

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

## **Contributors**

Johannesburg (South Africa)

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M.O.H. Report,  
1930—31.



# City of Johannesburg.

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## REPORT of the MEDICAL OFFICER OF HEALTH on the PUBLIC HEALTH and SANITARY CIRCUMSTANCES of JOHANNESBURG during the Year 1st JULY, 1930—30th JUNE, 1931.

ARTHUR J. MILNE, M.B., Ch.B., D.P.H., D.T.M.

*Medical Officer of Health; Hon. Cons. Medical Officer of the Rand Water  
Board; Medical Officer under Native Labour Regulations, Johannesburg  
Mining District; Member Board of Examiners, Royal Sanitary Institute;  
Lieut.-Colonel (Specialist Hygiene Officer), Union Defence Force.*


JOHANNESBURG,  
DECEMBER, 1931.



Johannesburg:

Printed by Radford, Adlington, Ltd., cor. Bissik and Marshall Streets

1932



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# City of Johannesburg.

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## Report of the Medical Officer of Health, 1930—1931.

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Public Health Department,  
City Hall,  
Johannesburg,  
November, 1931.

TO HIS WORSHIP THE MAYOR (Mr. Councillor D. F. CORLETT) and  
CITY COUNCILLORS OF THE CITY OF JOHANNESBURG.

GENTLEMEN,

I have the honour to present herewith my report of the health conditions of Johannesburg for the year 1930-31.

It is a pleasure to be able to record that the work of all members, professional, clerical and technical, of your Public Health Department has maintained the high level befitting the largest city in the Union of South Africa. Personally and officially I desire to acknowledge gratefully their valued assistance, often in difficult situations, and their loyalty both to the Council which they serve and to myself.

A detailed record for the year of inspections, etc., undertaken by the inspectorate staff is submitted on page 29.

I also desire to express my thanks in particular to the occupant of the Mayoral Chair during 1930-31, Councillor G. W. Nelson, and to the Chairman (Mr. Councillor S. Hancock) and members of the Public Health Committee who extended to me much kindly assistance and courtesy, and to all other Heads and Sub-Heads of Departments for their willing co-operation and assistance.

I have the honour to be, Gentlemen,

Your obedient servant,

A. J. MILNE,

*Medical Officer of Health.*

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# CITY OF JOHANNESBURG.

## PUBLIC HEALTH COMMITTEE, 1930-1931.

Councillor S. Hancock (Chairman).  
 Councillor Alf. Law Palmer (Vice-Chairman).  
 Councillor A. R. Bloch.  
 Councillor H. Kroomer.  
 Councillor J. Paterson.  
 Councillor W. H. Port.  
 Councillor R. Thompson.  
 His Worship the Mayor (ex officio).

## PUBLIC HEALTH DEPARTMENT

### STAFF.

#### *Administrative and Office—*

- 1 Medical Officer of Health: Arthur J. Milne, M.B., B.Ch., D.P.H., D.T.M.
- 1 Assistant Medical Officer of Health: John Joseph Middleton, M.B., M.C.P.S. (Ontario), D.P.H.
- 1 Chief Clerk: F. Thompson, Cert. R.S.I. (S.A.).
- 1 Typist Correspondent: Miss E. Oliver.
- 1 Licensing Clerk and Typist: Miss O. V. Joel.
- 1 Junior Clerk: W. van Derau.
- 1 Messenger: J. Boshoff.

#### *Inspectorial Staff—*

- 1 Chief Sanitary Inspector: G. Bidwell, Cert. R.S.I. (Eng.).
- 1 Plans Inspector: C. J. Crothall, Cert. R.S.I. (Eng.).
- 18 District Sanitary Inspectors:
 

A. Beale.	I. J. Distiller.	W. C. E. Lewis.
A. C. Lumsden.	E. A. Smorenburg.	F. Smith.
J. R. Sabiston.	N. A. Meintjes.	H. Ballantyne.
A. Patterson.	J. A. Haskins.	D. Smith.
J. W. Forrett.	J. S. Russell.	M. A. Elyat.
F. I. Hamilton.	E. C. Heather.	E. M. Coetzee.

All Certified Royal Sanitary Institute (S.A.).

#### 2 Probationary Sanitary Inspectors:

H. H. Alexander.  
 C. R. Morrison.

Both certified Royal Sanitary Institute (S.A.).

#### 2 Housing Inspectors appointed to deal with Insanitary Properties under the Local Government Ordinance:

A. C. Fraser.  
 P. Squires.

Both Certified Royal Sanitary Institute (S.A.).

#### 2 Mines Sanitation Inspectors:

J. Smith, Cert. R.S.I. (S.A.).  
 J. S. Pitman, Cert. R.S.I. (S.A.).

#### 2 Food and Drug Inspectors:

F. A. Wrighton, Cert. R.S.I. (S.A.).  
 S. G. Russell, Cert. R.S.I. (S.A.).

#### 3 Dairy Inspectors:

W. C. Watson, Cert. R.S.I. (S.A.).  
 G. Christie, Cert. R.S.I. (S.A.).  
 A. McIver, Cert. R.S.I. (S.A.).



*Infectious Diseases and Disinfecting Station—*

- 1 Infectious Diseases Inspector: C. Wallace, Cert. R.S.I. (Eng.).
- 2 Assistant Disinfecting Inspectors: J. A. M. Bain and H. J. Hancock.
- 1 Disinfecting Engineer: J. P. Jonas, six native assistants.

*Maternity and Child Welfare—*

- 1 Pediatric Officer:  
B. G. v. B. Melle, M.B., B.Ch. (Oxford), F.R.C.S.E.
- 2 Obstetric and Ante-Natal Officers:  
W. H. Maxwell, M.A., M.B., L.R.C.P., F.R.C.S.  
F. K. Te Water, M.B., B.Ch., L.R.C.P., F.R.C.S.E.
- 1 Senior Health Visitor:  
C. Morisse.
- 6 Health Visitors:
 

<ul style="list-style-type: none"> <li>(1) M. G. Ferris.</li> <li>(2) E. Ide.</li> <li>(3) M. Craig.</li> <li>(4) G. K. Jordan.</li> <li>(5) H. M. Townshend.</li> <li>(6) T. G. White.</li> </ul>	}	<p>All Trained General Nurses and Midwives and all certificated Health Visitors and School Nurses, Royal Sanitary Institute.</p> <p>(1) Cert. R.S.I. (S.A.).</p> <p>(2) Cert. R.S.I. (S.A.), Sanitary Inspector and Meat and Food Inspection.</p>
--	---	---
- 4 Ante-Natal Nurses:
 

<ul style="list-style-type: none"> <li>(1) E. Orn.</li> <li>(2) B. M. Innes.</li> <li>(3) L. W. Godfrey.</li> <li>(4) M. S. Wilson.</li> </ul>	}	<p>All Trained General Nurses and Midwives.</p> <p>No. (1), Cert. R.S.I. (S.A.), Health Visitor and School Nurse.</p>
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*Fever Hospital—*

- 1 Physician: H. A. Loeser, M.D.
- 1 Resident Medical Officer.
- Nursing Staff:
  - Permanent: 1 Matron, 3 Sisters.
  - Temporary: 1 Staff Nurse, 8 Probationers.
- Administrative: 1 Clerk.
- General: 9 and 18 Natives.

*Veneral Diseases Clinic—*

- 1 Director: H. Gluckman, M.R.C.S. (Eng.), L.R.C.P. (Lond.)
- 1 Clinic Orderly (Male).
- 2 Nursing Sisters.

*Plague Rat-catching Staff—*

- 1 Senior Rodent Inspector: R. J. Fox.
- 9 Rat-catchers.
- 7 Rat-catching Youths.

*Death of a Member of the Staff:—*

It is recorded with much regret that Mr. M. J. Doyle died in August, 1930.

# Report, 1st July, 1930—30th June, 1931.

## CLIMATE AND RATEABLE VALUE.

*Latitude.*—26 degrees 11 minutes 44 seconds South.

*Longitude.*—1 hour 52 minutes 10 seconds East.

*Mean Altitude.*—5,850 feet.

*Climate.*—The days are bright and warm, the nights cool, and in winter often very cold. The following averages of Johannesburg records for sixteen years are kindly supplied by R. T. A. Innes, Esq., until recently Union Astronomer: Temperature, average maximum, 69·6 degrees F., average minimum 49·5 degrees F. Rainfall, 30·74 inches on 96 days. Relative humidity, 65·5 at 8.30 a.m. Bright sunshine, 8·9 hours daily.

*Area.*—The area of the city of Johannesburg is 52,330 acres (*vide Government Gazette*, October, 1903), the extreme length 11½ miles, extreme breadth 9½ miles, extent of perimeter 41½ miles.

*Annual Rateable Value.*—As assessed in accordance with Ordinance 13 of 1928, and representing "the full and fair price or sum which the same would realise if brought at the time of valuation to voluntary sale," was in 1930-31 £64,941,312.

The rate for 1930-31 was 6½d. in the £ on land. Rate produced £555,080 15s. 3d.; Special Road Rate, 1d. in the £ on land, producing £77,586 6s. 7d. Total, £632,667 1s. 10d.

In 1930-31 the valuation was: Land, £20,366,509; Improvements, £44,574,803.

## POPULATION.

		Census, 3rd May, 1931.		Estimated, 30th June, 1931.
Whites	...	199,203	...	199,203
Natives	...		...	150,000
Eurafricans	...		...	20,000
Asiatics	...		...	8,000
Totals	...		...	377,203

## BIRTHS.

From 1st July, 1930, to 30th June, 1931, the number of white births registered was 4,906, as compared with 4,672 and 4,668 in 1928-29 and 1929-30 respectively.

The *white birth-rate* was 24·62 per 1,000 for 1930-31, the two previous years being 25·95 and 25·64.

For "The 107 Great Towns" of England and Wales in 1930 the birth-rate was 16·6, in Pretoria 22·13, in Capetown 21·11, and in Durban 15·75 for 1930-31.

*White Illegitimate Births.*—These numbered 175, and constituted 3·56 per cent. of all births, as against 4·6 in England and Wales in 1929, 5·59 in Capetown, 3·1 in Durban, and 4·25 in Pretoria in 1930-31.

The *native and coloured births* registered during 1930-31 numbered 2,024, as against 1,920 and 1,873 in 1928-29 and 1929-30 respectively. But as the ratio of females to males in the native and coloured population is only about 1 to 7, it would merely mislead to strike a birth-rate.

The numbers, however, indicate very clearly what continues to happen in Johannesburg, as elsewhere in urban areas in South Africa, which is that in spite of the Natives (Urban Areas) Act and its amendments, urban Authorities are threatened with the complex problem of dealing with a large and increasing mass of detribalised natives, who are not only unnecessary for the city's domestic and industrial requirements, but whose presence in the city implies grave handicaps in respect of native housing and the clearance of slum properties. In this regard it is notable that during the period under review the City Council has by the purchase of Farm Klipspruit No. 8 gone far to make provision for some 40,000 natives under proper housing conditions. This provision, when the housing accommodation is completed, added to the existing provision at Klipspruit Location, the Western and Eastern Native Townships, the Wemmer Barracks and single native women's hostel will to a very large extent solve the slum problem provided the influx of natives into the City is properly controlled.



## DEATHS AND DEATH-RATES.

The deaths herein referred to are those of persons who died within the extended Municipal Area as defined by proclamations 13 of 1902 and 46 of 1903:—

## DEATHS.

Year	Whites	Natives	Eurafricans	Asiatics	All Persons
1911-12	1,505	2,683	270	80	4,538
1912-13	1,411	2,907	229	103	4,650
1913-14	1,204	1,706	208	89	3,207
1914-15	1,453	1,890	296	107	3,746
1915-16	1,338	2,095	227	85	3,745
1916-17	1,852	2,061	324	132	4,369
1917-18	1,661	1,737	273	118	3,789
1918-19	2,261	2,843	447	263	5,814
1919-20	1,632	2,110	303	126	4,171
1920-21	1,710	2,194	373	114	4,391
1921-22	1,758	1,891	330	145	4,124
1922-23	1,610	1,994	319	111	4,034
1923-24	1,562	2,314	321	143	4,340
1924-25	1,568	2,213	345	142	4,268
1925-26	1,600	2,238	309	114	4,261
1926-27	1,801	2,621	354	139	4,915
1927-28	1,858	2,696	440	137	5,131
1928-29	1,989	2,795	304	143	5,231
1929-30	1,942	3,115	339	172	5,568
1930-31	2,038	3,349	357	181	5,925

## DEATH-RATES.

DEATH- RATES (excluding non-residents)	White		Natives	Eur- africans	Asiatics	All Persons
	Gross	*Corrected for Age and Sex distrib.				
1911-12	11.6	13.3423	25.5	24.4		18.9
1912-13	10.52	12.10	27.63	23.21		18.68
1913-14	8.98	10.32	16.34	21.19		12.66
1914-15	10.84	†	18.00	28.11		14.39
1915-16	9.55	—	19.95	21.81		14.32
1916-17	12.04	—	16.73	23.21		14.69
1917-18	10.55	—	14.14	20.25		12.69
1918-19	16.06	—	26.94	38.15		21.94
1919-20	10.88	—	17.58	27.54	25.20	14.58
1920-21	11.07	—	17.90	33.86	21.07	14.96
1921-22	10.98	—	17.19	29.96	26.80	14.39
1922-23	10.06	—	16.43	29.25	20.72	13.55
1923-24	9.76	—	19.06	29.43	26.70	14.61
1924-25	9.31	—	17.75	28.53	23.90	13.72
1925-26	9.50	—	17.95	25.56	19.19	13.70
1926-27	10.46	—	18.77	27.57	22.78	14.85
1927-28	10.50	—	18.52	31.16	21.39	14.96
1928-29	11.05	—	19.07	17.88	20.42	14.92
1929-30	10.67	—	21.62	18.83	22.93	15.72
1930-31	10.22	—	22.32	17.85	22.62	15.70

\* Factor for correction 1.502.

† No factor available.

## DEATH-RATE IN BRITISH, COLONIAL AND FOREIGN CITIES.

Appended, for purposes of comparison, are particulars as to the "Death-rate per 1,000 from All Causes" in large cities in other parts of the world:—

Greater London (i.e., Metro- politan and City Police Districts) ... ..			JOHANNESBURG—		
"Great Towns" of England and Wales ... ..			Whites ... ..	...	10.22 (1930-31)
East London ... ..			Natives ... ..	...	22.32 "
Durban ... ..			Eurafricans ... ..	...	17.85 "
Kimberley ... ..			Asiatics ... ..	...	22.62 "
Bloemfontein ... ..			All Persons ... ..	...	15.70 "
Capetown ... ..					
Pretoria ... ..					
Pietermaritzburg ... ..					

Except in regard to South African towns, these figures are taken from the Quarterly Return of the Registrar-General for England and Wales, 1930. The European Death-Rate is considerably lower than that of the great towns of England and Wales and compares favourably with the European rates in the last five years.



## CAUSES OF DEATH.

The causes of and ages at death and the local distribution are analysed in the usual Tables A to D for "Whites," "Natives," "Eurafricans" and "Asiatics" respectively. For reasons of economy, these voluminous tables have not, however, been printed, but are available for inspection.

## FACTORS OF MORTALITY, 1928-29, 1929-30 AND 1930-31.

DISEASE	1928-29		1929-30		1930-31		DISEASE	1928-29		1929-30		1930-31	
	Deaths	Rates	Deaths	Rates	Deaths	Rates		Deaths	Rates	Deaths	Rates	Deaths	Rates
Enteric Fever ...	W. 26 N. 99 E. 5 A. 2	0.14 0.60 0.29 0.28	19 86 1 1	0.10 0.58 0.05 0.13	20 129 8 3	0.10 0.86 0.40 0.37	Diseases of the Heart ...	W. 273 N. 132 E. 17 A. 17	1.51 0.90 1.00 2.42	301 123 29 10	1.65 0.83 1.61 1.33	323 110 26 23	1.62 0.73 1.30 2.85
Measles ...	W. 5 N. 7 E. — A. 1	0.02 0.04 — 0.14	1 4 1 —	0.005 0.02 0.05 —	5 1 — 1	0.02 0.006 — 0.12	Acute Bronchitis ...	W. 24 N. 82 E. 12 A. 8	0.13 0.55 0.70 1.14	25 98 13 10	0.13 0.66 0.72 1.33	25 108 13 4	0.12 0.72 0.65 0.50
Scarlet Fever ...	W. 15 N. — E. — A. —	0.08 — — —	— 1 — —	— 0.006 — —	2 — — —	0.01 — — —	Chronic Bronchitis ...	W. 56 N. 17 E. 5 A. 3	0.31 0.11 0.29 0.42	47 22 11 12	0.25 0.15 0.67 1.60	49 13 7 7	0.24 0.08 0.35 0.85
Whooping Cough ...	W. 11 N. 13 E. 1 A. 2	0.06 0.08 0.03 0.28	6 12 3 —	0.02 0.07 0.16 —	2 12 3 —	0.01 0.08 0.15 —	Pneumonia ...	W. 271 N. 804 E. 56 A. 49	1.50 5.48 3.29 7.00	316 1,030 86 57	1.74 7.03 4.77 7.66	278 1,057 91 46	1.39 7.03 4.55 5.75
Diphtheria and Croup ...	W. 15 N. 4 E. 1 A. —	0.08 0.02 0.05 —	17 2 — —	0.09 0.01 — —	6 5 — —	0.03 0.03 — —	Silicosis ...	W. 40 N. 11 E. 1 A. —	0.22 0.07 0.05 —	33 14 5 —	0.18 0.09 0.27 —	45 6 — —	0.22 0.04 — —
Influenza ...	W. 26 N. 13 E. 1 A. 1	0.14 0.08 0.05 0.14	13 13 — 1	0.07 0.08 — 0.13	32 9 1 1	0.16 0.06 0.05 0.12	Other Respiratory Diseases ...	W. 32 N. 23 E. 3 A. 3	0.17 0.15 0.17 0.42	37 38 1 3	0.20 0.25 0.05 0.40	44 37 2 1	0.22 0.23 0.10 0.12
Tuberculosis of Lungs ...	W. 51 N. 190 E. 24 A. 7	0.28 1.29 1.41 1.00	65 189 27 7	0.35 1.29 1.50 0.93	69 210 23 8	0.34 1.40 1.15 1.00	Diarrhoea and Enteritis ...	W. 116 N. 370 E. 51 A. 10	0.63 2.52 3.00 1.42	118 489 51 19	0.65 3.33 2.72 2.53	157 615 62 31	0.78 4.10 3.10 3.87
Other Forms of Tuberculosis...	W. 5 N. 92 E. 5 A. 4	0.02 0.62 0.29 0.57	9 54 3 1	0.04 0.36 0.16 0.13	6 51 4 —	0.03 0.34 0.20 —	Acute Nephritis and Bright's Disease ...	W. 88 N. 59 E. 4 A. 3	0.55 0.40 0.23 0.42	75 41 11 6	0.41 0.27 0.61 0.80	95 49 13 8	0.47 0.32 0.65 1.00
Cancer ...	W. 170 N. 28 E. 10 A. 3	0.94 0.19 0.58 0.42	176 23 12 4	0.96 0.15 0.66 0.53	159 23 7 2	0.79 0.15 0.35 0.25	Congenital Malformation Premature & Early Infancy	W. 138 N. 149 E. 38 A. 6	0.76 1.01 2.11 0.85	130 179 36 13	0.71 1.22 2.00 1.73	145 219 37 11	0.72 1.46 1.85 1.37
Meningitis ...	W. 55 N. 73 E. 4 A. 3	0.30 0.49 0.23 0.42	29 74 2 2	0.10 0.50 0.11 0.26	32 63 4 1	0.16 0.42 0.20 0.12	Violent Deaths	W. 158 N. 301 E. 19 A. 5	0.87 2.05 1.11 0.71	121 345 13 4	0.66 2.35 0.72 0.53	131 327 21 9	0.65 2.18 1.05 1.12
Cerebral Haemorrhage and Softening	W. 62 N. 23 E. 5 A. 1	0.34 0.15 0.29 0.14	37 21 7 2	0.20 0.14 0.38 0.26	48 21 5 3	0.24 0.14 0.25 0.37							

The following observations are suggested by inspection of this table:—

(1) That during 1930-31 the chief factors of mortality were:—

(a) For Whites.—Heart diseases (323), pneumonia (278), cancer (159), diarrhoea and enteritis (157), congenital debility (145), violent deaths (131), acute nephritis and Bright's disease (95), tuberculosis of lungs (69), chronic bronchitis (49), cerebral hæmorrhage (48), silicosis (45), other respiratory diseases (44), meningitis (32), influenza (32), acute bronchitis (25), and enteric fever (20).

(b) *For Natives*.—Pneumonia (1,057), diarrhoea and enteritis (615), violent deaths (327), congenital debility (219), tuberculosis of lungs (210), enteric fever (129), heart diseases (110), acute bronchitis (108), meningitis (63), other forms of tuberculosis (51), acute nephritis and Bright's disease (49), other respiratory diseases (37), cancer (23), cerebral hæmorrhage (21), chronic bronchitis (13), influenza (9), and silicosis (6).

(c) *For Eurafrians*.—Pneumonia (91), diarrhoea and enteritis (62), congenital debility (37), heart diseases (26), tuberculosis of lungs (23), violent deaths (21), acute bronchitis (13), nephritis (13), cancer (7), and chronic bronchitis (7).

(d) *For Asiatics*.—Pneumonia (46), diarrhoea and enteritis (31), heart diseases (23), congenital debility (11), tuberculosis of lungs (8), acute nephritis (8), and chronic bronchitis (7).

(2) That the comparison with the two previous years is as follows:—

(a) *As regards Whites*, the principal increases are in respect of heart disease, 323 as compared with 301 in 1929-30 and 273 in 1928-29; congenital debility, 145 as compared with 130 in 1929-30 and 138 in 1928-29; violent deaths, 131 as compared with 121 in 1929-30; Bright's disease, 95 as compared with 75 in 1929-30 and 88 in 1928-29. The principal decreases are in respect of pneumonia, 278 as compared with 316 in 1929-30, and cancer, 159 as compared with 176 in 1929-30 and 170 in 1928-29.

(b) *As regards Natives*, the principal increases are in respect of diarrhoea and enteritis, 615 as compared with 489 in 1929-30 and 370 in 1928-29; congenital debility, 219 as compared with 179 in 1929-30 and 149 in 1928-29; and enteric fever, 129 as compared with 86 in 1929-30 and 99 in 1928-29. There are no decreases worthy of comment. The increase in enteric fever is attributable to the considerably increased incidence of this disease among native mine employees.

(c) *As regards Eurafrians* there is nothing worthy of comment except a slight increase in respect of diarrhoea and enteritis.

(d) *As regards Asiatics*, there is a small decrease in respect of pneumonia and a slight increase in respect of diarrhoea and enteritis.

#### INFANTILE MORTALITY, MATERNAL MORTALITY AND MATERNITY AND CHILD WELFARE MEASURES.

*Infantile Mortality*, i.e., deaths of infants under one year per each 1,000 births registered, was Whites 79.08, Eurafrians 206.34, and Asiatics 121.21.

The following table shows the white infantile mortality rate in recent years:—

1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
88.26	81.2	78.55	74.01	83.29	83.39	72.77	78.62	79.08

The rate for Europeans is very slightly higher than in 1929-30, but is considered satisfactory, taking into account the present economic depression and extent of unemployment, which are factors of some importance in influencing infant upbringing. The rate for Eurafrians is slightly lower than in the previous year and the Asiatic rate very much lower.



## DISTRIBUTION OF INFANTILE MORTALITY IN DISTRICTS OF JOHANNESBURG.

	1928-29			1929-30			1930-31.		
	Births	Deaths under 1 year	Rate per 1,000 Births	Births	Deaths under 1 year	Rate per 1,000 Births	Births	Deaths under 1 year	Rate per 1,000 Births
1.—Johannesburg Proper ... ..	112	14	125.00	70	11	157.14	59	13	220.33
2.—Braamfontein, Hospital Hill and Hillbrow	1,044	38	36.39	1,164	46	39.51	1,285	46	35.79
3.—Ferreiras, Marshalls and City and Suburban ... ..	36	11	305.55	42	8	190.64	45	13	288.88
4.—Newtown, Fordsburg and Mayfair ...	385	41	106.49	361	44	121.88	405	44	108.64
5.—Vrededorp and Malay Location ...	257	31	120.62	306	33	107.84	311	33	106.10
6.—Jeppes, Jeppes Exten., Belgravia, etc. ...	707	40	56.57	739	56	75.77	683	42	61.49
7.—Doornfontein, Troyeville, Kensington and Bezuidenhout Valley Districts ...	533	38	71.29	519	35	67.43	562	57	101.42
8.—Berea, Yeoville, Bellevue and North-Eastern Districts ... ..	235	16	68.08	293	21	88.98	193	21	108.80
9.—Richmond, Auckland Park, Parktown and North-Western Districts ... ..	552	42	76.08	439	49	111.61	489	57	116.56
10.—Paarlshoop and Western Mines ...	60	5	83.33	66	6	90.90	56	4	71.42
11.—Central Mines (Ferreira to City and Suburban) ... ..	28	3	107.14	30	5	166.66	33	2	60.60
12.—Prospect Township and Eastern Mines ...	79	5	63.29	68	7	102.94	91	2	21.97
13.—Ophirton, Booyens and Southern Dists.	644	56	86.95	628	46	73.24	694	54	77.88
TOTALS ... ..	4,672	340	72.77	4,668	367	78.62	4,906	388	79.08



## MATERNAL MORTALITY.

	Puerperal Sepsis per 1,000 Births		Other Causes per 1,000 Births		All Causes per 1,000 Births	
	Joh'burg	E. & W.	Joh'burg	E. & W.	Joh'burg	E. & W.
1921-22	1.34	1.46 (1921)	2.90	2.25	4.25	3.71
1922-23	1.47	1.46 (1922)	3.23	2.12	4.72	3.58
1923-24	1.49	1.30 (1923)	4.96	2.30	6.45	3.60
1924-25	1.26	1.39 (1924)	4.79	2.50	6.06	3.89
1925-26	1.50	1.56 (1925)	4.00	2.51	5.50	4.07
1926-27	1.72	1.59 (1926)	1.97	2.52	3.69	4.11
1927-28	3.33	1.56 (1927)	1.90	2.55	5.23	4.11
1928-29	1.49	1.79 (1928)	2.35	2.63	3.85	4.42
1929-30	1.07	1.80 (1929)	2.77	2.53	3.85	4.33
1930-31	1.42	1.92 (1930)	1.01	2.48	2.44	4.40

The above table shows the Maternal Mortality Rate from Puerperal Sepsis, Other Causes and All Causes. In commenting on this subject in my last report I had occasion to remark that "the improvement in this rate had been maintained." This improvement was considered to be due to a variety of factors and special mention was made of the effect on the rate of the Council's Ante-Natal and District Midwifery Schemes. My predecessor in office was the originator of these schemes though they did not come into effect until after his retiral. This year's rate, 2.44 per 1,000 births, from All Causes is far and away the lowest that has been experienced, is one that compares more than favourably with the similar rate of any large city, and is one which reflects much credit on the City Council, which has been to the fore in approving of the establishment of the existing Ante-Natal and District Midwifery services, on the nursing staff engaged in these services, and last, but perhaps not least, on the high standard of midwifery services attained in Johannesburg, both by the medical and nursing professions.

## MATERNAL AND CHILD WELFARE MEASURES.

## 1.—GENERAL SUMMARY.

Year	Number of		Mothers referred to		Infants sent to Children's Hospital and O.P.D.	Infants Reported to Children's Aid Society	Mothers Attending		Cases Referred to Pediatric Officer	Ante-Natal Clinic	Assisted at Clinics
	First Visits	Re-visits	Maternity Hospital	District Midwife			Welfare Clinics	Health Visitors' Office			
1930-31 ...	2,319	8,625	350	216	292	20	33,721	464	1,195	1,520	9,680
1929-30 ...	2,090	8,091	258	190	248	15	26,115	299	891	1,164	7,992

## 2.—BIRTHS INVESTIGATED.

Year	Legitimate : 2,289	Illegitimate : 50	Full Time : 2,293	Premature : 46	Stillborn : 30
1930-31 ...	2,044	49	2,044	35	14
1929-30 ...					

Year	Attended by			Condition of Mother				Condition of Infant				Condition of Home		
	Doctor	Midwife	Friends	Good	Fair	Poor	Sick	Good	Fair	Poor	Sick	Good	Fair	Dirty
1930-31 ...	236	1,489	825	5	2,190	89	7	27	2,204	78	4	1,846	460	10
1929-30 ...	188	1,251	835	4	1,925	121	10	34	1,973	59	10	1,573	510	2

## 3.—METHODS OF FEEDING.

Breast Milk	Cow's Milk	Tinned Milk	Breast and Complemental	Other Foods	Feeding Bottles				Comforter Used
					Pattern		Condition		
					Good	Bad	Good	Bad	
2,190	27	11	46	20	64	—	64	—	423

## 4.—NATIVE TOWNSHIPS.

First Visits	Re-visits	Referred to	Welfare Clinics and Office Attendances	Feeding		Comforter Used
				Breast	Other	
Health Visitors 288	Health Visitors 1,668	Native Midwife 110	12,005	423	10	162
Native Nurses 202	Native Nurses 12,160	Bridgman Mem. Hospital 5				



In the preceding table, and in order to call attention to the expansion of these measures of Maternal and Child Welfare, a comparison is drawn in the "General Summary" and "Births Investigated" with the figures for the previous year. It will be noted that the numbers of home visits and attendances at Clinics are very materially on the up-grade, which goes to show an increasing appreciation by expectant and nursing mothers of the services rendered and rendered well by the Council's efficient and hard-working maternal and child welfare staff.

*Breast Feeding.*—The percentage of wholly or partially breast-fed infants is again the highest on record, being the almost unbelievable figure of 96 per cent. of the total of the infants supervised by the Child Welfare Staff. As in previous years this high percentage of breast-fed infants is to a considerable extent the result of persuasion by the staff and their persistence in advocating the breast feeding by all mothers of their infants. The effect of the provision of accessory foods for mothers at the Clinics has no doubt also been a factor in the maintenance of the percentage of breast-fed infants. Whatever the stimulus, the results are extremely satisfactory and gratifying.

#### STAFF AND CLINICS.

*Health Visitors.*—The Council employs one Senior Health Visitor and six Health Visitors, five of whom are entirely engaged on post-natal measures among the European population. All these Health Visitors are qualified general nurses and midwives, and in addition hold the certificate of the Royal Sanitary Institute for Health Visitors and School Nurses. Infant Clinics are held weekly at the Central Clinic (New Market Buildings), Florence Hall, Vrededorp, Jeppes Central School, the Kerksaal, Turffontein, and Newlands Bioscope Hall. During the year the Senior Health Visitor, who had in 1929-30 established Native Clinics in the Council's Native Townships, was given the assistance of an additional Health Visitor, devoting her whole time to native infant welfare. This native welfare work is progressing and these Clinics are now well established and promise to exert a very beneficial influence on the native infantile mortality. The attendances at all Clinics and the activities of all the Health Visitors are incorporated in the foregoing table. At all the European Clinics tea is provided for the attending mothers, principally through the good offices of the Women's National Service Fund, and nursing mothers are provided by the Council with foodstuffs and medical comforts when necessary. Very considerable amounts of such foodstuffs and medical comforts are provided. The Council also, by means of a coupon system, provides large quantities of pasteurised milk delivered at the home to poor mothers for consumption by infants who are not breast-fed or who have passed the breast-fed stage up to two years of age. The expenditure for pasteurised milk so supplied during the year was £2,100. Standard layettes are also provided for destitute mothers at the Central Clinic, where the mothers are provided with the necessary material free, but are required to attend to make up the materials.

The Council's Pediatric Officer (Dr. B. G. v. B. Melle) attends all the Clinics and deals with all infants who require specialised dietetic and medical attention.

*Nursery Health Class.*—During the year the Council sanctioned the establishment of a Nursery Health Class in Vrededorp, under the care of a supervisor who had had practical experience and knowledge of this class of child welfare, which is designed to secure better health conditions, sound nutrition and the remedy of physical defects of the pre-school (2-7 years) child. The class is held from 9 a.m. to 12 noon in the Florence Hall, Vrededorp. The children attending are given simple health exercises and are instructed in the simple rules of hygiene such as teeth cleaning, body cleanliness, etc., etc. They are also weighed and have their body measurements taken regularly, with the object of ascertaining errors of development and the correction of such errors. This work is showing good progress and its extension to other poor-class areas is under serious consideration.

*Ante-Natal Nurses.*—The Council employs four Ante-Natal Nurses, stationed at two Centres—Western and Central. These Ante-Natal Nurses are qualified general nurses and midwives. They extend ante-natal care to expectant mothers in the homes, shepherd these mothers to the Ante-Natal Clinics, arrange for their confinement in the Queen Victoria Maternity Hospital when desired, or themselves conduct the confinements in the homes. This branch of the work is extending rapidly, as will be seen by the comparative figures in the table, and is becoming a great boon to poor expectant mothers, who in the past have had to submit in their confinements to the tender mercies of the crude and unqualified midwife. The effect of this service is reflected in the continued reduction in the maternal mortality rate, which has now reached an unprecedentedly low figure, as stated elsewhere.

*Ante-Natal Clinics.*—Two Ante-Natal Clinics are conducted on Tuesday and Friday afternoons at the New Market Buildings. The attendance, shown in the General Summary above, continues to increase and expectant mothers are now clamouring to avail themselves of this service, which is, of course, designed to ensure safe confinements. Two Specialist Obstetric Officers attend the Ante-



Natal Clinics, and, besides carrying out the necessary procedure for the examination of expectant mothers attending the Clinics, render assistance, when necessary, at the confinements which the Ante-Natal Nurses conduct. During the year the Ante-Natal Nurses attended 225 confinements, paid 3,062 post-confinement visits, and made 1,936 visits to expectant mothers in their homes prior to their confinements.

#### HEALTH PROPAGANDA.

The Department's activities on propaganda lines were continued during the year. The principal propaganda measures were:—

- (a) Distribution of leaflets on health subjects.
- (b) Preparation of new original posters illustrating various health subjects.
- (c) Distribution of booklets on health matters. These publications include "Care of Mother and Child," "Your Health, Look into It" (a booklet dealing with every aspect of public health), "Prevention and Destruction of Rats and Mice," "The House or Typhoid Fly." It may be mentioned that by arrangement with the Registrar of Births and Deaths, a copy of the booklet "Care of Mother and Child" is handed to every person registering a birth.
- (d) In collaboration with the "Sunday Times" a "Fly Competition" was held during the months of October, November, and December, 1930, and January, 1931. Prizes to the amount of £102 were awarded to successful competitors. The competition resulted in the destruction of no less than 27,942,075 flies and the eradication of 262 fly-breeding places. In these months flies must have led a somewhat harassing existence.

#### PNEUMONIA.

The death-rates per 1,000 from this disease are as follows:—

	Whites	Natives	Eurafricans	Asiatics	England and Wales
1921-22 ... ..	0.77	2.70	1.81	2.58	0.91 (1921)
1922-23 ... ..	0.45	2.26	2.49	2.58	1.07 (1922)
1923-24 ... ..	0.63	2.73	2.38	2.42	0.87 (1923)
1924-25 ... ..	0.71	2.82	2.31	2.86	1.00 (1924)
1925-26 ... ..	1.06	4.42	4.71	3.03	0.95 (1925)
1926-27 ... ..	1.13	4.68	6.07	5.73	0.82 (1926)
1927-28 ... ..	1.47	5.09	4.46	5.30	0.94 (1927)
1928-29 ... ..	1.50	5.48	3.29	7.00	0.78 (1928)
1929-30 ... ..	1.74	7.03	4.77	7.66	1.10 (1929)
1930-31 ... ..	1.39	7.03	4.55	5.75	—

The mortality rate for pneumonia and acute lung conditions is slightly lower than in previous years, but is still a very large factor in the death rate of the city.

#### MINERS' PHTHISIS, ROCK-DRILL PNEUMONIA OR SILIICOSIS.

51 deaths (45 Whites and 6 Natives) were registered during 1930-31, as compared with 52 (40 Whites, 11 Natives and 1 Eurafrican) and 52 (33 Whites, 14 Natives and 5 Eurafricans) in 1928-29 and 1929-30 respectively.

#### ORGANIC DISEASES OF THE HEART.

These heart affections include pericarditis, endocarditis, angina pectoris, valvular diseases and other diseases of the circulatory system. The deaths recorded during the year 1st July, 1930, to 30th June, 1931, were 323 for Whites, as compared with 273 and 301 for the two previous years. This figure represents a rate of 1.62 per 1,000, as against 2.49 for England and Wales in 1927. For Natives the rate was 0.73; for Eurafricans 1.30; and for Asiatics 2.85.

## DIARRHOEAL DISEASES.

The following are the mortality rates per 1,000 of population for the period under notice:—

	Whites	Natives	Eurafricans	Asiatics	Great Towns in England and Wales
1921-22 ... ..	0.81	1.52	5.90	4.25	0.45 (1921)
1922-23 ... ..	0.93	1.48	3.44	4.43	0.19 (1922)
1923-24 ... ..	0.68	2.09	6.09	3.92	0.21 (1923)
1924-25 ... ..	0.64	2.03	5.93	4.20	0.19 (1924)
1925-26 ... ..	0.59	2.30	5.54	2.69	0.21 (1925)
1926-27 ... ..	0.99	3.02	4.74	3.11	0.21 (1926)
1927-28 ... ..	0.59	2.32	4.67	2.96	0.15 (1927)
1928-29 ... ..	0.63	2.52	3.00	1.42	0.16 (1928)
1929-30 ... ..	0.65	3.33	2.72	2.53	0.17 (1929)
1930-31 ... ..	0.78	4.10	3.10	3.87	0.13 (1930)

The increase in these rates is attributed to the fact that the rainy season was unduly delayed, resulting in a minor outbreak of Enteritis amongst children during the months of December, 1930 and January, 1931.

## MALIGNANT DISEASE OR CANCER.

During 1930-31 the deaths from cancer numbered 197 Whites (including 38 non-residents), 31 Natives (including 4 non-residents), 8 Euraficans (including 1 non-resident) and 2 Asiatics, as compared with 208 Whites (including 32 non-residents), 29 Natives (including 6 non-residents), 13 Euraficans (including 1 non-resident) and 4 Asiatics in 1929-30 and 212 Whites (including 42 non-residents), 43 Natives (including 15 non-residents), 10 Euraficans and 3 Asiatics in 1928-29.

Of the 197 Whites, 100 were males and 97 females, and 188 were over the age of 35 years, the rates being 0.79, 0.96 and 0.94 for the three years respectively, as compared with 1.45 per 1,000 for England and Wales in 1930.

In the following table is set forth the part of the body affected:—

	Whites			Natives			Euraficans			Asiatics		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
Stomach ... ..	90	92	87	11	7	4	4	5	2	2	2	2
Womb ... ..	34	32	27	7	2	5	1	3	1	—	—	—
Breast ... ..	18	19	20	2	2	2	2	2	2	—	—	—
Liver ... ..	17	10	11	22	15	16	1	1	—	1	1	—
Neck and Throat ...	4	11	6	—	1	1	—	—	—	—	1	—
Mouth ... ..	4	—	5	—	—	1	—	—	—	—	—	—
Tongue ... ..	2	6	4	—	—	—	—	—	—	—	—	—
Lung ... ..	7	3	3	—	—	—	—	—	—	—	—	—
Rectum ... ..	10	10	5	1	—	—	—	1	—	—	—	—
Prostate ... ..	1	6	7	—	—	—	—	—	1	—	—	—
Head and Face ... ..	5	3	1	—	1	—	1	—	—	—	—	—
Bladder ... ..	5	—	9	—	—	2	—	—	1	—	—	—
Bones ... ..	—	4	1	—	—	—	—	—	—	—	—	—
Colon ... ..	5	3	2	—	—	—	1	—	1	—	—	—
Heart ... ..	1	—	—	—	—	—	—	—	—	—	—	—
Legs and Feet ...	2	—	2	—	—	—	—	—	—	—	—	—
Hand and Arm ...	1	1	—	—	—	—	—	—	—	—	—	—
Shoulder ... ..	1	—	—	—	—	—	—	—	—	—	—	—
Chest ... ..	—	1	—	—	—	—	—	—	—	—	—	—
Ear ... ..	1	—	1	—	—	—	—	—	—	—	—	—
Kidney ... ..	3	2	—	—	—	—	—	—	—	—	—	—
Glands ... ..	—	—	2	—	—	—	—	—	—	—	—	—
Brain ... ..	—	—	2	—	—	—	—	—	—	—	—	—
Spine ... ..	—	1	—	—	—	—	—	—	—	—	—	—
Unspecified ... ..	2	3	3	—	1	—	—	1	—	—	—	—
Total ... ..	212	208	197	43	29	31	10	13	8	3	4	2

The figures show a slight decrease in the number of deaths from this group of diseases amongst white persons, which may be attributable to improved methods of treatment. The desirability of seeking early treatment for these conditions is, as always, of paramount importance if treatment is to be successful.



## MEASLES.

The death-rates per 1,000 were as follows:—

	1926-27	1927-28	1928-29	1929-30	1930-31.
Whites ... ..	0.02	0.08	0.02	0.005	0.02
Natives ... ..	0.04	0.13	0.04	0.02	0.006
Eurafricans ... ..	0.15	0.21	—	0.05	—
Asiatics ... ..	0.16	0.15	0.14	—	0.12
Great English Towns ...	0.09 (1927)	0.15 (1928)	—	—	0.15 (1930)
England and Wales ...	0.08 (1926)	0.09 (1927)	0.19 (1928)	—	0.10 (1930)

## VENEREAL DISEASE.

174 White and 2,176 Coloured cases of syphilis and other venereal diseases from Johannesburg were treated at Rietfontein Hospital during the year 1930-31.

## VENEREAL CLINIC.

Statistical Report of Director for period 1st July, 1930, to 30th June, 1931.

## 1.—SUMMARY.

Out Patients		Specimens		Salvarsan	
No. of New Patients	No. of Attendances	No. sent to Institute	No. Examined at Clinic	No. of Patients treated with 606 or Substitutes	No. of Doses Administered
1,247	11,417	791	899	1,137	4,111

## 2.—ATTENDANCES AND DISEASES (OUT PATIENTS).

Attendances of New Patients								Attendances of Old Patients							
Gonorrhœa		Syphilis		Soft Chancre		Not V.D.		Gonorrhœa		Syphilis		Soft Chancre		Not V.D.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
752	103	206	169	7	—	10	—	4,476	605	3,309	1,758	13	—	9	—

## 3.—LABORATORY. NUMBER OF SPECIMENS EXAMINED AND RESULTS OF EXAMINATION.

Clinic						Institute										Total Number of Specimens Examined
Gonococci		Spirochaetes		Others		Gonococci		Spirochaetes		Wasserman Test						
+	-	+	-	+	-	+	-	+	-	+++	++	+	-	?		
285	457	—	—	62	95	19	78	2	3	248	59	2	290	90		
															1,690	

## REMARKS.

1. ATTENDANCES OF PATIENTS.—There has been an increase in the number of new patients during the period under review, the increase being 213 as compared with 1929-30. The number of total attendances has also increased proportionately, being 11,417 as compared with 9,774 in 1929-30.

2. CENTRE FOR THE TREATMENT OF NON-EUROPEAN FEMALES AND CHILDREN.—On the 15th May, 1931, a "Centre" was inaugurated in the Non-European Hospital for the examination and treatment of Non-European females and children suffering from Venereal Diseases. The opening of this Centre was only made possible by the Council deciding to bear the full cost of maintenance, the Union Health Department having intimated that, though it looked on the extension favourably, it was unable, on account of financial stringency, to contribute the usual two-thirds refund on maintenance. In connection with the establishment of this new "Centre," the Council is greatly indebted to the Board of the Johannesburg Hospital, the Superintendent of the Hospital, Dr. A. H. Louw, and the



Matron of the Non-European Hospital, who extended whole-hearted co-operation to the scheme. Two rooms in the new Outpatient Department of the Non-European Hospital have been adequately equipped for the expeditious examination and treatment of patients attending the "Centre." Two Cliniques are held weekly, on Tuesdays and Fridays at 4 p.m. For the moment the Hospital Administration is permitting two of its resident medical officers to assist in the administration of the "Centre" under the direction of the Director. Arrangements are in progress, however, to employ in the future one whole-time resident medical officer whose duties will, in addition to his attendance at the Fever Hospital, include attendance at all the Council's Venereal Cliniques, both European and Non-European. This arrangement will enable him to become thoroughly conversant with the routine and technique employed in the European "Centre" and so to be in a position to carry out the work at the Non-European Centre along the same lines. The work of the Non-European "Centre" is also under the direct supervision of the Director, who makes it his business to give it personal attention.

As this "Centre" is financed solely by the City Council, separate accounts for dispensing and other services require to be kept, but essential anti-specific drugs are procured from the Government's Central Depot in Pretoria at the lowest possible prices. It is too early yet to comment on the measure of success which this "Centre" will achieve, but the attendances already indicate that it is going to fulfil a much-needed want for the examination and treatment of Non-European female domestic servants and Non-European children.

3. PUBLICATIONS.—The Director desires to express his indebtedness to the Medical Officer of Health for the assistance and co-operation which he received in the publication of his book "Lectures on Gonorrhoeal and Syphilitic Affections," and more especially for the permission to include in that publication the brochure dealing with the administration and arrangement of the Centre, which was issued by the City Council in March, 1930.

HENRY GLUCKMAN,

Director, Johannesburg City Council  
"Special Treatment Centre."

#### OPHTHALMIA NEONATORUM.

##### CASES NOTIFIED.

	1928-29	1929-30	1930-31
<b>Ophthalmia Neonatorum—</b>			
Whites ... ..	6	8	18
Natives ... ..	2	3	7
Eurafricans ... ..	1	—	1
Asiatics ... ..	—	—	—
	9	11	26
<b>Gonorrhoeal Ophthalmia—</b>			
Whites ... ..	6	5	2
Natives ... ..	3	2	—
Eurafricans ... ..	—	—	—
Asiatics ... ..	—	—	—
	9	7	2
<b>All Cases—</b>			
Whites ... ..	12	13	20
Natives ... ..	5	5	7
Eurafricans ... ..	1	—	1
Asiatics ... ..	—	—	—
	18	18	28

#### NOTIFIABLE INFECTIOUS DISEASES.

During the year under notice, 1,625 cases were notified, viz., 698 amongst Whites, 882 amongst Natives, 28 amongst Euraficans, and 18 amongst Asiatics. These occurrences are discussed elsewhere in this Report.

The procedure adopted in regard to notified infectious diseases, disinfection, etc., has been the same as recorded in previous years.

1,717 houses and 16,456 articles of clothing, bedding, etc., were disinfected.

#### SMALL-POX.

No cases of this disease were reported during the year.

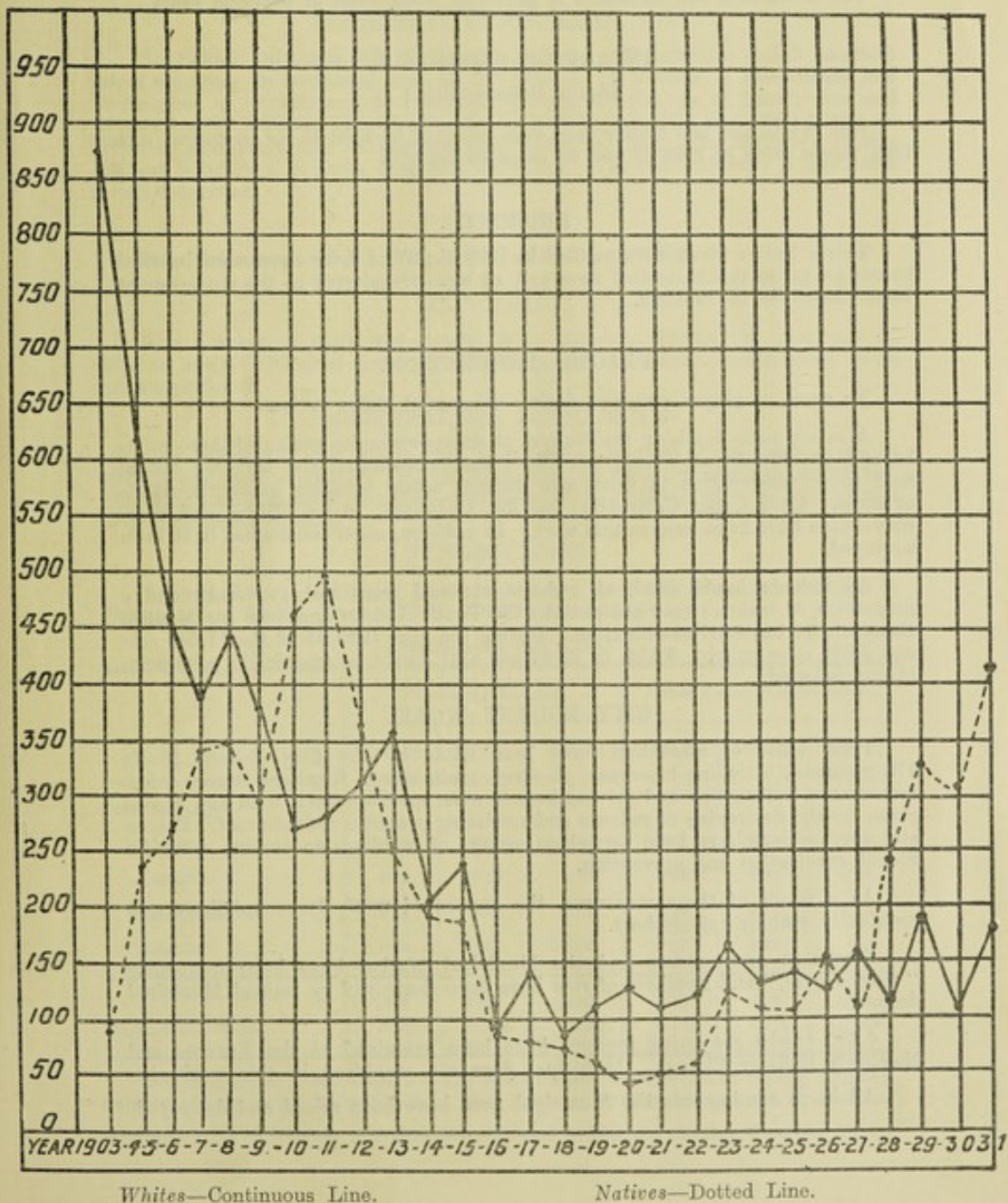


## ENTERICA.

In the following is set forth the number of cases, and deaths, together with the case-rate per cent. and the death-rate per 1,000, and the death-rate for England and Wales:—

	1928-29				1929-30				1930-31			
	Cases	Deaths	Case-rate %	Death-rate	Cases	Deaths	Case-rate %	Death-rate	Cases	Deaths	Case-rate %	Death-rate
Whites ... ..	182	26	14.28	0.14	103	19	18.44	0.10	174	20	11.49	0.10
Natives ... ..	328	99	30.18	0.60	312	86	27.56	0.58	411	129	31.38	0.86
Eurafricans ...	11	5	45.45	0.29	8	1	12.5	0.05	15	8	53.33	0.40
Asiatics ... ..	3	2	66.66	0.28	10	1	10.0	0.13	13	3	23.07	0.37
England and Wales ...				0.011 (1928)				0.010 (1929)				0.01 (1930)

Yearly Incidence of Enteric Fever in the 28 Years, 1903-4 to 1930-31.





### ERYSIPELAS.

43 White and 13 Native cases of erysipelas were notified in 1930-31, as compared with 27 White, 14 Natives, 1 Eurafrican and 1 Asiatic in 1928-29 and 32 White and 13 Native cases in 1929-30.

### MENINGITIS.

The following table shows the registered number of deaths, with death-rates, from meningitis during the triennium 1928-30:—

	1928-29		1929-30		1930-31	
	Deaths	Death-rate	Deaths	Death-rate	Deaths	Death-rate
Whites ... ..	55	0·30	29	0·10	32	0·16
Natives ... ..	73	0·49	74	0·50	63	0·42
Eurafricans ... ..	4	0·23	2	0·11	4	0·20
Asiatics ... ..	3	0·42	2	0·26	1	0·12

The death-rate and incidence is generally lower than in previous years.

### INFANTILE PARALYSIS.

(Acute Poliomyelitis.)

One White and one Native case were reported in 1930-31, as compared with four White cases in 1928-29 and no cases in 1929-30.

### LEPROSY.

Thirty Native cases were notified in 1930-31; 27 of these cases were infected before arrival in the Municipal Area and all were transferred to the Government Leper Institute in Pretoria.

### PLAGUE PREVENTION.

No cases of plague occurred during the period under review.

A safety zone has been maintained at an approximate radius of three miles beyond the Municipal boundaries. This has necessitated the carrying out of field rodent destruction in thirty-two distinct areas, totalling many thousands of acres. 4,492 Capex Cartridges, 255 lbs. Cyanogas, 78 lbs. Wheat and 8 oz. Strychnine have been used in this work. In addition, other large areas have been surveyed.

All rodents found dead, all rodents obtained from railway trucks and a proportion of trapped rats are sent to the South African Institute for Medical Research for bacterial examination. During the year 1930/31 of the 11,344 rats and 2,356 mice caught, 3,134, or 22·87 per cent., were so examined; none were plague infected.

### CITY RODENT WORK.

1,500 visits of inspection have been made by the City Rodent Staff; 170 premises, including bioscopes, theatres, grain stores, furniture stores, cafes, restaurants, refuse tips and private houses were specially dealt with and advice given for the destroying of rodents and rendering premises rodent-proof. Eleven statutory notices have been served on owners of buildings to execute work for rodent eradication and prevention.

As a result of these measures, the owners of many large buildings now constantly employ rat-catchers.

Stocks in grain stores and the Municipal Market have been frequently "turned over," and numbers of rats have been destroyed by trained Municipal dogs.

4,480 trucks conveying produce have been examined at the Kazerne and Newtown Railway Sidings. Municipal dogs are employed in this work.

All hares coming into the Municipal Area have been seized and destroyed.

## SCARLET FEVER.

In 1930-31 there were 290 White cases of this disease. There were two deaths among the White population, the death-rate being 0.01. In the two previous years the cases notified were 1,321 (all Whites) in 1928-29 and 453 White, 2 Native and 1 Eurafrican in 1929-30, the mortality rate being 0.07 and 0.006 per 1,000 respectively. The rate per 1,000 in England and Wales for 1930 was 0.02.

## TYPHUS.

No cases were reported in 1930-31, as against 3 Natives in 1928-29 and none in 1929-30.

## DIPHTHERITIC DISEASE, INCLUDING MEMBRANOUS CROUP.

The occurrences of diphtheritic disease in 1930-31 numbered 123 (112 Whites, 8 Natives, 2 Eurafricans and 1 Asiatic), in 1928-29 169 (159 Whites, 3 Natives, 3 Eurafricans and 4 Asiatics), and in 1929-30, 149 (138 Whites, 8 Natives, 2 Eurafricans and 1 Asiatic). The case mortality for Whites being 4.87, 9.43 and 12.51 per cent. for the respective years in order mentioned above, and the death-rate per 1,000 was 0.08 in 1928-29, 0.09 in 1929-30 and 0.03 in 1930-31, as compared with 0.09 for England and Wales in 1930. The low case mortality and the low death-rate are worthy of note and reflect credit on the medical and nursing staff of the Fever Hospital.

## PUERPERAL SEPTICÆMIA, ETC.

In 1930-31 39 cases (19 Whites, 13 Natives, 4 Eurafricans and 3 Asiatics) were reported, as compared with 53 (27 Whites, 15 Natives, 7 Eurafricans and 4 Asiatics) in 1928-29 and 50 cases (31 Whites, 13 Natives, 3 Eurafricans and 3 Asiatics) in 1929-30. The death-rate for 1930-31 was 1.42 per 1,000 births for Whites, as against 1.92 in England and Wales in 1930. The incidence of this disease is referred to under Maternal Mortality. The low incidence is creditable to all concerned.

## ANTHRAX.

One Native case of this disease was notified in 1930-31.

## INFLUENZA.

The number of registered deaths from influenza during the year was 32 Whites and 11 Coloured persons. These figures as compared with most years are insignificant.

## ENCEPHALITIS LETHARGICA.

One White and one Native case was notified in 1930-31, as against one in 1928-29 and none in 1927-28. Seven White and two Native deaths were registered. The attention of medical practitioners is again called to their failure to notify cases of this notifiable disease.

## TUBERCULOSIS.

Appended is a statistical summary of the mortality from tuberculosis in Johannesburg for the years 1928-29, 1929-30 and 1930-31:—

## DEATH-RATE PER 1,000.

	Pulmonary Phthisis			Other Forms of Tuberculosis		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
Johannesburg—						
Whites ... ..	0.28	0.35	0.34	0.02	0.04	0.03
Natives ... ..	1.29	1.29	1.40	0.62	0.36	0.34
Eurafricans ... ..	1.41	1.50	1.15	0.29	0.16	0.20
Asiatics ... ..	1.00	0.93	1.00	0.57	0.13	—
England and Wales ...	1928 0.755	1929 0.793	1930 0.739	1928 0.173	1929 0.166	1930 0.159

Notification of Tuberculosis.—429 notifications were received during 1930-31, namely, in regard to 22 Whites, 400 Natives, 6 Eurafricans and 1 Asiatic. The incidence in Natives is practically confined to Natives employed on the Mines.



## BACTERIOLOGICAL DIAGNOSIS

The following are particulars of the specimens examined under this heading for the City Council at the South African Institute for Medical Research during the year 1930-31:—

Disease.	Positive.	Negative.	Doubtful.
Typhoid ... ..	853	2,613	17
Tuberculosis ... ..	492	7	—
Diphtheria ... ..	430	1,980	62
Haemolytic Streptococcus ...	111	406	—
Gonococcus ... ..	3	17	—
Plague ... ..	—	2	—
Leprosy ... ..	4	26	1
Anthrax ... ..	1	2	—
Bilharzia ... ..	—	1	—
Meningitis ... ..	—	5	—
Animal Parasites ... ..	—	1	—
	1,894	5,060	80

The figures do not include rats examined for suspected plague (vide p. ).

## ISOLATION HOSPITALS.

Fever Hospital.—The number of White cases treated at the Fever Hospital in Johannesburg was 475 as compared with 307 in 1929-30, as follows: Diphtheria 111, scarlet fever 147, measles 74, mumps 46, chicken-pox 3, erysipelas 50, whooping cough 2, meningitis 9, frontal sinus 1, German measles 5, enteric fever 26 and tonsillitis 1.

The cost of the upkeep of the Fever Hospital for 1930-31 was £12,026 10s. 3d.; the Government refunded 50 per cent. of this amount.

In connection with the number of cases treated at the Fever Hospital, it should be noted that there is a marked increase. To a considerable extent this increase is due to the utilisation of the new Observation Block, which now receives numbers of cases of the non-notifiable infectious diseases as well as cases of erysipelas, cerebro-spinal meningitis, enteric fever, etc., which hitherto were accommodated in the Johannesburg General Hospital.

Springkell Sanatorium.—10 non-miners suffering from tuberculosis were being treated at the Springkell Sanatorium on 1st July, 1930, and 17 fresh cases were sent there during 1929-31, 3 patients died and 12 left. The cost of treatment of these cases was £2,322 16s., of which Government refunded 50 per cent.

Rietfontein Hospital.—11 White cases of venereal, 1 anthrax and 1 erysipelas, and 65 Native cases of chicken-pox, 31 leprosy, 3 suspect small-pox, 21 measles, 2-diphtheria, 1 sleeping sickness, 2 suspect plague, 17 mumps, 7 venereal disease and 1 scarlet fever were removed for treatment to the Rietfontein Hospital. Rietfontein Hospital was paid £309 15s. for these services, 50 per cent. being refunded by Government.

## AMBULANCE REMOVALS.

During the period under review 13 White cases and 151 Coloured were removed to Rietfontein Hospital, and 266 White cases to the Fever Hospital. In addition, 2 White patients were removed to the Children's Hospital 21 patients to the Non-European Hospital, 7 Whites to Springkell Sanatorium, and 2 Whites to Private Hospitals. Six cases were also removed from outside districts at the request of, and on payment by, the local authorities concerned.

## NURSING HOMES.

There are 37 nursing homes in Johannesburg, all of which are periodically inspected by District Inspectors or Health Visitors and the Technical Medical Staff.

## LIVE STOCK MARKET AND PUBLIC ABATTOIR.

The following figures have kindly been supplied by the Director, Abattoir and Live Stock Market.

During 1930-31 1,296,617 animals passed through the Live Stock and Quarantine Yards, and 110,103 cattle, 427,590 sheep, etc., 12,665 calves and 73,019 pigs, or a total of 623,377 animals, were slaughtered at the Abattoir; 1,471,798 lbs. imported meat was inspected; and 1,427,121 lbs. meat was condemned.

## INSPECTION OF FOODSTUFFS.

The following goods were condemned by the Food and Drugs Inspectors:—Fish, 91,624 lbs.; smoked fish, 1,730 boxes; butter, 4 lbs.; salt herrings, 15 barrels; jam, 600 lbs.; hares, 71; crayfish, 1,542; herrings, 48 tins. During the period under review they passed 492,125 lbs. of bacon, etc., and 10,409,553 lbs. of fish.

## ANALYSIS OF FOODS, ETC.

*Milk.*—Appended is a tabulated summary of the results of analyses and prosecutions.

	1928-29	1929-30	1930-31
Number of Samples taken ...	530	513	314
Number examined bacterially .	—	41	3
Number deficient Solids-not Fat	38	31	2
Number deficient Fat ...	23	24	3
Number of Preservatives ...	4	—	—
Number of Prosecutions ...	8	3	4
Amount of Fines ...	£14 10s.	£3	£7

In addition to the 708 water examinations (see page 27) 332 articles of food, etc., were examined during 1930-31 at the Government Laboratories. Details are appended:—

Description.	Genuine or Pure.	Adulterated or Impure.
Milk ...	309	5
Lard ...	1	—
Sugar ...	2	—
Jam ...	1	4
Bread ...	1	—
Chicory ...	—	1
Eucalyptus Oil ...	4	—
Frutine ...	1	—
Epsom Salts ...	1	—
Disinfectant ...	1	—
Raspberry ...	1	—

This is 1.66 samples per annum per 1,000 of the white population.

## MILK SUPPLIES AND DAIRY INSPECTION.

Milk control is exercised by inspection of dairies inside the Municipal Area and inspection of dairies outside the Area.

## (a) INSPECTION OF DAIRIES INSIDE THE MUNICIPAL AREA.

Apart from routine inspection of dairies by District Health Inspectors, the following synopsis shows the inspections made and duties carried out by the City Dairy Inspector.



1. <i>Approximate Milk Gallonage Produced Daily</i>	...	...	6,000
2. <i>No. of Inspections.</i>			
Score Card Work	...	...	776
Work in progress, advisory, widals, etc.	...	...	562
			<u>1,338</u>
3. <i>Comparative Analysis in Dairies Scored.</i>			
No. for year ended 30th June, 1930	...	...	119
No. for year ended 30th June, 1931	...	...	132
Increase	...	...	<u>13</u>
4. <i>Comparative Analysis in Score Returns.</i>			
Average 30th June, 1930	...	...	66.1 %
Average, 30th June, 1931	...	...	75.33 %
Increase	...	...	<u>9.23 %</u>
5. <i>Distribution of Scores.</i>			
		No. of Dairies.	
90% and over	...	...	19
80% and under 90%	...	...	27
70% and under 80%	...	...	43
60% and under 70%	...	...	34
50% and under 60%	...	...	9
			<u>132</u>
6. <i>Comparative Analysis of Low Scoring Dairies.</i>			
The lowest scored dairies, 30th June, 1930	...	...	46.5 %
The lowest scored dairies, 30th June, 1931	...	...	56 %
Increase	...	...	<u>9.5 %</u>
7. <i>Introduction of New System of Scoring Dairies.</i>			
The new arrangement in scoring points is more searching than that contained in the previous card, consequently more satisfactory. Had the previous award of 14 points for the Widal Test remained instead of the 7 points now given, the number of dairies scoring 80% and over would have been greater and the general increase in averages much higher.			
8. <i>Competition Awards—Year ended 30/6/30.</i>			
		Firms.	
Two Gold Medals, nine Certificates of Merit	...	...	11
Eligible for this year's competition	...	...	16
9. <i>Progress in Constructional Work.</i>			
(a) Recently licensed dairy premises complete of outstanding type	...	...	7
(b) Reconstruction of existing shedding, walls, lighting, etc.	...	...	10
(c) New cowsheds to replace those considered unsatisfactory	...	...	9
(d) New milkrooms to replace those considered unsatisfactory	...	...	6
(e) New washrooms to replace those considered unsatisfactory	...	...	12
(f) New floors in existing cowsheds	...	...	16
(g) New floors where stanchion equipment has been installed	...	...	11
(h) New native quarters	...	...	4
10. <i>Visits by Dairymen to Modern Dairies.</i>			
Practically the whole of the construction work as detailed was the outcome of showing dairymen modern dairying conditions. Although this method may not be the affair of the Council, it is the proven way to obtain results, and has been accomplished by the Dairy Inspector conveying numbers of dairymen in his own car and demonstrating up-to-date methods of construction and production.			

11. *Progress in General Methods and Equipment.*

Substantial improvement has been made in this direction, the chief improvement being the replacement of the often dirty wicker basket by that of the metal crate.

12. *Refrigeration and Cooling of Milk.*

There is a want in this direction, and several manufacturers are now giving this matter attention on details supplied by this Department. It is anticipated that reasonably priced plants will soon be available for use in local dairies and small milk depots.

13. *New Dairy By-laws.*

New by-laws to meet the alterations in dairying conditions are now in the hands of the Administrator of the Transvaal for his approval or otherwise.

14. *Reports Furnished.*

- (a) Johannesburg Milk Supply.
- (b) School Club Milk.
- (c) Locomotion Allowance.

## RAW MILK DEPOTS, I.E. MILKSHOPS.

1. No. on Register	...	...	...	...	...	290
<hr/>						
2. Comparative Analysis in Milkshops Scored.						
No. scored for year ended 30th June, 1930	...	...	...	...	...	34
No. scored for year ended 30th June, 1931	...	...	...	...	...	57
Increase	...	...	...	...	...	23
<hr/>						
3. Comparative Analysis in Score Returns.						
Average score, 30th June, 1930	...	...	...	...	...	72.7%
Average score, 30th June, 1931	...	...	...	...	...	75 %
Increase	...	...	...	...	...	2.3%
<hr/>						
4. Milkshops Scoring over 90 per cent.						
Year ended 30th June, 1930	...	...	...	...	...	13
Year ended 30th June, 1931	...	...	...	...	...	20
Increase	...	...	...	...	...	7
<hr/>						
5. Competition Awards—Year ended 30/6/30.						Firms.
Two Gold Medals, six Certificates of Merit	...	...	...	...	...	8
Eligible for this year's competition	...	...	...	...	...	14
Increase	...	...	...	...	...	6

## MILK PASTEURISING FIRMS.

1. <i>No. of Milk Pasteurising Firms.</i>						
Number of Milk Pasteurising Firms	...	...	...	...	...	5
(Same as for year ended 30th June, 1930.)						<u>5</u>
2. <i>Competition Awards—Year ended 30/6/30.</i>						
						Firms.
One Gold Medal	...	...	...	...	...	1
Eligible for this year's competition	...	...	...	...	...	2
						<u>2</u>
3. <i>General Progress.</i>						

Two of these firms have improved their plants very considerably, one is negotiating with the Government with a view to meeting the requirements of the Council's draft new by-laws, and two are contemplating alterations to meet these requirements.



## GENERAL TO ALL LOCAL MILK HANDLERS.

*Sediment Tests Taken During Inspections.*

Sediment tests taken during inspections	...	...	...	...	...	...	301
Analysis—							
Good	...	...	...	...	...	...	230
Fair	...	...	...	...	...	...	61
Bad	...	...	...	...	...	...	10
Allocation of bad samples—							
Local producers	...	...	...	...	...	...	5
Milkshops	...	...	...	...	...	...	5

## Action—

Local producers were assisted to find the cause.

Subsequent tests proved satisfactory.

Milkshops: Samples handed to Outside Dairy Inspectors for their information.

*Widal Tests (City).*

Number taken	...	...	...	...	...	...	278
Results—							
Suspects	...	...	...	...	...	...	3
Carrier found and repatriated	...	...	...	...	...	...	1

While the figures show a material improvement, it is considered that the great majority of milk producers and milk handlers will be prepared to effect much greater improvements when they receive that fairness in business competition which the draft new by-laws will afford them.

## (b) INSPECTION OF DAIRIES OUTSIDE THE MUNICIPAL AREA.

With regard to outside dairies the following particulars are submitted:—

*Number and Situation of Dairy Farms.*

The number of dairy farms supplying milk to Johannesburg during the period under review was 328. These farms are situate in the districts of Potchefstroom, Ventersdorp, Witwatersrand, Rustenberg, Pretoria, Vereeniging, Heidelberg, Standerton, Bethal, Breyten, in the Transvaal, and in the northern parts of the Orange Free State.

*Quantity of Milk Introduced per Diem.*

Approximately 17,000 gallons of milk are introduced daily into Johannesburg. This amount is about two-thirds of the milk supply to the City. The results of analysis show that the quality of milk is of high standard.

*Applications for Permits to Introduce Milk into Johannesburg.*

Applications received	...	...	...	...	...	...	351
Granted	...	...	...	...	...	...	328
Refused	...	...	...	...	...	...	23

*Applications for Licences to Retail Milk in Johannesburg.*

Applications received	...	...	...	...	...	...	40
Granted	...	...	...	...	...	...	40

*Inspection of Dairy Premises.*

Systematic and regular inspection of all dairies supplying milk to Johannesburg has been carried out, and the results of such inspections have been carefully reported to, and dealt with by the Medical Officer of Health. The total number of inspections made was 1,403.

*Score Card Inspection.*

Under this system 33 outside dairies licensed to sell milk in Johannesburg are scored quarterly.

The scores ranged from 80 to 94 per cent.

### *Control of Milk Supplies.*

Periodical visits to railway stations in Johannesburg and those in outer districts have been made with the object of checking supplies of milk arriving in, or being despatched to, Johannesburg. Four supplies from unpermitted sources were discovered. Further supplies from these sources were prohibited.

### *Tests for Visible Dirt in Milk.*

This test, which is applied by passing a pint of milk through a cotton wool pad of small area, thereby arresting and rendering visible all solid impurities, was applied to 320 supplies of milk on dairy farms or at railway stations. The results generally were satisfactory, but when dirty pads were obtained the milk producer was dealt with immediately.

### *Widal Test.*

Two hundred and ninety three persons engaged in the production and handling of milk submitted themselves to this test. Three "carriers" of Enteric Fever were detected, isolated and placed under special treatment.

### *Thanks.*

It is desired to express thanks to the officials on the South African Railway, particularly those at Johannesburg Station, for their assistance in connection with milk inspection on railway property.

## WATER SUPPLY.

Water is supplied in bulk by the Rand Water Board to the City Council. The Council controls the distribution of water throughout the city and owns the reticulation. The following table shows the quantity and percentage of water pumped from various sources by the Rand Water Board and is taken from the Twenty-sixth Annual Report of the Chief Engineer, Rand Water Board:—

Source	Total Quantity Pumped during Year ending 31st March, 1931	Percentages
	Gallons	
From Zwartkopjes ... ..	744,976,000	11.56
From Zuurbekom ... ..	1,944,008,000	30.15
From Vaal River ... ..	3,758,327,700	58.29
Grand Total ... ..	6,447,311,700	100.00

The length of mains within the Municipal Area is now 521.57 miles, 24.96 miles having been added during 1930-31, while during the same period 2,196,062,000, or 6,016,608 gallons of water per day, were supplied to consumers connected to same.

## CHEMICAL AND BACTERIOLOGICAL EXAMINATIONS.

679 samples of water were taken for examination during the year 1930-31, also 29 samples from private boreholes and wells.

It is desired to acknowledge the obligation of the city to the officials of the Rand Water Board, who are at all times so assiduous in securing an adequate and pure supply of water to the city.

## SEWERAGE.

The City Engineer has kindly supplied the following information:—

On 30th June, 1931, there were 290.52 miles of sewers completed.

On the same date 29,547 premises had been connected.

It is noteworthy that the Council's progressive policy of sewerage extension is being continued vigorously and that towards the end of the period under review three new Sewage Disposal Works were placed in commission. These Works—the "Antea" Works at "Industria," the "Bruma" Works at Kensington South, and the "Cydna" Works at Melrose—are examples of up-to-date sewage disposal practice in Great Britain, Europe and America, and whilst the manner of their functioning may present minor difficulties at the outset, since the quality of the sewage from the reticulation which they serve is almost an unknown quantity, it is confidently expected that they will fulfil the requirements of such Works, viz., a first-class effluent with the minimum of offence to residents. During the year the Council wisely approved of the addition to its staff of a Bio-Chemist, whose express duties will be to control the working of the new



Works and advise the other technical advisers of the Council in regard to improvements and general working. For this position the Council was fortunate in securing the services of Mr. Harold Wilson, B.Sc. (London), a highly experienced Bio-Chemist with over 25 years practical experience of sewage disposal works in England. The Sewage Farm at Klipspruit has also during the year been greatly improved by tank additions and the provision of final filter beds on one section of the farm. These improvements have resulted in a vastly purer effluent on the southern run-off, and other contemplated filtration of farm effluent on the north-western run-off, when completed, will result in the quality of all effluent from the farm being discharged in as good a state as the effluent from any up-to-date disposal works.

#### MINES SANITATION.

The usual procedure has been carried out in regard to systematic inspections of the mining properties in the Johannesburg area.

This work has included frequent inspections of all Native compounds, hospitals and locations, married and single White quarters, contractors' compounds, brickfields, dairies and cowsheds, Native eating houses, stone crushing works, mine boarding houses, railway stations and quarters, pumping and power stations, disposal of refuse, the sanitary arrangements at the various works and the supervision of the daily cleaning up and scavenging at all places and premises on the surface.

All plans submitted in regard to new, or additions and alterations to existing housing accommodation, drainage or other sanitary requirements have been examined by the Medical Officer of Health and amended when necessary.

All cases of infectious disease among Whites, Natives and Coloured persons have been visited, inquired into and reported on in the usual way.

As the result of reports and suggestions made by your Inspectors, considerable improvements have been effected throughout the various mining properties during the year.

#### UNDERGROUND SANITATION.

Systematic inspections are made in regard to underground sanitation of all mining properties in the Johannesburg area. This supervision includes the inspection of all sanitary arrangements on all levels, working places, stations; the inspection of disused stopes, ladderways, etc., and the provision of suitable drinking water supplies on each level.

It is very satisfactory to be able to report that the work of supervising sanitary work and cleansing methods underground is carried out by white men, and there is no doubt that this accounts for the general high standard which has been maintained throughout the year.

It is desired to acknowledge the ready, reasonable and sympathetic attitude of Mine Managers in regard to requirements called for by the department.

The Government Mining Engineer and the Director of Native Labour have been kept in close touch with the general work of mine sanitation under the department's direction.

#### HOUSING AND INSANITARY PROPERTIES.

During the year Closing Orders were applied for by the Council and granted by the Courts under Section 74 of the Local Government Ordinance No. 11 of 1926 in respect of 345 slums or insanitary properties, and in addition 10 Demolition Orders were obtained in respect of premises for which Closing Orders had previously been obtained and in connection with which owners had taken no steps to reconstruct satisfactorily. The properties concerned were situated in the following townships, viz., Fordsburg (120), Malay Location (94), Doornfontein (63), Denver and Main Reef Road (48), Johannesburg (10), Marshalls (9), Ferreira's (3), Rosettenville (2), Troyeville (2), Braamfontein (2), Jeppes (1) and Booysens (1). In most cases the owners at once took steps to reconstruct or recondition the properties so as to bring them into conformity with the Council's requirements. In a number of cases, however, the buildings were so dilapidated that the owners decided to demolish and erect in their place entirely new structures. These activities were entrusted to two special inspectors, who in the first place completed a survey of every single premises in the townships concerned, then prepared full details of the insanitary conditions in each of the premises for the purpose of elaborating the certificates required to be submitted to the Council, then accompanied the Medical Officer of Health and Assistant Medical Officer of Health on their personal inspections which are necessary as evidence of the details of the certificates, then prepared and served notices of application for Orders on all owners and occupying tenants (in some cases the tenants numbered fifty or more), then attended Court to give evidence in each case, and finally paid numerous visits to the premises for which Orders had been obtained in order to see that the Closing thereof was being strictly enforced. The volume of work involved has been very large and the actual number of inspections, etc., runs into many thousands. These Special Inspectors have rendered the Council valued and strenuous service.



In addition to the ground covered by the Special Inspectors, the District Inspectorate Staff have accomplished 526 inspections in connection with repairs to buildings, and 209 inspections in connection with unauthorised buildings. They have also in respect of insanitary properties, where necessary alterations were of a minor character, served 39 notices, paid 4,009 visits of inspection and secured the demolition of 59 and the vacation of 98 properties (*vide* following schedule):—

# ANNUAL RECORD OF DUTIES PERFORMED BY DISTRICT INSPECTORS ONLY.

From 1st July, 1930, to 30th June, 1931.

INSPECTIONS.	
BUILDINGS—	CYANIDE FUMIGATIONS—
Repairs to ... .. 526	Supervised ... .. 2,342
Unauthorised ... .. 209	INFECTIOUS DISEASES—
CLOSETS AND URINALS—	Cases Investigated ... .. 405
Inspected ... .. 6,701	Contacts ... .. 113
Additional Provided ... .. 117	Vaccination ... .. —
French Drains ... .. 1,089	Licensing Court ... .. 78
HOUSES—	LICENSED PREMISES—
Dwellings ... .. 209	Aerated Water and Ice
INSANITARY DWELLINGS—	Factories ... .. 411
Notices ... .. 39	Asiatic Eating Houses ... .. 164
Visits ... .. 1,752	Bakeries ... .. 1,505
Demolished ... .. 59	Barbers' Shops ... .. 1,647
Vacated ... .. 98	Bioscopes ... .. 392
INTERVIEWS—	Boarding Houses ... .. 601
Owners, Agents, etc. ... .. 582	Butchers' Shops ... .. 3,464
Native Housing ... .. 1,566	Cowsheds ... .. 1,311
NUISANCES—	Dairies ... .. 1,379
Animals ... .. 1,221	General Dealers ... .. 7,936
Drainage ... .. 1,049	Hotel Dining Rooms ... .. 560
Fly ... .. 385	Ice Creameries ... .. 216
Manure ... .. 1,108	Kaffir Eating Houses ... .. 2,361
Mosquito ... .. 164	Laundries ... .. 793
Rats ... .. 185	Lodging Houses ... .. 116
Refuse ... .. 2,230	Milk Shops ... .. 2,275
Slopwater ... .. 766	Noxious Trades ... .. 2,260
Smoke ... .. 226	Nursing Homes ... .. 520
Stables ... .. 1,573	Private Cows ... .. 875
Stormwater ... .. 189	Restaurants ... .. 1,150
Unspecified ... .. 2,102	Tea Rooms ... .. 2,083
SAMPLES TAKEN—	NOTICES SERVED—
Food and Milk ... .. 169	Statutory ... .. 2,231
Water ... .. 3	Others ... .. 1,682
Service Complaints ... .. 311	Prosecutions ... .. 100
Slum Properties ... .. 2,257	Attendance at Court ... .. 13
Miscellaneous ... .. 236	
Wells and Boreholes ... .. 195	



## LICENSED PLACES.

From 1st July, 1930, to 30th June, 1931, 5,052 applications for licences of various kinds have been dealt with, the premises in question being in all cases carefully examined as to sanitary requirements.

	1930-31		
	Granted	Refused or not taken out	Total
1. Tea Shops, Eating Houses, Restaurants, etc.	1,058	113	1,171
2. Dairies ... ..	245	53	298
3. Milk Shops ... ..	386	50	436
4. Butchers' Shops ... ..	695	102	797
5. Private Cowkeepers ... ..	169	25	194
6. Bakers and Confectioners ... ..	126	8	134
7. Permits to introduce Milk ... ..	308	75	383
8. Kaffir and Asiatic Eating Houses ... ..	238	67	305
9. Nursing Homes ... ..	40	5	45
10. Laundries ... ..	82	15	97
11. Ice Creameries ... ..	325	18	343
12. Noxious or Offensive Trades ... ..	384	57	441
13. Aerated Water and Ice Factories ... ..	27	—	27
14. Hairdressers and Barbers ... ..	362	13	375
15. Lodging House ... ..	4	2	6
	4,449	603	5,052

## PROSECUTIONS.

One hundred and thirty-four persons were prosecuted for various breaches of the Public Health Act and By-laws; 123 were convicted, and fines aggregating £205 10s. were imposed. Particulars are appended:—

By-laws Infringed.	Race of Accused.			Totals.
	Whites.	S.A. Coloured	Asiatic.	
Prevention of Nuisances ...	9	9	4	22
Sale of Food and Drugs ...	6	—	2	8
Dairies and Milk Shops ...	32	13	4	49
Butchers ... ..	13	9	1	23
Bakery ... ..	1	—	1	2
Laundry ... ..	—	—	1	1
Closing Order ... ..	2	—	—	2
Public Health Act, Art. 125	12	2	10	24
Food and Drugs Act ...	3	—	—	3
Totals ...	78	33	23	134
RESULTS—				
Convicted and Fined ...	60	27	20	107
Convicted and Cautioned	11	3	2	16
Dismissed ... ..	3	2	1	6
Withdrawn ... ..	4	1	—	5
Prohibition Order Granted	11	—	8	19
AMOUNT OF FINES ...	£135 15 0	£41 0 0	£28 15 0	£205 10 0

This work is supervised by the Medical Officer of Health, under whose directions proofs of evidence, summonses, subpoenas and charge-sheets are prepared and handed to the Council's Solicitors.





