | 117        |
| Infectious Diseases .. .. .                     | 15         | 14         |
| Other Causes .. .. .                            | 24         | 46         |
| Prematurity .. .. .                             | 87         | 87         |
| Injury at birth .. .. .                         | 15         | 28         |
| Malnutrition .. .. .                            | 15         | —          |
| <b>Total Non-European Infant Deaths .. .. .</b> | <b>396</b> | <b>465</b> |

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

| Year.           | European. | Native. | Asiatic. | 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             | 149·53               |
| 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                |
| 1950-51 .. .. . | 28·98     | 151·51  | 43·48    | 58·82        | 136·93             | 77·94                |

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.

**Native:**

| Marabas Location. |         | Bantule Location. |         | Atteridgeville Location. |         | Hercules Area. |         | Town.   |         |
|-------------------|---------|-------------------|---------|--------------------------|---------|----------------|---------|---------|---------|
| Births.           | Deaths. | Births.           | Deaths. | Births.                  | Deaths. | Births.        | Deaths. | Births. | Deaths. |
| 33                | 4       | 177               | 43      | 307                      | 33      | 1,672          | 242     | 286     | 53      |

**Asiatic:**

| Asiatic Location. |         | Hercules. |         | Town.   |         |
|-------------------|---------|-----------|---------|---------|---------|
| Births.           | Deaths. | Births.   | Deaths. | Births. | Deaths. |
| 128               | 6       | 44        | —       | 58      | 4       |

**Eurafrican:**

| Cape Location. |         | Hercules. |         | Town.   |         |
|----------------|---------|-----------|---------|---------|---------|
| Births.        | Deaths. | Births.   | Deaths. | Births. | Deaths. |
| 81             | 5       | 93        | 5       | 13      | 1       |

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

**European:**

25 Deaths were recorded under this age group:—

|                                           |       |
|-------------------------------------------|-------|
| Cerebro Spinal Meningococcal Meningitis.. | 1     |
| Diphtheria ..                             | 2     |
| Tuberculosis (Central Nervous System) ..  | 2     |
| Influenza ..                              | 1     |
| Measles ..                                | 1     |
| Diseases of the blood ..                  | 2     |
| Convulsions ..                            | 1     |
| Broncho Pneumonia ..                      | 7     |
| Lobar Pneumonia ..                        | 2     |
| Diarrhoea and Enteritis ..                | 1     |
| Diseases of the liver ..                  | 1     |
| Congenital Hydrocephalus ..               | 1     |
| Motor Accidents ..                        | 1     |
| Accidental poisoning ..                   | 1     |
| Accident due to electric currents..       | 1     |
|                                           | <hr/> |
|                                           | 25    |

**Native:**

183 Deaths were recorded under this age group:—

|                                           |    |
|-------------------------------------------|----|
| Whooping Cough ..                         | 4  |
| Diphtheria ..                             | 5  |
| Tuberculosis (Pulmonary) ..               | 7  |
| Tuberculosis (Central Nervous System) ..  | 4  |
| Tuberculosis (Acute Miliary) ..           | 3  |
| Congenital Syphilis ..                    | 3  |
| Measles ..                                | 1  |
| Disease of the Parathyroid Glands ..      | 1  |
| Malnutrition ..                           | 26 |
| Beri Beri ..                              | 1  |
| Pellagra ..                               | 3  |
| Convulsions ..                            | 2  |
| Disease of the ear and mastoid process .. | 1  |
| Heart disease (rheumatic) ..              | 1  |
| Gangrene ..                               | 1  |
| Bronchitis ..                             | 1  |
| Broncho Pneumonia ..                      | 51 |
| Lobar pneumonia ..                        | 5  |
| Empyema ..                                | 1  |
| Diarrhoea and enteritis ..                | 52 |
| Nephritis ..                              | 1  |
| Congenital Hydrocephalus ..               | 2  |
| Accidental Burns ..                       | 4  |
| Accidental Crushing ..                    | 1  |
| Unknown or Unspecified Causes ..          | 2  |

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183

## Asiatic:

4 Deaths were recorded under this age group:—

|                          |       |
|--------------------------|-------|
| Lobar Pneumonia .. .. .  | 1     |
| Tumours .. .. .          | 1     |
| Accidental burns .. .. . | 1     |
| Accidental fall .. .. .  | 1     |
|                          | <hr/> |
|                          | 4     |

## Eurafrican:

10 Deaths were recorded under this age group:—

|                                               |       |
|-----------------------------------------------|-------|
| Tuberculosis (pulmonary) .. .. .              | 1     |
| Tuberculosis (Central Nervous System) .. .. . | 1     |
| Disease of the Larynx .. .. .                 | 1     |
| Broncho Pneumonia .. .. .                     | 1     |
| Diarrhoea and Enteritis .. .. .               | 4     |
| Whooping Cough .. .. .                        | 1     |
| Accidental Burns .. .. .                      | 1     |
|                                               | <hr/> |
|                                               | 10    |

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

The principal causes of death were:—

|                                              | Europeans. |                                | Non-Europeans. |                                |
|----------------------------------------------|------------|--------------------------------|----------------|--------------------------------|
|                                              | 1950-51    | Yearly Average<br>for 5 years. | 1950-51        | Yearly Average<br>for 5 years. |
| Cancer .. .. .                               | 107        | 93.4                           | 25             | 15.2                           |
| Heart Disease .. .. .                        | 148        | 141.4                          | 42             | 33.0                           |
| Bronchitis and Pneumonia (all forms) .. .. . | 53         | 43.8                           | 97             | 81.0                           |
| Influenza .. .. .                            | 1          | 0.4                            | 3              | 1.2                            |
| Typhoid Fever .. .. .                        | —          | 0.4                            | 4              | 3.6                            |
| Appendicitis .. .. .                         | 1          | 1.8                            | 1              | 1.0                            |
| Tuberculosis (pulmonary) .. .. .             | 13         | 13.4                           | 104            | 73.6                           |
| Diabetes .. .. .                             | 10         | 7.2                            | 4              | 1.4                            |
| Apoplexy .. .. .                             | 62         | 51.4                           | 12             | 10.8                           |
| Disease of Kidneys .. .. .                   | 26         | 32.0                           | 25             | 19.0                           |
| Disease of Arteries .. .. .                  | 22         | 20.0                           | 8              | 9.4                            |
| Disease of Liver and Gall Bladder .. .. .    | 15         | 12.4                           | 6              | 3.8                            |
| Puerperal disease .. .. .                    | —          | 0.2                            | 6              | 2.0                            |
| Old Age .. .. .                              | 20         | 19.4                           | 16             | 8.6                            |
| Suicide .. .. .                              | 9          | 10.8                           | 7              | 3.4                            |
| Accidents .. .. .                            | 29         | 32.2                           | 40             | 39.2                           |
| Other Infectious diseases .. .. .            | 14         | —                              | 38             | —                              |
| Other causes .. .. .                         | 129        | —                              | 99             | —                              |

## DETAILS OF CAUSES OF DEATH—5 YEARS AND OVER.

(In all the following tables the figures for 1949-50 are shown in brackets).

## 1. CANCER:

Europeans: 107. Death rate 0.83 per 1,000 population.

Site of disease:—

|                                                     |         |
|-----------------------------------------------------|---------|
| Buccal cavity and pharynx .. .. .                   | 2 (3)   |
| Digestive organs and peritoneum .. .. .             | 55 (60) |
| Respiratory tract .. .. .                           | 7 (5)   |
| Uterus .. .. .                                      | 9 (5)   |
| Other female genital organs .. .. .                 | 5 (4)   |
| Breast .. .. .                                      | 9 (10)  |
| Male genital organs .. .. .                         | 4 (8)   |
| Male and female urinary organs .. .. .              | 5 (3)   |
| Brain and other parts of the nervous system .. .. . | — (1)   |
| Skin .. .. .                                        | 1 (1)   |
| Bones .. .. .                                       | 2 (3)   |
| Other and unspecified organs .. .. .                | 7 (7)   |

TOTAL .. .. . 107 (110)

## Death Age:

Under:

|           |         |         |         |         |          |           |
|-----------|---------|---------|---------|---------|----------|-----------|
| 40 Years. | 40-50.  | 50-60.  | 60-70.  | 70-80.  | Over 80. | Total.    |
| 8 (7)     | 12 (10) | 22 (21) | 27 (29) | 30 (33) | 8 (10)   | 107 (110) |

**Non-Europeans:**

Site of disease:—

**Natives**

|                                 |         |        |
|---------------------------------|---------|--------|
| Digestive organs and peritoneum | .. .. . | 8 (10) |
| Respiratory tract               | .. .. . | — (1)  |
| Uterus                          | .. .. . | 5 (—)  |
| Other female genital organs     | .. .. . | 1 (—)  |
| Male and female urinary organs  | .. .. . | 3 (3)  |
| Skin                            | .. .. . | 1 (—)  |
| Bones                           | .. .. . | 1 (—)  |
| Other and unspecified organs    | .. .. . | 1 (—)  |

**Asiatics:**

|                                 |         |       |
|---------------------------------|---------|-------|
| Buccal cavity and pharynx       | .. .. . | — (2) |
| Digestive organs and peritoneum | .. .. . | 2 (—) |

**Eurafricans:**

|                                 |         |       |
|---------------------------------|---------|-------|
| Digestive organs and peritoneum | .. .. . | 1 (—) |
| Uterus                          | .. .. . | 1 (—) |
| Breast                          | .. .. . | 1 (—) |
| Skin                            | .. .. . | — (1) |

TOTAL .. .. . 25 (17)

2. **DISEASES OF THE HEART:** Death rate per 1,000 European population 1·15 (1·07)  
Europeans: 148 (141).  
Non-Europeans: 42 (43). Natives 31. Asiatics 8. Eurafricans 3.
3. **BRONCHITIS AND PNEUMONIA.**  
Europeans: 53 (38).  
Non-Europeans 97 (102). Natives 88. Asiatics 3. Eurafricans 6.
4. **INFLUENZA :**  
Europeans 1 (1).  
Non-Europeans 3 (2). Natives 3.
5. **TYPHOID FEVER:**  
Europeans — (—).  
Non-Europeans 4 (3). Natives 3.
6. **APPENDICITIS:**  
Europeans 1 (4).  
Non-Europeans 1 (—). Native 1.
7. **TUBERCULOSIS (PULMONARY):**  
Europeans 13 (15).  
Non-Europeans 104 (81). Natives 95. Asiatic 1. Eurafricans 8.
8. **DIABETES:**  
Europeans 10 (9).  
Non-Europeans 4 (1). Natives 3. Eurafrican 1.
9. **APOPLEXY:**  
Europeans 62 (68).  
Non-Europeans 12 (17). Natives 9. Asiatics 3.
10. **DISEASES OF THE KIDNEYS:**  
Europeans 26 (35).  
Non-Europeans 25 (26). Natives 22. Eurafricans 3.
11. **DISEASES OF ARTERIES:**  
Europeans 22 (13).  
Non-Europeans 8 (31). Natives 7. Asiatic 1.
12. **DISEASES OF THE LIVER AND GALL BLADDER:**  
Europeans 15 (11).  
Non-Europeans 6 (3). Natives 4. Asiatic 1. Eurafrican 1.

## 13. PUERPERAL DISEASES:

Europeans — (—).  
Non-Europeans 6 (1). Natives 4. Asiatics 2.

## 14. OLD AGE:

Europeans 20 (27).  
Non-Europeans 16 (11). Natives 14. Eurafricans 2.

## 15. SUICIDE:

Europeans 9 (11).  
Non-Europeans 7 (3). Natives 7.

## 16. HOMICIDE:

|                                    | Europeans. | Natives. | Asiatics. | Eurafricans. |
|------------------------------------|------------|----------|-----------|--------------|
| By firearms . . . . .              | —          | —        | —         | —            |
| By cutting or piercing instruments | —          | 7        | —         | —            |
| By other unspecified means . .     | 1          | 5        | —         | 1            |

## 17. ACCIDENT:

Europeans 29 (40).  
Non-Europeans 40 (50).

|                                                            | Europeans. | Natives. | Asiatics. | Eurafricans. |
|------------------------------------------------------------|------------|----------|-----------|--------------|
|                                                            | 1950-51.   | 1949-50. | 1950-51.  | 1949-50.     |
| On Railways . . . . .                                      | 1 (2)      | — (6)    | — (—)     | — (—)        |
| By Motor, road vehicles (excluding motor cycles) . . . . . | 9 (19)     | 13 (20)  | 1 (1)     | — (2)        |
| „ motor cycles . . . . .                                   | — (4)      | — (1)    | — (—)     | — (—)        |
| „ Road Transport (not Motor) . . . . .                     | — (1)      | — (3)    | — (—)     | — (—)        |
| „ machinery (not transport or agricultural)                | — (—)      | — (—)    | — (—)     | — (—)        |
| „ farm machinery . . . . .                                 | 1 (—)      | — (—)    | — (—)     | — (—)        |
| „ burns (not conflagration) . . . . .                      | — (1)      | 9 (3)    | — (—)     | — (—)        |
| „ electric current . . . . .                               | 5 (2)      | — (—)    | — (—)     | — (—)        |
| „ mechanical suffocation . . . . .                         | — (—)      | — (—)    | — (—)     | — (—)        |
| „ drowning . . . . .                                       | 1 (—)      | 3 (1)    | — (—)     | — (—)        |
| „ firearms . . . . .                                       | 1 (3)      | 1 (—)    | — (—)     | — (—)        |
| „ injury by cutting or piercing instruments . .            | — (—)      | — (—)    | — (—)     | — (—)        |
| „ fall . . . . .                                           | 6 (3)      | 2 (1)    | — (—)     | — (—)        |
| „ crushing . . . . .                                       | 1 (1)      | 3 (2)    | — (—)     | — (—)        |
| „ anaesthetic . . . . .                                    | 1 (1)      | 1 (2)    | — (—)     | — (—)        |
| „ poisonous gases . . . . .                                | — (2)      | 1 (5)    | — (—)     | — (—)        |
| „ poisoning (not by gas) . . . . .                         | 1 (—)      | 3 (—)    | — (—)     | — (—)        |
| „ other and unspecified accidents . . . . .                | 2 (1)      | 4 (2)    | — (—)     | — (1)        |
| TOTAL . . . . .                                            | 29 (40)    | 40 (46)  | 1 (1)     | — (3)        |

## DETAILS OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR.

In writing up this section of the report the figures for Pretoria and the newly incorporated area of Hercules are given separately. This is done deliberately because Hercules includes Lady Selborne Native Location and other districts where sanitary and other health conditions are on the average much lower than those of the rest of Pretoria.

Note.—All figures for 1949-50 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.

## PRETORIA — EXCLUDING HERCULES.

## Typhoid Fever:

|                                 | Europeans. | Non-Europeans. | Total.    |
|---------------------------------|------------|----------------|-----------|
| Local cases . . . . .           | 22 (13)    | 28 (20)        | 50 (33)   |
| Imported cases . . . . .        | 38 (21)    | 119 (85)       | 157 (106) |
| Deaths in local cases . . . . . | 0 (0)      | 3 (0)          | 3 (0)     |



## Tests carried out for the Typhoid Fever Carrier State:

|                                                               | No. of<br>persons Vi-tested. | Blood found<br>Vi-positive. | Stool and urine<br>found positive. |
|---------------------------------------------------------------|------------------------------|-----------------------------|------------------------------------|
| Typhoid fever investigations .. .. .                          | 18                           | 4                           | 2 Eur.stool (+)<br>nil.            |
| Prospective employees at dairies. . . .                       | 709                          | 56                          |                                    |
| Prospective employees at Rietvlei Mun.<br>Waterworks .. . . . | 2                            | —                           | "                                  |
| Prospective employees at Pretoria Hos-<br>pital .. . . .      | Unknown.                     | 28                          | "                                  |

For Dairy Typhoid Testing, see under section dealing with control of dairies and milk supplies.

## Typhoid Carrier Camp:

|                                              |    |
|----------------------------------------------|----|
| Number of inmates on 1st July, 1950 .. . . . | 12 |
| Number admitted during year .. . . .         | 34 |
|                                              | 46 |
| Number discharged during year. . . . .       | 38 |
|                                              | —  |
| Still in camp on 30th June, 1951 .. . . .    | 8  |

## Imported Cases:

Of the imported cases, one European and four Bantus were Pretoria residents who contracted the disease outside the Municipal area. One of the Bantus died.

## Tuberculosis:

|                         | Europeans. | Non-Europeans. | Total.    |
|-------------------------|------------|----------------|-----------|
| Local cases .. . . .    | 30 (32)    | 101 (94)       | 131 (126) |
| Imported cases .. . . . | 22 (33)    | 77 (59)        | 99 (92)   |

Of the 101 non-European local cases, 85 were Bantus, 9 Eurafricans and 7 Asiatics.

## Local Cases:

The various forms in which the disease occurred:—

|                   | Pul-<br>monary. | Mili-<br>ary. | Menin-<br>gitic. | General. | Spinal. | Cere-<br>bral. | Renal. | Myo-<br>cardial. | Total. |
|-------------------|-----------------|---------------|------------------|----------|---------|----------------|--------|------------------|--------|
| Europeans ..      | 26              | —             | 1                | 1        | —       | 1              | 1      | —                | 30     |
| Non-<br>Europeans | 84              | 7             | 3                | 1        | 5       | —              | —      | 1                | 101    |
|                   | 110             | 7             | 4                | 2        | 5       | 1              | 1      | 1                | 131    |

Of the 131 cases, 57 died during the year. Fifty-four (8 Europeans, 3 Eurafricans, 1 Asiatic and 42 Bantus) died in Pretoria, 2 non-Europeans had left Pretoria and died elsewhere and 1 died at Rietfontein Tuberculosis Hospital.

Eight Europeans and 31 non-Europeans were notified only at death. Eleven non-Europeans died within three months and 7 non-Europeans within six months of notification.

Two Europeans and 33 non-Europeans gave a familial history. Eight non-Europeans gave histories of being contacts of known cases. One non-European had been employed on the Rand Mines years ago.

## How Notified:

Thirty-three notifications were received from the Pretoria General Hospital and the Isolation Hospital, 31 were from the weekly returns of the Registrar of Births and Deaths, 23 were notified by private practitioners, 36 by the Municipal Tuberculosis and other Clinics and 8 from other sources.

## Sanatorium Treatment:

During the year ten cases, seven Europeans and three Bantus were admitted to Sanatoria. This figure does not include cases admitted to the local Isolation Wards.

## Imported Cases:

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

Thirty-four cases, classified as imported infections, were patients who had contracted the disease prior to coming to live in Pretoria. Of these, three Europeans and seven non-Europeans have since died. Another six cases were notified from Government Institutions: Weskoppies Mental Hospital 3, Pretoria Gaol 2 and Central Prison 1. Three have since died.

#### SCARLET FEVER:

|                        | Europeans. | Non-Europeans. | Total.    |
|------------------------|------------|----------------|-----------|
| Local cases .. .. .    | 260 (215)  | 0 (1)          | 260 (216) |
| Imported cases .. .. . | 14 (10)    | 0 (0)          | 14 (10)   |

Eight of the cases were adults, 133 were scholars and 119 were children of pre-school age.

Fifty-seven of the patients were removed to the Isolation Wards, two to the Military Hospital at Voortrekkerhoogte and 201 were treated at home. There were 37 secondary cases.

#### DIPHTHERIA:

|                        | Europeans. | Non-Europeans. | Total.  |
|------------------------|------------|----------------|---------|
| Local cases .. .. .    | 33 (48)    | 30 (17)        | 63 (65) |
| Imported cases .. .. . | 38 (37)    | 47 (27)        | 85 (64) |

#### Local cases:

The non-European cases were: 2 Euraficans, 2 Asiatics and 26 Bantus. Six of the cases died, 1 European and 5 Bantus. They had never been immunised. Ten of the cases were adults, 23 were scholars and 30 were children of pre-school age. Fifty-eight of the cases were removed to the Isolation Wards, two were treated at home and three died at home prior to notification. There were nine secondary cases. Fifty-five of the cases had never been immunised. Eight of the cases had been immunised previously, but developed mild attacks.

#### MENINGOCOCCAL MENINGITIS:

|                        | Europeans. | Non-Europeans. | Total.  |
|------------------------|------------|----------------|---------|
| Local cases .. .. .    | 6 (8)      | 7 (9)          | 13 (17) |
| Imported cases .. .. . | 3 (9)      | 5 (15)         | 8 (24)  |

There were four deaths among the local cases, three Europeans and one Bantu. All the cases were removed to hospital.

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

|                         | LOCAL.     |                | IMPORTED.  |                |
|-------------------------|------------|----------------|------------|----------------|
|                         | Europeans. | Non-Europeans. | Europeans. | Non-Europeans. |
| Poliomyelitis .. .. .   | 1          | —              | 5          | —              |
| Malaria .. .. .         | —          | —              | 1          | —              |
| Leprosy .. .. .         | —          | —              | —          | 1              |
| Encephalitis .. .. .    | 4          | —              | 3          | —              |
| Undulant Fever .. .. .  | 1          | —              | —          | —              |
| Erysipelas .. .. .      | 4          | 1              | 5          | 1              |
| Trachoma .. .. .        | —          | —              | —          | 1              |
| Puerperal Fever .. .. . | 2          | —              | —          | 4              |

#### HERCULES AREA:

##### TYPHOID FEVER:

|                               | Europeans. | Non-Europeans. | Total.  |
|-------------------------------|------------|----------------|---------|
| Local cases .. .. .           | 5 (3)      | 36 (25)        | 41 (28) |
| Imported cases .. .. .        | 0 (1)      | 2 (6)          | 2 (7)   |
| Deaths in local cases .. .. . | 0 (0)      | 1 (0)          | 1 (0)   |

#### Local cases:

Two of the non-Europeans were Euraficans, one of whom died. Thirty-seven of the cases were removed to hospital and four were treated at home.

#### Distribution of cases:

|                                                      | European. | Non-European. |
|------------------------------------------------------|-----------|---------------|
| Location area of Lady Selborne and Claremont .. .. . | —         | 24            |
| Industrial Native Compounds .. .. .                  | —         | 12            |
| Daspoort Estate .. .. .                              | 2         | —             |
| Remainder of Hercules .. .. .                        | 3         | —             |

The number of cases in the Lady Selborne area was about the same as during the previous year when the figure was 22 cases. Five were secondary cases. Four of these secondary cases occurred on the same premises and were already infected by the time the first case was notified

One of the Bantu cases had a double infection of typhoid and malaria. The malaria infection was of plasmodium vivax type. The history was that the patient, a Bantu male aged 14 years, had never left Pretoria. The accuracy of this history cannot however be relied on.

In three of the European cases and in the twelve cases from the compounds, the source of infection pointed to an infected water supply. An irrigation furrow from the Aapies River passes through the area where these cases occurred and the water level in the shallow wells, within a few feet of this furrow, on a number of properties, varies with the level in this furrow. It is also known that stormwater from the Bantule Location, during thunderstorms floods into the Aapies River at a point above where this furrow leaves the river. If one bears in mind the unhygienic habits of Bantu children, especially those who have recently come from rural areas, then it can be appreciated how the river water and subsequently the wells become polluted after thunderstorms. When the average incubation period of the disease was correlated with the occurrence of cases and thunderstorms, the possibility of infected water as a source of infection seemed to be supported. Repeated attempts to isolate typhoid organisms from the water were unsuccessful. The provision of a wholesome piped water supply to the incorporated area of Hercules is an essentiality which is, I am happy to say, in the process of realisation. When this is accomplished, it should be accompanied by a considerable drop in the typhoid incidence in that area.

Phage-typing:

The following types were found in the Hercules area:—

[illegible]

Tests carried out for Possible Carrier State:

Seven persons were tested during the year.

The kitchen staff (4) at one of the compounds, was tested and one of the boys whose blood gave a Vi-positive reaction, was removed to the carrier camp for further observation. Stool and urine specimens however, were all negative for *B. typhosus*.

Imported infections:—

Two Bantus in the location area contracted their infection outside the Municipal area.

## TUBERCULOSIS:

|                             | Europeans. | Non- Europeans. | Total.   |
|-----------------------------|------------|-----------------|----------|
| Local cases . . . .         | 5 (5)      | 126 (74)        | 131 (79) |
| Imported infections . . . . | 1 (0)      | 26 (24)         | 27 (24)  |

Seven of the 126 non-Europeans were Eurafricans and 119 Bantus.

Local Cases:

The various forms in which the disease occurred:—

|                     | Pul-<br>monary. | Mili-<br>ary. | Menin-<br>gitic. | Spinal. | Glan-<br>dular. | Renal. | Other<br>forms. | Total. |
|---------------------|-----------------|---------------|------------------|---------|-----------------|--------|-----------------|--------|
| Europeans ..        | 5               | —             | —                | —       | —               | —      | —               | 5      |
| Non-<br>Europeans.. | 107             | 3             | 10               | 3       | 1               | 1      | 1               | 126    |
|                     | 112             | 3             | 10               | 3       | 1               | 1      | 1               | 131    |

All the non-European cases except one, were from the location area.

Of the 131 local cases, 71, all non-Europeans, died during the year, 67 in Pretoria and four elsewhere.

Forty-one were only notified on death. Twenty-four died within three months, five within six months and one within nine months of notification.

One European and 18 non-Europeans gave a familial history.

How notified:

|                                           |            |
|-------------------------------------------|------------|
| By Lady Selborne Government Health Centre | 37         |
| " Tuberculosis and other Clinics.         | 32         |
| " Registrar of Births and Deaths Returns  | 25         |
| " Private Practitioners                   | 12         |
| " Pretoria Hospital and Isolation Wards.  | 19         |
| " Other Means                             | 6          |
| <b>Total</b>                              | <b>131</b> |

**Imported Infections:**

One European and 26 non-Europeans who took up residence in the Hercules area had contracted the disease prior to coming to live here.

The European and 13 of the non-Europeans have since died.

**SCARLET FEVER:**

|                             | Europeans. | Non-Europeans. | Total.  |
|-----------------------------|------------|----------------|---------|
| Local cases .. .. .         | 23 (12)    | 1 (0)          | 24 (12) |
| Imported infections .. .. . | 2 (1)      | 0 (0)          | 2 (1)   |

One of the cases was an adult, ten were scholars and thirteen were children of pre-school age.

Six of the patients were removed to the Isolation Wards and 18 were treated at home. There were three secondary cases.

**DIPHTHERIA:**

|                             | Europeans. | Non-Europeans. | Total.  |
|-----------------------------|------------|----------------|---------|
| Local cases .. .. .         | 30 (10)    | 48 (22)        | 78 (32) |
| Imported infections .. .. . | 0 (1)      | 1 (0)          | 1 (1)   |

The non-European cases were all Bantus from the Location area.

Seven of the cases died — two Europeans and five Bantus.

Three of the cases were adults, 24 were scholars and 51 were children of pre-school age.

Forty-six of the cases were removed to the Isolation Wards and 32 were treated at home. There were six secondary cases. Seventy-one of the cases had never been immunised.

**MENINGOCOCCAL MENINGITIS:**

|                        | Europeans. | Non-Europeans. | Total. |
|------------------------|------------|----------------|--------|
| Local cases .. .. .    | 3 (1)      | 5 (13)         | 8 (14) |
| Imported cases .. .. . | 0 (0)      | 0 (0)          | 0 (0)  |

There were three deaths; one European and two Bantus.

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

|                         | LOCAL.    |               | IMPORTED. |               |
|-------------------------|-----------|---------------|-----------|---------------|
|                         | European. | Non-European. | European. | Non-European. |
| Poliomyelitis .. .. .   | —         | 1             | —         | —             |
| Malaria .. .. .         | —         | 1             | —         | —             |
| Leprosy .. .. .         | 1         | —             | —         | —             |
| Encephalitis .. .. .    | 1         | —             | —         | —             |
| Trachoma .. .. .        | —         | 2             | —         | —             |
| Puerperal Fever .. .. . | —         | 1             | —         | —             |
| Ophthalmia Neonatorum   | —         | 2             | —         | —             |

**STATISTICAL ANALYSIS OF INFECTIOUS DISEASES FOR PRETORIA INCLUDING HERCULES.****TYPHOID FEVER:**

|                                 | Europeans. | Non-Europeans. | Total.    |
|---------------------------------|------------|----------------|-----------|
| Local cases .. .. .             | 27 (16)    | 64 (45)        | 91 (61)   |
| Imported cases .. .. .          | 38 (22)    | 121 (91)       | 159 (113) |
| Deaths in Local Cases .. .. .   | 0 (0)      | 4 (0)          | 4 (0)     |
| Attack Rate Local Cases .. .. . | ·21 (·12)  | ·65 (·41)      | ·41 (·25) |
| Death Rate .. .. .              | 0% (0%)    | 6·25% (0%)     | 4·4% (0%) |

**Results of Phage typing:**

|                             |    |
|-----------------------------|----|
| Type A .. .. .              | 10 |
| Type E. 1 .. .. .           | 6  |
| Type F. 1 .. .. .           | 1  |
| Untyped strains .. .. .     | 23 |
| No culture obtained .. .. . | 46 |
| Typing not done .. .. .     | 5  |

**TUBERCULOSIS:**

|                                 | Europeans. | Non-Europeans. | Total.    |
|---------------------------------|------------|----------------|-----------|
| Local cases .. .. .             | 35 (37)    | 227 (168)      | 262 (205) |
| Imported cases .. .. .          | 23 (33)    | 103 (83)       | 126 (116) |
| Attack Rate—Local cases .. .. . | ·27 (·28)  | 2·3 (1·53)     | 1·1 (·85) |

The various forms in which the disease occurred:—

|               | Pul-<br>monary. | Mili-<br>ary. | Menin-<br>gitic. | General. | Spinal. | Cerebral. | Renal. | Myo-<br>cardial. | Total. |
|---------------|-----------------|---------------|------------------|----------|---------|-----------|--------|------------------|--------|
| Europeans ..  | 31              | —             | 1                | 1        | —       | 1         | 1      | —                | 35     |
| Non-Europeans | 191             | 10            | 13               | 4        | 6       | 1         | 1      | 1                | 227    |
|               | 222             | 10            | 14               | 5        | 6       | 2         | 2      | 1                | 262    |

#### SCARLET FEVER:

|                        | Europeans. | Non-Europeans. | Total.    |
|------------------------|------------|----------------|-----------|
| Local cases .. .. .    | 283 (227)  | 1 (1)          | 284 (228) |
| Imported cases .. .. . | 16 (11)    | — (—)          | 16 (11)   |

#### DIPHTHERIA:

|                        | Europeans. | Non-Europeans. | Total.   |
|------------------------|------------|----------------|----------|
| Local cases .. .. .    | 63 (58)    | 78 (39)        | 141 (97) |
| Imported cases .. .. . | 38 (38)    | 48 (27)        | 86 (65)  |

#### MENINGOCOCCAL MENINGITIS:

|                        | Europeans. | Non-Europeans. | Total.  |
|------------------------|------------|----------------|---------|
| Local cases .. .. .    | 9 (9)      | 12 (22)        | 21 (31) |
| Imported cases .. .. . | 3 (9)      | 5 (15)         | 8 (24)  |

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

|                       | LOCAL.     |                | IMPORTED.  |                |
|-----------------------|------------|----------------|------------|----------------|
|                       | Europeans. | Non-Europeans. | Europeans. | Non-Europeans. |
| Poliomyelitis .. ..   | 1          | 1              | 5          | —              |
| Malaria .. .. .       | —          | 1              | 1          | —              |
| Leprosy .. .. .       | 1          | —              | —          | 1              |
| Encephalitis .. ..    | 5          | —              | 3          | —              |
| Undulant Fever .. ..  | 1          | —              | —          | —              |
| Erysipelas .. .. .    | 4          | 1              | 5          | 1              |
| Trachoma .. .. .      | —          | 2              | —          | 1              |
| Puerperal Fever .. .. | 2          | 1              | —          | 4              |
| Ophthalmia            |            |                |            |                |
| Neonatorum .. ..      | —          | 2              | —          | —              |

#### 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 100 in an emergency.

Of the 70 beds, 50 are in the two European sections and 20 are in the non-European section.

The total number of cases treated this year, both Europeans and non-Europeans was 685. This is a decrease of 107 on last year's admissions and of 243 on the figures given in the report for 1948.

As explained in previous reports, half the available beds which used to be reserved for typhoid cases are used by patients suffering from Pulmonary Tuberculosis, who are unsuitable for admission to a Sanatorium. They are all however open cases and are a source of danger unless isolated. The length of stay of such patients is indefinite and periods of two years and over in hospital are quite common.

The admission of such cases has resulted in limitation of accommodation for other types of infectious disease, and this in turn has caused a marked fall in the total number of patients admitted during the year.

#### Total Admissions:

685 of which 445 were Europeans and 240 non-Europeans.

The area distribution was:—

| Pretoria Municipality. |                | Outside Areas. |                |
|------------------------|----------------|----------------|----------------|
| Europeans.             | Non-Europeans. | Europeans.     | Non-Europeans. |
| 311                    | 117            | 134            | 123            |

**PULMONARY TUBERCULOSIS:**

64 Patients were admitted. Of these, 56 were Pretoria residents and eight were living outside the Municipal area.

| Pretoria.  |                | Other Areas. |                |
|------------|----------------|--------------|----------------|
| Europeans. | Non-Europeans. | Europeans.   | Non-Europeans. |
| 42         | 14             | 5            | 3              |

Two of the Europeans and five of the non-Europeans died.

**Pneumothorax refills:**

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

During the year 310 pneumothorax refills and 106 pneumoperitoneum refills were given.

**DIPHTHERIA:**

192 Patients and seven carriers were treated during the year. All but one of the carriers were Pretoria residents.

**Distribution:**

Pretoria 61, Hercules and Lady Selborne 46, other areas 85.

There were 95 Europeans and 97 non-Europeans.

The disease this year was characterised by an increased incidence and severity, a large number of „bull neck” cases which were nearly always fatal, and an increased necessity for tracheotomy operations. Europeans and non-Europeans were attacked almost equally. There were six European deaths and 20 non-Europeans deaths. Only four of the children who died were over five years of age, the other sixteen were toddlers between one and four years old.

There were no deaths over the age of ten years. Fourteen of the patients who died suffered from the „bull neck” type of the disease.

**Tracheotomies:**

Twenty tracheotomies were performed and sixteen of these patients recovered.

There was a marked difference between the case fatality rate of local patients and those who came from outside; the reasons for death, as in previous years, were the delay in obtaining medical advice and the long distances to be travelled before the patient reaches hospital.

The incidence in Pretoria is far too high and will remain so until parents take heed of the need of immunising their children.

**Case Fatality Rate:**

|               |    |    |    |    |    |    |    |    |    |    |    |       |
|---------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| Pretoria      | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8.4%  |
| Outside Areas | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 20%   |
| All cases     | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 13.5% |

**TYPHOID FEVER:**

The total number of cases treated was 125. One local European typhoid carrier was treated for the carrier state. Of the patients, 53 were Europeans, none of whom died and 72 non-Europeans of whom four died.

There were no complications in the European group but two patients suffered relapses.

Of the four non-European deaths two were children aged four and two years respectively who died of a concurrent broncho-pneumonia and the other two were adults who were late admissions and died of toxic myocarditis. The youngest patient was three months old.

**Distribution:**

Pretoria 31, Hercules and Lady Selborne 14, other areas 80.

**Case Fatality Rate:**

|              |    |    |    |    |    |    |    |    |    |    |    |       |
|--------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| European     | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | Nil % |
| Non-European | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 5.5%  |
| Combined     | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3.2%  |

**SCARLET FEVER:**

The total number of patients treated was 81 all of whom were European persons.

**Distribution:**

Pretoria 64, Hercules 6, Other areas 11.

There were no deaths and no complications.

**MEASLES:**

12 Cases were admitted nine of which were complicated by broncho-pneumonia.

**Distribution:**

Pretoria 6, Hercules and Lady Selborne nil, other areas 6.  
There were no deaths.

**MENINGOCOCCAL MENINGITIS:**

Only seven patients were admitted during the year. One death occurred in a European baby of a year old, two hours after admission. A patient suffering from Waterhouse-Friedrichson syndrome recovered.

**Distribution:**

Pretoria 2, Hercules and Lady Selborne 2, other areas 3.

**Case Fatality rate:**

14.2%.

**POLIOMYELITIS:**

Five Europeans and one native were admitted.

**Distribution:**

Pretoria 1, Hercules 1, other areas 4.

Two European patients aged 28 and 12 years respectively died, the disease in them taking the form of an ascending Landry's type of paralysis.

**GERMAN MEASLES:**

Nine nurses were admitted, all from the General Hospital.

**WHOOPING COUGH:**

Five European children and one non-European infant were admitted, all suffering from a concurrent broncho-pneumonia.

There were no deaths.

**Distribution:**

Pretoria 4, Hercules and Lady Selborne 1, other areas 1.

**MUMPS:**

38 Europeans and eight non-Europeans were admitted. 17 Patients were nurses in training, nine were males suffering from orchitis—the rest were residents of hotels or hostels in the City. There were no deaths.

**ERYSIPELAS:**

Seven Europeans and one non-European were treated.

**Distribution:**

Pretoria 2, other areas 6.  
There were no deaths.

**VENEREAL DISEASES:**

19 Cases needed admission of whom five were natives.

The types of venereal disease were as follows:—

|                                    |    |                |
|------------------------------------|----|----------------|
| Secondary Syphilis .. .. .         | 3  | Non-Europeans. |
| Syphilitic Pemphigus .. .. .       | 2  | Non-Europeans. |
| Congenital Syphilis .. .. .        | 1  | European.      |
| Gonorrhoea .. .. .                 | 1  | European.      |
| Gonococcal Vulvo-vaginitis .. .. . | 12 | Europeans.     |

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 newcomers are allowed to mix with the other children.

**CHICKEN POX:**

11 Europeans and 11 non-Europeans were admitted.

**Distribution:**

Pretoria 16, Hercules and Lady Selborne nil, other areas 6.

One European male of 82 years had Herpes Zoster which was followed a few days later by chicken pox. There were no deaths.

# ENCEPHALITIS:

Four cases of encephalitis, one of whom came from Pretoria, were admitted during the year. They were all post-infective encephalitides and followed measles, mumps, whooping cough and chicken pox respectively. All patients recovered.

# PUERPERAL SEPSIS:

Two Europeans from Pretoria and three non-Europeans from outside areas were treated in hospital. All five patients recovered.

# LESS COMMON DISEASES:

These included two cases of infectious mononucleosis, relapsing fever 1, influenzal meningitis 1, roseola infantum 1, murine typhus 1, Malta fever 1, acute streptococcal septicaemia 1, leprosy 1, Stevens-Tolmson syndrome 1 — a total of 10 cases. There were no deaths.

# OBSERVATION CASES:

51 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 .. .. .             | 13 |
| Tracheo-bronchitis provisionally diagnosed as diphtheria .. .. .            | 3  |
| Tuberculous adenitis provisionally diagnosed as diphtheria .. .. .          | 2  |
| Agranulocytic Angina provisionally diagnosed as diphtheria .. .. .          | 1  |
| Broncho-pneumonia provisionally diagnosed as diphtheria .. .. .             | 1  |
| Monilliasis provisionally diagnosed as diphtheria .. .. .                   | 1  |
| Acute tonsillitis provisionally diagnosed as scarlet fever .. .. .          | 3  |
| Acute abdomen provisionally diagnosed as scarlet fever .. .. .              | 1  |
| Acute influenza provisionally diagnosed as typhoid .. .. .                  | 6  |
| Acute enteritis provisionally diagnosed as typhoid .. .. .                  | 1  |
| Pelvic peritonitis provisionally diagnosed as typhoid .. .. .               | 1  |
| Acute meningism provisionally diagnosed as meningitis .. .. .               | 5  |
| Acute lobar pneumonia provisionally diagnosed as pulm. tuberculosis .. .. . | 3  |
| Enema rash provisionally diagnosed as measles .. .. .                       | 1  |
| Tracheo-bronchitis provisionally diagnosed as measles .. .. .               | 1  |
| Tracheo-bronchitis provisionally diagnosed as whooping cough .. .. .        | 2  |
| Thread worm vaginitis provisionally diagnosed as gonorrhoea .. .. .         | 1  |
| Salivary calculus provisionally diagnosed as mumps .. .. .                  | 1  |
| Enteritis with meningism provisionally diagnosed as poliomyelitis .. .. .   | 2  |
| Polynuritis provisionally diagnosed as encephalitis .. .. .                 | 1  |
| Nephritis with uraemia provisionally diagnosed as encephalitis .. .. .      | 1  |

TOTAL .. .. . 51

There were no deaths in this group.

The following tables „A” and „B” show the total number of cases, the distribution and the deaths from various diseases.

TABLE „A”.

| Type of Disease.                 | Europeans. |           | Non-Europeans. |           |
|----------------------------------|------------|-----------|----------------|-----------|
|                                  | Local.     | Imported. | Local.         | Imported. |
| Pulmonary Tuberculosis .. .. .   | 42         | 5         | 14             | 3         |
| Diphtheria .. .. .               | 57         | 38        | 50             | 47        |
| Diphtheria Carriers .. .. .      | 3          | 1         | 3              | 0         |
| Typhoid Fever .. .. .            | 18         | 35        | 27             | 45        |
| Typhoid Fever Carrier .. .. .    | 1          | 0         | 0              | 0         |
| Scarlet Fever .. .. .            | 70         | 11        | 0              | 0         |
| Measles .. .. .                  | 3          | 4         | 3              | 2         |
| Meningococcal Meningitis .. .. . | 3          | 3         | 1              | 0         |
| Acute Poliomyelitis .. .. .      | 1          | 4         | 1              | 0         |
| German Measles .. .. .           | 9          | 0         | 0              | 0         |
| Whooping Cough .. .. .           | 4          | 1         | 1              | 0         |
| Mumps .. .. .                    | 34         | 4         | 7              | 1         |
| Erysipelas .. .. .               | 2          | 5         | 0              | 1         |
| Venereal Disease .. .. .         | 14         | 0         | 1              | 4         |
| Chicken Pox .. .. .              | 11         | 0         | 5              | 6         |
| Encephalitis .. .. .             | 1          | 3         | 0              | 0         |
| Puerperal Sepsis .. .. .         | 2          | 0         | 0              | 3         |
| Less Common Diseases .. .. .     | 5          | 3         | 0              | 2         |
| Non-Infectious .. .. .           | 30         | 16        | 2              | 3         |
| Lodgers .. .. .                  | 1          | 1         | 2              | 6         |
| TOTALS .. .. .                   | 311        | 134       | 117            | 123       |

TABLE "B"

| Type of Disease.                 | Pretoria.  | Other Areas. | Total.     | Deaths.   |
|----------------------------------|------------|--------------|------------|-----------|
| Pulmonary Tuberculosis .. .. .   | 56         | 8            | 64         | 7         |
| Diphtheria .. .. .               | 107        | 85           | 192        | 26        |
| Diphtheria Carriers .. .. .      | 6          | 1            | 7          | 0         |
| Typhoid Fever .. .. .            | 45         | 80           | 125        | 4         |
| Typhoid Fever Carrier .. .. .    | 1          | 0            | 1          | 0         |
| Scarlet Fever .. .. .            | 70         | 11           | 81         | 0         |
| Measles .. .. .                  | 6          | 6            | 12         | 0         |
| Meningococcal Meningitis .. .. . | 4          | 3            | 7          | 0         |
| Poliomyelitis .. .. .            | 2          | 4            | 6          | 2         |
| German Measles .. .. .           | 9          | 0            | 9          | 0         |
| Whooping Cough .. .. .           | 5          | 1            | 6          | 0         |
| Mumps .. .. .                    | 45         | 1            | 46         | 0         |
| Erysipelas .. .. .               | 2          | 6            | 8          | 0         |
| Veneral Disease .. .. .          | 15         | 4            | 19         | 0         |
| Chicken Pox .. .. .              | 16         | 6            | 22         | 0         |
| Encephalitis .. .. .             | 1          | 3            | 4          | 0         |
| Puerperal Sepsis .. .. .         | 2          | 3            | 5          | 0         |
| Less Common Diseases .. .. .     | 8          | 2            | 10         | 0         |
| Non-Infectious .. .. .           | 32         | 19           | 51         | 0         |
| Lodgers .. .. .                  | 3          | 7            | 10         | 0         |
| <b>TOTAL .. .. .</b>             | <b>435</b> | <b>250</b>   | <b>685</b> | <b>39</b> |

TOTAL CASES TREATED (EXCLUDING LODGERS) = 675

TOTAL DEATHS .. .. . = 39

OVERALL MORTALITY RATE .. .. . = 5.7%

#### SPECIAL DISEASES CLINICS.

##### TUBERCULOSIS SECTION:

Five Tuberculosis clinics are conducted weekly. For Europeans, clinics 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 p.m. – 4 p.m. At the Municipal Clinic situated within the Pretoria General Hospital grounds.
- (b) Wednesdays: 2 p.m. – 4 p.m. } At the Municipal Polyclinic, Atteridgeville.
- Fridays: 11 a.m. – 1 p.m. }
- (c) Thursdays: 2 p.m. – 4 p.m. In a section of the Administration building in Bantule Location.

From the accompanying table it will be noted that there is a slight decrease in the number of attendances among Europeans and an increase among non-Europeans as compared with the figures of the previous year.

A number of cases was notified through private practitioners, the out-patient department, Pretoria General Hospital and the non-European Influx Control section of the Municipality.

Regular examinations of all contacts of cases are undertaken, both from the point of view of detection of early cases and prevention of the spread of infection. Sputum and X-ray examinations of all cases and where necessary of all contacts are done at regular intervals.

All cases are treated, constantly supervised and educated in preventive measures. Every case notified is immediately and carefully investigated. Cases and contacts when visited at their homes are repeatedly advised regarding personal hygiene and supplied with the necessary disinfectants. Printed instructions are issued to patients regarding the nature of the disease and the manner by which it is spread. Essential foodstuffs, such as milk, meat, butter, meal, vegetables, clothing and blankets are given free of charge where necessary.

Free conveyance to the clinics is provided for poorer patients from the outlying areas of the City and from the surrounding areas outside the Municipal boundaries. Portable tuberculosis huts are supplied wherever possible, especially when the case is found to be suffering from an open lesion and resides in an overcrowded home. These huts are collapsible and can be erected in the yards of patients' homes.

Financial assistance was again obtained as during previous years through the Government's scheme for all indigent cases suffering from tuberculosis (Europeans, Indians, Coloureds and Natives) especially where the sufferer is the breadwinner.

All Children discharged from the Preventorium were visited regularly and records were kept of their progress.

The long waiting list for institutional treatment continued to be the most urgent problem during the year. The shortage of sanatorium beds is one of the biggest handicaps in our anti-tuberculosis work.

The Pretoria Branch of the South African National Tuberculosis Association (which started as the Pretoria and District Anti-Tuberculosis Association) has worked in close collaboration with this Department. The immediate aims of the Branch are:—

To raise funds in order to assist tuberculosis sufferers and their families.

To obtain suitable employment for those who have been discharged from institutions and for other suitable cases.

To assist with occupational and diversional therapy for both Hospital and home-treated cases.

To assist in the housing or rehousing of tuberculosis sufferers.

The Branch has collected a substantial sum of money which will be used to finance the work in connection with the establishment of a settlement for families affected by tuberculosis.

#### RETURN OF TUBERCULOSIS PATIENTS FOR THE YEAR JULY 1950 TO JUNE 1951.

|                                                                    | <i>European.</i> |         | <i>Non-European.</i> |         | <i>Total.</i> |         |
|--------------------------------------------------------------------|------------------|---------|----------------------|---------|---------------|---------|
|                                                                    | 1950-51          | 1949-50 | 1950-51              | 1949-50 | 1950-51       | 1949-50 |
| Number of new cases coming under treatment during the year .. .. . | 28               | 31      | 161                  | 154     | 189           | 185     |
| Total number of attendances                                        | 646              | 706     | 3,404                | 2,425   | 4,050         | 3,131   |
| Number of home visits paid by Health Visitors .. ..                | 3,146            | 3,748   | 9,812                | 8,245   | 12,958        | 11,993  |

#### VENEREAL DISEASES.

##### 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 part-time non-European female nurse, one full-time and two part-time non-European male orderlies. The doctor in charge is assisted by one of the Assistant Medical Officers.

##### ACCOMMODATION:

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

(b) **Atteridgeville Clinic:** During the year, the new Polyclinic was opened and the V.D. Clinic is now suitably accommodated.

(c) **Bantule Clinic:** This is held in a Section of the Administration Buildings in Bantule.

(d) **Lady Selborne:** The arrangement, by which the Venereologist attends the Government Health Centre at Lady Selborne once weekly to see cases in consultation with the permanent staff there, continues to work satisfactorily.

##### Clinic Hours:

**Mondays:** 11 a.m. to 1 p.m. and 2 to 4.30 p.m.—Non-European mixed.

**Tuesdays:** 8.30 a.m. to 10 a.m. — European males.

11 a.m. to 12.30 p.m. — Non-European mixed. (Bantule).

2 p.m. to 4.30 p.m. — European females and children.

**Wednesdays:** 9 a.m. to 10 a.m. — European females and children.

4.15 p.m. to 7 p.m. — Non-European males.

**Thursdays:** 10.30 a.m. to 1 p.m. — Non-European mixed. (Atteridgeville).

2 p.m. to 4.30 p.m. — Non-European mixed.

4.45 p.m. to 5.15 p.m. — European females.

**Fridays:** 9 a.m. to 10 a.m. — European special consultation.

10.30 a.m. to 12.30 p.m. — Lady Selborne consultation.

5 p.m. to 6.30 p.m. — European males.

The hours are so arranged as to cater for office and shift workers.

Special consultations are arranged without charge at the request of local practitioners.

### NON-EUROPEAN SERVICES:

There has been a drop of about 10% in the number of new cases and in the total attendances. There is a satisfactory increase in the numbers of natives „discharged as cured”, which shows that more of them are completing the full course of treatment.

Once again, attention must be drawn to the fact that facilities for anti-V.D. treatment have not yet been provided in the Peri-Urban area of Pretoria. This matter has already been discussed with the Department of Health and the Peri-Urban Medical Officer of Health.

Thanks to the assistance of the Union Department of Health, we have been able to give free rail warrants to those natives living near the railways within a 20-mile radius of Pretoria, and this has been of great assistance in encouraging regular attendance.

Routine examination of urine of non-specific urethritis cases has revealed, once again, a substantial number of cases as being due to bilharzia.

### EUROPEAN SERVICES:

There was a slight increase in the number of new cases reporting for examination. It will be noted that 80% of these cases were found to be free of V.D. It has been found that lectures and press publicity are invariably followed by an increase in the number of people requesting routine check-ups.

The routine examination of children committed to places of safety and orphanages, as well as routine examination of the inmates of the Irene Homes and the Armstrong Berning Tehuis has been continued. An analysis of the cases examined follows.

**GROUP I: Includes Children from Orphanages and Places of Safety (Europeans only) and entailed 100 boys and 103 girls.**

The results were as follows:—

|               | Positive for<br>Syphilis. | Positive for<br>Gonorrhoea | Negative.                             | Total Cases<br>Seen. |
|---------------|---------------------------|----------------------------|---------------------------------------|----------------------|
| Males .. ..   | 6 (6%)                    | 0                          | 94 (94%)                              | 100                  |
| Females .. .. | 11 (10.3%)                | 16 (14.9%)                 | 80 (74.8%)                            | 103                  |
|               |                           |                            | (4 children had<br>double infection). |                      |
| Total .. ..   | <u>17 (8.2%)</u>          | <u>16 (7.8%)</u>           | <u>174 (84.0%)</u>                    | <u>203</u>           |

**GROUP II:—Includes Delinquent Older Girls and Unmarried Mothers (Europeans only) and entailed 101 females. The results were as follows:—**

|               | Positive for<br>Syphilis. | Positive for<br>Gonorrhoea. | Negative.         | Total Cases<br>Seen. |
|---------------|---------------------------|-----------------------------|-------------------|----------------------|
| Females .. .. | <u>9 (8.9%)</u>           | <u>3 (3%)</u>               | <u>89 (88.1%)</u> | <u>101</u>           |



## INSPECTION OF NURSING HOMES AND HOSPITALS.

All Nursing Homes and Hospitals other than the Pretoria General Hospital and the Andrew McColm 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 in August 1951.

There are two Hospitals, five Nursing Homes and one Convalescent Home in the City. No further Nursing Homes have been established during the year and one General Nursing Home has been abandoned. All these establishments were generally satisfactory.

One Hospital (85 beds) and three Nursing Homes of 35, 9 and 46 beds respectively are purely for maternity cases. The Nursing Home with 46 beds is for non-Europeans. The shortage of maternity beds, especially in the case of the non-Europeans, still remains an important problem which should be dealt with if we are to prevent confinements being conducted under unsatisfactory conditions.

In addition to the 46 beds for non-European maternity cases in the Holy Cross Nursing Home, Hercules, there are twelve beds in the maternity section of the Pretoria General Hospital. The City Council pays the Holy Cross Nursing Home a fixed annual grant.

As during previous years, those in charge of these Hospitals and Homes have been most co-operative and helpful.

## CHILD WELFARE ACTIVITIES.

During the past year the work in this section has steadily increased. Apart from an increase in the number of clinics and attendances members of the staff have also rendered more public service and have in increasing numbers been serving on committees which are of public health interest. As it is felt that the education of the public is such a very important part of the work, this has been encouraged.

During the year it became clear that another fulltime Medical Officer of Child Welfare work had to be appointed. This was especially necessary for European Child Welfare work, as can be seen from the number of children seen by the doctor at the clinics. It is very nearly double that of the previous year.

The new Medical Officer assumed duties on the 1st May, 1951.

I again have to stress the fact that the public are very urgently in need of child guidance clinics. Many Mothers are in need of advice. As this is a very time consuming work I have to report with regret that we cannot give the services asked for. Apart from not having the time, the space is also lacking. The work at the Central clinic has again outgrown the available space, and the congestion at some clinics makes the work difficult for the staff and uncomfortable for the public.

Our efforts to get more suitable accommodation for clinics in the suburbs have not been successful. At some places our difficulties have been aggravated by the fact that the school authorities have taken over halls in which we previously conducted clinics.

It is important to realize that attendances at clinics are very greatly affected by the adequacy of the premises. At Hercules the space is adequate but the alterations to the building have not yet been done.

## EUROPEAN CHILD WELFARE.

The number of Child Welfare clinics in Pretoria and Hercules is 29. At 12 of these a doctor is in attendance. At most of these clinics there have been substantial increases in attendances, at some however there have been decreases. This decrease can in some instances be explained by shifting of staff, for example at a few clinics where a doctor was previously in attendance it has been stopped. At a few others we had to move to different quarters. Changes in health visiting staff also reflects on the attendance. The increased attendance at the clinics is much bigger than can be attributed to the increased number of babies born for the period under consideration.

The expansion in work at the clinics is mostly in the Central area, Danville and Hercules. Those are the three centres where we have fairly adequate clinic premises.

## ATTENDANCES AT CLINICS.

(Figures for 1949-1950 in brackets.)

|            | First<br>Attendance. | Re-Attendance.  | Total<br>Attendances. | Seen by<br>Doctor. |
|------------|----------------------|-----------------|-----------------------|--------------------|
| 1950-51 .. | 1,673 (1,817)        | 23,051 (20,740) | 24,724 (22,557)       | 3,328 (1,834)      |

## DETAILED ATTENDANCES.

(Figures for 1949-1950 in brackets)

|                        | First<br>Attendances. | Re-Attendances. | Total<br>Attendances. | Seen by<br>Doctor. |
|------------------------|-----------------------|-----------------|-----------------------|--------------------|
|                        | 1950-1951             | 1950-1951       | 1950-1951             | 1950-1951          |
| Central (Tuesday) ..   | 76 (69)               | 998 (651)       | 1,074 (720)           | 601 (369)          |
| Central (Wednesday) .. | 76 (46)               | 892 (561)       | 968 (607)             | — (85)             |
| Central (Friday) ..    | 97 (63)               | 959 (727)       | 1,056 (790)           | — (214)            |
| Bloed Street .. ..     | 45 (72)               | 695 (585)       | 740 (657)             | — (—)              |
| West End .. ..         | 101 (131)             | 1,465 (1,230)   | 1,566 (1,361)         | 264 (124)          |
| Proclamation Hill ..   | 40 (42)               | 720 (498)       | 760 (540)             | 86 (48)            |
| Iscor .. ..            | 55 (45)               | 810 (512)       | 865 (557)             | — (—)              |
| Gezina .. ..           | 74 (71)               | 897 (1,013)     | 971 (1,084)           | 43 (69)            |
| Villieria 24th Avenue  | 104 (106)             | 1,095 (841)     | 1,199 (947)           | 228 (117)          |
| Villieria 30th Avenue  | 46 (91)               | 477 (616)       | 523 (707)             | — (—)              |
| Wonderboom South ..    | 69 (87)               | 868 (984)       | 937 (1,071)           | 99 (73)            |
| Mayville .. ..         | 109 (88)              | 902 (755)       | 1,011 (843)           | — (4)              |
| Capital Park .. ..     | 61 (83)               | 651 (877)       | 712 (960)             | — (—)              |
| Hatfield .. ..         | 76 (68)               | 876 (884)       | 952 (952)             | — (—)              |
| New Muckleneuk ..      | 59 (97)               | 786 (1,070)     | 845 (1,167)           | — (—)              |
| Sunnyside .. ..        | 119 (134)             | 1,281 (1,029)   | 1,400 (1,163)         | — (—)              |
| Riviera .. ..          | 44 (37)               | 563 (586)       | 607 (623)             | 92 (42)            |
| Salvokop .. ..         | 23 (70)               | 465 (486)       | 488 (556)             | — (—)              |
| Danville .. ..         | 51 (27)               | 1,119 (718)     | 1,170 (745)           | 326 (152)          |
| Defence Reserve ..     | 9 (27)                | 31 (327)        | 40 (354)              | — (—)              |
| Armstrong Berning ..   | 60 (29)               | 506 (399)       | 566 (428)             | 148 (65)           |
| Corrylyn Creche ..     | — (24)                | — (133)         | — (157)               | — (48)             |
| Arcadia .. ..          | 51 (34)               | 587 (623)       | 638 (657)             | — (—)              |
| Beatrix Street .. ..   | 1 (13)                | 8 (206)         | 9 (219)               | — (—)              |
| Showgrounds .. ..      | 17 (8)                | 370 (235)       | 387 (243)             | — (—)              |
| Hercules .. ..         | 174 (156)             | 3,141 (3,021)   | 3,315 (3,177)         | 1,439 (424)        |
| Booyens .. ..          | 72 (53)               | 1,236 (553)     | 1,308 (606)           | — (—)              |
| Mountain View ..       | 64 (46)               | 653 (620)       | 717 (666)             | — (—)              |
| Total .. ..            | 1,673 (1,817)         | 23,051 (20,740) | 24,724 (22,557)       | 3,328 (1,834)      |

## HOME VISITS BY HEALTH VISITORS.

(Figures for 1949-1950 in brackets.)

|                 | First Visits. | Subsequent<br>Visits. | Number of Sick<br>Children Visited. | Total Visits.   |
|-----------------|---------------|-----------------------|-------------------------------------|-----------------|
| 1950-1951 .. .. | 3,261 (3,209) | 8,983 (7,439)         | 1,888 (2,641)                       | 14,296 (13,484) |

There is no real decrease in the number of visits to sick children. Previously a large variety of visits were included under this heading. Since this year these have been sorted out and they have been called general visits. A total of 797, such visits were paid during the year.

## EUROPEAN ANTE-NATAL CLINICS.

(Figures for 1949-1950 in brackets)

|                           | Central.      | Proclamation<br>Hill. | Danville. | Hercules. | Total.        |
|---------------------------|---------------|-----------------------|-----------|-----------|---------------|
|                           | 1950-1951     | 1950-1951             | 1950-1951 | 1950-1951 | 1950-1951     |
| No. of new<br>cases .. .. | 374 (274)     | — (8)                 | 53 (62)   | 123 (145) | 550 (489)     |
| Total Atten-<br>dances .. | 1,586 (1,196) | — (41)                | 293 (308) | 820 (466) | 2,699 (2,011) |

The figures reflect a large increase in the attendances at the Central Ante-Natal clinic. The congestion on clinic days is beginning to hamper the work very seriously. If the premises were more suitable better services could be given to larger numbers of patients. A second clinic session is the only solution and this will start as soon as we have the requisite health visiting staff.

The „Preparation for Child Bearing" classes are becoming more and more popular. A total of 16 patients were given a full course of five to six classes. In addition to these a much larger number of patients are given a few selected exercises to relieve such complaints as backache. There is no doubt that the demand is increasing. The number of people whom we can help are limited by various factors, the chief one being that we insist that no patient should get this training unless she is prepared to attend our clinic for the full course. The reports from individual patients are so enthusiastic that it is felt that more of this type of educational work should be undertaken.

The routine Rh. factor testing of all pregnant women was continued during the year. Two patients had anti-bodies. In the one case a healthy baby was delivered and the other case premature labour started and the baby died soon after delivery.

Ante-Natal work at Hercules has also shown a marked increase. The gratifying feature is that in spite of the fact that the first attendance has hardly altered the re-attendances have nearly doubled. This shows that the patients are attending much more regularly. Supervision during pregnancy is still considered unnecessary by a large majority of the public. It therefore requires patient educational work to induce pregnant women to submit to regular health supervision.

During the year an arrangement was arrived at with the Dental clinic whereby we refer all pregnant women in need of dental care who cannot afford private dental attention, to the clinic in Prinsloo Street. It has on the whole been very difficult to convince the women that dental care is necessary and the response has been very poor. During the coming year a new system will be tried.

At the Ante-Natal clinics much stress is laid on the importance of maintaining general health and wellbeing and a well balanced diet during pregnancy. Detailed diet histories and diet analysis are done in certain selected cases. We were very fortunate in having the services of nutritionists from the Union Department of Health at these clinics. This service has unfortunately now been stopped because of shortage of staff.

#### EUROPEAN DIPHTHERIA AND WHOOPING COUGH IMMUNIZATION CLINICS.

Last year the number of children immunized was low probably on account of the newspaper publicity about the reputed association between poliomyelitis and immunization.

This year as a result of the minor diphtheria epidemic the attendances at all the clinics were very heavy for a few months. There was a very marked drop in requests for immunization against Whooping Cough.

Apart from the immunization at the regular clinics, requests came from several schools and institutions.

#### CLINIC RETURNS.

|                                                       |       |
|-------------------------------------------------------|-------|
| No. of cases immunized against Diphtheria .. .. .     | 2,471 |
| No. of cases immunized against Whooping Cough .. .. . | 115   |

#### MIDWIFERY SUPERVISION.

|                                         |     |
|-----------------------------------------|-----|
| No. of midwifery bags inspected .. .. . | 116 |
| Special visits to midwives .. .. .      | 21  |
| Visits to midwifery cases .. .. .       | 2   |
| Visits to maternity homes .. .. .       | 18  |

As the stillbirth rate both of confinements conducted at Nursing Homes and at private homes of patients was considered to be unduly high, a special investigation into each stillbirth is being conducted. A report will be submitted when more information is available.

#### NON-EUROPEAN CHILD WELFARE.

The new polyclinic at Atteridgeville was opened during May. The official opening of the clinic was performed by the Administrator Dr. W. Nicol on the 16th May, 1951. This big new building provides ample space for all the work normally conducted at such a centre. Every section is well equipped. The work is expanding steadily as reflected in the clinic returns.

This is due to the natural increase of the population and to cases coming from areas outside Pretoria, like Mooiplaas and the Peri-Urban Areas.

Thabong, the place of safety, is giving us much additional work as the children admitted are often neglected and in very poor health and require careful supervision and frequent checking.

Of the 213 deaths under five investigated 62 were from outside areas.

The native population in the central area is becoming very small. Only 96 first visits were paid for the total area. The first attendances at the clinic amount to 787 and the total re-attendances to 2,449. The explanation is that the majority are cases from the Peri-Urban Areas.

One additional native nurse was appointed during the year.

### ATTENDANCES AT CLINICS.

(Figures for 1949-1950 in brackets.)

|                    | Compound.     |               |               | Atteridgeville. | Bantule.      | Railway Compound. |
|--------------------|---------------|---------------|---------------|-----------------|---------------|-------------------|
|                    | Natives.      | Eurafricans.  | Asiatics.     |                 |               |                   |
| First attendances: |               |               |               |                 |               |                   |
| 1950-1951 ..       | 787 (620)     | 125 (151)     | 91 (110)      | 399 (315)       | 214 (182)     | 3 (17)            |
| Re-attendances:    |               |               |               |                 |               |                   |
| 1950-1951 ..       | 2,449 (2,513) | 2,693 (2,473) | 1,696 (1,509) | 8,454 (6,648)   | 4,536 (5,331) | 18 (381)          |
| Seen by doctor:    |               |               |               |                 |               |                   |
| 1950-1951 ..       | 617 (417)     | 832 (399)     | 268 (275)     | 2,417 (1,952)   | 702 (571)     | — (—)             |

### HOME VISITS.

(Figures for 1949-1950 in brackets.)

|                                     | Atteridgeville. | Compound.   |               |               | Bantule.  |
|-------------------------------------|-----------------|-------------|---------------|---------------|-----------|
|                                     |                 | Natives.    | Asiatics.     | Eurafricans.  |           |
| First visits to newly born infants: |                 |             |               |               |           |
| 1950-1951 .. ..                     | 461 (—)         | 96 (774)    | 223 (245)     | 99 (105)      | 274 (—)   |
| Subsequent visits:                  |                 |             |               |               |           |
| 1950-1951 .. ..                     | 7,118 (—)       | 957 (9,378) | 1,755 (2,112) | 1,953 (1,382) | 2,593 (—) |
| Visits to sick children:            |                 |             |               |               |           |
| 1950-1951 .. ..                     | 143 (—)         | 36 (818)    | 8 (69)        | 106 (52)      | 804 (—)   |
| No. of sick children visited:       |                 |             |               |               |           |
| 1950-1951 .. ..                     | 88 (—)          | 30 (479)    | 19 (38)       | 82 (31)       | 789 (—)   |

### NON-EUROPEAN ANTE-NATAL CLINICS.

(Figures for 1949-1950 in brackets.)

|                                   | Compound.     |                           | Atteridgeville. | Bantule.    | Total.        |
|-----------------------------------|---------------|---------------------------|-----------------|-------------|---------------|
|                                   | Natives.      | Eurafricans and Asiatics. |                 |             |               |
| No. of cases reporting at clinic: |               |                           |                 |             |               |
| 1950-1951 .. ..                   | 1,028 (624)   | 163 (120)                 | 440 (385)       | 208 (185)   | 1,889 (1,314) |
| No. of all attendances:           |               |                           |                 |             |               |
| 1950-1951 .. ..                   | 4,234 (2,775) | 808 (739)                 | 2,624 (1,816)   | 1,076 (934) | 8,742 (6,264) |

### NON-EUROPEAN IMMUNIZATION.

#### CLINIC RETURNS.

|                                                       |     |
|-------------------------------------------------------|-----|
| No. of cases immunized against Diphtheria .. .. .     | 330 |
| No. of cases immunized against Whooping Cough .. .. . | 380 |

#### FEEDING SCHEMES.

The infant Feeding Scheme at Bantule and the scheme for the feeding of the School and Pre-School child has gone on without interruption.

#### NURSERY SCHOOLS.

Medical inspection by the staff is still done at three Nursery Schools and one European creche and one Coloured creche.

In collaboration with the Union Department of Social Welfare, institutions housing children, as defined by the amendment No. 25 of 1944 of the Children's Act, has been inspected and reported on. It is hoped in this way to have greater control and to improve the standards of child care at such centres.

#### HEALTH EDUCATION.

Talks:—

- (1) Die Fisiese Sorg en Ontwikkeling van die Vyf-Jarige Kind.  
(The Physical Care and Development of the Five Year old Child.)
- (2) Mediese Aspekte wat in aanmerking geneem moet word wanneer die vyf jarige kind gewone skole moet bywoon.  
(Medical Aspects to be taken into consideration when the five year old child has to attend school.)

- (3) The Five Year olds.
- (4) Mediese Aspekte van Kleuterskole.  
(Medical Aspects of Nursery Schools.)
- (5) What Happens to the Child in Hospital.
- (6) The Physical Care of Children in Institutions.
- (7) Voorgeboortelike Voorligting.  
(Ante-Natal Preparation.)
- (8) Position of Women in Medicine.

A training course for Health Visitors was conducted by members of the Department at the Technical College.

In collaboration with the Department of Native Affairs an exhibit was arranged at the Industrial Exhibition. This was awarded a Special Gold Medal.

#### DENTAL SERVICES.

Much of the dental work has been transferred to the Dental Hospital. Expectant mothers and pre-school children are still being seen at the Dental Clinic.

Dental services for Non-Europeans have been expanded and improved during the past year.

### PRETORIA DENTAL CLINIC.

#### GENERAL.

The Clinic under the Board of Control representing the Provincial, Municipal, Union Health and Dental Authorities, has attempted during the year to carry on its progressive policy of rendering effective conservative dental treatment to the indigent children and principally emergency services for indigent and semi-indigent adults for a period of nine months.

In January 1951, the services for indigent adult patients were transferred to the University Dental School in order to provide adequate material for the training of dental students.

Services for pre-school children and ante- and post-natal cases were provided and, although a certain amount of advantage has been taken of these facilities there remains a great deal of patience to be exercised and hard work to be done in order to establish a full service for these groups.

The lack of interest displayed by these patients is mainly due to, in the case of pre-school children, the fact that five-year olds—hitherto the main source of supply of this group—are now school-going children and also because of prejudice of parents against the preservation of deciduous teeth with the result that emergency treatment is called for as a last resource. In the „ante- and post-natal” group a very small percentage of patients referred to the Clinic by the Municipal Health Department visit the Clinic at all and the majority who do attend are only interested in emergency services. Expectant mothers seem to be prejudiced against any form of dental treatment and only attend for extraction services when teeth are so badly decayed that toothache becomes unbearable. Educational propaganda for these groups is very desirable.

The non-European services — which became more or less full-time services in July 1950, have expanded considerably.

#### DENTAL EQUIPMENT.

Five new dental units were installed at the Clinic and the existing chairs were re-upholstered and spittoons re-ducoed. New forceps and other instruments were also purchased.

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

The members of these staffs rendered valuable services for Indigent and Semi-Indigent Adults until the end of December 1950, when the services were transferred to the University Dental School.

#### SCHOOL CHILDREN.

As the years go by the children are on the whole becoming more appreciative of conservative treatment. The fact that the staff has been able to do a certain amount of conservative work at the schools where the children are under the supervision of the school authorities has resulted in fewer children refusing conservative treatment than hitherto.

## STATISTICAL RECORDS.

|                                                             |        |
|-------------------------------------------------------------|--------|
| No. of schools at which examinations were conducted .. .. . | 39     |
| No. attending schools .. .. .                               | 25,343 |
| No. children examined .. .. .                               | 23,637 |
| No. examined requiring treatment .. .. .                    | 16,414 |
| No. of indigents .. .. .                                    | 14,769 |
| No. of indigents requiring treatment .. .. .                | 11,633 |
| No. of indigents requiring no treatment .. .. .             | 3,106  |

Owing to the fact that very few pupils from the Afrikaans Meisies Hoër, Afrikaans Seuns Hoër, the Girls' High and the Boys' High Schools attend the Clinic for treatment, their examination results have not been included in the above records, as also those of the Clapham High School. At this school 366 out of a total of 869 scholars were allowed to be examined as only those scholars who voluntarily submitted themselves for examination received this service.

## SUB-CLINICS (AT SCHOOLS):

|                                                       |       |
|-------------------------------------------------------|-------|
| No. of schools at which sub-clinics were held .. .. . | 13    |
| No. of children treated .. .. .                       | 1,198 |
| No. of teeth extracted .. .. .                        | 2,440 |

## MORNING CLINIC (AT CLINIC):

|                                 |     |
|---------------------------------|-----|
| No. of clinics held .. .. .     | 17  |
| No. of children treated .. .. . | 635 |
| No. of teeth extracted .. .. .  | 939 |

## MEERHOF CHRONIC SICK HOME:

|                                 |    |
|---------------------------------|----|
| No. of visits .. .. .           | 3  |
| No. of children treated .. .. . | 68 |
| No. of teeth extracted .. .. .  | 25 |
| No. of teeth filled .. .. .     | 52 |

In view of the change which took place in the Financial Year of the Clinic, Column No. 4 (Marked\*) appearing in the Comparative Table below is for a period of seventeen months instead of a year and this should be borne in mind when comparing the figures.

## FIVE YEAR PERIOD — COMPARATIVE TABLE.

|                                              | 1946   | 1947   | 1948   | 1949   | 1950   |
|----------------------------------------------|--------|--------|--------|--------|--------|
| No. of children examined .. .. .             | 11,911 | 18,278 | 18,253 | 19,241 | 23,637 |
| No. of new patients treated .. .. .          | 3,055  | 4,671  | 5,275  | 10,983 | 6,087  |
| No. of re-visits .. .. .                     | 2,769  | 8,055  | 5,371  | 6,733  | 5,834  |
| No. discharged—treatment completed .. .. .   | 292    | 788    | 1,179  | 1,810  | 1,453  |
| No. of fillings done .. .. .                 | 2,044  | 7,903  | 6,382  | 11,970 | 8,663  |
| No. of teeth extracted .. .. .               | 3,343  | 7,315  | 6,360  | 10,885 | 7,155  |
| No. root therapy and prophylaxis .. .. .     | —      | —      | 482    | 604    | 182    |
| No. casuals treated work completed .. .. .   | —      | 976    | 497    | 670    | 437    |
| No. total operations on children .. .. .     | 7,335  | 20,169 | 17,814 | 29,084 | 20,785 |
| No. total operations all departments .. .. . | 18,904 | 32,494 | 27,155 | 42,278 | 26,835 |

It is very gratifying to report that the Director of Education has now given his consent for school children to attend the Clinic during school hours for conservative treatment, as hitherto only a specified number of nearby schools were allowed to send children in for any but emergency treatment during school hours. If arrangements can be made for the necessary transport it should make a very big difference in the output of the work.

## NURSERY SCHOOLS.

These schools received dental examinations towards the end of 1950 but, owing to transport difficulties, few of the schools have been able to take advantage of the facilities provided for this pre-school group.

## THE MOBILE DENTAL UNIT.

The Mobile Dental Unit was used for extraction services at sub-clinics (see Statistical Records). It has also been used for conservative clinics conducted at the schools, when 552 children were treated, 641 fillings completed and 87 patients discharged with all treatment completed.

Owing to a shortage of operators and because a second examination of all schools became necessary so that the new Superintendent could meet the Principals of schools and also be in a position to assess the amount of treatment to be done, the Unit was not used for conservative treatment during the latter part of 1950.

## ADULTS.

The record of treatments completed as shown is for a period of nine months and shows that the extraction services were well maintained and also shows a marked increase in conservative treatment.

## NON- EUROPEAN DEPARTMENT SCHOOL CHILDREN.

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| No. of schools visited where examinations were undertaken .. .. . | 6     |
| No. of children examined .. .. .                                  | 2,044 |
| No. of children requiring treatment .. .. .                       | 1,232 |

A record sheet for all non-European groups is appended.

## ORTHODONTIC SERVICES.

There remains a great demand for these services which are being well maintained by Drs. Fouche and Allen. Attendances are excellent especially on Saturday mornings.

Twenty-one appliances were completed during the period under review.

# EUROPEANS.

| 1st. APRIL, 1950,<br><br>TO<br>31st. MARCH, 1951. | PATIENTS. |            |        |                      |          | TREATMENTS.   |           |               |              |              |                   |        |
|---------------------------------------------------|-----------|------------|--------|----------------------|----------|---------------|-----------|---------------|--------------|--------------|-------------------|--------|
|                                                   | ADMITTED. |            |        | DISCHARGED.          |          | EXAMINATIONS. |           |               |              |              | Total Operations. |        |
|                                                   | New.      | Re-Visits. | Total. | Treatment completed. | Casuals. | Total.        | Fillings. | Root Therapy. | Prophylaxis. | Extractions. |                   |        |
| Pre-School Children .. .. .                       | 468       | 177        | 645    |                      |          | 59            | 210       |               |              | 680          | 122               | 1,071  |
| School Children .. .. .                           | 5,619     | 5,657      | 11,276 | 1,453                | 437      | 4,018         | 8,453     | 79            | 103          | 6,475        | 586               | 19,714 |
| ADULTS: ..Semi-Indigents .. .. .                  | 20        | 11         | 31     |                      |          | 2             | 10        |               |              | 28           | 1                 | 41     |
| Indigents. .. .. .                                | 1,435     | 1,285      | 2,720  | 2                    |          | 138           | 943       | 2             | 76           | 4,767        | 83                | 6,009  |
| TOTAL .. .. .                                     | 7,542     | 7,130      | 14,672 | 1,455                | 437      | 4,217         | 9,616     | 81            | 179          | 11,950       | 792               | 26,835 |

# NON-EUROPEANS.

|                             |       |     |       |   |  |   |     |  |   |       |    |       |
|-----------------------------|-------|-----|-------|---|--|---|-----|--|---|-------|----|-------|
| Pre-School Children .. .. . | 164   | 22  | 186   | 3 |  | 3 | 82  |  |   | 173   | 3  | 270   |
| School Children .. .. .     | 1,075 | 17  | 1,092 | 1 |  | 1 | 93  |  |   | 1,543 | 14 | 1,726 |
| Adults .. .. .              | 3,547 | 67  | 3,614 | 1 |  | 1 | 99  |  | 1 | 4,927 | 56 | 5,158 |
| TOTAL .. .. .               | 4,786 | 106 | 4,892 | 5 |  | 5 | 274 |  | 1 | 6,643 | 73 | 7,154 |

### NURSERY SCHOOLS.

No special report about the Pretoria Nursery Schools Society is included this year, as there is nothing new to be added to last years' report.

### HEALTH PROPAGANDA.

The main emphasis in health education and propaganda has this year been placed on Tuberculosis. The seriousness of this, our greatest public health problem, has been brought to the public notice. Wherever possible, propaganda in this direction has been made jointly with the South African National Tuberculosis Association, of which organisation a very active branch exists in Pretoria.

As in the past, filmlets on health subjects were shown in weekly rotation at each of a circuit of seven cinemas in the city.

A number of talks on health matters were given to the general public and to different organisations.

The Press has again given the fullest publicity to all health matters brought to their attention. They have helped us very much indeed in propaganda to combat Tuberculosis.

### MEDICAL EXAMINATIONS CONDUCTED BY MEDICAL OFFICERS IN THE HEALTH DEPARTMENT.

A total of 762 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.

#### CATTLE SUPPLIES:

There was a marked decrease in the numbers of cattle killed during the year, 48,191 as compared with 64,891 for the previous year, a drop of 16,700 or over 26 percent. The now chronic meat shortage was in consequence more noticeable than it has been since the first year of the meat scheme. This shortage is felt to a much greater extent by the lower income groups since it has become customary for motorists whose business or pleasure takes them into the country districts to buy their meat in the smaller towns, and from rural butchers.

This tendency is deplorable from all points of view. The effect from the health and hygiene point of view can be serious and from the supply angle it is even more so. The encouragement of the small rural butcher to kill beyond his quota militates against the supply of stock to the controlled areas and then more urban dwellers are driven to seek their meat supplies from outside these areas. The results are that abattoir development and improvement are held in obedience because the flow of stock does not seem to justify further expenditure in this direction.

A close study of the above data reveals a very disturbing fact, namely, the ever increasing proportion of cows and heifers being slaughtered, over 25 percent of the total kill last year compared with under 20 percent the previous year. The effect of this on cattle breeding must be felt in the very near future. More and more ranch owners are concentrating on buying stock for fattening and neglecting breeding. Some breeders are turning to dairy ranching as being more remunerative, directly due to the government subsidy on cream production. It is only in the native reserves that beef breeding shows no signs of diminishing. Not only are fewer beef cattle being bred but the average quality of the stock produced will deteriorate as the proportion of native-bred cattle increases.

The measures adopted by the State and the Board to try and halt this retrogression in breeding quality slaughter stock are:—

- (a) Giving a lower grade for cows compared with oxen.
- (b) Giving premiums on high grade young oxen.

It is felt that other and more far-reaching measures are required if the desired position is to be regained and the main step will have to be to give the beef producer a comparable return for his outlay as compared with dairy ranching and other types of farming in the same areas.

To restore the balance of supplies as between the controlled centres on the one hand and the small urban and rural butchers on the other is a far more difficult matter. It is manifestly impracticable to appoint sufficient inspectors to control adequately all the „outside” slaughtering. However loth the Board may be to undermine the structure of the present scheme it will nevertheless be forced to consider allowing the meat traders in the controlled centres to buy stock for their own account, while maintaining a retail price ceiling. Such a measure of open competition for the available supplies will ensure a more even distribution between the larger controlled centres

and the outside areas. It will also reveal whether there is a real shortage of beef by minimising the unrecorded slaughtering, and the direct contact between producer and retailer will stimulate production. Selective, competitive, buying is a stimulus for quality production in every industry and this feature has been entirely absent from the meat industry since the introduction of the meat scheme. The trader has had to take whatever is handed him and the producer, due to this lack of contact, has produced the cheapest article that could be marketed.

It is generally accepted that meat prices are lagging well behind in the general rise of price levels of agricultural products. If it is feared that re-introduction of competitive buying will force an increase in meat prices, that position will have to be faced. The present downward trend in beef production with almost total disregard for quality production will be far more detrimental to the country in the long run, and will eventually bring about a much higher price level whereas a stimulus applied at the proper time in the form of a possible small price increase may be sufficient now to encourage bigger and better production.

**Cysticercosis and Tuberculosis:** The decrease in the incidence of Cysticercosis is of no significance, 8.27 percent as compared with 9.33 percent, since the drop in supplies has been due to a decrease of supplies from the Transvaal Bushveld areas where the infection is high, and a consequent proportional increase in supplies of Highveld stock.

Similarly the small increase in the incidence of Tuberculosis, 0.19 percent as compared with 0.16 percent, is due to the same variation in the sources of supply.

#### **SHEEP SUPPLIES:**

Supplies of sheep, since the introduction of the partly open market system, whereby butchers are enabled to buy for their own account, increased considerably, 50,900 as compared with 27,400. This has happened in spite of the tremendous boom in wool prices, and is a significant pointer to what may be expected by a general introduction of a more open market for meat generally.

**Pork supplies,** remain more or less constant. The stimulus to quality production due to price fixation is largely offset by the restricted market for pork. Supplies increase slightly when beef and mutton are scarce, and recede again in times of plenty.

#### **POULTRY ABATTOIR:**

The abattoir came into operation during August of this financial year. A total of 51,490 birds were killed and 469 were condemned including 208 dead or moribund on arrival. The very large drop in the number of birds marketed is thought to be due to the restrictions imposed by the State Veterinary Department due to Newcastle disease.

These restrictions are due to be lifted in August of next year when it is expected that the market will improve. It will then be possible for dealers and sellers to remove live poultry instead of being compelled to slaughter immediately.

Under the restricted market conditions the poultry market and abattoir have been running at a loss. It is, however, performing a very important public health service and is an example of what should be the general practice throughout the country.

The proper inspection of even a part of the poultry supplies is sufficiently important to be regarded as an essential health service irrespective of whether it becomes a free service or not.

#### **SLAUGHTER OF EQUINES:**

During the year the Council agreed, under certain restrictions and safeguards, to undertake the slaughter of equines. The work is done after hours and the meat carefully marked to prevent substitution for beef. It may be sold only from premises clearly advertised for that purpose.

The number of horses slaughtered daily has increased rapidly since the inception of the scheme, indicating the need for such an undertaking to supply the demand for pets food.

#### **THE MEAT CONTROL SCHEME:**

**Decontrol of Mutton.** A possibly far reaching step was taken by the Livestock and Meat Industries Control Board during September of this year. Mutton supplies were virtually decontrolled to the extent that butchers were enabled to buy outside the controlled areas on their own accounts. Some wholesalers availed themselves of this concession with the result that mutton supplies were immediately more than doubled.

**United Municipal Executive.** A special committee appointed by the United Municipal Executive met the Livestock and Meat Industries Control Board on the 6th June 1951 to discuss a memorandum prepared by the Directors of the four major abattoirs.

The main points discussed with the Board were:—

1. The irregularity of supplies.
2. The ownership of the various subsidiary products of abattoirs.
3. Increased representation on the Board of the Local Authorities.

4. Control by the Local Authorities over all the personnel operating within the Municipal abattoirs.
5. Establishment of a technical Sub-committee of the four directors of the major abattoirs and financial advisors to discuss and formulate proposals regarding the internal operations of Municipal abattoirs and other technical matters.

The Board welcomed the establishment of the Technical Sub-committee and promised to go into the matters of improving the means of control by the Local Authorities, and the question of ownership of subsidiary abattoir products.

#### ABATTOIR FINANCE:

There was a drop in revenue of approximately £3,000 compared with the previous year, a drop of 6.4 percent. The supplies of cattle, which are the main source of revenue from by-products, fell by 26 percent. The nett shortfall in the revenue from by-products was 12.4 percent, although the weight of beef condemned was only about 2/3 that of last year. The revenue was maintained by better use of the available material and to some extent by purchases of raw material from the Offal Pool. The sale of medicinal products earned a revenue of £1,640 2s. 6d. for the year.

The collection of certain glands and other products was commenced in August 1949 when the pancreas from cattle was collected. This side of our activities has increased considerably and the following materials which were formerly waste products are now saved for medicinal and industrial purposes.

**Pancreas Glands** from cattle and pigs — used for manufacture of Insulin, for Diabetis.

**Adrenal glands** — for manufacture in the Union of Adrenalin and Suprarenal Cortex extract. It is also used in the preparation of Cortisone the new drug against Rheumatoid Arthritis and allied conditions.

**Pituitary glands.**—These are very tiny glands in the skull (about 150 glands weigh one pound) and they are used for making Pituitary extract.

**Ox Gall** used in production of Cortisone.

**Calf Rennets** — extract used in cheese making to coagulate the milk.

**Sheep Gut** — used for surgical gut and for tennis racquet strings.

**Pharmaceutical Liver** — suitable pieces from condemned livers are collected for making liver extracts for treatment of Pernicious Anaemia.

**Spinal Cord** used for preparation of cholesterin which is the basis for several hormone preparations.

#### SLAUGHTERING STATISTICS.

##### Animal Slaughtered:

|                | 1950-1951      | 1949-1950      |
|----------------|----------------|----------------|
| Oxen .. .. .   | 35,457         | 50,883         |
| Cows .. .. .   | 12,195         | 13,385         |
| Bulls .. .. .  | 539            | 623            |
| Calves .. .. . | 3,303          | 4,027          |
| Sheep .. .. .  | 50,922         | 27,433         |
| Goats .. .. .  | 1,439          | 1,630          |
| Pigs .. .. .   | 35,021         | 33,096         |
| Total .. .. .  | <u>138,876</u> | <u>131,077</u> |

##### Carcases, Organs Condemned for all Causes.

|                    | Cattle. | Calves. | Sheep and Goats. | Pigs. |
|--------------------|---------|---------|------------------|-------|
| Carcases .. .. .   | 1,611   | 86      | 26               | 1,764 |
| Quarters .. .. .   | 71      | —       | 7                | —     |
| Livers .. .. .     | 6,535   | —       | 9,869            | —     |
| Lungs .. .. .      | 3,280   | —       | 19               | —     |
| Plucks .. .. .     | 784     | —       | 69               | 2,535 |
| Heads .. .. .      | 3,234   | —       | —                | 366   |
| Tongues .. .. .    | 142     | —       | —                | 366   |
| Hearts .. .. .     | 68      | —       | —                | —     |
| Kidneys .. .. .    | 347     | —       | —                | —     |
| Tripes .. .. .     | 3,129   | —       | —                | —     |
| Intestines .. .. . | 3,130   | —       | 2,097            | —     |
| Tails .. .. .      | 128     | —       | —                | —     |
| Udders .. .. .     | 142     | —       | —                | —     |
| Viscerae .. .. .   | 1,595   | —       | —                | —     |
| Spleens .. .. .    | 3,130   | —       | —                | —     |

## Imported Meat examined.

|                        | Examined. | Condemned.              | Detained for Cold Storage Treatment. |
|------------------------|-----------|-------------------------|--------------------------------------|
| Beef Carcases .. .. .  | 10,433    | 4 (Measles)             | 93                                   |
| Beef Quarters .. .. .  | —         | 34 (Decomposition)      | 2                                    |
| Beef Quarters .. .. .  | —         | 1 (Soiled)              | —                                    |
| Sheep Carcases .. .. . | 10,368    | 9 (Decomposition)       | —                                    |
| Sheep Carcases .. .. . | —         | 39 (Illegally Imported) | —                                    |
| Sheep Quarters .. .. . | 4         | 2 (Illegally imported)  | —                                    |
| Pork .. .. .           | 4         | —                       | —                                    |

## Total condemnations.

|                       | 1950-1951.  |              | 1949-1950.  |              |
|-----------------------|-------------|--------------|-------------|--------------|
|                       | Percentage. | Weight.      | Percentage. | Weight.      |
| Cattle .. .. .        | 3.342       | 412.165 Tons | 3.408       | 621.285 Tons |
| Calves .. .. .        | 2.603       | 1.728 Tons   | 4.395       | 3.837 Tons   |
| Sheep & Goats .. .. . | 0.049       | 1.146 Tons   | 0.217       | 0.924 Tons   |
| Pigs .. .. .          | 5.036       | 76.196 Tons  | 4.632       | 94.012 Tons  |

## Diseases encountered.

## Cysticercosis.

|                | 1950-1951. |              |              |             |
|----------------|------------|--------------|--------------|-------------|
|                | Total No.  | Incidence %. | % Condemned. | % Detained. |
| Cattle .. .. . | 3,985      | 8.269        | 1.859        | 6.410       |
| Calves .. .. . | 1          | 0.030        | —            | 0.030       |
| Pigs .. .. .   | 1,816      | 5.185        | 3.977        | 1.208       |

|                | 1949-1950. |              |              |             |
|----------------|------------|--------------|--------------|-------------|
|                | 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 of cysticercosis affected cattle detained for Cold Storage treatment:—

Tongues 3,079. Tails 3,079. Livers 2,883. Hearts 2,671.

## Tuberculosis:

|                | 1950-1951.       |                                |              |
|----------------|------------------|--------------------------------|--------------|
|                | Total Incidence. | % Generalised No. of C/S Cond. | % Localised. |
| Cattle .. .. . | 91 or 0.188%     | 0.141                          | 0.047        |
| Pigs .. .. .   | 458 or 1.307     | 0.265                          | 1.042        |

|                | 1949-1950.       |                                |              |
|----------------|------------------|--------------------------------|--------------|
|                | Total Incidence. | % Generalised No. of C/S Cond. | % Localised. |
| 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.     | lbs. Beef. | Calves. | Sheep. | Qrts.    | Goats. | Pigs. | lbs. Pork.     |
|-------------------------------------------|---------|---------------|------------|---------|--------|----------|--------|-------|----------------|
| Actinomycosis                             | 1       | 46 Localised. | —          | —       | —      | —        | —      | 1     | —              |
| Acute Nephritis .. .. .                   | —       | —             | —          | —       | —      | —        | —      | 1     | —              |
| Botriomycosis                             | 1       | —             | —          | —       | —      | —        | —      | 3     | —              |
| Caseous Lymphadenitis .. .. .             | —       | —             | —          | —       | 6      | 95 Aff 6 | —      | —     | —              |
| Defective Bleeding .. .. .                | 15      | —             | —          | —       | —      | —        | —      | 3     | —              |
| Def. Bleeding & Gen. Fat Necrosis .. .. . | 1       | —             | —          | —       | —      | —        | —      | —     | —              |
| Dermatitis .. .. .                        | —       | —             | —          | —       | —      | —        | —      | 9     | 28 lbs. Affec. |
| Emaciation .. .. .                        | 98      | —             | —          | 21      | 2      | —        | 2      | 41    | —              |
| Emphysema .. .. .                         | 19      | 12            | —          | —       | —      | —        | —      | —     | —              |
| Enteritis .. .. .                         | —       | —             | —          | —       | —      | —        | —      | 2     | —              |
| Erysipelas .. .. .                        | —       | —             | —          | —       | —      | —        | —      | 5     | —              |
| Ext. Bruising                             | 85      | 30            | 113,216    | 1       | 4      | 2        | —      | 22    | 3,061          |

|                |    |     |    |   |    |   |   |   |    |               |
|----------------|----|-----|----|---|----|---|---|---|----|---------------|
| Follicular     |    |     |    |   |    |   |   |   |    |               |
| Mange...       | .. | —   | —  | — | —  | — | — | — | 62 | 156           |
|                |    |     |    |   |    |   |   |   |    | <i>Affec.</i> |
| Gangrene       | .. | 30  | 4  | — | —  | 1 | — | — | 12 | —             |
| Gen.           |    |     |    |   |    |   |   |   |    |               |
| Echinococcus   |    | —   | —  | — | —  | — | — | — | 1  | —             |
| Immaturity     | .. | —   | —  | — | 14 | — | — | — | —  | —             |
| Jaundice       | .. | 10  | —  | — | 4  | 1 | — | — | 19 | —             |
| Malignant      |    |     |    |   |    |   |   |   |    |               |
| Tumours        | .. | 1   | —  | — | —  | — | — | — | —  | —             |
| Mange          | .. | —   | —  | — | —  | — | — | — | 1  | —             |
| Melanosis      | .. | —   | —  | — | —  | — | — | — | 13 | —             |
| Moribund       | .. | 18  | —  | — | 2  | 1 | — | — | 1  | —             |
| Multiple       |    |     |    |   |    |   |   |   |    |               |
| Abscesses      | .. | 36  | 25 | — | 2  | 1 | — | — | 12 | —             |
| Multiple       |    |     |    |   |    |   |   |   |    |               |
| Haemorrhages   | .. | —   | —  | — | —  | — | — | — | 2  | —             |
| Multiple       |    |     |    |   |    |   |   |   |    |               |
| Tumours        | .. | 1   | —  | — | —  | — | — | — | 3  | —             |
| Navel Ill.     | .. | —   | —  | — | 36 | — | — | — | —  | —             |
| Odema          | .. | 1   | —  | — | —  | — | — | — | 1  | —             |
| Peritonitis    | .. | 44  | —  | — | 1  | 2 | — | — | 12 | —             |
| Pleuritis      | .. | 12  | —  | — | —  | — | — | — | 4  | —             |
| Pleurisy &     |    |     |    |   |    |   |   |   |    |               |
| Peritonitis    | .. | 153 | —  | — | —  | — | — | — | 9  | —             |
| Pyæmia         | .. | 2   | —  | — | 2  | — | — | — | 1  | —             |
| Rickets        | .. | —   | —  | — | —  | — | — | — | 1  | —             |
| Sarcosporidio- |    |     |    |   |    |   |   |   |    |               |
| sis            | .. | 4   | —  | — | —  | — | — | — | —  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Mastitis       | .. | 35  | —  | — | —  | — | — | — | 3  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Metritis       | .. | 23  | —  | — | —  | 1 | — | — | 3  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Nephritis      | .. | 7   | —  | — | 1  | 1 | — | — | 1  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Pericarditis   | .. | 4   | —  | — | —  | — | — | — | —  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Pneumonia      | .. | 43  | —  | — | 2  | 1 | — | 4 | 6  | —             |
| Septic         |    |     |    |   |    |   |   |   |    |               |
| Orchitis       | .. | —   | —  | — | —  | — | — | — | 9  | —             |
| Sup.           |    |     |    |   |    |   |   |   |    |               |
| Lymphadenitis  | .. | 1   | —  | — | —  | — | — | — | —  | —             |
| Uraemia        | .. | 2   | —  | — | —  | — | — | — | —  | —             |
| Urticaria      | .. | —   | —  | — | —  | — | — | — | 15 | —             |

All cold storages also wholesale and retail Butchershops were inspected by the Asst. Chief Health Inspector Abattoir as a follow up inspection and check on imported meat being submitted for inspection and stamping at the City Abattoir.

#### SLAUGHTERING STATISTICS FOR HORSES.

##### No. Slaughtered.

Horses 425.

##### Condemnations.

| Diseases              | Carcases. | Quarters. |
|-----------------------|-----------|-----------|
| Emaciation .. .. .    | 2         | —         |
| Emphysema .. .. .     | 1         | —         |
| Strangles .. .. .     | 1         | —         |
| Peritonitis .. .. .   | 2         | —         |
| Ext. Bruising .. .. . | —         | 4         |

## SLAUGHTERING STATISTICS FOR POULTRY.

| Fowls.                     | Turkeys. | Chickens. | Ducks. | Geese. | Musc. Ducks | Bantams. | Pigeons. |
|----------------------------|----------|-----------|--------|--------|-------------|----------|----------|
| 44,243                     | 1,052    | 2,965     | 2,817  | 91     | 220         | 10       | 92       |
| Diseases Encountered.      |          |           |        |        |             |          |          |
|                            |          |           |        | Fowls. | Ducks.      |          |          |
| Carcinoma .. .. .          |          |           |        | 1      | —           |          |          |
| Defective Bleeding .. .. . |          |           |        | 1      | —           |          |          |
| Egg-bound .. .. .          |          |           |        | 43     | —           |          |          |
| Emaciation .. .. .         |          |           |        | 1      | —           |          |          |
| Extensive Bruising .. .. . |          |           |        | 4      | —           |          |          |
| Gangrene .. .. .           |          |           |        | 18     | —           |          |          |
| Hepatitis .. .. .          |          |           |        | 1      | —           |          |          |
| Internal Abscesses .. .. . |          |           |        | 18     | —           |          |          |
| Leukaemia .. .. .          |          |           |        | 1      | —           |          |          |
| Multiple Abscesses .. .. . |          |           |        | 9      | —           |          |          |
| New Growths .. .. .        |          |           |        | 48     | —           |          |          |
| Nodular Tapeworm .. .. .   |          |           |        | 27     | —           |          |          |
| Peritonitis .. .. .        |          |           |        | 123    | —           |          |          |
| Tapeworm Infected .. .. .  |          |           |        | 3      | —           |          |          |
| Tuberculosis .. .. .       |          |           |        | 2      | —           |          |          |
| Yolk Rupture .. .. .       |          |           |        | 1      | —           |          |          |

134 Fowls, 6 chickens and 1 pigeon arrived dead on the market. 66 Fowls and 1 duck arrived in a moribund condition, all were killed and destroyed.

## CONTROL OF DAIRIES AND MILK SUPPLIES.

## DAIRY LICENCES:

Applications approved amounted to 304. This figure includes six tearoom licences for the sale of milk cartons.

Details of licences dealt with are as follows:—

|                                                 | New.      | Surrendered. | Renewals refused. | New applicants refused. | Transferred. | New Applicants pending. | Increase or Decrease. |
|-------------------------------------------------|-----------|--------------|-------------------|-------------------------|--------------|-------------------------|-----------------------|
| Producers .. .. .                               | 31        | 30           | 2                 | 5                       | 18           | 4                       | —1                    |
| Producer—Distributors .. .. .                   | 3         | 2            | —                 | —                       | 4            | —                       | +1                    |
| Distributors .. .. .                            | 12        | 6            | 2                 | —                       | 19           | —                       | +4                    |
| Tearooms (selling milk in cartons only) .. .. . | 5         | —            | —                 | —                       | —            | —                       | +5                    |
| TOTAL .. .. .                                   | <u>51</u> | <u>38</u>    | <u>4</u>          | <u>5</u>                | <u>41</u>    | <u>4</u>                | <u>+9</u>             |

## SITUATION OF PREMISES:

The situation of the 304 dairy premises is as follows:—

|                                 | In Mun. Area. | Within 10 miles | 11–25 miles | 26–50 miles | 51–75 miles | 76–100 miles | 101–150 miles | 151–200 miles | Over 200 miles | Total.     |
|---------------------------------|---------------|-----------------|-------------|-------------|-------------|--------------|---------------|---------------|----------------|------------|
| Producers .. .. .               | 3             | 21              | 72          | 17          | 12          | 6            | 41            | 24            | 1              | 197        |
| Producer-Distributors .. .. .   | 10            | 4               | 4           | —           | —           | —            | —             | —             | —              | 18         |
| Distributors .. .. .            | 83            | —               | —           | —           | —           | —            | —             | —             | —              | 83         |
| Tearooms (Cartons only) .. .. . | 6             | —               | —           | —           | —           | —            | —             | —             | —              | 6          |
| TOTAL .. .. .                   | <u>102</u>    | <u>25</u>       | <u>76</u>   | <u>17</u>   | <u>12</u>   | <u>6</u>     | <u>41</u>     | <u>24</u>     | <u>1</u>       | <u>304</u> |

It will be noticed that one-third of the producers are already beyond the 100 mile zone. These dairies are situated mainly in the Carolina-Belfast area and the tendency for development away from the cities persists. The cooler Highveld climate is better suited to the European type of dairy cow and dairying fits well into the mixed type of farming now finding favour in that area. The milk depot in use at Carolina is handling more and more milk for our largest dairy in the City.

This tendency is welcomed as it is leading to the production of milk by bona fide farmers instead of by speculators who have no real interest in the health aspect of the undertaking.

**MILK SUPPLIES:**

|                                                |        |
|------------------------------------------------|--------|
| No. of premises where milk is produced .. .. . | 215    |
| Approx. No. of cows kept (in milk) .. .. .     | 9,000  |
| Approx. No. of cows kept (dry) .. .. .         | 4,600  |
| Approx. No. of gallons produced daily .. .. .  | 16,800 |

**TOTAL GALLONAGE ESTIMATED AS AT 30TH JUNE 1951 (DAILY):**

|                                                                      |                        |
|----------------------------------------------------------------------|------------------------|
| Producers .. .. .                                                    | 16,100                 |
| Producer-Distributors .. .. .                                        | 700                    |
| <b>Imported:</b>                                                     |                        |
| From Johannesburg, Bloemfontein & Klerksdorp during Shortage .. .. . | 200                    |
| From Johannesburg for schools .. .. .                                | 400                    |
| From Johannesburg for Government Institutions .. .. .                | 500                    |
| <b>TOTAL .. .. .</b>                                                 | <b>17,900 Gallons.</b> |

Of the 16,100 gallons from producers, 12,300 gallons or 76.39% are pasteurised at the five pasteurising plants in the City. The imported milk is pasteurised before being dispatched to Pretoria. This gives an increase of pasteurised milk consumed of approximately 16%. It is perhaps felt that our proposed legislation (still lying with the Provincial Administrator) for enforcing compulsory pasteurisation, will sooner or later be approved so that new development is bound to occur with an eye on future requirements.

The total consumption of milk remains about the same as for last year, while there is a slight increase in the number cows kept.

Another midsummer drought was experienced throughout the Transvaal so that a severe drop in milk production resulted, which necessitated supplementation from Johannesburg, Bloemfontein and Klerksdorp, as the Pretoria Milk Distributors Association could not supply the need.

The milk for schools was also supplied from Johannesburg, and it is still felt that, although introduced milk may be handled under good supervision, the principle is wrong as responsibility can be assumed only if we have full control.

I am pleased to record that the Education Department has now agreed that we undertake inspection of all milk delivered to schools under the various feeding schemes. Such inspections have already been done to great advantage.

The Education Department also has agreed to the supply of milk to school children only from premises licensed by the Pretoria Municipality, as was requested by us.

**PERSONNEL EMPLOYED IN MILK TRADE:**

| Employed by.                  | Europeans. | Natives.     | Total.       |
|-------------------------------|------------|--------------|--------------|
| Producers .. .. .             | 228        | 1,144        | 1,372        |
| Producer-Distributors .. .. . | 20         | 69           | 89           |
| Distributors .. .. .          | 187        | 482          | 669          |
| <b>TOTAL .. .. .</b>          | <b>435</b> | <b>1,695</b> | <b>2,130</b> |

**TYPHOID TESTING OF DAIRY EMPLOYEES:**

The voluntary free typhoid testing of dairy employees was well supported by employers in an around the City. During the year 709 employees were tested for the typhoid carrier state. Of these 56 were Vi positive, giving a somewhat lower percentage than during the previous year. These differences are of no significance.

Two Vi positive Europeans were stool and urine tested with negative results.

Of the 54 native reactors, 26 were admitted to the carrier camp where stool and urine tests in all cases proved negative. Stool and urine tests of 9 natives outside the camp proved negative.

Three cases had previously been tested, 5 absconded, 3 had already been discharged by employers while the remaining eight were too far away for treatment in our camp.

Details as follows:—

|                                            | Producers. | Producer-Distributors. | Distributors. | Total. |
|--------------------------------------------|------------|------------------------|---------------|--------|
| No. of dairies submitted employees ..      | 31         | 15                     | 43            | 89     |
| No. of dairy employees tested .. ..        | 202        | 77                     | 430           | 709    |
| No. of European employees tested ..        | 15         | 6                      | 59            | 80     |
| No. of non-European employees tested ..    | 187        | 71                     | 371           | 629    |
| No. of Europeans Vi positive .. ..         | —          | —                      | 2             | 2      |
| No. of non-Europeans Vi positive ..        | 19         | 6                      | 29            | 54     |
| Percentage of Europeans Vi positive ..     | —          | —                      | —             | 2.5%   |
| Percentage of non-Europeans Vi positive .. | —          | —                      | —             | 8.6%   |

Since the inception of the scheme 8,312 employees have been tested.

**DAIRY INSPECTIONS:**

Regular inspection of the premises of producers and producer-distributors was undertaken as before by two Veterinary Officers and three Dairy Inspectors while the inspection of dairies and milk shops in the urban area was undertaken by the District Health Inspectors as well. Milk production is controlled by the Dairy Staff under veterinary supervision and includes such measures as hygienic milking and handling of milk, inspection of animals, advice on diseases, feeding and breeding of animals, etc. As the dairies supplying the City are spread over so large an area, a great deal of travelling is necessary to carry out the work.

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

**INSPECTION OF DAIRIES (PRODUCERS AND PRODUCER-DISTRIBUTORS):**

|                                          |       |
|------------------------------------------|-------|
| (a) During day milking .. .. .           | 197   |
| (b) During early morning milking .. .. . | 60    |
| (c) At other periods .. .. .             | 1,608 |
| (d) Contraventions dealt with .. .. .    | 801   |

**INSPECTION OF HERDS (VETERINARY OFFICERS):**

|                                  |       |
|----------------------------------|-------|
| No. of animals inspected .. .. . | 9,437 |
|----------------------------------|-------|

**INSPECTION OF MILK DEPOTS:**

|                                   |       |
|-----------------------------------|-------|
| (a) During day .. .. .            | 1,284 |
| (b) During early morning .. .. .  | 126   |
| Contraventions dealt with .. .. . | 407   |

**DISTRIBUTION STREET INSPECTIONS, ETC:**

|                                        |     |
|----------------------------------------|-----|
| (a) During day .. .. .                 | 405 |
| (b) During early morning .. .. .       | 705 |
| Contraventions dealt with .. .. .      | 158 |
| Other inspections or enquiries .. .. . | 265 |
| Complaints dealt with .. .. .          | 52  |
| Written notices served .. .. .         | 168 |

**MILK SAMPLING FOR TESTS AND ANALYSIS:**

A full-time Health Inspector is employed for the taking of milk samples.

Details of samples taken and of the various tests 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 .. .. .                                               | 378 |
| No. conforming to legal standard .. .. .                                   | 259 |
| No. containing excess micro-organisms (warnings issued) .. .. .            | 56  |
| No. containing excess micro-organisms (prosecuted) .. .. .                 | 1   |
| No. containing excess B. coli (warnings issued) .. .. .                    | 38  |
| 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) .. .. .     | 1   |
| Total no. of warnings issued .. .. .                                       | 117 |
| Total no. of prosecutions .. .. .                                          | 2   |

**(b) Breed Smear Counts:**

|                                      |        |
|--------------------------------------|--------|
| No. of milk samples examined .. .. . | 26,207 |
|--------------------------------------|--------|

The above were classified as follows:—

|                        |        |
|------------------------|--------|
| Very good .. .. .      | 11,375 |
| Good .. .. .           | 4,044  |
| Fair .. .. .           | 4,991  |
| Unsatisfactory .. .. . | 5,797  |
|                        | <hr/>  |
|                        | 26,207 |

These counts done in our laboratory give us a good assessment of the milk of over 60% of our producers in regard to bacterial development and the presence of mastitis organisms.

(c) **Presumptive Coliform Tests:** 2,930 samples of pasteurised milk tested as an indication of the cleanliness of the plants—1,451 specimens were positive and 1,479 negative.

(d) **Microscopic Mastitis Tests:** Two owners availed themselves of the facilities for testing their cows. Samples from bulked milk are examined from time to time. Altogether 204 smears were examined. Antibiotic drugs are still used on a fairly large scale to suppress the acute visible forms of the disease.

**2. CHEMICAL ANALYSIS:** (Samples taken under the Food, Drugs and Disinfectants Act No. 13 of 1929).

Analysis was undertaken as before by our Municipal Chemists. The data for the year are:—

|                                                         |     |
|---------------------------------------------------------|-----|
| No. of samples taken .. .. .                            | 576 |
| No. of samples satisfactory .. .. .                     | 234 |
| No. of samples unsatisfactory and where warnings issued |     |
| Deficient in Fat .. .. .                                | 19  |
| Deficient in Solids-not-Fat .. .. .                     | 288 |
| No. of bad samples where owners were prosecuted         |     |
| Deficient in Milk-Fat & Solids-not-Fat .. .. .          | 11  |
| Deficient in Milk-Fat .. .. .                           | 6   |
| Deficient in Milk-Solids-not-Fat .. .. .                | —   |
| Adulterated (added water) .. .. .                       | 18  |

**3. DISC SEDIMENT TEST FOR VISIBLE DIRT:**

|                                               |       |
|-----------------------------------------------|-------|
| No. of specimens tested .. .. .               | 1,110 |
| No. satisfactory .. .. .                      | 760   |
| No. not quite satisfactory & warnings issued: |       |
| Very unsatisfactory samples .. .. .           | 305   |
| Severe warnings issued .. .. .                | 30    |
| Final warnings issued .. .. .                 | 13    |
| Prosecutions .. .. .                          | 2     |

**4. PHOSPHATASE TEST FOR PASTEURIZED MILK:**

|                                        |             |
|----------------------------------------|-------------|
| No. of samples tested .. .. .          | 2,872       |
| No. satisfactorily pasteurised .. .. . | 2,427       |
| No. slightly under pasteurized .. .. . | 317         |
| No. grossly under-pasteurized .. .. .  | 128         |
|                                        | <hr/> 2,872 |

Daily samples from the five pasteurizing plants were submitted to the phosphatase test for the discovery of any plant defects. The unsatisfactory samples originated mainly from one dairy where increased business led to reduction in the time of „holding“.

**5. BIOLOGICAL TESTS FOR MILK:**

(a) **T.B.** Facilities for guinea pig inoculation are very limited nevertheless 20 samples were inoculated from producers supplying raw milk depots. With the limited facilities it was not considered wise to test milk going to pasteurising plants. None of the samples proved positive for T.B. and only one positive for C.A. The estimated incidence of T.B. infected milk is about 1%. Negative results in so few samples do not mean much.

(b) **Contagious abortion:** Guinea pig inoculations for C.A. were carried out. As indicated above of 20 specimens, one proved positive.

**6. MISCELLANEOUS TESTS:**

(a) **Contagious abortion blood tests** — Fortyone blood specimens were collected and submitted to Onderstepoort Veterinary Laboratory. Of these four proved positive and one suspicious.

(b) **Contagious abortion ring tests** — Sixteen samples were tested, of which seven were positive, one doubtful and eight negative.

Positive tests lead to discussions with the farmers concerned and in most cases vaccination was advised.

This test will probably be improved in the near future, so as to render it cheaper and more reliable.

**GENERAL REMARKS:**

Farmers are not availing themselves of the facilities under the Government's Interim Tuberculosis Scheme primarily because of lack of price incentive for accredited milk.

Contagious infertility helped to introduce artificial insemination which is now already on a sound footing.

The Government Veterinary Department expects that there might be an outbreak of Rift Valley Fever in the summer which may spread to humans not only through the natural vector but also through milk.

## ANIMAL POUNDS AND DIPPING TANKS:

Dipping tanks and the treatment and advertising of impounded animals fall under this Department.

Two pounds and two dipping tanks were closed down during the previous year thus leaving only the West End and Hercules Pounds and one dipping tank at Hercules.

Details are as follows:—

|                  | No. of Animals<br>Impounded. | Pound Fees<br>and Sales. | Dipping<br>Fees. | No. of Animals<br>Dipped. |
|------------------|------------------------------|--------------------------|------------------|---------------------------|
| Hercules .. .. . | 1,083                        | £361 10 10               | £2 6 8           | 246                       |
| West End .. .. . | 1,069                        | £283 11 5                | —                | —                         |
| <b>TOTAL ..</b>  | <b>2,152</b>                 | <b>£645 2 3</b>          | <b>£2 6 8</b>    | <b>246</b>                |

## RECORD OF THE WORK OF THE HEALTH INSPECTORS.

Notwithstanding the Inspectorial Staff being below the normal establishment and despite the rapid expansion of the City and the consequent increased amount of work and activity entailed, a satisfactory standard of hygiene was maintained throughout the year. This was to a great extent due to the provision of a locomotion allowance for all Health Inspectors, which enabled the available personnel to cover larger areas than formerly when the Municipal bus service was used. In addition, complaints and urgent matters were dealt with more expeditiously.

During the year the Chief Health Inspector convened a number of meetings attended by the whole of the Inspectorial Staff. Full discussions took place in order to arrive at uniformity of action in regard to the procedure to be adopted and the requirements to be enforced in regard to all premises engaged in the manufacture, preparation, handling and distribution of foodstuffs. These meetings and discussions have been of great value.

Building activity throughout the City was well maintained throughout the year. All plans submitted were scrutinised by this Department; these included a large number of proposed hotels, blocks of flats and offices. Where foodstuffs were to be processed, handled, or stored, particular attention was given to the provision of adequate amenities and facilities to ensure more modern methods of hygiene in such premises.

The following table shows the number of plans passed and the approximate cost of the building for the periods stated:—

| Period.                   | No. of Plans<br>Passed. | Approximate Value<br>of Buildings. |
|---------------------------|-------------------------|------------------------------------|
| Jan. to Dec. 1949 .. .. . | 1,186                   | 2,114,512                          |
| Jan. to Dec. 1950 .. .. . | 1,702                   | 3,667,465                          |
| Jan. to June 1951 .. .. . | 895                     | 2,302,550                          |

The policy of encouraging members of the public to notify public health nuisances was continued. Immediate attention was paid to complaints and the complainants were notified of the action taken.

A great deal has been done in the newly-incorporated Hercules area towards the improvement of hygienic conditions. Much, however, remains to be done, but the present rate of improvement is fairly satisfactory.

The following list indicates the type and number of licensed premises for the year under review. These premises were all inspected at regular intervals:—

|                                   | European. | Non-European. |
|-----------------------------------|-----------|---------------|
| Bakers and Confectioners .. .. .  | 28        | 4             |
| Butchers .. .. .                  | 106       | 34            |
| Hotels .. .. .                    | 19        | —             |
| Tea Rooms and Restaurants .. .. . | 251       | 75            |
| Native Eating Houses .. .. .      | 7         | 10            |
| Food Purveyors .. .. .            | 282       | 221           |
| Fishmongers .. .. .               | 10        | 1             |
| Fruiterers .. .. .                | 336       | 165           |
| Bioscope Tea Rooms .. .. .        | 1         | —             |
| Hawkers and Pedlars .. .. .       | 46        | 148           |
| Mineral Water Factories .. .. .   | 5         | 2             |
| Grain Millers .. .. .             | 4         | —             |
| Boarding & Lodging Houses .. .. . | 397       | —             |
| Launderers .. .. .                | 10        | 8             |
| Cobblers .. .. .                  | 96        | 30            |
| Theatres .. .. .                  | 12        | 4             |
| Public Halls .. .. .              | 11        | 1             |
| Market Stalls .. .. .             | 62        | —             |
| Cycle Dealers .. .. .             | 76        | 24            |
| Billiard Rooms .. .. .            | 3         | 5             |

|                             |     |    |
|-----------------------------|-----|----|
| Poulterers .. .. .          | 26  | —  |
| Secondhand Dealers .. .. .  | 27  | 6  |
| Workshops .. .. .           | 209 | 2  |
| Milk Shops .. .. .          | 5   | —  |
| Tannery .. .. .             | 1   | —  |
| Fumigators .. .. .          | 4   | —  |
| Woodsawyers .. .. .         | 3   | —  |
| Brick Burners .. .. .       | 1   | —  |
| Ice Cream Factories .. .. . | 3   | —  |
| Pawnbroker .. .. .          | 1   | —  |
| Milk Producers .. .. .      | 201 | —  |
| Dairies .. .. .             | 100 | 7  |
| Hairdressers .. .. .        | 94  | 18 |
| Offal Dealers .. .. .       | 1   | —  |

New By-laws have been drafted for the control of Fishmongers, restaurants, butcheries, boarding and lodging houses. It is hoped to have these by-laws promulgated in the near future.

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

|                                                                                             |        |
|---------------------------------------------------------------------------------------------|--------|
| Total inspections made .. .. .                                                              | 58,023 |
| Nuisances dealt with .. .. .                                                                | 17,603 |
| Nuisances abated (this includes unabated nuisances carried over from previous year) .. .. . | 16,304 |
| Complaints dealt with .. .. .                                                               | 2,717  |
| Licences approved .. .. .                                                                   | 3,374  |
| Licences refused .. .. .                                                                    | 75     |
| Samples of water taken .. .. .                                                              | 342    |
| Samples of foodstuffs taken .. .. .                                                         | 630    |
| Visits of enquiry re infectious diseases .. .. .                                            | 4,713  |

#### Nuisances Detected and Referred to Other Departments.

|                                         |     |
|-----------------------------------------|-----|
| Chief Licence Officer .. .. .           | 41  |
| Chief Traffic Officer .. .. .           | 1   |
| City Electrical Engineer .. .. .        | 8   |
| City Engineer .. .. .                   | 234 |
| Director of Parks .. .. .               | 41  |
| Fire Master .. .. .                     | —   |
| Market Master .. .. .                   | —   |
| Non-European Affairs Department .. .. . | 69  |
| Town Clerk .. .. .                      | 1   |

During the year there were 98 prosecutions instituted by the Department for contravention of Municipal By-laws, resulting in total fines of £267.

They are as detailed below:—

| Nature of Offence.                                 | No. of Cases. | No. Guilty. | No. cautioned and discharged. | No. withdrawn. | No. not Guilty. | Fines Imposed. |
|----------------------------------------------------|---------------|-------------|-------------------------------|----------------|-----------------|----------------|
|                                                    |               |             |                               |                |                 | £ s. d.        |
| Ice Cream below Chemical Standard ..               | 1             | 1           | —                             | —              | —               | 5 0 0          |
| Milk below Chemical Standard ..                    | 32            | 28          | 9                             | 2              | 1               | 136 0 0        |
| Milk below Bacteriological Standard ..             | 1             | 1           | —                             | —              | —               | 4 0 0          |
| Contravention of Dairy By-laws ..                  | 9             | 8           | 2                             | —              | 1               | 18 0 0         |
| Contravention of Bakery By-laws ..                 | 3             | 3           | —                             | —              | —               | 5 10 0         |
| Contravention of Tearoom By-laws ..                | 2             | 2           | —                             | —              | —               | 10 0 0         |
| Contravention of Hairdressers By-laws ..           | 1             | 1           | —                             | —              | —               | 9 0 0          |
| Exposing Foodstuffs to Contamination .. .. .       | 2             | 2           | —                             | —              | —               | 7 0 0          |
| Exposing Unsound Foods for Sale ..                 | 3             | 3           | —                             | —              | —               | 10 0 0         |
| Keeping animals without a permit ..                | 4             | 2           | 2                             | 1              | 1               | —              |
| Breeding — Flies .. .. .                           | 1             | 1           | —                             | —              | —               | 2 0 0          |
| Breeding — Mosquitoes .. .. .                      | 2             | 2           | —                             | —              | —               | 6 0 0          |
| Failure to provide Temp. Builders Latrines .. .. . | 12            | 9           | 1                             | 3              | —               | 18 10 0        |
| Excess Preservatives in Foodstuffs ..              | 1             | 1           | —                             | —              | —               | 3 0 0          |
| Unregistered Midwife .. .. .                       | 1             | 1           | —                             | —              | —               | 5 0 0          |
| Failing to comply with terms of a notice .. .. .   | 23            | 11          | 1                             | 9              | 1               | 25 0 0         |
| TOTAL .. .. .                                      | 98            |             |                               |                |                 | £267 0 0       |

## SUPERVISION OF FOODSTUFFS:

Regular inspections were carried out of all food factories, stores and premises where food-stuffs are prepared, stored or kept for sale.

A special drive for cleaner food handling was commenced in the early months of summer. This was directed more to such premises as cafes, restaurants and snack bars, which serve large amounts of food during the lunch hour and rush periods. The handling of all unprotected food-stuffs by suitable instruments was insisted upon, advice was given as to the proper storage of food and cleansing of crockery and utensils. Printed notices inviting the co-operation of the public by insisting on the hygienic handling of foodstuffs were displayed in cafes and restaurants.

A film and lecture dealing with food handling was given to a gathering of the Pretoria Caterers Association; this proved to be valuable propaganda for the clean handling of foodstuffs in public eating places and encouraged co-operation of the proprietors of food trade establishments for catering along more hygienic lines.

A total 262 consignments of unsound foodstuffs were seized or surrendered and the following quantities were condemned as unfit for human consumption:—

|                           |            |                 |                |
|---------------------------|------------|-----------------|----------------|
| Jam .....                 | 2,501 lbs. | Pickles .. .. . | } 347 Bottles. |
| Confectionery .. .        | 796 lbs.   | Sauces .. .. .  |                |
| Fresh & Prepared Meats .. | 752 lbs.   | Mayonnaise .. . |                |
| Cereals .. .              | 186 lbs.   | Meat .. .. .    | } 11,708 Tins. |
| Fresh Fish .. .           | 1,781 lbs. | Fish .. .. .    |                |
| Cheese .. .               | 118 lbs.   | Fruit .. .. .   |                |
| Dried Fruit .. .          | 35 lbs.    | Vegetables .. . |                |
| Spices .. .               | 40 lbs.    | Milk .. .. .    |                |
| Fresh Cream .. .          | 13½ Galls. | Soup. .. .. .   |                |

In the enforcement of the Food, Drugs and Disinfectants Act and other legislation pertaining to food for human consumption, three prosecutions were instigated and 98 written warnings were issued.

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

|            |        |           |        |
|------------|--------|-----------|--------|
| Bags :     | 1,648. | Crates :  | 363.   |
| Trays :    | 445.   | Pockets : | 8,542. |
| Boxes :    | 5,278. | Lots :    | 66.    |
| Carriers : | 553.   | Baskets : | 1.     |

In addition there were 99 dozen eggs and 703 watermelons seized and condemned as unfit for human consumption.

## INSPECTIONS OF LIVE AND DRESSED POULTRY AND GAME ON THE PRODUCE MARKET:

|                                 |                                   |
|---------------------------------|-----------------------------------|
| (1) Live Poultry:               | (2) Dressed Poultry:              |
| No. examined .. .. . 17,532     | No. examined .. .. . 4,439        |
| No. condemned .. .. . 47        | No. condemned .. .. . 118         |
| Percentage condemned .. .. . 2% | Percentage condemned .. .. . 2.6% |

The examination of live poultry at the Market has been discontinued as a special poultry abattoir under Municipal control was put into operation as from October. This is discussed in the section dealing with Abattoirs.

|                                    |                            |
|------------------------------------|----------------------------|
| (3) Game:                          | Wild Boar.                 |
| Buck.                              | No. examined .. .. . 9     |
| No. examined .. .. . 637           | No. condemned .. .. . Nil. |
| No. condemned .. .. . 9            |                            |
| Percentage condemned .. .. . 1.4%  |                            |
| Guinea Fowl, Pheasant, Etc.        |                            |
| No. examined .. .. . 439           |                            |
| No. condemned .. .. . 48           |                            |
| Percentage condemned .. .. . 10.9% |                            |

The following food samples were taken for Chemical and Bacteriological Analysis:—

(1) Chemical:

| Article.                        | No. of Samples. | Satisfactory. | Unsatisfactory. |
|---------------------------------|-----------------|---------------|-----------------|
| Boerwors .. .. .                | 128             | 124           | 4               |
| Minced Meat .. .. .             | 24              | 24            | —               |
| Dripping .. .. .                | 3               | 3             | —               |
| Bread .. .. .                   | 19              | 19            | —               |
| Honey .. .. .                   | 3               | 3             | —               |
| Brawn .. .. .                   | 4               | 4             | —               |
| Coffee .. .. .                  | 5               | 4             | 1               |
| Cheese .. .. .                  | 10              | 10            | —               |
| Skimmilk Cheese .. .. .         | 2               | 2             | —               |
| Icing Sugar .. .. .             | 5               | 5             | —               |
| Dried Fruit .. .. .             | 7               | 7             | —               |
| Polony .. .. .                  | 7               | 7             | —               |
| Soda Water .. .. .              | 30              | 27            | 3               |
| Spices .. .. .                  | 10              | 10            | —               |
| Mealie Meal .. .. .             | 4               | 4             | —               |
| Sago .. .. .                    | 3               | 3             | —               |
| Sugar .. .. .                   | 1               | 1             | —               |
| Flour .. .. .                   | 2               | 2             | —               |
| Pork Sausage .. .. .            | 1               | 1             | —               |
| Chocolate Confectionery .. .. . | 2               | 2             | —               |
| Milk .. .. .                    | 8               | 1             | 7               |
| Ice Cream .. .. .               | 176             | 152           | 24              |
| Water .. .. .                   | 82              | 82            | —               |
|                                 | <u>536</u>      | <u>497</u>    | <u>39</u>       |

(2) Bacteriological:

| Article.          | No. of Samples. | Satisfactory. | Unsatisfactory. |
|-------------------|-----------------|---------------|-----------------|
| Ice Cream .. .. . | 176             | 145           | 31              |

The water samples, as set out below include those taken from the City's water supplies at various points and at the Municipal Swimming Baths.

| No. of Samples. | Satisfactory. | Unsatisfactory. | Not satisfactory for use unless chlorinated. |
|-----------------|---------------|-----------------|----------------------------------------------|
| 260             | 162           | 73              | 25                                           |

REPORT ON PEST CONTROL SECTION FOR THE YEAR ENDED 30TH JUNE, 1951.

Anti-Mosquito Control Measures:

Anti-mosquito measures which consisted of the clearing of vegetation from water courses, irrigation dams and furrows, straightening and levelling of furrows, filling-in and levelling of depressions liable to hold water, and spraying were maintained during the period under review.

The straightening of furrows and draining of swampy areas during the winter months, when it was possible to concentrate all available labour on this type of work, has resulted in a considerable shortening of the furrows and will reduce the amount of larvicide used and the amount of time spent on spraying during the next season.

1,080 Gallons of larvicide were used during the spraying season.

The co-operation from the Market Gardeners facilitated the carrying out of effective anti-mosquito control measures on agricultural holdings within the Municipal area.

Due to the lack of the necessary funds it was not possible to carry out comprehensive control measures in the Hercules area, but complaints in this area were dealt with and where necessary spraying was done.

Negotiations with the owners of swampy areas and property through which a spruit passes, are in hand and it is proposed to establish regular anti-mosquito control measures in the Hercules area, during the next few months.

Rodent Control Eradication:

The usual methods of trapping, gassing and poisoning for the control of rodents on Municipal property were maintained.

Complaints from the Public were dealt with and advice in regard to methods of rodent eradication was given and where warranted, assistance in the eradication of rodents was given.

Rodent-Free Certificates:

Sixty-nine rodent-free certificates were issued to owners of buildings prior to demolition.

Of these buildings four were found to be rodent infested and they had to be gassed before the necessary certificates could be issued.

**Control of Fly-Breeding:**

Fly-breeding in the Municipal compost pits was reduced to a minimum by the Parks Department by regular spraying with D. & B. Solution.

The Zoological Gardens applied similar measures with satisfactory results.

**Cockroach Eradication:**

Due to inadequate staff and the lack of suitable equipment a general campaign for the eradication of cockroaches from sewers and storm-water drains could not be put into operation.

A few storm-water gulleys which were heavily infested and which were in close proximity to food stores were sprayed.

Advice in the correct method of spraying and assistance where necessary were given to several food stores and restaurants.

**General:**

An infestation of ants at the City Hall was successfully eradicated by spraying with D. & B. Solution.

D. & B. Solution has been found more useful as a general insecticide than D.D.T. and it has been used to destroy bugs and other insect pests in the Municipal sub-economic houses and Native Compounds.

**WATER SUPPLIES.**

As in previous years, the demand for water has increased tremendously year by year as the table set out hereunder shows:—

|           |         |        |                          |
|-----------|---------|--------|--------------------------|
| 1929-1930 | .. .. . | 4.2    | million gallons per day. |
| 1934-1935 | .. .. . | 7.4    | " " "                    |
| 1939-1940 | .. .. . | 8.78   | " " "                    |
| 1945-1946 | .. .. . | 13.8   | " " "                    |
| 1946-1947 | .. .. . | 14.2   | " " "                    |
| 1947-1948 | .. .. . | 14.52  | " " "                    |
| 1948-1949 | .. .. . | 15.254 | " " "                    |
| 1949-1950 | .. .. . | 15.963 | " " "                    |
| 1950-1951 | .. .. . | 16.973 | " " "                    |

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     | .. .. . | 2,435.1 |
| Springs (Fountains)  | .. .. . | 1,660.4 |
| Sterkfontein Springs | .. .. . | 521.5   |
| Rietvlei Springs     | .. .. . | 586.9   |
| Rietvlei Filters     | .. .. . | 996.9   |

23.4 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               | .. .. . | 206,778   | cub. yards. |
| Special and Coupon Service | .. .. . | 17,553    | cub. yards. |
| Sanitary Pail Service      | .. .. . | 6,296,300 | Gallons.    |
| Vacuum Tanks               | .. .. . | 9,265,400 | Gallons.    |

**SLUM CLEARANCE, HOUSING AND REHABILITATION.****Slum Clearance:**

Owing to the shortage of housing accommodation, it has not been possible to deal with many properties, which are considered to be unfit for human habitation.

The Slums Section has worked in close co-operation with the Housing Section, and no slums were condemned or demolished unless the Housing Section was able to accommodate the occupiers or unless other suitable arrangements were made for them.

Although there has been a notable increase in the number of new houses and flats erected by private enterprise, this has not catered for the lower income groups. There has also been no major extension of any of the Council's existing housing schemes. For these reasons we have adopted a „go-slow” slum elimination policy.

There is therefore a great need for the building of homes for the lower income group families. Unless, however, more financial assistance is given to local authorities by the Union Government, we will not be in a position to tackle our serious housing problems. Owing to the present financial

burden on local authorities in respect of losses on sub-economic housing schemes, the provision of low-cost economic houses, which do not incur losses, would appear to be the answer. Most local authorities in the Union are of the opinion that they cannot continue building sub-economic houses if they are to continue to bear the present rate of losses. Something must be done, however, as by providing healthy houses for families who are at present living in slums, we do not only help them to improve their health standards, but we also improve their socio-economic position and so eliminate the problems of social evils which go hand in hand with bad environment.

Statistical information regarding the work undertaken by the Slums Section is as follows:—

#### Rehousing:

Old Aged Housing Scheme: Of 30 applicants 29 were rehoused from slums.

Other Housing Schemes: Of 230 applicants living under slums conditions the rehousing of 195 was approved by the Council, but only 84 families comprising 435 persons could be rehoused owing to the inadequacy of accommodation in our various schemes.

#### Demolitions:

|                                                             | Dwellings.           | Apartments. |
|-------------------------------------------------------------|----------------------|-------------|
| As a result of slums declarations.. .. .                    | 1 comprising         | 4           |
| As a result of action in terms of Slums Regulations .. .. . | 22 comprising        | 114         |
| By request of owners .. .. .                                | 53 comprising        | 270         |
| <b>TOTAL OF .. .. .</b>                                     | <b>75 comprising</b> | <b>388</b>  |

Total number of applications received for demolitions in terms of Government Proclamation No. 267 of 1947 .. .. . 119  
Of these the National Housing and Planning Commission approved 89 and refused 30.

#### General:

|                                                       | Old Pretoria Area. | Hercules Area. |
|-------------------------------------------------------|--------------------|----------------|
| <b>Notices:</b>                                       |                    |                |
| Notices sent prohibiting occupation of outbuildings.. | 54                 | 69             |
| Outbuildings vacated .. .. .                          | 81                 | 14             |
| Notices sent prohibiting overcrowding .. .. .         | 59                 | 38             |
| Notices complied with .. .. .                         | 104                | 17             |
| Notices sent prohibiting occupation of slum dwellings | 12                 | 40             |
| No. of dwellings vacated or demolished.. .. .         | 98                 | 40             |

|                                      | Old Pretoria Area. | Hercules Area. |
|--------------------------------------|--------------------|----------------|
| <b>Occupied Slums:</b>               |                    |                |
| Major slums still occupied .. .. .   | 275                | 67             |
| Minor slums still occupied .. .. .   | 236                | 20             |
| Dwellings still overcrowded .. .. .  | 121                | 42             |
| Outbuildings still occupied .. .. .  | 71                 | 103            |
| <b>Total number of slums .. .. .</b> | <b>703</b>         | <b>232</b>     |

GRAND TOTAL 935.

The above figures apply only to premises occupied by Europeans, in respect of which action has been taken by the Department, but do not reflect the actual number of slums throughout the City. The actual number is perhaps two to three times greater.

#### New Housing Schemes:

In order to afford some relief to the housing problem the Council is at present planning to erect a further 50 Sub-Economic and 150 Economic houses.

During the year three new housing schemes were instituted, namely a housing scheme of 30 flats for old-aged couples, an extension of the economic housing scheme at the Showgrounds by the provision of another eight flats, and the erection of economic shops and flats at Danville.

The old-aged scheme was accomplished by conversion of military bungalows into self-contained flats. These flats have proved a great success and the old-aged couples occupying them are very happy. An endeavour has been made to provide them with various forms of entertainment such as concerts, cinema shows and parties. These functions have proved very popular and have assisted in creating a true community spirit.

The eight Economic flats are an extension of the older Economic scheme of converted military bungalows.

A block of shops and flats has been erected at Danville. The new shops comprise a restaurant, chemist, fruiterer and greengrocer, general dealer and outfitter, dairy and butchery. There are eighteen self-contained two-roomed flats which have proved very popular with newly-married couples.

A building has also been set aside here for a Post Office, which we are given to understand will be started during the coming year.

#### Sundry Properties:

Additional sundry Municipal properties were taken over by the Housing Section during the year and, even though some of the dwellings are not in a very sound structural condition, they afforded additional accommodation for families who could not be rehoused in any of the Council's Sub-economic housing schemes.

There has been a reduction in rent arrears in respect of these properties as a result of the rent collection system being undertaken by the Housing Section. Maintenance costs of these properties are rather high, but as most of them have been expropriated or purchased by the Council for purposes of proceeding with other schemes such as canalisation and road construction, these costs do not represent a loss when compared with the rents received.

Amongst the sundry properties nine houses at Saulsvile Township were taken over. These houses are in a bad condition. Since the Department has taken over this Township, it has been responsible for an improvement in the water supply, sanitary and rubbish removal services.

#### Non-European Housing:

As has been reported previously, this remains a very serious problem even though the Atteridgeville Location has been extended.

Conditions at Lady Selborne and Bantule Locations are most unsatisfactory from a health point of view and the need for positive action in the provision of extensive native housing schemes can no longer be overlooked.

The conditions under which the Asiatic and Cape Coloured communities live are indeed very bad. The areas occupied by them are congested with buildings of the most defective types, and there is gross overcrowding.

The need for improving the plight of these communities is urgent and I must repeat, as in previous reports, that unless suitable action is taken, the presence of such conditions will continue to constitute a menace to the health of the whole City.

### REPORT ON SEWAGE WORKS AND LABORATORIES.

Table 1 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 the Apies Stream, Steenhoven and Skinner 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.

There is a slight decrease in the daily average Sewage flow figure compared with that for last year. This is probably due to the lower rainfall.

#### Sewage Purification.

(1) *Two-stage filtration versus recirculation.*—These two processes were operated during 1950 in 12 feet deep filters and the results are given in Table II. The units employed were designed for two-stage filtration, and for this reason humus removal in the recirculation process was not as efficient as in the two-stage process. However, the results show that there is very little to choose between the two processes. Their operating costs are also practically the same.

(2) *Jenks bio-filtration.*—The comparative results for Jenks bio-filtration on a 5 ft. deep filter, and single filtration on 6 ft. deep filters are given in Table III. The Jenks filter treats a mixture of 3 volumes purified effluent and 1 volume of settled sewage, at a constant rate of recirculation of purified effluent. For the dosages applied, single filtration on 6 ft. deep filters produced an effluent of a higher standard of purity than the Jenks bio-filtration process. Investigations on both two-stage filtration and recirculation are continuing.

### New Works

In December, 1950, the Council purchased the farm Rooiwal, 1,400 morgen in extent and situated approximately 15 miles north of Church Square, at a price of £35,000. A sewage purification works to serve the northern suburbs is to be established on this farm within the next few years.

### Use of Effluent as Cooling Water.

The normal humus tank capacity will be doubled in order to remove more settleable humus from the filter effluent prior to sand filtration. The designs for rapid gravity sand filters with a capacity of 2½ million gallons per day are being completed by the City Engineer's department. Sand filtered effluent will be pumped to the Power Station for use as cooling water in the new station.

### Sludge Digestion:

Efficient sludge digestion was maintained in both the old and new tanks. During the year, 5470 cubic yards of digested sludge were removed from the drying beds.

### Laboratory Services.

In addition to water and sewage analyses, analytical work and investigations were carried out for various other municipal departments. 2,218 Samples were analysed during the year.

During the latter half of the summer, serious occurrences of 'red water' took place in the northern suburbs. This trouble was experienced only with Rand Water Board water, and the matter was investigated by the chemical laboratory. In order to avoid further troubles, the Water Engineer is making the necessary arrangements for the treatment of this water.

TABLE I.

| MONTH        | Sewage Flow           | Raw Sludge             | Sludge Sewage | Filter Dosage                   | Screenings                      | Grit                            | Dasport Weir           | Ratio of Dilution Effluent to Stream Water. | Rainfall at Sewage Works Inches. |
|--------------|-----------------------|------------------------|---------------|---------------------------------|---------------------------------|---------------------------------|------------------------|---------------------------------------------|----------------------------------|
|              | Daily Average Gallons | Daily Average Gallons. | Percentage.   | Gallons per cubic yard per day. | Cubic Feet per million gallons. | Cubic Feet per million gallons. | Daily Average Gallons. |                                             |                                  |
| 1950—        |                       |                        |               |                                 |                                 |                                 |                        |                                             |                                  |
| July .. ..   | 6,300,000             |                        |               |                                 | 22.4                            | 3.2                             | 8,311,000              | 1:0.32                                      | nil                              |
| August ..    | 6,121,000             |                        |               |                                 | 19.5                            | 3.8                             | 8,392,000              | 1:0.37                                      | nil                              |
| September .. | 6,093,000             |                        |               |                                 | 19.2                            | 3.6                             | 8,212,000              | 1:0.35                                      | 0.36                             |
| October ..   | 6,132,000             |                        |               |                                 | 17.9                            | 3.3                             | 8,012,000              | 1:0.31                                      | 0.94                             |
| November ..  | 6,317,000             |                        |               |                                 | 16.8                            | 4.6                             | 10,515,000             | 1:0.66                                      | 3.22                             |
| December ..  | 6,976,000             |                        |               |                                 | 14.6                            | 3.4                             | 17,949,000             | 1:1.57                                      | 7.46                             |
| 1951—        |                       |                        |               |                                 |                                 |                                 |                        |                                             |                                  |
| January ..   | 7,435,000             |                        |               |                                 | 12.5                            | 4.3                             | 12,890,000             | 1:0.73                                      | 2.16                             |
| February ..  | 7,059,000             |                        |               |                                 | 14.3                            | 4.0                             | 14,050,000             | 1:0.99                                      | 5.58                             |
| March ..     | 6,371,000             |                        |               |                                 | 18.4                            | 3.3                             | 9,881,000              | 1:0.55                                      | 1.53                             |
| April ..     | 6,853,000             |                        |               |                                 | 18.7                            | 3.5                             | 11,033,000             | 1:0.61                                      | 3.11                             |
| May ..       | 6,973,000             |                        |               |                                 | 17.5                            | 3.6                             | 10,342,000             | 1:0.48                                      | 2.77                             |
| June ..      | 6,345,000             |                        |               |                                 | 18.9                            | 3.6                             | 7,339,000              | 1:0.16                                      | nil                              |
| Year 1950-51 | 6,581,000             |                        |               |                                 | 17.6                            | 3.7                             | 10,577,000             | 1:0.61                                      | 27.13                            |

Table II.  
COMPARATIVE RESULTS FOR FIXED TWO STAGE.  
OPERATION AND RECIRCULATION (1 : 1) ON 12 FT. FILTERS AT PRETORIA, 1950.  
24 HOUR SAMPLING.

| RESULTS IN PARTS PER 100,000                                                              | Jan.              | Feb.              | Mar.              | April             | May                | June              | July               | Aug.               | Sept.              | Oct.               | Nov.              | Dec.              | AVERAGES.         |                    |                    | Year.              |
|-------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
|                                                                                           |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   | Jan.<br>April     | May<br>Aug.        | Sept.<br>Dec.      |                    |
| DOSAGE: GALLS/CU.YD./DAY.<br>LOADING (O.A. X DOSAGE)<br>LOADING (STRENGTH X DOSAGE) 100's | 220<br>940<br>150 | 225<br>990<br>160 | 250<br>990<br>170 | 242<br>960<br>162 | 262<br>1070<br>191 | 237<br>990<br>166 | 250<br>1140<br>188 | 275<br>1240<br>206 | 262<br>1150<br>186 | 261<br>1170<br>190 | 235<br>930<br>155 | 261<br>940<br>157 | 234<br>970<br>160 | 256<br>1100<br>188 | 254<br>1050<br>173 | 248<br>1040<br>174 |
| MEAN AIR TEMP. DURING SAMPLING °F ..                                                      | 70                | 73                | 75                | 66                | 53                 | 53                | 48                 | 49                 | 62                 | 65                 | 69                | 70                | 71                | 51                 | 67                 | 63                 |
| SETTLED SEWAGE                                                                            | 4.25              | 4.40              | 3.95              | 3.95              | 4.10               | 4.15              | 4.55               | 4.50               | 4.40               | 4.50               | 3.95              | 3.60              | 4.15              | 4.30               | 4.15               | 4.20               |
| H.T.E. : F.P. ..                                                                          | 1.75              | 1.90              | 2.00              | 1.75              | 2.00               | 1.80              | 1.85               | 1.90               | 1.75               | 1.90               | 1.65              | 1.45              | 1.85              | 1.90               | 1.70               | 1.80               |
| : F.S. ..                                                                                 | 1.05              | 1.15              | 1.10              | 1.05              | 1.10               | 1.15              | 1.30               | 1.40               | 1.55               | 1.30               | 1.15              | 1.15              | 1.10              | 1.25               | 1.30               | 1.20               |
| : REC. ..                                                                                 | 1.35              | 1.55              | 1.40              | 1.20              | 1.35               | 1.35              | 1.30               | 1.40               | 1.55               | 1.40               | 1.40              | 1.45              | 1.40              | 1.35               | 1.45               | 1.40               |
| OXYGEN                                                                                    |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |
| E.F. : F.P. ..                                                                            | 1.20              | 1.45              | 1.35              | 1.15              | 1.35               | 1.25              | 1.25               | 1.40               | 1.25               | 1.20               | 1.05              | 1.10              | 1.30              | 1.30               | 1.15               | 1.25               |
| : F.S. ..                                                                                 | 0.80              | 0.95              | 0.90              | 0.85              | 0.90               | 0.90              | 0.90               | 1.00               | 1.05               | 0.95               | 0.85              | 0.85              | 0.90              | 0.90               | 0.95               | 0.90               |
| : REC. ..                                                                                 | 0.95              | 1.10              | 1.05              | 0.95              | 1.00               | 1.00              | 0.95               | 0.95               | 1.10               | 1.00               | 1.00              | 1.10              | 1.00              | 1.00               | 1.05               | 1.00               |
| ABSORBED                                                                                  |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |
| SETTLED SEWAGE                                                                            | 63                | 71                | 68                | 67                | 73                 | 70                | 75                 | 75                 | 71                 | 73                 | 66                | 60                | 69                | 73                 | 68                 | 70                 |
| H.T.E. : F.P. ..                                                                          | 33                | 38                | 44                | 38                | 46                 | 42                | 41                 | 42                 | 37                 | 43                 | 36                | 33                | 38                | 43                 | 37                 | 39                 |
| : F.S. ..                                                                                 | 15                | 18                | 21                | 18                | 22                 | 22                | 23                 | 25                 | 26                 | 21                 | 17                | 18                | 18                | 23                 | 21                 | 21                 |
| : REC. ..                                                                                 | 21                | 23                | 24                | 19                | 23                 | 23                | 23                 | 26                 | 25                 | 24                 | 20                | 21                | 22                | 24                 | 23                 | 23                 |
| OXYGEN                                                                                    |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |
| E.F. : F.P. ..                                                                            | 27                | 33                | 36                | 30                | 37                 | 35                | 33                 | 36                 | 32                 | 35                 | 30                | 30                | 32                | 34                 | 32                 | 33                 |
| : F.S. ..                                                                                 | 13                | 17                | 18                | 15                | 20                 | 19                | 19                 | 21                 | 21                 | 18                 | 13                | 15                | 16                | 20                 | 17                 | 18                 |
| : REC. ..                                                                                 | 16                | 19                | 19                | 17                | 19                 | 19                | 20                 | 21                 | 20                 | 17                 | 16                | 17                | 18                | 20                 | 17                 | 18                 |
| McGOWAN                                                                                   |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |
| SETTLED SEWAGE                                                                            | 34.0              | 26.0              | 27.0              | 26.0              | 28.0               | 22.0              | 24.0               | 25.0               | 25.5               | 28.0               | 22.0              | 25.0              | 28.0              | 27.0               | 25.0               | 26.5               |
| H.T.E. : F.P. ..                                                                          | 2.90              | 4.45              | 5.05              | 4.55              | 6.90               | 3.95              | 3.80               | 4.15               | 4.00               | 2.45               | 2.20              | 2.75              | 4.25              | 4.70               | 2.85               | 3.95               |
| : F.S. ..                                                                                 | 1.15              | 1.90              | 3.65              | 3.70              | 2.70               | 1.90              | 2.70               | 3.30               | 2.65               | 2.50               | 2.05              | 2.65              | 2.60              | 2.65               | 2.45               | 2.55               |
| : REC. ..                                                                                 | 1.85              | 1.65              | 2.15              | 2.05              | 3.55               | 2.55              | 2.40               | 2.60               | 3.25               | 1.95               | 1.90              | 3.35              | 1.95              | 2.80               | 2.60               | 2.45               |
| 5 DAY                                                                                     |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |
| E.F. : F.P. ..                                                                            | 1.15              | 1.90              | 2.20              | 1.70              | 3.35               | 1.85              | 1.55               | 1.50               | 1.20               | 0.90               | 0.80              | 1.20              | 1.75              | 2.05               | 1.05               | 1.65               |
| : F.S. ..                                                                                 | 0.50              | 0.50              | 0.70              | 0.65              | 0.95               | 0.65              | 0.70               | 0.90               | 0.65               | 0.55               | 0.45              | 0.60              | 0.60              | 0.80               | 0.55               | 0.65               |
| : REC. ..                                                                                 | 0.80              | 0.80              | 1.00              | 0.85              | 1.45               | 0.95              | 1.10               | 1.00               | 1.35               | 0.60               | 0.85              | 0.76              | 0.85              | 1.15               | 0.90               | 0.95               |
| B.O.D.                                                                                    |                   |                   |                   |                   |                    |                   |                    |                    |                    |                    |                   |                   |                   |                    |                    |                    |

NOTE: H.T.E. = HUMUS TANK EFFLUENT  
F.P. = FIXED PRIMARY  
REC. = RECIRCULATION (1:1)  
E.F. = EFFLUENT FILTERED IN LAB.  
F.S. = FIXED SECONDARY.

Table II—(Continued).  
COMPARATIVE RESULTS FOR FIXED TWO STAGE.—(Continued).

|                                                     | Jan.             | Feb. | Mar. | April | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | AVERAGES.     |             |               | Year. |
|-----------------------------------------------------|------------------|------|------|-------|------|------|------|------|-------|------|------|------|---------------|-------------|---------------|-------|
|                                                     |                  |      |      |       |      |      |      |      |       |      |      |      | Jan.<br>April | May<br>Aug. | Sept.<br>Dec. |       |
| AMMONIACAL                                          | SETTLED SEWAGE.  | 4.50 | 4.75 | 5.25  | 5.00 | 5.75 | 5.00 | 5.50 | 5.00  | 5.00 | 4.75 | 4.50 | 4.90          | 5.45        | 4.80          | 5.05  |
|                                                     | : F.P. ..        | 3.00 | 3.75 | 4.65  | 3.90 | 5.00 | 4.75 | 4.50 | 4.00  | 4.75 | 4.00 | 3.75 | 3.75          | 4.70        | 4.15          | 4.20  |
|                                                     | H.T.E. : F.S. .. | 0.75 | 1.30 | 1.28  | 1.30 | 2.05 | 2.05 | 1.80 | 2.00  | 1.50 | 0.90 | 1.25 | 1.30          | 2.05        | 1.40          | 1.60  |
| NITROGEN                                            | : REC. ..        | 1.20 | 1.45 | 1.50  | 1.25 | 1.75 | 1.75 | 1.80 | 1.75  | 1.65 | 1.00 | 1.15 | 1.35          | 1.90        | 1.40          | 1.55  |
|                                                     | : F.P. ..        | 3.00 | 3.75 | 4.50  | 3.90 | 4.90 | 4.50 | 4.25 | 4.00  | 4.75 | 4.00 | 3.75 | 3.65          | 4.50        | 4.15          | 4.10  |
|                                                     | H.T.E. : F.S. .. | 0.80 | 1.30 | 1.80  | 1.30 | 2.05 | 2.05 | 1.80 | 2.00  | 1.50 | 0.90 | 1.25 | 1.30          | 2.05        | 1.40          | 1.60  |
| ALBUMENOID                                          | : REC. ..        | 1.20 | 1.45 | 1.50  | 1.25 | 1.75 | 1.75 | 1.80 | 1.75  | 1.65 | 1.00 | 1.15 | 1.35          | 1.90        | 1.35          | 1.55  |
|                                                     | SETTLED SEWAGE.  | 0.70 | 0.80 | 0.80  | 0.65 | 0.95 | 0.85 | 0.75 | 0.80  | 0.75 | 0.65 | 0.60 | 0.75          | 0.85        | 0.70          | 0.75  |
|                                                     | : F.P. ..        | 0.30 | 0.37 | 0.42  | 0.43 | 0.40 | 0.45 | 0.38 | 0.36  | 0.31 | 0.30 | 0.28 | 0.38          | 0.40        | 0.30          | 0.36  |
| NITROGEN                                            | H.T.E. : F.S. .. | 0.15 | 0.16 | 0.18  | 0.17 | 0.19 | 0.14 | 0.20 | 0.20  | 0.15 | 0.17 | 0.14 | 0.17          | 0.18        | 0.17          | 0.17  |
|                                                     | : REC. ..        | 0.23 | 0.26 | 0.23  | 0.20 | 0.26 | 0.25 | 0.22 | 0.23  | 0.23 | 0.24 | 0.23 | 0.23          | 0.24        | 0.25          | 0.24  |
|                                                     | : F.P. ..        | 0.16 | 0.23 | 0.23  | 0.17 | 0.27 | 0.23 | 0.23 | 0.20  | 0.18 | 0.18 | 0.16 | 0.20          | 0.12        | 0.18          | 0.20  |
| NITRITE                                             | : F.S. ..        | 0.09 | 0.13 | 0.13  | 0.11 | 0.12 | 0.10 | 0.14 | 0.15  | 0.13 | 0.11 | 0.11 | 0.12          | 0.13        | 0.12          | 0.12  |
|                                                     | : REC. ..        | 0.12 | 0.14 | 0.16  | 0.13 | 0.18 | 0.17 | 0.14 | 0.17  | 0.15 | 0.14 | 0.14 | 0.14          | 0.17        | 0.14          | 0.15  |
|                                                     | : F.P. ..        | 0.13 | 0.04 | 0.01  | 0.04 | 0.04 | 0.06 | 0.10 | 0.08  | 0.08 | 0.10 | 0.11 | 0.06          | 0.07        | 0.09          | 0.07  |
| NITROGEN                                            | : F.S. ..        | 0.07 | 0.07 | 0.07  | 0.07 | 0.07 | 0.08 | 0.09 | 0.08  | 0.07 | 0.07 | 0.07 | 0.07          | 0.08        | 0.07          | 0.07  |
|                                                     | : REC. ..        | 0.08 | 0.07 | 0.05  | 0.07 | 0.07 | 0.07 | 0.08 | 0.08  | 0.07 | 0.07 | 0.08 | 0.07          | 0.08        | 0.07          | 0.07  |
|                                                     | : F.P. ..        | 0.30 | 0.10 | 0.05  | 0.10 | Tr.  | 0.20 | 0.25 | 0.40  | 0.20 | 0.45 | 0.35 | 0.15          | 0.20        | 0.35          | 0.25  |
| RELATIVE STABILITY<br>(Methylene Blue)<br>Per Cent. | H.T.E. : F.S. .. | 1.05 | 1.30 | 1.65  | 1.30 | 1.30 | 1.10 | 2.00 | 0.65  | 2.00 | 2.05 | 1.45 | 1.30          | 1.65        | 1.55          | 1.50  |
|                                                     | : REC. ..        | 0.75 | 0.95 | 1.10  | 1.20 | 1.65 | 1.50 | 1.80 | 0.80  | 1.05 | 1.05 | 1.40 | 1.00          | 1.50        | 1.10          | 1.20  |
|                                                     | : F.P. ..        | 80   | 29   | 11    | 21   | 26   | 50   | 60   | 50    | 50   | 95   | 68   | 35            | 50          | 67            | 51    |
| SUSPENDED<br>SOLIDS                                 | H.T.E. : F.S. .. | 100  | 100  | 100   | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100  | 100           | 100         | 100           | 100   |
|                                                     | : REC. ..        | 100  | 100  | 100   | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100  | 100           | 100         | 100           | 100   |
|                                                     | : F.P. ..        | 100  | 49   | 29    | 49   | 50   | 91   | 100  | 100   | 100  | 100  | 100  | 57            | 85          | 100           | 81    |
| SOLIDS                                              | H.T.E. : F.S. .. | 100  | 100  | 100   | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100  | 100           | 100         | 100           | 100   |
|                                                     | : REC. ..        | 100  | 100  | 100   | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100  | 100           | 100         | 100           | 100   |
|                                                     | : F.P. ..        | 4.7  | 3.3  | 4.4   | 4.4  | 5.5  | 5.5  | 5.3  | 8.3   | 3.8  | 4.7  | 4.6  | 4.2           | 5.4         | 4.4           | 4.7   |
| SOLIDS                                              | H.T.E. : F.S. .. | 1.8  | 1.4  | 1.6   | 2.3  | 1.9  | 3.0  | 2.8  | 2.8   | 2.1  | 2.2  | 2.6  | 1.8           | 2.8         | 2.4           | 2.3   |
|                                                     | : REC. ..        | 2.7  | 2.6  | 2.6   | 2.6  | 3.2  | 3.4  | 3.3  | 4.0   | 3.2  | 3.3  | 4.0  | 2.6           | 3.3         | 3.6           | 3.2   |
|                                                     | : F.P. ..        | 4.7  | 3.3  | 4.4   | 4.4  | 5.5  | 5.5  | 5.3  | 8.3   | 3.8  | 4.7  | 4.6  | 4.2           | 5.4         | 4.4           | 4.7   |

NOTE: H.T.E. = HUMUS TANK EFFLUENT  
F.P. = FIXED PRIMARY  
REC. = RECIRCULATION (1:1)  
E.F. = EFFLUENT FILTERED IN LAB.  
F.S. = FIXED SECONDARY.

Table III.  
COMPARATIVE RESULTS FOR JENKS BIO-FILTRATION ON 5 FT. FILTER AND SINGLE STAGE FILTRATION  
ON 6 FT. FILTERS AT PRETORIA, 1950.

| RESULTS IN PARTS PER 100,000          | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | AVERAGES       |              |                | Year. |
|---------------------------------------|------|------|------|------|------|------|------|------|-------|------|------|----------------|--------------|----------------|-------|
|                                       |      |      |      |      |      |      |      |      |       |      |      | Jan.-<br>April | May-<br>Aug. | Sept.-<br>Nov. |       |
| DOSAGE: GALLS./CU. YD./DAY:           |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| SINGLE. ..                            | 117  | 116  | 110  | 102  | 118  | 100  | 94   | 89   | 89    | 81   | 91   | 111            | 100          | 87             | 99    |
| JENKS ..                              | 327  | 332  | 324  | 310  | 352  | 305  | 296  | 298  | 294   | 285  | 303  | 323            | 313          | 296            | 311   |
| LOADING (O.A. X DOSAGE)               |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| SINGLE ..                             | 374  | 360  | 341  | 311  | 390  | 330  | 338  | 307  | 298   | 300  | 302  | 347            | 341          | 300            | 339   |
| LOADING (STRENGTH X DOSAGE) 100s      | 57   | 51   | 58   | 50   | 61   | 56   | 54   | 49   | 48    | 46   | 45   | 54             | 55           | 47             | 52    |
| MEAN AIR TEMP. DURING SAMPLING °F. .. | 72   | 73   | 71   | 65   | 55   | 52   | 52   | 54   | 65    | 61   | 70   | 70             | 53           | 67             | 65    |
| RAW SEWAGE.                           | 6.10 | 7.00 | 6.40 | 5.00 | 5.60 | 5.20 | 6.20 | 5.80 | 6.20  | 5.90 | 6.30 | 6.10           | 5.70         | 6.10           | 6.00  |
| SETTLED SEWAGE.                       | 3.20 | 3.10 | 3.10 | 3.05 | 3.30 | 3.30 | 3.60 | 3.45 | 3.35  | 3.70 | 3.30 | 3.10           | 3.40         | 3.45           | 3.30  |
| 'OXYGEN                               |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| F.B.E. SINGLE. ..                     | 1.20 | 1.20 | 1.45 | 1.40 | 1.75 | 1.65 | 1.84 | 1.40 | 1.62  | 1.43 | 1.35 | 1.30           | 1.65         | 1.45           | 1.45  |
| JENKS. ..                             | 1.50 | 1.75 | 1.55 | 1.35 | 1.55 | 1.50 | 1.50 | 1.80 | 1.70  | 1.65 | 1.70 | 1.50           | 1.60         | 1.70           | 1.60  |
| H.T.E. SINGLE. ..                     | 0.85 | 1.10 | 1.00 | 0.95 | 1.20 | 1.05 | 1.10 | 1.00 | 1.00  | 1.00 | 1.10 | 0.95           | 1.10         | 1.00           | 1.00  |
| JENKS. ..                             | 1.30 | 1.40 | 1.35 | 1.20 | 1.30 | 1.30 | 1.40 | 1.40 | 1.45  | 1.40 | 1.50 | 1.30           | 1.35         | 1.45           | 1.35  |
| E.F. SINGLE. ..                       | 0.60 | 0.60 | 0.65 | 0.70 | 0.70 | 0.80 | 0.70 | 0.70 | 0.80  | 0.70 | 0.60 | 0.65           | 0.70         | 0.70           | 0.70  |
| JENKS. ..                             | 1.10 | 1.10 | 0.95 | 0.90 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00  | 1.10 | 1.10 | 1.00           | 1.00         | 1.05           | 1.00  |
| RAW SEWAGE.                           | 86   | 98   | 93   | 71   | 79   | 78   | 88   | 83   | 88    | 81   | 84   | 87             | 82           | 84             | 84    |
| SETTLED SEWAGE.                       | 53   | 48   | 53   | 49   | 52   | 56   | 58   | 55   | 54    | 57   | 51   | 51             | 55           | 54             | 53    |
| 'STRENGTH'                            |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| F.B.E. SINGLE. ..                     | 15   | 15   | 21   | 21   | 27   | 25   | 25   | 19   | 22    | 17   | 17   | 18             | 24           | 19             | 20    |
| JENKS. ..                             | 24   | 26   | 24   | 22   | 26   | 30   | 26   | 31   | 30    | 27   | 25   | 24             | 28           | 27             | 26    |
| H.T.E. SINGLE. ..                     | 11   | 14   | 15   | 16   | 20   | 17   | 16   | 15   | 15    | 13   | 14   | 14             | 17           | 14             | 15    |
| JENKS. ..                             | 21   | 22   | 21   | 20   | 23   | 26   | 24   | 24   | 27    | 22   | 24   | 21             | 24           | 24             | 23    |
| E.F. SINGLE. ..                       | 8    | 8    | 12   | 13   | 14   | 14   | 12   | 11   | 12    | 9    | 9    | 10             | 13           | 10             | 11    |
| JENKS. ..                             | 18   | 17   | 17   | 17   | 20   | 20   | 19   | 19   | 21    | 19   | 19   | 17             | 20           | 20             | 19    |
| RAW SEWAGE.                           | 36.0 | 39.0 | 37.0 | 32.0 | 36.0 | 27.0 | 34.0 | 34.0 | 37.5  | 43.0 | 37.0 | 36.0           | 33.0         | 39.0           | 36.0  |
| SETTLED SEWAGE.                       | 20.0 | 15.5 | 19.0 | 17.5 | 16.5 | 15.0 | 17.5 | 21.0 | 20.0  | 17.0 | 19.5 | 18.5           | 17.5         | 19.0           | 18.0  |
| 5 DAY                                 |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| F.B.E. SINGLE. ..                     | 1.80 | 1.30 | 2.70 | 3.25 | 4.45 | 3.25 | 4.25 | 2.50 | 2.45  | 1.60 | 1.70 | 2.30           | 3.60         | 1.90           | 2.60  |
| JENKS. ..                             | 3.15 | 1.50 | 2.75 | 2.20 | 3.40 | 2.60 | 3.50 | 3.30 | 3.10  | 2.30 | 2.50 | 2.40           | 3.20         | 2.60           | 2.70  |
| H.T.E. SINGLE. ..                     | 1.20 | 1.15 | 1.60 | 1.70 | 2.40 | 1.75 | 2.20 | 2.05 | 1.85  | 1.80 | 1.45 | 1.50           | 2.10         | 1.65           | 1.75  |
| JENKS. ..                             | 3.00 | 1.15 | 2.20 | 1.75 | 3.10 | 1.95 | 2.85 | 2.70 | 2.40  | 1.60 | 1.60 | 2.00           | 2.65         | 1.90           | 2.20  |
| E.F. SINGLE. ..                       | 0.50 | 0.40 | 0.50 | 0.80 | 1.00 | 1.00 | 0.60 | 0.70 | 0.50  | 0.50 | 0.45 | 0.55           | 0.80         | 0.50           | 0.60  |
| JENKS. ..                             | 0.90 | 0.65 | 0.60 | 0.80 | 1.25 | 1.00 | 0.95 | 1.10 | 0.90  | 0.60 | 0.70 | 0.75           | 1.05         | 0.70           | 0.80  |

NOTE: SINGLE = Single stage filtration in 6 ft. filters.  
 SETTLED SEWAGE = Primary Dortmund Tank Effluent, applied to single stage filters.  
 F.B.E. = Filter Bed Effluent.  
 E.F. = Effluent, filtered in Laboratory through Whatmans No. 12.  
 JENKS = Recirculation (3:1) on 5 ft. filter.  
 H.T.E. = Humus Tank Effluent.

Table III.—(Continued).  
COMPARATIVE RESULTS FOR JENKS BIO-FILTRATION ON 5 FT. FILTER AND SINGLE STAGE FILTRATION  
ON 6 FT. FILTERS AT PRETORIA, 1950.—(Continued).

|                     | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | AVERAGES.      |              |                | Year. |
|---------------------|------|------|------|------|------|------|------|------|-------|------|------|----------------|--------------|----------------|-------|
|                     |      |      |      |      |      |      |      |      |       |      |      | Jan.—<br>April | May—<br>Aug. | Sept.—<br>Nov. |       |
| RAW SEWAGE.         | 3.85 | 4.25 | 4.60 | 3.50 | 3.50 | 4.50 | 4.00 | 3.75 | 4.00  | 3.50 | 3.30 | 4.05           | 3.90         | 3.60           | 3.85  |
| SETTLED SEWAGE.     | 3.57 | 3.00 | 3.90 | 3.25 | 3.25 | 4.25 | 4.00 | 3.75 | 3.75  | 3.50 | 3.25 | 3.50           | 3.80         | 3.50           | 3.60  |
| AMMONIACAL          |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| F.B.E. SINGLE       | 0.30 | 0.40 | 0.90 | 1.15 | 1.45 | 1.20 | 0.90 | 0.75 | 0.65  | 0.35 | 0.45 | 0.70           | 1.10         | 0.50           | 0.75  |
| JENKS. "            | 1.55 | 1.40 | 1.35 | 1.45 | 1.90 | 2.75 | 1.90 | 2.40 | 2.25  | 2.00 | 1.50 | 1.40           | 2.25         | 1.90           | 1.85  |
| NITROGEN            |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| H.T.E. SINGLE       | 0.30 | 0.40 | 0.90 | 1.15 | 1.40 | 1.20 | 0.90 | 0.75 | 0.65  | 0.35 | 0.45 | 0.70           | 1.05         | 0.50           | 0.75  |
| JENKS. "            | 1.45 | 1.40 | 1.40 | 1.45 | 1.90 | 2.70 | 1.90 | 1.90 | 2.25  | 1.50 | 1.45 | 1.40           | 2.10         | 1.70           | 1.70  |
| E.F. SINGLE         | 0.30 | 0.40 | 0.90 | 1.15 | 1.40 | 1.20 | 0.80 | 0.75 | 0.65  | 0.35 | 0.45 | 0.70           | 1.05         | 0.50           | 0.75  |
| JENKS. "            | 1.45 | 1.10 | 1.40 | 1.45 | 1.90 | 2.60 | 1.75 | 1.60 | 2.25  | 1.50 | 1.45 | 1.45           | 1.95         | 1.80           | 1.75  |
| ALBUMENOID          |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| RAW SEWAGE.         | 0.95 | 1.20 | 1.00 | 0.75 | 1.05 | 0.80 | 1.10 | 1.05 | 1.00  | 0.90 | 0.80 | 0.95           | 1.00         | 0.90           | 0.95  |
| SETTLED SEWAGE.     | 0.50 | 0.50 | 0.50 | 0.50 | 0.55 | 0.55 | 0.60 | 0.50 | 0.50  | 0.60 | 0.40 | 0.50           | 0.55         | 0.50           | 0.50  |
| F.B.E. SINGLE       | 0.20 | 0.20 | 0.30 | 0.30 | 0.35 | 0.35 | 0.30 | 0.25 | 0.35  | 0.20 | 0.20 | 0.25           | 0.30         | 0.25           | 0.25  |
| JENKS. "            | 0.22 | 0.28 | 0.28 | 0.30 | 0.37 | 0.30 | 0.30 | 0.35 | 0.33  | 0.25 | 0.29 | 0.27           | 0.30         | 0.30           | 0.30  |
| NITROGEN            |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| H.T.E. SINGLE       | 0.13 | 0.16 | 0.16 | 0.17 | 0.22 | 0.19 | 0.18 | 0.19 | 0.20  | 0.10 | 0.17 | 0.16           | 0.20         | 0.16           | 0.17  |
| JENKS. "            | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 | 0.20 | 0.20 | 0.25  | 0.20 | 0.25 | 0.20           | 0.25         | 0.25           | 0.25  |
| E.F. SINGLE         | 0.07 | 0.07 | 0.12 | 0.08 | 0.10 | 0.14 | 0.10 | 0.08 | 0.16  | 0.07 | 0.07 | 0.09           | 0.11         | 0.10           | 0.10  |
| JENKS. "            | 0.13 | 0.12 | 0.14 | 0.13 | 0.15 | 0.17 | 0.15 | 0.14 | 0.15  | 0.13 | 0.15 | 0.13           | 0.15         | 0.14           | 0.14  |
| NITRITE             |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| NITROGEN.           |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| SINGLE              | 0.03 | 0.04 | 0.04 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04  | 0.03 | 0.03 | 0.04           | 0.05         | 0.03           | 0.04  |
| JENKS. "            | 0.12 | 0.20 | 0.08 | 0.09 | 0.11 | 0.09 | 0.09 | 0.11 | 0.09  | 0.11 | 0.10 | 0.12           | 0.10         | 0.10           | 0.11  |
| NITRATE             |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| NITROGEN.           |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| SINGLE              | 0.65 | 0.96 | 0.50 | 0.50 | 0.70 | 1.05 | 1.00 | 1.10 | 1.15  | 0.85 | 0.95 | 0.65           | 1.00         | 1.05           | 0.90  |
| JENKS. "            | 0.20 | 0.60 | 0.30 | 0.40 | 0.75 | 0.45 | 0.40 | 0.45 | 0.70  | 0.60 | 0.70 | 0.35           | 0.45         | 0.70           | 0.50  |
| RELATIVE STABILITY. |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| (METHYLENE BLUE.)   |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| PER CENT.           |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| H.T.E. SINGLE       | 80   | 100  | 100  | 99   | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 95             | 99           | 100            | 98    |
| JENKS. "            | 100  | 100  | 83   | 88   | 96   | 94   | 88   | 74   | 100   | 87   | 92   | 93             | 88           | 93             | 91    |
| E.F. SINGLE         | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100            | 100          | 100            | 100   |
| JENKS. "            | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100   | 100  | 100  | 100            | 100          | 100            | 100   |
| SUSPENDED.          |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| F.B.E. SINGLE       | 6.0  | 4.8  | 6.0  | 6.6  | 9.7  | 9.5  | 10.2 | 6.7  | 7.5   | 5.3  | 7.8  | 5.9            | 9.0          | 6.9            | 7.3   |
| JENKS. "            | 4.4  | 4.9  | 4.7  | 5.4  | 7.3  | 4.9  | 4.2  | 5.6  | 5.5   | 4.2  | 4.3  | 4.8            | 5.5          | 4.7            | 5.0   |
| SOLIDS.             |      |      |      |      |      |      |      |      |       |      |      |                |              |                |       |
| H.T.E. SINGLE       | 2.2  | 3.9  | 1.5  | 2.7  | 3.1  | 2.5  | 3.0  | 2.4  | 3.6   | 2.2  | 3.7  | 2.6            | 2.8          | 3.2            | 2.9   |
| JENKS. "            | 2.8  | 3.4  | 3.3  | 3.4  | 3.6  | 2.5  | 2.5  | 3.0  | 3.6   | 2.8  | 3.4  | 3.2            | 2.9          | 3.3            | 3.1   |

NOTE: SINGLE = Single stage filtration in 6 ft. filters.  
SETTLED SEWAGE = Primary Dortmund Tank Effluent, applied to single stage filters.  
F.B.E. = Filter Bed Effluent.  
E.F. = Effluent, filtered in Laboratory through Whatmans No. 12.  
JENKS = Recirculation (3:1) on 5ft. filter.  
H.T.E. = Humus Tank Effluent.

## NON-EUROPEAN MEDICAL SERVICES.

This report includes:—

- (a) 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<br>Clinic. | Bantule<br>Clinic. | Atteridgeville<br>Clinic. | Special Diseases<br>Clinics. Out-<br>patients<br>Department,<br>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.. .. .                                                      | 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-PATIENTS RETURNS FOR THE YEAR (in column showing „Total”, last years figures where available are shown in brackets).

|                                                                       | Compound. | Atteridgeville. | Bantule. | Total 1950-1951. |
|-----------------------------------------------------------------------|-----------|-----------------|----------|------------------|
| (1) No. of new cases seen ..                                          | 1,318     | 2,976           | 946      | 5,240 (4,401)    |
| (2) No. of repeat attendances                                         | 214       | 1,438           | 387      | 2,039 (1,782)    |
| (3) No. of Wasserman tests done .. .. .                               | 22        | 304             | 67       | 393 (288)        |
| (4) No. of Wasserman reactions positive .. .. .                       | 10        | 84              | 41       | 135 (89)         |
| (5) No. of Eye smears taken..                                         | —         | 4               | 3        | 7 (13)           |
| (6) No. of eye smears revealing gonococci .. .. .                     | —         | —               | 1        | 1 (—)            |
| (7) No. of urethral and cervical smears taken .. .. .                 | 1         | 2               | 1        | 4 (10)           |
| (8) No. of urethral and cervical smears revealing gonococci           | —         | —               | 1        | 1 (2)            |
| (9) No. of cases dressed by orderlies .. .. .                         | 121       | 3,617           | 1,213    | 4,951 (4,319)    |
| (10) No. of dressings done by orderlies .. .. .                       | 565       | 9,828           | 6,731    | 17,124 (14,426)  |
| (11) No. of cases referred to Ante-Natal clinics .. ..                | 21        | 18              | 7        | 46 (48)          |
| (12) No. of cases referred to Dental clinics .. .. .                  | 10        | 43              | 14       | 67 (59)          |
| (13) No. of cases referred to Venereal Diseases clinic ..             | 10        | 84              | 41       | 135 (114)        |
| (14) No. of cases referred for X-Ray examination .. ..                | 27        | 32              | 9        | 68 (28)          |
| (15) No. of cases referred to Tuberculosis clinics .. ..              | 12        | 13              | 4        | 29 (12)          |
| (16) No. of cases referred to O.P.D. for Bilharzia treatment .. .. .  | 5         | 9               | 1        | 15 (—)           |
| (17) No. of cases referred to casualty (medical and surgical) .. .. . | 11        | 26              | 14       | 51 (—)           |
| (18) No. of cases referred to O.P.D. .. .. .                          | 21        | 44              | 20       | 85 (—)           |
| (19) No. of cases admitted to hospital from clinics.. .. .            | 6         | 24              | 10       | 40 (—)           |

## SCHOOL HEALTH SERVICES AT ATTERIDGEVILLE LOCATION.

Atteridgeville school Health Services have been continued throughout the year and are still proving to be a valuable adjunct to the location's health services.

The following is a list of illnesses and injuries discovered on medical examination of school children from July 1st, 1950 to June 30th, 1951. (Last year's figures are shown in brackets.) The prevention and treatment of many of these ailments at an early age has a beneficial effect on the progress and future of the school-going child.

## INCIDENCE OF DISEASES ETC. AMONG ATTERIDGEVILLE SCHOOL CHILDREN

|                                                                                                                                                                                                                       | No. of Cases. | Approximate<br>Percentage of<br>Total Diseases. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------|
| 1. Respiratory Diseases:                                                                                                                                                                                              |               |                                                 |
| Lobar pneumonia .. .. .                                                                                                                                                                                               | 4             | } 21.6                                          |
| Bronchial catarrh .. .. .                                                                                                                                                                                             | 103           |                                                 |
| Bronchitis (acute and Chronic) .. .. .                                                                                                                                                                                | 32            |                                                 |
| Bronchiectasis .. .. .                                                                                                                                                                                                | 1             |                                                 |
| Influenza .. .. .                                                                                                                                                                                                     | 30            |                                                 |
| Laryngitis (acute and chronic) .. .. .                                                                                                                                                                                | 6             |                                                 |
| Trachitis .. .. .                                                                                                                                                                                                     | 2             |                                                 |
| Whooping Cough .. .. .                                                                                                                                                                                                | 13            |                                                 |
| Broncho pneumonia .. .. .                                                                                                                                                                                             | 1             |                                                 |
| Pulmonary Tuberculosis (including contacts with pulmonary physical signs) .. .. .                                                                                                                                     | 6             |                                                 |
| Minor respiratory ailments .. .. .                                                                                                                                                                                    | 101           |                                                 |
| Pleurisy .. .. .                                                                                                                                                                                                      | 3             |                                                 |
| 2. Skin Diseases (including impetigo contagiosa, ringworm, furunculosis, warts, veld sores, acne vulgaris, seborrhoea, Pityriasis, scabies, pruritis, dermatitis (chiefly infective) Urticaria herpes zoster) .. .. . | 155           | 10.9                                            |
| 3. Ear, Nose and Throat Infections:                                                                                                                                                                                   |               |                                                 |
| Tonsillitis (acute, subacute and chronic) .. .. .                                                                                                                                                                     | 232           | } 25.5                                          |
| Otitis Media (acute and chronic) .. .. .                                                                                                                                                                              | 49            |                                                 |
| Other conditions referable to the ear, nose and throat .. .. .                                                                                                                                                        | 83            |                                                 |
| 4. Eye Infections and Visual Defects:                                                                                                                                                                                 |               |                                                 |
| Conjunctivitis (acute and chronic) .. .. .                                                                                                                                                                            | 69            | } 7.2                                           |
| Defective sight and other ailments .. .. .                                                                                                                                                                            | 34            |                                                 |
| 5. Gastro Intestinal Ailments:                                                                                                                                                                                        |               |                                                 |
| Diarrhoea (including enteritis and Dysenteries) .. .. .                                                                                                                                                               | 32            | } 8.6                                           |
| Constipation (chiefly due to faulty diet) .. .. .                                                                                                                                                                     | 72            |                                                 |
| Other conditions (chiefly helmenthic infections). (1 case appendicitis) .. .. .                                                                                                                                       | 19            |                                                 |
| 6. Injuries .. .. .                                                                                                                                                                                                   | 87            | 6.1                                             |
| 7. Deficiency Diseases. (As main feature of cases) including vitamin deficiencies, other forms of malnutrition, anaemia, many other cases showed signs of malnutrition .. .. .                                        | 55            | 3.9                                             |
| 8. Nervous Disorders (including Epilepsy) .. .. .                                                                                                                                                                     | 14            | 1                                               |
| 9. Heart Disease .. .. .                                                                                                                                                                                              | 3             | 0.2                                             |
| 10. Rheumatic Manifestations .. .. .                                                                                                                                                                                  | 36            | 2.5                                             |
| 11. Dental Caries (Marked) and infections of the gums .. .. .                                                                                                                                                         | 34            | 2.4                                             |
| 12. Acute Infectious Fevers .. .. .                                                                                                                                                                                   | 42            | 3                                               |
| 13. Abscesses .. .. .                                                                                                                                                                                                 | 24            | 1.7                                             |
| 14. Venereal Diseases .. .. .                                                                                                                                                                                         | 4             | .3                                              |
| 15. Urinary Disorders (including Bilharzia 5 cases) .. .. .                                                                                                                                                           | 18            | 1.2                                             |
| 16. Menstrual Disorders .. .. .                                                                                                                                                                                       | 11            | .8                                              |
| 17. Lymphadenitis (acute and chronic) occurring per se or along with other conditions .. .. .                                                                                                                         | 27            | 1.8                                             |
| 18. Diseases of the Genital Organs .. .. .                                                                                                                                                                            | 7             | .5                                              |
| 19. Tuberculous (other than Pulmonary) .. .. .                                                                                                                                                                        | 4             | .3                                              |
| 20. Tumours .. .. .                                                                                                                                                                                                   | 2             | .15                                             |

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

Records kept at these clinics show the following:

|                                                                  | 1950-51 | 1949-50 | 1948-49 |
|------------------------------------------------------------------|---------|---------|---------|
| (1) No. injured on duty and treated at the Compound clinic ..    | 768     | 696     | 691     |
| (2) No. injured on duty and referred to the General Hospital ..  | 84      | 73      | 60      |
| (3) No. injured off duty and treated at the Compound clinic ..   | 876     | 861     | 921     |
| (4) No. injured off duty and referred to the General Hospital .. | 84      | 157     | 124     |
| (5) No. of sick treated at Compound clinic .. .. .               | 2,844   | 2,782   | 2,352   |
| (6) No. of sick referred to General Hospital .. .. .             | 216     | 120     | 97      |
| (7) Total No. examined by the doctor at the Compound clinic ..   | 4,562   | 4,339   | 4,283   |
| (8) Total No. of attendances at the Compound clinic .. ..        | 15,000  | 14,095  | 14,212  |

#### NATIVE INFLUX CONTROL.

##### (1) Urban Services:

|                                       | 1950-51       | 1949-50       |
|---------------------------------------|---------------|---------------|
| Number of natives examined.           |               |               |
| (a) New Cases .. .. .                 | 14,427        | 21,231        |
| (b) Return Cases .. .. .              | 33,493        | 31,116        |
|                                       | <u>47,920</u> | <u>52,347</u> |
| Number of natives vaccinated.. .. .   | 2,714         | 11,429        |
| Number of natives infested with Lice. |               |               |
| (a) Head and Body Lice .. .. .        | 38            | 2,980         |
| (b) Crab Lice .. .. .                 | 3,109         | 3,776         |
|                                       | <u>3,147</u>  | <u>6,756</u>  |

Number of natives temporarily unfit for employment because of:—

##### 1. Suspected Venereal Diseases:

|                                  |            |              |
|----------------------------------|------------|--------------|
| (a) Gonorrhoea .. .. .           | 80         | 358          |
| (b) Primary Syphilis .. .. .     | 21         | 62           |
| (c) Secondary Syphilis .. .. .   | 35         | 61           |
| (d) Tertiary Syphilis .. .. .    | 49         | 43           |
| 2. Simple Balanitis .. .. .      | 9          | 12           |
| 3. Bilharzial Urethritis .. .. . | 1          | 2            |
| 4. Dental Decay .. .. .          | 224        | 863          |
| 5. Tapeworms .. .. .             | 21         | 10           |
| 6. Scabies .. .. .               | 8          | 6            |
| 7. Dermatitis .. .. .            | 5          | —            |
| 8. Inguinal Hernias .. .. .      | 4          | 7            |
| 9. Traumatic Conditions .. .. .  | 7          | 2            |
|                                  | <u>464</u> | <u>1,446</u> |

Number permanently unfit for heavy duties and fit only for light or domestic duties because of:—

|                                              |            |            |
|----------------------------------------------|------------|------------|
| 1. Senility .. .. .                          | 213        | 285        |
| 2. Obesity .. .. .                           | 46         | 49         |
| 3. Valvular Disease of the Heart .. .. .     | 4          | 17         |
| 4. Residual effects of hemiplegia .. .. .    | 1          | —          |
| 5. Skeletal Deformities and Arthritis.. .. . | 51         | —          |
| 6. Unclassified Minor Ailments .. .. .       | 8          | —          |
|                                              | <u>323</u> | <u>351</u> |

Numerous other minor transient and permanent conditions and defects were also found on medical examination. Where these could benefit from treatment the natives were referred to the various out-patient departments of the General Hospital, Pretoria for the necessary treatment.

##### (2) Peri-Urban Services:

|                             | 1950-51      |
|-----------------------------|--------------|
| Number of natives examined: |              |
| (a) New cases .. .. .       | 3,846        |
| (b) Return Cases .. .. .    | 5,282        |
|                             | <u>9,128</u> |

|                                       |       |
|---------------------------------------|-------|
| Number of natives vaccinated .. .. .  | 3,846 |
| Number of natives infested with Lice: |       |
| (a) Head and Body Lice .. .. .        | 51    |
| (b) Crab Lice .. .. .                 | 90    |
|                                       | <hr/> |
|                                       | 141   |

Number of persons who required Dental Treatment and who were referred to the Dental Clinic.. .. . 676

Number of natives unfit for immediate employment because of:—

|                                                                  |    |
|------------------------------------------------------------------|----|
| 1. Venereal Diseases:                                            |    |
| (a) Primary Syphilis .. .. .                                     | 52 |
| (b) Secondary Syphilis .. .. .                                   | 38 |
| (c) Tertiary Syphilis .. .. .                                    | 9  |
| (d) Urethral Discharge .. .. .                                   | 60 |
| 2. Tuberculosis-Pulmonary and Other forms .. .. .                | 16 |
| 3. Scabies .. .. .                                               | 3  |
| 4. Leprosy .. .. .                                               | 4  |
| 5. Tapeworm (Diagnosed by segments lying in Natal Cleft) .. .. . | 3  |

Many natives found to be suffering from curable diseases were advised as to where and how to get the necessary treatment.

Table No. 1.  
BIRTHS (ALL RACES) FOR THE YEAR ENDED 30TH JUNE 1951.

|              | EUROPEAN.   |               | NATIVE      |               | ASIATIC     |               | EURAFRICAN. |               |
|--------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|
|              | Legitimate. | Illegitimate. | Legitimate. | Illegitimate. | Legitimate. | Illegitimate. | Legitimate. | Illegitimate. |
|              | Male.       | Female.       | Male.       | Female.       | Male.       | Female.       | Male.       | Female.       |
| July ..      | 101         | 94            | 33          | 18            | 7           | —             | 2           | 1             |
| August ..    | 161         | 174           | 76          | 62            | 13          | 1             | 6           | 4             |
| September .. | 139         | 120           | 55          | 62            | 9           | —             | 4           | 1             |
| October ..   | 128         | 133           | 78          | 52            | 13          | —             | 5           | 3             |
| November ..  | 152         | 173           | 77          | 74            | 15          | 1             | 9           | 3             |
| December ..  | 150         | 156           | 69          | 73            | 12          | —             | 5           | 3             |
| January ..   | 136         | 139           | 93          | 83            | 6           | —             | 6           | 1             |
| February ..  | 121         | 137           | 68          | 63            | 1           | —             | 5           | 1             |
| March ..     | 146         | 155           | 48          | 51            | 2           | —             | 4           | 4             |
| April ..     | 124         | 134           | 80          | 62            | 5           | 1             | 6           | 1             |
| May ..       | 165         | 135           | 86          | 66            | 14          | —             | 7           | 3             |
| June ..      | 176         | 185           | 106         | 116           | 18          | 2             | 11          | 4             |
| TOTALS..     | 1,699       | 1,735         | 869         | 782           | 421         | 403           | 116         | 103           |
|              |             |               |             |               |             |               | 6           | 5             |
|              |             |               |             |               |             |               | 68          | 26            |
|              |             |               |             |               |             |               | 25          | 25            |

## BIRTHS TO NON-RESIDENTS.

## STILLBIRTHS (LOCAL RESIDENTS).

|              | EUROPEAN. |         | NON-EUROPEAN. |         | EUROPEAN. |         | NON-EUROPEAN. |         |
|--------------|-----------|---------|---------------|---------|-----------|---------|---------------|---------|
|              | Male.     | Female. | Male.         | Female. | Male.     | Female. | Male.         | Female. |
| July ..      | 2         | 1       | 2             | 2       | 18        | 26      | 8             | 5       |
| August ..    | 1         | —       | 3             | 3       | 49        | 47      | 25            | 20      |
| September .. | —         | 3       | 1             | 1       | 48        | 40      | 30            | 34      |
| October ..   | 2         | 2       | 4             | 3       | 32        | 30      | 38            | 42      |
| November ..  | 2         | 4       | 3             | 4       | 54        | 43      | 50            | 38      |
| December ..  | 3         | 3       | 5             | 6       | 51        | 50      | 23            | 26      |
| January ..   | 2         | 3       | 3             | 11      | 33        | 39      | 35            | 47      |
| February ..  | 1         | 2       | 5             | 2       | 38        | 30      | 38            | 30      |
| March ..     | 1         | 1       | 4             | 7       | 36        | 36      | 31            | 24      |
| April ..     | 1         | 3       | 5             | 6       | 37        | 31      | 33            | 25      |
| May ..       | 5         | —       | 4             | 2       | 32        | 24      | 39            | 51      |
| June ..      | —         | 2       | 1             | 1       | 49        | 59      | 51            | 43      |
| TOTALS ..    | 20        | 24      | 40            | 48      | 477       | 455     | 401           | 385     |

Table No. 2.  
DEATHS OF EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDED 30TH JUNE 1951.

|                                                                           | 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. |
| Arebro-spinal Meningococcal Meningitis ..                                 | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | 1                          | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | 1                    | —  |
| Diphtheria .. .. .                                                        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | 1                        | —  | —                        | —  | —                        | —  | 1                    | —  |
| Tuberculosis—Pulmonary .. .. .                                            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Tuberculosis—Central Nervous System ..                                    | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Influenza .. .. .                                                         | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | —  | —                               | —  | —                          | —  | —                  | —  | 1                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Measles .. .. .                                                           | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Cancer and other Tumours (Brain and other parts of the Nervous System) .. | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Diseases of the Thymus .. .. .                                            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Primary Purpura .. .. .                                                   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Other unspecified haemorrhage Conditions .. .. .                          | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Leukaemia .. .. .                                                         | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Diseases of the Nervous System and Sense Organs .. .. .                   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Pneumococcal Meningitis .. .. .                                           | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | —  | —                               | —  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Convulsions .. .. .                                                       | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Diseases of the Ear and Mastoid Process .. .. .                           | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Bronchitis .. .. .                                                        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Pneumonia .. .. .                                                         | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |

TABLE NO. 2. DEATHS OF EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDED 30TH JUNE 1951.

|                                          | 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 to 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. |
| Other diseases of the                    |                     |    |                          |    |                         |    |                           |    |                            |    |                                   |    |                            |    |                    |    |                          |    |                          |    |                          |    |                      |    |
| Pharynx and Tonsils                      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | 1                                 | —  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    | —  |
| Diarrhoea and Enteritis                  | —                   | —  | —                        | —  | 5                       | —  | —                         | —  | —                          | —  | 3                                 | 5  | 3                          | 3  | 1                  | —  | —                        | —  | —                        | —  | —                        | 6  | 3                    | —  |
| Diseases of the Liver ..                 | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    | —  |
| Acute Nephritis ..                       | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | 1                                 | 1  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    | —  |
| Congenital Hydrocephalus ..              | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Congenital Malformation of the Heart ..  | —                   | —  | —                        | —  | 1                       | —  | —                         | —  | 2                          | —  | 1                                 | 3  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 3  | 1                    | —  |
| Imperforate Anus ..                      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | —  | —                                 | 1  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    | —  |
| Other Stated Congenital Malformations .. | —                   | —  | 1                        | 1  | —                       | —  | —                         | —  | —                          | —  | 1                                 | —  | 2                          | 1  | —                  | —  | —                        | —  | —                        | —  | —                        | 2  | 1                    | —  |
| Premature Birth ..                       | 9                   | 8  | 7                        | 1  | 1                       | 2  | 1                         | —  | —                          | —  | —                                 | 18 | 11                         | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 18 | 11                   | —  |
| Injury at Birth ..                       | 2                   | 2  | 6                        | 3  | 2                       | —  | —                         | —  | —                          | —  | —                                 | 10 | 5                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 10 | 5                    | —  |
| Atelectasis ..                           | 7                   | 4  | 1                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | 8  | 4                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 8  | 4                    | —  |
| Other Diseases — First Year of Life ..   | —                   | —  | 1                        | —  | 2                       | —  | —                         | —  | —                          | 1  | 1                                 | 1  | 4                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | 4                    | —  |
| Accidents — Motor Vehicles ..            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | 1  | —                        | —  | —                        | —  | —                    | —  |
| Accidental Poisoning ..                  | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    | —  |
| Accidental Fall ..                       | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Accidental Electrocution ..              | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Unknown Causes ..                        | —                   | —  | —                        | —  | —                       | —  | —                         | 1  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Monstrosities ..                         | —                   | 1  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | 1                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| TOTAL ..                                 | 18                  | 15 | 16                       | 5  | 5                       | 4  | 8                         | 2  | 8                          | 3  | 8                                 | 9  | 63                         | 38 | 7                  | 9  | 2                        | 2  | 2                        | —  | 2                        | 1  | 76                   | 50 |

Table No. 3.  
DEATHS OF NON-EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDED 30TH JUNE 1951.

|                                            | 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 to 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                  | 3  | —                        | —  | —                        | —  | —                        | 1  | 4                    |    |
| Diphtheria ..                              | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | 1                  | 1  | —                        | —  | —                        | —  | —                        | 3  | 2                    |    |
| Tetanus ..                                 | —                   | —  | 1                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | 2                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | 2  | —                    |    |
| Tuberculosis — Pulmonary ..                | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 2                          | 1  | 1                                 | 1  | 3                          | 2  | 1                  | 1  | 1                        | —  | 1                        | —  | 3                        | 6  | 6                    |    |
| Tuberculosis — Central Nervous System ..   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | 1  | —                                 | 1  | 1                          | 2  | 1                  | 1  | —                        | —  | 1                        | —  | —                        | 4  | 3                    |    |
| Tuberculosis — Acute Miliary ..            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | —  | —                                 | 1  | 1                          | 1  | 2                  | —  | 1                        | —  | —                        | —  | —                        | 3  | 2                    |    |
| Purulent Infection and Septicaemia ..      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | 1  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | 1                    |    |
| Congenital Syphilis ..                     | 1                   | 1  | 4                        | 6  | 3                       | 2  | 1                         | 1  | —                          | —  | 1                                 | —  | 10                         | 10 | —                  | 3  | —                        | —  | —                        | —  | —                        | 10 | 13                   |    |
| Influenza ..                               | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | 1                                 | —  | 1                          | 1  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    |    |
| Measles ..                                 | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    |    |
| Diseases of the Parathyroid glands ..      | —                   | —  | —                        | —  | —                       | —  | —                         | 1  | —                          | —  | —                                 | —  | —                          | 1  | —                  | —  | —                        | —  | —                        | —  | —                        | 1  | —                    |    |
| Malnutrition ..                            | —                   | —  | —                        | —  | —                       | —  | 1                         | 1  | 3                          | 6  | 2                                 | 2  | 6                          | 9  | 9                  | 9  | 6                        | 1  | —                        | —  | —                        | 22 | 19                   |    |
| Beri-Beri ..                               | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | 1                        | —  | —                        | —  | —                        | 1  | —                    |    |
| Pellagra ..                                | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | 1                                 | —  | 1                          | —  | —                  | 2  | 1                        | —  | —                        | —  | —                        | 2  | 2                    |    |
| Convulsions ..                             | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | 1                        | —  | 1                        | —  | —                        | —  | —                    |    |
| Diseases of the Ear and Mastoid Process .. | —                   | —  | —                        | —  | —                       | —  | —                         | 1  | —                          | —  | —                                 | —  | —                          | 1  | 1                  | —  | —                        | —  | —                        | —  | 1                        | 1  | —                    |    |
| Pericarditis ..                            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    |    |
| Gangrene including Cancerum Oris ..        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    |    |
| Bronchitis ..                              | —                   | —  | —                        | —  | —                       | —  | —                         | —  | 1                          | —  | —                                 | 2  | 1                          | 2  | —                  | 1  | —                        | —  | —                        | —  | —                        | —  | 1                    | 3  |
| Pneumonia — Broncho                        | —                   | —  | 2                        | 4  | 8                       | 12 | 17                        | 12 | 17                         | 12 | 20                                | 51 | 54                         | 20 | 19                 | 2  | 4                        | 2  | 3                        | —  | —                        | 1  | 75                   | 81 |
| Pneumonia — Lobar ..                       | —                   | —  | 1                        | 1  | —                       | —  | 2                         | 1  | 2                          | 1  | 1                                 | 6  | 3                          | —  | 1                  | 2  | —                        | —  | —                        | —  | 2                        | 9  | 5                    |    |
| Empyema ..                                 | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                                 | —  | —                          | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    |    |

|                                         | 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 to 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                 | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Cirrhosis of Liver ..                   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Nephritis ..                            | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Acute Abscess ..                        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Congenital Hydrocephalus ..             | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Spina Bifida and Meningocele ..         | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Monstrosities ..                        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Unspecified Congenital Malformations .. | 1                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Premature Birth ..                      | 11                  | 17 | 10                       | 10 | 12                      | 11 | 7                         | 2  | 1                          | 1  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Birth Injury ..                         | 2                   | 2  | 6                        | 3  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Atelectasis ..                          | 2                   | 4  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Melaena Neonatorum                      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Other Diseases — First                  | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Year of Life ..                         | —                   | —  | 2                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Infanticide ..                          | 1                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Accidental Burns                        | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Accidental Fall ..                      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| Unknown Causes ..                       | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                           | —  | —                          | —   | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —   |
| TOTAL ..                                | 18                  | 24 | 22                       | 26 | 24                      | 25 | 33                        | 29 | 49                         | 30 | 49                          | 47 | 195                        | 181 | 53                 | 64 | 22                       | 17 | 6                        | 9  | 4                        | 7  | 280                  | 278 |

## ASIATICS.

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prematurity ..              | — | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Tumour of the Brain ..      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Diarrhoea and Enteritis     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Accidental Burns ..         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Birth Injury ..             | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Broncho Pneumonia ..        | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Congenital Hydrocephalus .. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unknown Cause ..            | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Anaemia ..                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pneumonia—Lobar ..          | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Accidental Fall ..          | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| TOTAL ..                    | — | 1 | 1 | — | — | — | 1 | 3 | 1 | — | 2 | 1 | 5 | 5 | 2 | 1 | — | — | 1 | — | — | — | 8 | 6 |

Table 3.  
DEATHS OF NON-EUROPEAN CHILDREN UNDER 5 YEAR OF AGE FOR THE YEARS ENDED 30TH JUNE, 1951.

|                         | 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. |    | 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. |
| EUROPEANS.              |                     |    |                          |    |                         |    |                           |    |                            |    |                                 |    |                    |    |                          |    |                          |    |                          |    |                      |    |
| Tuberculosis—           |                     |    |                          |    |                         |    |                           |    |                            |    |                                 |    |                    |    |                          |    |                          |    |                          |    |                      |    |
| Pulmonary .. ..         | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | 1                    | —  |
| Tuberculosis — Central  |                     |    |                          |    |                         |    |                           |    |                            |    |                                 |    | 1                  | —  | —                        | —  | —                        | —  | —                        | —  | 1                    | —  |
| Nervous System ..       | —                   | —  | —                        | 1  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Tetanus .. ..           | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Whooping Cough ..       | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Disease of the Larynx   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Broncho Pneumonia ..    | —                   | —  | —                        | —  | 2                       | —  | —                         | 1  | —                          | —  | 1                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Pneumonia Lobar ..      | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Pneumonia Unspecified   | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Diarrhoea and Enteritis | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | —                    | —  |
| Prematurity .. ..       | 1                   | —  | —                        | 1  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | 3                  | —  | —                        | —  | —                        | —  | —                        | —  | 3                    | —  |
| Atelectasis .. ..       | 1                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | 2                    | —  |
| Accidental Burns ..     | —                   | —  | —                        | —  | —                       | —  | —                         | —  | —                          | —  | —                               | —  | —                  | —  | —                        | —  | —                        | —  | —                        | —  | 1                    | —  |
| TOTAL .. ..             | 2                   | —  | —                        | 2  | 3                       | —  | 1                         | —  | —                          | —  | 1                               | 2  | 7                  | 4  | 8                        | —  | 2                        | —  | —                        | —  | 15                   | 6  |

Table No. 4.

## DEATHS OF EUROPEANS, FIVE YEARS OF AGE AND OVER, WITHIN THE MUNICIPAL AREA FOR THE YEAR ENDED 30TH JUNE 1951.

|                                                                               | 5-10<br>Years. |    | 10-15<br>Years. |    | 15-20<br>Years. |    | 20-25<br>Years. |    | 25-30<br>Years. |    | 30-40<br>Years. |    | 40-50<br>Years. |    | 50-60<br>Years. |    | 60-70<br>Years. |    | 70-80<br>Years. |    | Over 80<br>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               | 1  | —               | 1  | 2               | 2  | 2               | 1  | 4               | 2  | 2               | —  | 3                 | 1  | 16     | 11  |
| Malignant and Other Tumours .. .. .                                           | —              | —  | —               | —  | —               | —  | —               | —  | 2               | —  | 3               | 3  | 8               | 4  | 7               | 15 | 16              | 13 | 16              | 13 | 2                 | 6  | 54     | 54  |
| Diseases of Nutrition and Endocrine .. .. .                                   | 1              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 2               | 2  | —               | 4  | —               | 4  | —                 | —  | 3      | 10  |
| Diseases of the Blood and Blood Forming Organs .. .. .                        | 2              | —  | 1               | —  | —               | —  | —               | —  | 1               | —  | 1               | 1  | 1               | 1  | —               | 3  | 1               | —  | 1               | —  | —                 | —  | 9      | 5   |
| Chronic Poisoning and Diseases of the Nervous System and Sense Organs .. .. . | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 1               | —  | —               | —  | —                 | —  | 1      | —   |
| Diseases of the Circulatory System .. .. .                                    | 1              | —  | —               | 1  | —               | —  | —               | —  | 1               | —  | 3               | 1  | 14              | 5  | 22              | 6  | 29              | 17 | 26              | 24 | 20                | 16 | 108    | 70  |
| Diseases of the Respiratory System .. .. .                                    | —              | —  | —               | —  | —               | —  | —               | —  | 1               | —  | 4               | 1  | 5               | 2  | 9               | 4  | 19              | 6  | 12              | 11 | 12                | 9  | 73     | 34  |
| Diseases of the Digestive System .. .. .                                      | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | 1  | 5               | 3  | 2               | 1  | 3               | 4  | 6               | 2  | —                 | 1  | 16     | 12  |
| Non-Veneral Diseases of the Genito-Urinary System .. .. .                     | 1              | —  | —               | —  | —               | —  | —               | —  | 1               | —  | 2               | —  | —               | —  | 1               | 3  | 5               | 3  | 7               | 5  | 6                 | 1  | 23     | 12  |
| Diseases of the Skin & Cellular Tissue ..                                     | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 1                 | —  | 1      | —   |
| Diseases of the Bones and Organs of Movement .. .. .                          | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 1               | —  | —               | —  | —                 | —  | 1      | —   |
| Congenital Malformations .. .. .                                              | —              | 1  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 1               | —  | —                 | —  | —      | —   |
| Senility — Old Age ..                                                         | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | 1               | —  | —                 | —  | 2      | 1   |
| Suicide .. .. .                                                               | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —                 | —  | 5      | 15  |
| Homicide .. .. .                                                              | —              | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —               | —  | —                 | —  | 8      | 1   |
| Accident .. .. .                                                              | 1              | 2  | —               | —  | —               | —  | 3               | 1  | 2               | 3  | 3               | —  | 3               | —  | 2               | —  | 2               | —  | 1               | 2  | 3                 | 1  | 20     | 9   |
| TOTALS .. .. .                                                                | 6              | 5  | 1               | 2  | 7               | —  | 7               | 2  | 9               | 6  | 22              | 8  | 48              | 21 | 54              | 40 | 89              | 63 | 83              | 78 | 55                | 53 | 381    | 278 |

Table No. 5.  
DEATHS OF NATIVES, FIVE YEARS OF AGE AND OVER WITHIN THE MUNICIPAL AREA FOR THE YEAR ENDED, 30TH JUNE 1951.

|                                                           | 5-10<br>Years. |           | 10-15<br>Years. |           | 15-20<br>Years. |           | 20-25<br>Years. |           | 25-30<br>Years. |           | 30-40<br>Years. |           | 40-50<br>Years. |           | 50-60<br>Years. |           | 60-70<br>Years. |           | 70-80<br>Years. |          | Over 80<br>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 .. .. .                 | 5              | 4         | 3               | 3         | 4               | 5         | 6               | 12        | 4               | 5         | 13              | 14        | 16              | 5         | 15              | —         | 11              | 4         | 5               | —        | 2                 | 2         | 84         | 54         |
| Malignant and Other Tumours .. .. .                       | —              | —         | —               | 1         | —               | —         | —               | —         | 2               | —         | 2               | 4         | 1               | 1         | 4               | —         | 2               | 2         | —               | 1        | —                 | —         | 11         | 9          |
| Diseases of Nutrition and Endocrine Glands .. .. .        | —              | —         | —               | —         | —               | —         | 1               | —         | —               | —         | 1               | 1         | 2               | 1         | —               | 1         | 2               | 1         | 2               | —        | —                 | 2         | 8          | 6          |
| Diseases of the Blood and Blood Forming Organs .. .. .    | —              | —         | —               | 1         | 1               | —         | 1               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —        | —                 | —         | 2          | 1          |
| Chronic Poisoning and Intoxication .. .. .                | —              | —         | —               | —         | —               | —         | —               | —         | 1               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —        | —                 | —         | 1          | —          |
| Diseases of the Nervous System and Sense Organs .. .. .   | —              | 1         | —               | —         | 2               | 1         | 1               | 1         | —               | —         | 2               | —         | 2               | —         | 2               | —         | 1               | 4         | 2               | 2        | —                 | —         | 12         | 9          |
| Diseases of the Circulatory System .. .. .                | —              | 2         | 1               | 1         | 2               | 1         | —               | 2         | 2               | —         | 4               | 3         | 3               | 6         | 2               | 6         | 2               | 4         | 2               | 1        | 1                 | 1         | 19         | 27         |
| Diseases of the Respiratory System .. .. .                | 4              | 1         | 2               | 3         | —               | 2         | —               | 1         | 6               | 4         | 13              | 5         | 16              | 7         | 6               | 3         | 8               | 7         | 6               | 2        | —                 | 3         | 61         | 38         |
| Diseases of the Digestive System .. .. .                  | 1              | 3         | —               | 1         | —               | 1         | —               | —         | 1               | —         | 1               | —         | 4               | 1         | 2               | 3         | —               | 2         | —               | —        | 1                 | —         | 10         | 11         |
| Non-Veneral Diseases of the Genito-Urinary System .. .. . | —              | —         | —               | —         | —               | —         | —               | —         | 1               | 1         | 2               | —         | 3               | 1         | 2               | 2         | 4               | 3         | 2               | —        | 1                 | 1         | 15         | 8          |
| Diseases of Pregnancy .. .. .                             | —              | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —        | —                 | —         | —          | 4          |
| Senility—Old Age .. .. .                                  | —              | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | —               | —         | 2               | 1         | —               | 2        | 2                 | 7         | 4          | 10         |
| Suicide .. .. .                                           | —              | —         | —               | —         | —               | —         | —               | —         | —               | —         | 3               | 1         | 1               | —         | 2               | —         | —               | —         | —               | —        | —                 | —         | 6          | 1          |
| Homicide .. .. .                                          | —              | —         | —               | —         | 1               | —         | 2               | 1         | 3               | —         | 4               | —         | 1               | —         | —               | —         | —               | —         | —               | —        | —                 | —         | 11         | 1          |
| Accident .. .. .                                          | —              | 5         | —               | —         | 3               | 2         | 6               | —         | 4               | 1         | 10              | 1         | 4               | 2         | 1               | 1         | —               | —         | —               | —        | —                 | —         | 28         | 12         |
| Unstated or Ill-defined Causes .. .. .                    | —              | 1         | —               | —         | —               | —         | —               | —         | —               | —         | —               | 2         | —               | —         | 2               | —         | 3               | —         | —               | —        | —                 | —         | 5          | 3          |
| <b>Total</b> .. .. .                                      | <b>10</b>      | <b>17</b> | <b>6</b>        | <b>10</b> | <b>13</b>       | <b>13</b> | <b>17</b>       | <b>18</b> | <b>24</b>       | <b>13</b> | <b>55</b>       | <b>31</b> | <b>53</b>       | <b>24</b> | <b>38</b>       | <b>16</b> | <b>35</b>       | <b>28</b> | <b>19</b>       | <b>8</b> | <b>7</b>          | <b>16</b> | <b>277</b> | <b>194</b> |

Table No. 6.  
 INFANTILE MORTALITY: EUROPEAN: CAUSES OF DEATH AND MORTALITY RATES FOR THE YEAR ENDED 30TH JUNE 1951.

|                                                       | 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.    | M.           | F.    |
| Central Area .. ..                                    | —                    | —  | —                    | —  | —                       | —  | —                  | —  | —             | —  | —            | —  | —                | —  | 7             | 7  | 257           | 251   | 27.23                                  | 27.89 | 27.56        | 27.56 |
| Pretoria West .. ..                                   | —                    | —  | 1                    | —  | 2                       | —  | 1                  | —  | 3             | 1  | —            | 4  | —                | 2  | 7             | 7  | 278           | 299   | 35.97                                  | 23.41 | 29           | 46    |
| Leper and Mental Hospitals and Defence Reserves .. .. | —                    | —  | —                    | —  | —                       | —  | —                  | —  | —             | —  | —            | —  | —                | —  | —             | —  | 10            | 13    | —                                      | —     | —            | —     |
| Salvokop .. ..                                        | —                    | —  | —                    | 1  | —                       | —  | —                  | —  | —             | —  | —            | —  | —                | —  | —             | 1  | 17            | 14    | —                                      | 71.43 | 32.26        | 32.26 |
| Roberts Heights .. ..                                 | —                    | —  | —                    | —  | —                       | —  | —                  | —  | —             | —  | —            | —  | —                | —  | 2             | —  | 47            | 56    | 42.55                                  | —     | 19.42        | 19.42 |
| Eastern Suburbs .. ..                                 | —                    | —  | —                    | —  | 2                       | —  | —                  | 2  | 4             | 1  | 5            | 1  | 1                | 1  | 12            | 5  | 338           | 340   | 35.50                                  | 14.71 | 25.07        | 25.07 |
| Northern Suburbs .. ..                                | —                    | 1  | 1                    | —  | 2                       | 1  | 3                  | —  | 4             | 5  | 8            | 2  | 6                | 1  | 24            | 10 | 530           | 542   | 45.28                                  | 18.45 | 31.72        | 31.72 |
| Hercules .. ..                                        | 1                    | 1  | 1                    | 1  | 1                       | 1  | —                  | —  | 1             | 4  | 3            | —  | 1                | 1  | 8             | 8  | 245           | 248   | 32.65                                  | 32.26 | 32.45        | 32.45 |
| TOTAL MALES .. ..                                     | 1                    | —  | 5                    | —  | 8                       | —  | 5                  | —  | 15            | —  | 18           | —  | 11               | —  | 63            | —  | 1,222         | —     | 36.59                                  | —     | —            | —     |
| TOTAL FEMALES .. ..                                   | —                    | 2  | —                    | 2  | —                       | 2  | —                  | 2  | —             | 13 | —            | 12 | —                | 5  | —             | 38 | —             | 1,763 | —                                      | 21.55 | —            | 28.98 |



DEATHS IN INSTITUTIONS OF PERSONS NOT RESIDENT IN PRETORIA FOR THE YEAR ENDED 30TH JUNE 1951. Table No. 8.

|                                      |           | 0-1 Years. |           | 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.         |
| <b>PRETORIA AND OTHER HOSPITALS.</b> |           |            |           |            |           |             |           |              |           |              |           |                |            |                  |            |                      |            |
| European ..                          | ..        | 22         | 17        | 11         | 1         | 2           | —         | 1            | 5         | 26           | 17        | 109            | 81         | 171              | 121        | —                    | —          |
| Non-European ..                      | ..        | 78         | 55        | 42         | 60        | 11          | 10        | 17           | 9         | 77           | 40        | 112            | 44         | —                | —          | 337                  | 218        |
| <b>MENTAL HOSPITAL.</b>              |           |            |           |            |           |             |           |              |           |              |           |                |            |                  |            |                      |            |
| European ..                          | ..        | —          | —         | —          | —         | —           | —         | —            | —         | —            | 2         | 31             | 28         | 31               | 30         | —                    | —          |
| Non-European ..                      | ..        | —          | —         | —          | —         | —           | —         | 3            | —         | 16           | 2         | 16             | 6          | —                | —          | 35                   | 8          |
| <b>LEPER ASYLUM.</b>                 |           |            |           |            |           |             |           |              |           |              |           |                |            |                  |            |                      |            |
| European ..                          | ..        | —          | —         | —          | —         | —           | —         | —            | —         | —            | —         | 3              | 1          | 3                | 1          | —                    | —          |
| Non-European ..                      | ..        | 3          | 3         | —          | 1         | —           | —         | 2            | —         | 9            | 8         | 21             | 8          | —                | —          | 35                   | 20         |
| <b>PRISONS.</b>                      |           |            |           |            |           |             |           |              |           |              |           |                |            |                  |            |                      |            |
| European ..                          | ..        | —          | —         | —          | —         | —           | —         | —            | —         | 1            | —         | 2              | —          | 3                | —          | —                    | —          |
| Non-European ..                      | ..        | —          | —         | —          | —         | —           | —         | —            | —         | 33           | —         | 11             | —          | —                | —          | 44                   | —          |
| <b>VISITORS.</b>                     |           |            |           |            |           |             |           |              |           |              |           |                |            |                  |            |                      |            |
| European ..                          | ..        | —          | —         | —          | —         | —           | —         | —            | —         | —            | —         | 4              | 4          | 4                | 4          | —                    | —          |
| Non-European ..                      | ..        | 5          | 4         | 1          | —         | —           | —         | 1            | 1         | —            | —         | 7              | 3          | —                | —          | 14                   | 8          |
| <b>TOTAL EUROPEAN ..</b>             | <b>..</b> | <b>22</b>  | <b>17</b> | <b>11</b>  | <b>1</b>  | <b>2</b>    | <b>—</b>  | <b>1</b>     | <b>5</b>  | <b>27</b>    | <b>19</b> | <b>149</b>     | <b>114</b> | <b>212</b>       | <b>156</b> | <b>—</b>             | <b>—</b>   |
| <b>TOTAL NON-EUROPEAN ..</b>         | <b>..</b> | <b>86</b>  | <b>62</b> | <b>43</b>  | <b>61</b> | <b>11</b>   | <b>10</b> | <b>22</b>    | <b>10</b> | <b>136</b>   | <b>50</b> | <b>167</b>     | <b>61</b>  | <b>—</b>         | <b>—</b>   | <b>465</b>           | <b>254</b> |





Table No. 11.

## DISTRICT DISTRIBUTION OF NOTIFIED INFECTIOUS DISEASES FOR THE YEAR ENDED 30TH JUNE 1951.

|                                                              | Infective Encephalitis. |    | Cerebro-Spinal Meningitis. |    | Tuberculosis |    | Trachoma. |    | Ophthalmia Neonatorum. |    | Puerperal Fever |    | Leprosy. |    | Typhoid Fever |    | Malaria Fever |    | Malaria. |    | Diphtheria |    | Scarlet Fever. |    | Erysipelas. |    | Polionmyelitis. |    |
|--------------------------------------------------------------|-------------------------|----|----------------------------|----|--------------|----|-----------|----|------------------------|----|-----------------|----|----------|----|---------------|----|---------------|----|----------|----|------------|----|----------------|----|-------------|----|-----------------|----|
|                                                              | 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 .. ..                                           | Eur.                    | —  | 1                          | —  | 4            | 1  | —         | —  | —                      | —  | —               | 1  | —        | —  | 2             | 2  | —             | —  | —        | —  | 1          | 3  | 18             | 22 | —           | —  | —               | —  |
| Pretoria West .. ..                                          | N.E.                    | —  | —                          | —  | 2            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | 1  | —             | —  | —        | —  | —          | 1  | —              | —  | —           | —  | —               | —  |
|                                                              | Eur.                    | 1  | —                          | —  | 5            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | 3             | —  | —             | —  | —        | —  | 10         | 7  | 13             | 28 | —           | 1  | —               | —  |
|                                                              | N.E.                    | —  | —                          | 1  | 2            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | 2             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Leper and Mental Hospitals Prison and Defence Reserves .. .. | Eur.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | 1          | —  | 3              | 2  | —           | —  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Roberts Heights .. ..                                        | Eur.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | 1              | 1  | —           | —  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | 1            | 2  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Eastern Suburbs .. ..                                        | Eur.                    | 2  | 1                          | —  | 8            | 5  | —         | —  | —                      | —  | —               | 1  | —        | —  | 2             | 6  | —             | —  | —        | —  | 2          | 1  | 28             | 33 | —           | 1  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | 4             | 1  | —             | —  | —        | —  | 2          | —  | —              | 2  | —           | —  | —               | —  |
| Salvokop .. ..                                               | Eur.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | 1          | 2  | —              | 2  | —           | —  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Northern Suburbs .. ..                                       | Eur.                    | —  | —                          | 1  | 3            | 5  | 2         | —  | —                      | —  | —               | —  | —        | —  | 5             | 2  | 1             | —  | —        | —  | 3          | 2  | 49             | 60 | —           | 2  | —               | 1  |
|                                                              | N.E.                    | —  | —                          | 1  | —            | 2  | —         | —  | —                      | —  | —               | —  | —        | —  | 3             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Hercules .. ..                                               | Eur.                    | 1  | 2                          | 3  | 2            | 69 | 57        | —  | 2                      | 2  | —               | 1  | —        | —  | 4             | 1  | —             | —  | —        | —  | 13         | 17 | 9              | 14 | —           | —  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | —            | 3  | —         | —  | —                      | —  | —               | —  | —        | —  | 20            | 16 | —             | —  | —        | —  | 20         | 29 | 1              | —  | —           | 1  | —               | —  |
| Marabas .. ..                                                | Eur.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Bantule .. ..                                                | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | 1             | 1  | —             | —  | —        | —  | 1          | —  | —              | —  | —           | —  | —               | —  |
| Atteridgeville .. ..                                         | N.E.                    | —  | —                          | —  | —            | 17 | 12        | —  | —                      | —  | —               | —  | —        | —  | 2             | 1  | —             | —  | —        | —  | 1          | 2  | —              | —  | —           | —  | —               | —  |
| Asiatic Bazaar .. ..                                         | N.E.                    | —  | —                          | —  | —            | 5  | 2         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Cape Location .. ..                                          | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | 3             | 8  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |
| Municipal Compound and Hostel .. ..                          | N.E.                    | —  | —                          | —  | —            | 5  | —         | —  | —                      | —  | —               | —  | —        | —  | 1             | —  | —             | —  | —        | —  | 1          | 2  | —              | —  | 1           | —  | —               | —  |
|                                                              | N.E.                    | —  | —                          | —  | —            | —  | —         | —  | —                      | —  | —               | —  | —        | —  | —             | —  | —             | —  | —        | —  | —          | —  | —              | —  | —           | —  | —               | —  |

Table No. 12.

## INCIDENCE OF INFECTIOUS DISEASES FOR THE YEAR ENDED 30TH JUNE 1951.

|              |    |    |    |    |             | Typhoid Fever. | Malta Fever | Malaria | Scarlet Fever | Diphtheria | Erysipelas | Polionyelitis Infective | Encephalitis | Cerebro-spinal Meningitis | Tuberculosis | Ophthalmia Neonatorum | Trachoma | Puerperal Fever | Leprosy. |
|--------------|----|----|----|----|-------------|----------------|-------------|---------|---------------|------------|------------|-------------------------|--------------|---------------------------|--------------|-----------------------|----------|-----------------|----------|
| July—        |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 2              | —           | —       | 14            | —          | 1          | —                       | —            | 4                         | 2            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | —              | —           | —       | 1             | 1          | —          | —                       | —            | —                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | —              | —           | —       | —             | 4          | —          | —                       | —            | 3                         | 13           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 6              | —           | —       | —             | 3          | —          | —                       | —            | 1                         | 2            | —                     | —        | —               | —        |
| August—      |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 1              | —           | —       | 29            | 3          | —          | —                       | 1            | 2                         | 4            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 1              | —           | —       | —             | 5          | 1          | 1                       | —            | 1                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 8              | —           | —       | —             | 7          | —          | —                       | —            | 2                         | 14           | —                     | 1        | —               | —        |
|              |    |    |    |    | Imported    | 4              | —           | —       | —             | 2          | —          | —                       | —            | 2                         | 5            | —                     | —        | —               | —        |
| September—   |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | —              | —           | —       | 10            | 2          | —          | —                       | —            | 2                         | 3            | —                     | —        | 1               | —        |
|              |    |    |    |    | Imported    | —              | —           | —       | —             | 2          | —          | —                       | —            | 2                         | 1            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 3              | —           | —       | 1             | —          | —          | —                       | —            | 4                         | 15           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | —              | —           | —       | —             | —          | —          | —                       | —            | 2                         | 3            | —                     | —        | —               | —        |
| October—     |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | —              | —           | —       | 21            | —          | —          | —                       | —            | —                         | 1            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 2              | —           | —       | 2             | 2          | —          | 1                       | —            | —                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 1              | —           | 1       | —             | 1          | —          | —                       | —            | —                         | 17           | —                     | —        | 1               | —        |
|              |    |    |    |    | Imported    | 1              | —           | —       | —             | 2          | —          | —                       | —            | —                         | 9            | —                     | —        | 1               | —        |
| November—    |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 1              | —           | —       | 52            | 5          | —          | —                       | 1            | —                         | 4            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 8              | —           | —       | 4             | 1          | —          | —                       | 1            | —                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 6              | —           | —       | —             | 5          | —          | —                       | —            | 1                         | 19           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 13             | —           | —       | —             | 4          | 1          | —                       | —            | —                         | 4            | —                     | —        | 1               | —        |
| December—    |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 4              | —           | —       | 19            | 4          | 1          | —                       | —            | —                         | 3            | —                     | —        | 1               | —        |
|              |    |    |    |    | Imported    | 6              | —           | —       | 1             | 1          | 1          | —                       | —            | —                         | 1            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 1              | —           | —       | —             | 4          | 1          | —                       | —            | —                         | 12           | 2                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 6              | —           | —       | —             | 2          | —          | —                       | —            | —                         | 2            | —                     | —        | 1               | —        |
| 1951         |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| January—     |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 3              | —           | —       | 24            | 14         | 1          | —                       | —            | —                         | 2            | —                     | —        | —               | 1        |
|              |    |    |    |    | Imported    | 10             | —           | —       | —             | 5          | 2          | 2                       | 1            | —                         | —            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 12             | —           | —       | —             | 9          | —          | —                       | —            | —                         | 16           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 6              | —           | —       | —             | 5          | —          | —                       | —            | —                         | 2            | —                     | —        | —               | —        |
| February—    |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 3              | —           | —       | 24            | 4          | —          | —                       | —            | —                         | 4            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 3              | —           | —       | 3             | —          | —          | —                       | —            | —                         | 4            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 12             | —           | —       | —             | 7          | —          | —                       | —            | 1                         | 18           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 8              | —           | —       | —             | 5          | —          | —                       | —            | —                         | 5            | —                     | —        | —               | —        |
| March—       |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 2              | —           | —       | 26            | 6          | 1          | —                       | 1            | —                         | 4            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 1              | —           | 1       | 1             | 11         | —          | —                       | —            | —                         | 4            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 5              | —           | —       | —             | 15         | —          | —                       | —            | —                         | 34           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 18             | —           | —       | —             | 6          | —          | —                       | —            | —                         | 7            | —                     | 1        | 1               | 1        |
| April—       |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 7              | —           | —       | 23            | 15         | —          | —                       | 2            | —                         | 2            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 2              | —           | —       | 1             | 2          | —          | 1                       | —            | —                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 5              | —           | —       | —             | 9          | —          | —                       | —            | —                         | 26           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 28             | —           | —       | —             | 5          | —          | —                       | —            | —                         | 18           | —                     | —        | —               | —        |
| May—         |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 2              | —           | —       | 20            | 9          | —          | 1                       | —            | —                         | 5            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 4              | —           | —       | 2             | 6          | —          | —                       | —            | —                         | 2            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 8              | —           | —       | —             | 10         | —          | 1                       | —            | —                         | 25           | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 13             | —           | —       | —             | 2          | —          | —                       | —            | —                         | 35           | —                     | —        | —               | —        |
| June—        |    |    |    |    |             |                |             |         |               |            |            |                         |              |                           |              |                       |          |                 |          |
| European     | .. | .. | .. | .. | .. Resident | 2              | 1           | —       | 21            | 1          | —          | —                       | —            | 1                         | 1            | —                     | —        | —               | —        |
|              |    |    |    |    | Imported    | 1              | —           | —       | 1             | 2          | 1          | —                       | —            | —                         | 1            | —                     | —        | —               | —        |
| Non-European | .. | .. | .. | .. | .. Resident | 3              | —           | —       | —             | 7          | —          | —                       | —            | 1                         | 18           | —                     | 1        | —               | —        |
|              |    |    |    |    | Imported    | 18             | —           | —       | —             | 10         | —          | —                       | —            | —                         | 11           | —                     | —        | —               | —        |



