

## **Medical Officer's annual report [to] Durban Corporation.**

### **Contributors**

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CITY OF DURBAN

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# Annual Report

OF

## CITY MEDICAL OFFICER OF HEALTH

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YEAR ENDING 30th JUNE, 1948.

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HAYNE & GIBSON (PTY) LTD.,  
DURBAN







# CITY HEALTH DEPARTMENT.

1st August, 1948.

TO HIS WORSHIP THE MAYOR AND  
CITY COUNCILLORS OF THE CITY OF DURBAN.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to present the Forty-Seventh Annual Report of the activities of the City Health Department during the year ending 30th June, 1948.

CLIMATIC DATA : Latitude 30 degrees. Longitude 31 degrees.

TEMPERATURE : (Statistics kindly supplied by the City and Water Engineer).

	TEMPERATURE			HUMIDITY			Rainfall	RAINFALL: No. of days rain fell
	Max.	Min.	Mean	Max.	Min.	Mean		
<b>1947 :</b>								
July ... ..	83	59	71	94	59	76	·63	7
August ... ..	88	71	75	90	53	73	·65	5
September... ..	85	63	74	90	41	71	1·88	8
October ... ..	81	63	76	90	62	79	1·76	12
November... ..	89	67	80	95	54	78	6·41	16
December... ..	88	74	66	82	48	70	2·76	9
<b>1948 :</b>								
January ... ..	87	73	82	95	61	79	5·13	12
February ... ..	90	74	83	99	62	78	4·16	8
March ... ..	87	73	71	99	68	77	3·15	9
April ... ..	86	68	80	71	95	60	5·25	11
May ... ..	89	74	78	90	60	75	·35	5
June ... ..	89	70	77	85	51	70	·11	2

AREA OF MUNICIPALITY : The area of Durban and suburbs inclusive of Townlands is 44,889 acres (70.14 sq. miles).

ANNUAL RATEABLE VALUE :

	1948	1947
Gross value of land ... ..	£32,327,020	(£31,580,680)
Gross value of buildings ... ..	£50,896,480	(£48,416,580)
TOTAL (including agricultural and undeveloped areas) ... ..	<u>£83,223,500</u>	<u>(£79,997,260)</u>

For the year under review, the rates imposed were 7d. on land and 3½d. on buildings (including water rate).

## REPORT "A"

1.—VITAL STATISTICS : (Figures in brackets represent the previous year in all cases).

POPULATION :

	CENSUS	ESTIMATE 30/6/48			ESTIMATE 30/6/47		
	May, 1946	Male	Female	Total	Male	Female	Total
European ... ..	124,792	60,126	67,948	128,074	59,486	67,234	126,720
Coloured ... ..	10,206	5,634	5,357	10,991	5,466	5,151	10,617
Native... ..	108,866	93,348	16,125	109,473	93,427	15,714	109,141
Asiatic... ..	113,440	61,547	58,497	120,044	59,986	56,842	116,828
	<u>357,304</u>	<u>220,655</u>	<u>147,927</u>	<u>368,582</u>	<u>218,365</u>	<u>144,941</u>	<u>363,306</u>

The principal Vital Statistics for the year, corrected for outward transfer are as follows :—

	European	Coloured	Native	Asiatic	Total
Population (Estimated at 30/6/48) ... ..	128,074 (126,720)	10,991 (10,617)	109,473 (109,141)	120,044 (116,828)	368,582 (363,306)
Birth Rates ... ..	20·45 (22·01)	53·50 (54·07)	28·29 (26·71)	42·45 (42·96)	30·93 (31·09)
Death Rates ... ..	9·43 (8·50)	19·23 (16·76)	24·36 (24·52)	16·20 (15·14)	16·36 (15·69)
Infantile Mortality (Rate per 1,000 live Births)	31·31 (26·53)	103·74 (81·88)	333·88 (330·36)	91·85 (80·69)	144·30 (131·77)
Percentage of Illegitimate to Live Births ... ..	1·55 (2·19)	25·17 (27·77)	52·05 (53·09)	1·69 (1·39)	16·55 (16·26)
Death Rate: Pulmonary T.B. per 1,000 of population	·43 (·45)	3·82 (3·86)	3·52 (3·33)	1·80 (1·60)	1·89 (1·79)



BIRTHS : The following births were registered in Durban during the Year :

	European	Coloured	Native	Asiatic	Total
Local Births ... ..	2,619 (2,789)	588 (574)	3,097 (2,915)	5,096 (5,019)	11,400 (11,297)
Local Illegitimate Births... ..	34 (61)	110 (159)	1,781 (1,547)	74 (70)	1,999 (1,837)
Still Births ... ..	46 (58)	16 (12)	223 (329)	134 (216)	419 (615)
Birth Rates ... ..	20.45 (22.01)	53.50 (54.07)	28.29* (26.71)*	42.45 (42.96)	30.93 (31.09)

\* This figure is inaccurate and unreliable owing to incomplete registration.

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

European ... ..	11.02	(13.30)
Coloured ... ..	34.21	(37.30)
Asiatic ... ..	26.25	(27.82)

Illegitimacy accounted for 1.30 per cent of the total European births, 18.54 of Coloureds, 57.51 of Native and 1.06 of Asiatic.

#### DEATHS :

	European	Coloured	Native	Asiatic	Total
DEATHS :					
Local Deaths ... ..	1,208 (1,078)	212 (178)	2,666 (2,676)	1,945 (1,769)	6,031 (5,701)
Non-Local Residents ... ..	241 (224)	32 (28)	2,012 (1,602)	131 (114)	2,416 (1,968)
Death Rates ... ..	9.43 (8.50)	19.23 (16.76)	24.36 (24.52)	16.20 (15.14)	16.36 (15.69)
INFANTILE MORTALITY :					
Local Deaths ... ..	82 (75)	61 (46)	1,034 (952)	468 (403)	1,645 (1,476)
Deaths of infants whose mothers came to Durban for confinement or were brought in suffering from illness which caused death	13 (15)	9 (2)	558 (444)	25 (13)	605 (474)

The Infantile Mortality rate per 1,000 live births for the year was : European 31.31 (26.53), Coloured 103.74 (81.88), Native 333.88 (330.36), and Asiatic 91.85 (80.69).

Causes of death were as follows :—

	European	Coloured	Native	Asiatic	Total
Congenital Causes ... ..	18 (5)	3 (3)	116 (153)	62 (67)	199 (228)
Prematurity ... ..	35 (37)	11 (8)	129 (73)	77 (52)	252 (170)
Diarrhoea, etc. ... ..	9 (6)	7 (16)	301 (374)	92 (86)	409 (482)
Bronchitis, Pneumonia, etc.	6 (7)	25 (13)	415 (184)	155 (151)	601 (355)
Other ... ..	14 (20)	15 (6)	73 (168)	82 (47)	184 (241)
	82 (75)	61 (46)	1,034 (952)	468 (403)	1,645 (1,476)

	European	Coloured	Native	Asiatic	Total
BIRTHS :					
Male ... ..	1,341 (1,459)	292 (301)	1,548 (1,428)	2,582 (2,478)	5,763 (5,666)
Female ... ..	1,278 (1,330)	296 (273)	1,549 (1,487)	2,514 (2,541)	5,637 (5,631)
INFANTILE DEATHS: ... ..					
Male ... ..	50 (42)	37 (30)	549 (477)	259 (224)	895 (773)
Female ... ..	32 (33)	24 (16)	485 (475)	209 (179)	750 (703)
STILLBIRTHS: ... ..					
Local ... ..	43 (58)	24 (12)	312 (329)	223 (216)	602 (615)
Imported ... ..	5 (5)	2 (1)	220 (209)	10 (10)	237 (225)
ILLEGITIMATE BIRTHS :					
Local ... ..	41 (61)	148 (159)	1,612 (1,547)	86 (70)	1,887 (1,837)
Imported ... ..	12 (12)	16 (8)	1,152 (1,124)	3 (2)	1,183 (1,146)



The following tables indicate the percentage of all deaths in age groups :—

	European			Coloured			Native			Asiatic			TOTAL		
	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%
Under 1	52	33	7.0	38	26	30.1	600	544	42.9	275	227	25.8	965	830	29.8
1—2	3	5	7	9	6	7.1	197	183	14.3	78	91	8.7	287	285	9.5
3—5	7	9	1.3	2	6	3.8	51	63	4.3	79	69	7.6	139	147	4.7
0—5	62	47	9.0	49	38	41.0	848	790	61.5	432	387	42.1	1,391	1,262	44.0
6—15	7	8	1.2	2	5	3.3	34	41	2.9	41	59	5.1	84	113	3.3
16—25	12	13	2.1	7	11	8.5	113	83	7.3	88	104	9.9	220	211	7.2
26—45	79	58	11.4	23	16	18.4	350	152	18.8	140	137	14.2	592	363	15.8
46—65	205	125	27.3	24	13	17.5	153	50	7.6	176	144	16.5	558	332	14.7
Over 65	336	256	49.0	17	7	11.3	30	32	1.9	144	93	12.2	527	378	15.0
Total	701	507	—	122	90	—	1,528	1,138	—	1,021	924	—	3,372	2,659	—

DEATHS FROM CERTAIN MAIN CAUSES : EUROPEANS : CITY ONLY

DISEASE	Number of Deaths		Percentage of Total Deaths	
Infective intestinal diseases (Enteric Fever, Dysentery, Diarrhoea and Enteritis)	14	(15)	1.1	(1.4)
Cancer	155	(118)	12.8	(10.9)
Heart and Circulatory System	331	(301)	27.4	(28.0)
Diseases of the Nervous System	105	(138)	8.8	(12.7)
Diseases of Birth and Early Infancy	51	(50)	4.2	(4.6)
Pneumonia and Bronchitis	68	(51)	5.6	(4.7)
Pulmonary Tuberculosis	55	(57)	4.5	(5.2)
Other Tuberculosis	3	(10)	.2	(.9)
Urinary and Genital Systems	63	(53)	5.2	(4.9)

MAIN CAUSES OF DEATH : CITY CASES ONLY :

DISEASE	European	Coloured	Native	Asiatic
1. Cancer : Site of Disease :				
Buccal Cavity — Pharynx	5 (—)	1 (—)	3 (—)	2 (—)
Oesophagus	9 (3)	— (—)	2 (2)	4 (1)
Stomach	45 (33)	1 (2)	3 (8)	21 (21)
Rectum	9 (12)	— (—)	— (—)	1 (3)
Liver	9 (9)	1 (—)	8 (3)	4 (4)
Pancreas	6 (5)	— (—)	— (—)	1 (—)
Other digestive organs	1 (—)	— (—)	— (—)	— (—)
Larynx	4 (2)	— (—)	— (—)	1 (2)
Lung	18 (18)	4 (—)	2 (2)	2 (3)
Uterus	2 (1)	— (—)	— (—)	1 (—)
Other female genital organs	10 (5)	4 (1)	4 (4)	4 (2)
Breast (male or female)	9 (17)	2 (1)	— (1)	— (6)
Prostate	4 (3)	— (—)	1 (—)	1 (3)
Other male genital organs	2 (—)	— (—)	— (2)	4 (—)
Urinary organs (male or female)	8 (2)	1 (—)	— (2)	— (—)
Skin	— (—)	— (—)	— (—)	— (1)
Brain	— (1)	— (—)	— (—)	— (—)
Bones	— (1)	— (—)	— (—)	— (—)
Unspecified organs	14 (6)	2 (2)	— (2)	4 (4)
	155 (118)	16 (6)	21 (26)	50 (50)
2. Diseases of the Heart	85 (197)	7 (22)	50 (144)	97 (153)
3. Bronchitis and Pneumonia	68 (50)	36 (24)	641 (402)	433 (425)
4. Typhoid	1 (—)	— (2)	9 (29)	4 (10)
5. Appendicitis	1 (1)	— (—)	4 (—)	2 (—)
6. Tuberculosis	58 (67)	47 (45)	449 (423)	251 (205)
7. Diabetes	20 (19)	1 (—)	2 (3)	19 (21)
8. Apoplexy	61 (62)	4 (—)	7 (21)	23 (32)
9. Diseases of the Kidneys :				
Nephritis	24 (19)	4 (2)	30 (24)	49 (88)
Other diseases of the kidneys	32 (20)	1 (1)	9 (6)	12 (4)
10. Diseases of the Liver	23 (14)	1 (1)	17 (15)	22 (7)
11. Accidents of Parturition	6 (6)	3 (—)	16 (16)	20 (16)
12. Old Age	69 (35)	4 (2)	12 (10)	39 (30)
13. Suicide :				
Poisoning	9 (5)	1 (—)	2 (3)	11 (8)
Hanging	3 (1)	1 (—)	2 (2)	8 (5)
Drowning	2 (—)	— (—)	— (—)	— (—)
Firearms	11 (4)	— (—)	— (—)	2 (—)
Cutting or piercing instruments	6 (4)	— (—)	— (—)	— (—)
Jumping from high places	— (1)	— (—)	— (—)	— (—)
14. Accidents :				
On Railways	2 (1)	— (—)	1 (5)	2 (2)
Motor driven vehicles	21 (24)	3 (—)	36 (30)	17 (9)
Burns	3 (5)	2 (—)	13 (7)	36 (29)
Falls	17 (5)	1 (2)	10 (10)	2 (4)
Drowning	3 (4)	— (—)	8 (5)	9 (8)
Other	8 (4)	2 (—)	20 (23)	1 (3)



DEATHS FROM CANCER IN AGE GROUPS : (CITY CASES ONLY) :

	European			Coloured			Native			Asiatic			All Races		
	DR	IR	Total	DR	IR	Total	DR	IR	Total	DR	IR	Total	DR	IR	Total
5-15 ...	3	(1)	4	—	(—)	—	—	(—)	—	1	(—)	1	—	(—)	—
16-25 ...	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—
26-45 ...	10	(7)	38	4	(2)	38	9	(11)	15	15	(10)	38	—	(—)	—
46-65 ...	63	(43)	102	9	(2)	102	8	(12)	22	22	(22)	102	—	(—)	—
Over 65 ...	78	(67)	96	3	(2)	96	3	(2)	12	12	(16)	96	—	(—)	—
Total	154	(118)	241	16	(6)	241	21	(26)	50	50	(50)	241	—	(—)	—

DEATHS FROM CANCER IN AGE GROUPS : (CITY CASES ONLY) :

	European			Coloured			Native			Asiatic			Total		
	DR	IR	Total	DR	IR	Total	DR	IR	Total	DR	IR	Total	DR	IR	Total
Enteric ...	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—
Diphtheria ...	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—	—	(—)	—

DR — Death Rate. IR — Incidence Rate.

DEATHS IN AGE GROUPS : ENTERIC, MALNUTRITION, GASTRO ENTERITIS AND PNEUMONIA AND BRONCHITIS (CITY ONLY) :

	ENTERIC					MALNUTRITION					GASTRO ENTERITIS					PNEUMONIA AND BRONCHITIS				
	Europ.	Col.	Native	Asiatic	Total	Europ.	Col.	Native	Asiatic	Total	Europ.	Col.	Native	Asiatic	Total	Europ.	Col.	Native	Asiatic	Total
Under 1 ...	— (—)	— (—)	— (—)	— (—)	— (—)	— (1)	— (2)	44 (77)	25 (25)	69 (105)	11 (5)	6 (16)	354 (402)	104 (93)	475 (516)	7 (9)	22 (11)	345 (164)	175 (155)	549 (339)
1—2 ...	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	1 (1)	33 (37)	12 (4)	46 (42)	— (—)	4 (3)	124 (162)	32 (45)	160 (210)	4 (4)	7 (3)	141 (127)	79 (65)	231 (199)
3—5 ...	— (—)	— (—)	— (3)	— (1)	— (4)	— (—)	— (—)	5 (8)	4 (2)	9 (10)	— (1)	2 (—)	22 (46)	20 (31)	44 (78)	5 (—)	3 (2)	45 (38)	60 (60)	113 (100)
6—15 ...	1 (—)	— (—)	2 (2)	— (2)	3 (4)	— (—)	— (—)	1 (1)	— (1)	1 (2)	— (2)	1 (—)	2 (2)	7 (8)	10 (12)	— (—)	— (—)	22 (15)	12 (26)	34 (41)
16—25 ...	— (—)	— (1)	3 (12)	1 (6)	4 (19)	— (—)	— (—)	— (—)	— (1)	— (1)	1 (2)	— (—)	2 (8)	3 (1)	6 (11)	1 (1)	1 (1)	12 (12)	12 (20)	26 (34)
26—45 ...	— (—)	— (1)	4 (11)	2 (—)	6 (12)	— (—)	— (—)	— (—)	— (—)	— (—)	1 (2)	— (2)	6 (39)	3 (5)	10 (48)	6 (4)	— (3)	43 (27)	17 (17)	66 (51)
46—65 ...	— (—)	— (—)	— (1)	— (—)	— (1)	— (—)	— (—)	— (—)	— (1)	— (—)	1 (—)	— (3)	— (24)	2 (12)	3 (39)	15 (12)	1 (—)	25 (14)	41 (45)	82 (71)
Over 65 ...	— (—)	— (—)	— (—)	— (1)	— (1)	— (—)	— (1)	— (2)	1 (1)	1 (4)	— (3)	— (—)	— (4)	4 (9)	4 (16)	30 (19)	2 (4)	8 (5)	37 (37)	77 (65)
Total ...	1 (—)	— (2)	9 (29)	4 (10)	14 (41)	— (1)	1 (4)	83 (125)	43 (34)	127 (164)	14 (15)	13 (24)	510 (687)	175 (204)	712 (930)	68 (49)	36 (24)	641 (402)	433 (425)	1,178 (900)



## DEATHS FROM ALL CAUSES :

Code No.	CAUSE OF DEATH	CITY				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
Infective and Parasitic Diseases :									
001	Typhoid Fever ... ..	1	—	9	4	2	—	16	1
008	Cerebro Spinal Meningitis ... ..	2	—	2	7	1	1	1	2
012	Diphtheria ... ..	1	—	12	5	2	—	16	—
011	Whooping Cough... ..	1	—	4	13	—	—	1	—
014	Tetanus ... ..	1	1	1	3	—	—	1	1
Tuberculosis of :									
015	Respiratory system ... ..	55	42	385	216	11	12	489	39
016	Central nervous system ... ..	1	2	18	13	—	—	11	—
017	Intestines ... ..	—	2	12	2	—	—	21	1
018	Vertebral column ... ..	—	—	—	1	—	—	2	—
019	Other bones and joints ... ..	—	—	1	—	—	—	1	—
021	Lymphatic system ... ..	—	—	—	—	—	—	4	—
023	Other organs ... ..	—	—	3	3	1	—	3	—
024	Miliary ... ..	2	1	30	16	—	—	33	—
Dysentery :									
032	Bacillary ... ..	1	—	5	3	1	—	18	1
033	Amoebic ... ..	—	3	69	11	3	—	57	2
Diseases due to Protozoa :									
036	Malaria ... ..	4	—	2	—	—	—	—	—
Diseases due to Spirochaetes :									
042	Aneurysm of the Aorta ... ..	6	—	2	2	1	—	1	—
043	Congenital syphilis ... ..	—	1	19	2	—	—	14	—
044	Other forms ... ..	—	1	9	2	—	—	14	—
Diseases due to Filterable Viruses :									
049	Influenza... ..	—	1	5	2	—	—	1	1
052	Measles ... ..	1	—	3	3	—	—	11	—
053	Poliomyelitis ... ..	5	1	1	4	2	—	—	—
054	Encephalitis ... ..	1	—	2	2	—	—	—	—
Diseases due to Helminths :									
071	Bilharzia ... ..	—	—	—	—	—	—	1	—
Diseases due to Fungi :									
073	Mycoses ... ..	1	—	—	—	—	—	—	—
Other Infective Diseases :									
075	Pernicious Lymphogranulomatosis ...	—	—	—	—	—	—	1	—
Cancer of :									
100	Buccal cavity-Pharynx ... ..	5	1	3	2	—	—	2	—
101	Oesophagus ... ..	9	—	—	4	2	—	2	—
102	Stomach ... ..	45	1	3	21	7	—	9	1
103	Rectum ... ..	9	—	—	1	1	—	—	—
104	Liver ... ..	9	1	8	4	1	—	12	—
105	Pancreas ... ..	6	—	—	1	4	—	3	—
106	Other digestive organs ... ..	1	—	—	—	—	—	—	—
107	Larynx ... ..	4	—	—	1	—	—	—	—
109	Lung ... ..	18	4	2	2	4	—	4	—
110	Uterus ... ..	2	—	—	1	—	—	1	—
111	Other female genital organs ... ..	10	4	4	4	1	—	11	—
112	Breast (Male or Female) ... ..	9	2	—	—	4	—	1	—
113	Prostate ... ..	4	—	1	1	2	—	1	—
114	Other Male genital organs... ..	2	—	—	4	—	—	—	—
115	Male or female urinary organs... ..	8	1	—	—	3	1	4	—
119	Unspecified organs ... ..	14	2	—	4	5	—	8	—
135	Tumours of the brain ... ..	3	—	3	4	—	—	1	—
General Diseases :									
149	Acute Rheumatic Fever ... ..	3	1	1	4	—	—	—	—
150	Osteo Arthritis ... ..	2	—	1	2	1	—	—	—
152	Diabetes ... ..	20	1	2	19	4	—	1	1
154	Simple goitre... ..	1	—	—	—	—	—	—	—
163	Malnutrition ... ..	—	1	83	43	—	—	135	3
164	Other general diseases... ..	1	—	—	1	—	—	—	—
Vitamin Deficiency Diseases :									
167	Beri-beri ... ..	—	—	—	—	—	—	1	—
168	Pellagra ... ..	—	—	14	4	—	—	9	—
169	Rickets ... ..	—	—	1	3	—	—	—	—
Diseases of the Blood :									
203	Pernicious Anaemia ... ..	6	—	1	2	1	—	1	—
206	Other anaemias ... ..	2	1	1	1	2	—	1	—
207	Leukaemia ... ..	10	1	1	2	4	—	—	1
209	Splenic Anaemia ... ..	—	—	—	—	1	—	—	—
211	Other diseases of the spleen ... ..	—	—	—	—	—	—	1	—
212	Agranulocytosis ... ..	1	—	—	—	—	—	—	—



Code No.	CAUSE OF DEATH	CITY				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
Chronic Poisonings and Intoxication :									
250	Acute alcoholism ... ..	—	—	—	—	1	—	—	—
251	Chronic alcoholism ... ..	4	—	—	—	1	—	—	—
258	Unspecified poisoning ... ..	1	1	8	7	1	—	4	—
Diseases of the Nervous system :									
300	Intra cranial abscess ... ..	—	—	—	—	—	—	1	—
303	Meningitis—other forms ... ..	3	3	17	8	2	—	15	3
304	Diseases of the spinal cord ... ..	1	—	—	—	1	—	4	—
305	Cerebral haemorrhage ... ..	61	4	7	23	9	—	3	—
306	Cerebral thrombosis ... ..	30	—	1	14	8	1	2	1
307	Hemiplegia ... ..	5	—	2	32	—	—	3	1
309	Epilepsy ... ..	2	—	5	8	—	—	1	—
310	Convulsions ... ..	1	—	2	8	1	—	—	—
313	Paralysis agitans ... ..	2	—	—	1	—	—	—	—
317	Diseases of the Mastoid Process ...	—	—	1	1	—	—	—	—
Diseases of the Circulatory system :									
351	Pericarditis ... ..	3	—	4	1	—	—	2	—
352	Endocarditis ... ..	4	—	2	3	—	—	1	1
353	Valvular disease ... ..	3	—	2	1	—	—	1	—
356	Chronic Myocarditis ... ..	2	—	2	14	—	1	5	—
357	Other Myocarditis ... ..	70	7	40	78	13	2	20	2
358	Diseases of the Coronary Arteries ...	104	7	9	32	13	—	1	1
359	Heart disease specified as rheumatic ...	—	—	—	—	—	—	1	—
360	Heart disease not specified ... ..	3	—	—	—	—	1	—	—
361	Aneurysm ... ..	—	—	—	1	1	—	—	—
362	Arterio sclerosis ... ..	47	1	11	32	12	—	16	2
364	Other diseases of the arteries ... ..	8	1	10	1	—	—	1	—
366	Diseases of the Lymphatic system ...	1	—	2	2	—	—	—	—
367	High Blood pressure ... ..	4	1	—	4	—	—	—	—
368	Other diseases of the circulatory system	82	6	34	84	15	1	33	3
Diseases of the Respiratory System :									
401	Diseases of the Larynx ... ..	—	—	—	1	—	—	1	—
402	Acute bronchitis ... ..	5	2	3	100	1	—	3	1
403	Chronic Bronchitis ... ..	9	1	6	25	—	—	5	1
404	Broncho Pneumonia ... ..	37	30	532	238	10	3	292	10
405	Lobar Pneumonia ... ..	17	3	100	70	3	—	32	—
407	Empyema ... ..	2	—	3	—	1	—	3	—
408	Unspecified forms of Pleurisy ... ..	1	—	—	1	—	—	—	—
409	Pulmonary embolism ... ..	3	—	—	2	—	—	—	—
410	Congestion of lungs ... ..	3	—	2	9	1	—	1	—
411	Asthma ... ..	16	4	5	46	—	—	—	—
413	Miners Phthisis ... ..	2	—	—	—	—	—	—	—
417	Abscess of the lungs ... ..	2	—	5	6	2	—	6	1
418	Other diseases of the Respiratory system ... ..	3	—	—	—	—	—	—	—
Diseases of the Digestive System :									
450	Diseases of the teeth and gums ...	—	1	—	1	—	—	—	—
456	Duodenum Ulcer ... ..	10	—	5	5	1	—	—	3
457	Other diseases of the stomach ... ..	—	—	—	—	1	—	—	1
458	Gastro Enteritis (under 2 years) ...	11	10	478	136	2	1	236	2
459	Gastro Enteritis (over 2 years) ...	3	3	32	39	—	—	15	1
461	Appendicitis ... ..	1	—	4	2	1	—	4	—
462	Hernia ... ..	1	—	1	—	—	—	2	—
463	Intestinal obstruction ... ..	7	1	4	9	—	—	—	1
466	Cirrhosis of Liver (with mention of alcoholism) ... ..	7	—	—	9	3	—	2	1
467	Cirrhosis of Liver (without mention of alcoholism) ... ..	8	—	4	8	1	—	1	1
468	Yellow atrophy of the liver ... ..	2	—	4	3	1	—	3	—
469	Other diseases of the Liver ... ..	6	1	9	2	—	—	4	—
470	Biliary Calculi ... ..	—	—	—	—	2	—	—	—
471	Cholecystitis ... ..	2	—	1	—	—	—	1	—
472	Diseases of the Pancreas ... ..	1	—	2	—	2	—	2	—
473	Peritonitis ... ..	9	1	11	3	2	—	11	1
Diseases of the Urinary and Genital Systems :									
500	Acute Nephritis ... ..	3	3	16	32	2	—	12	—
501	Chronic Nephritis ... ..	21	1	14	17	4	—	10	2
503	Pyelitis ... ..	1	—	2	2	—	1	2	—
504	Other kidney diseases ... ..	31	1	7	10	8	—	7	1
506	Cystitis ... ..	2	—	1	—	1	—	—	—
507	Other diseases of the bladder ... ..	1	—	—	—	1	—	—	—
508	Diseases of the urethra ... ..	—	—	—	—	—	—	1	—
510	Diseases of the prostate ... ..	2	—	—	—	3	—	—	—
512	Diseases of the ovaries, etc. ... ..	1	—	—	—	—	—	1	—
513	Diseases of the uterus ... ..	1	—	1	—	—	—	—	—
Diseases of Pregnancy :									
550	Spontaneous abortion ... ..	1	—	—	1	—	—	—	—
554	Ectopic gestation ... ..	—	—	1	—	—	—	2	—



Code No.	CAUSE OF DEATH	CITY				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
555	Haemorrhage from placenta praevia	—	—	1	—	—	—	—	—
558	Eclampsia of pregnancy ... ..	4	—	1	7	1	—	5	1
561	Other toxæmias of pregnancy ... ..	—	—	1	—	—	—	—	—
573	Puerperal toxæmia ... ..	—	—	1	3	1	—	4	—
574	Other accidents of childbirth ... ..	1	3	11	9	—	—	10	—
<b>Diseases of the Skin :</b>									
600	Carbuncle—Boils ... ..	—	—	—	2	—	—	—	—
601	Cellulitis ... ..	—	—	6	2	—	—	—	—
602	Other diseases of the skin ... ..	1	—	2	1	—	—	1	—
<b>Diseases of the Bones, etc.</b>									
650	Osteomyelitis ... ..	1	—	—	—	—	—	3	1
651	Other diseases of the bones ... ..	3	—	—	1	—	—	1	—
<b>Congenital Malformations :</b>									
701	Spina bifida ... ..	1	—	1	—	—	—	2	1
702	Congenital malformation of the heart	7	—	1	1	—	—	2	—
705	Cleft Palate ... ..	1	—	—	—	—	—	—	—
706	Imperforate anus ... ..	—	—	2	2	—	—	2	—
708	Other malformations ... ..	1	—	1	1	2	—	—	—
<b>Diseases Peculiar to First Year of Life :</b>									
750	Congenital debility ... ..	—	1	75	54	—	2	32	4
751	Premature birth ... ..	34	12	132	78	5	3	94	7
752	Intra cranial haemorrhage—birth injury	5	2	35	13	1	1	29	2
754	Asphyxia, during and after birth ... ..	5	—	11	4	2	—	17	—
758	Other specified diseases ... ..	7	4	35	7	1	—	14	—
<b>Old Age :</b>									
800	Senility (age 65 and over) ... ..	69	4	12	39	6	—	18	5
<b>Suicide :</b>									
850	Poisoning ... ..	9	1	2	11	—	—	1	1
856	Hanging or strangulation ... ..	3	1	2	8	2	—	3	—
857	Drowning ... ..	2	—	—	—	—	—	—	—
858	Firearms ... ..	11	—	—	2	—	—	1	—
859	Cutting or piercing instruments ... ..	6	—	—	—	—	—	—	—
863	Other or unspecified means ... ..	1	—	2	—	1	—	—	—
<b>Homicide :</b>									
865	Firearms ... ..	1	—	2	—	—	—	—	—
866	Cutting or piercing instruments ... ..	2	3	55	6	—	—	6	—
867	Unspecified means ... ..	—	—	2	—	—	—	—	—
<b>Accidental Deaths :</b>									
868	Accidents on Railways ... ..	2	—	1	2	—	—	3	—
871	—Motor driven vehicles ... ..	21	3	36	17	6	1	8	—
873	—Motor driven cycles ... ..	—	—	2	—	—	—	—	—
874	—Other accidents... ..	2	—	1	—	—	—	6	—
875	—Trams and Trolley buses ... ..	1	—	—	—	—	—	—	—
877	—Pedal cycles ... ..	—	—	3	—	—	—	2	—
881	—In quarries... ..	—	—	4	—	—	—	—	—
886	—Caused by machinery ... ..	2	—	1	—	—	—	—	—
887	—Food poisoning ... ..	—	—	—	—	—	—	2	—
889	—Poisoning (not gas) ... ..	2	1	4	1	—	—	2	1
891	—Burns ... ..	3	2	13	36	1	—	7	7
892	—Mechanical suffocation ... ..	—	1	1	—	—	—	1	—
893	—Drowning ... ..	3	—	8	9	2	—	2	—
895	—Cutting or piercing instruments	—	—	2	—	—	—	—	—
896	—Fall ... ..	17	1	10	2	5	—	4	—
897	—Landslide ... ..	1	—	4	—	—	—	2	—
900	Hunger or thirst ... ..	1	—	—	1	—	—	—	—
903	Lightning ... ..	—	—	—	—	1	—	—	—
904	Electric current ... ..	2	—	—	—	—	—	2	—
906	Anaesthetics ... ..	2	1	—	1	1	—	2	—
907	Lack of care of the newborn ... ..	—	—	1	—	—	—	—	—
916	Open verdict ... ..	5	—	9	—	—	—	6	—
950	Sudden death ... ..	—	—	1	—	—	—	—	—
951	Ill defined causes ... ..	9	3	37	44	1	—	20	6
<b>TOTALS</b> ... ..		1,208	212	2,666	1,945	241	32	2,012	131



## 2 (a). INFECTIOUS DISEASES NOTIFIED DURING THE YEAR (CITY ONLY) :

DISEASE	European	Coloured	Native	Asiatic
<b>Cerebro Spinal Meningitis :</b> ... ..				
Local Cases ... ..	13 (5)	2 (2)	15 (9)	5 (2)
Imported Cases ... ..	3 (—)	— (—)	4 (2)	2 (—)
Local Deaths ... ..	2 (1)	— (1)	2 (7)	7 (2)
Imported Deaths ... ..	1 (—)	1 (—)	1 (5)	2 (—)
<b>Diphtheria :</b> ... ..				
Local Cases ... ..	73 (156)	8 (24)	93 (110)	18 (46)
Imported Cases ... ..	21 (28)	3 (3)	40 (56)	8 (5)
Local Deaths ... ..	1 (4)	— (2)	12 (9)	5 (7)
Imported Deaths ... ..	2 (—)	— (—)	16 (12)	— (2)
<b>Encephalitis :</b> ... ..				
Local Cases ... ..	4 (1)	— (—)	2 (—)	— (4)
Imported Cases ... ..	— (—)	— (—)	1 (—)	— (1)
Local Deaths ... ..	1 (—)	— (—)	2 (—)	2 (1)
<b>Erysipelas :</b> ... ..				
Local Cases ... ..	9 (20)	5 (1)	2 (2)	— (2)
Imported Cases ... ..	— (3)	— (—)	1 (1)	— (—)
No Deaths Recorded				
<b>Gon. Ophthalmia :</b> ... ..				
Local Cases ... ..	— (—)	— (—)	11 (14)	— (—)
Imported Cases ... ..	— (—)	— (—)	— (1)	— (—)
No Deaths Recorded				
<b>Leprosy :</b> ... ..				
Local Cases ... ..	1 (—)	— (—)	17 (6)	— (—)
Imported Cases ... ..	— (1)	— (—)	3 (3)	— (—)
No Deaths Recorded				
<b>Malaria :</b> ... ..				
Local Cases ... ..	— (1)	— (—)	— (—)	— (—)
Imported Cases ... ..	4 (4)	— (1)	4 (1)	1 (1)
Local Deaths ... ..	4 (1)	— (—)	2 (—)	— (—)
<b>Malta Fever :</b> ... ..				
Local Cases ... ..	— (—)	1 (—)	— (—)	— (—)
No Deaths Recorded				
<b>Ophthalmia Neonatorum :</b> ... ..				
Local Cases ... ..	20 (7)	4 (14)	119 (61)	24 (25)
Imported Cases ... ..	— (—)	— (—)	1 (—)	— (—)
No Deaths Recorded				
<b>Poliomyelitis :</b> ... ..				
Local Cases ... ..	89 (2)	14 (2)	16 (2)	22 (1)
Imported Cases ... ..	7 (—)	— (—)	23 (1)	4 (1)
Local Deaths ... ..	5 (—)	1 (—)	1 (—)	4 (—)
Imported Deaths ... ..	2 (—)	— (—)	— (—)	— (—)
<b>Puerperal Sepsis :</b> ... ..				
Local Cases ... ..	1 (2)	1 (2)	8 (2)	5 (5)
Imported Cases ... ..	— (—)	— (—)	1 (—)	1 (—)
Local Deaths ... ..	— (—)	— (—)	1 (1)	3 (1)
Imported Deaths ... ..	1 (—)	— (—)	4 (1)	— (—)
<b>Scarlet Fever :</b> ... ..				
Local Cases ... ..	72 (72)	4 (3)	— (10)	— (1)
Imported Cases ... ..	6 (10)	— (—)	1 (—)	— (—)
No Deaths Recorded				
<b>Small Pox :</b> ... ..				
Local Cases ... ..	— (—)	— (—)	1 (—)	— (1)
Imported Cases ... ..	— (—)	— (—)	1 (—)	— (—)
No Deaths Recorded				
<b>Tickbite Fever :</b> ... ..				
Local Cases ... ..	1 (1)	— (—)	1 (1)	— (—)
Imported Cases ... ..	1 (1)	— (—)	1 (—)	— (—)
No Deaths Recorded				
<b>Trachoma :</b> ... ..				
Imported Cases ... ..	1 (—)	— (—)	— (1)	— (—)
No Deaths Recorded				
<b>Typhoid :</b> ... ..				
Local Cases ... ..	7 (14)	7 (21)	57 (108)	24 (67)
Imported Cases ... ..	9 (7)	2 (2)	27 (71)	18 (48)
Local Deaths ... ..	1 (—)	— (2)	9 (29)	4 (10)
Imported Deaths ... ..	2 (—)	— (—)	16 (34)	1 (8)
<b>Typhus (Murine) :</b> ... ..				
Local Cases ... ..	3 (2)	— (—)	— (2)	— (—)
Imported Cases ... ..	— (1)	— (—)	— (2)	— (—)
No Deaths Recorded				
<b>Undulant Fever :</b> ... ..				
Imported Cases ... ..	1 (—)	— (—)	— (—)	— (—)
No Deaths Recorded				

## (b) INFECTIOUS DISEASES ADMITTED TO THE CITY FEVER HOSPITAL, CONGELLA, DURING THE YEAR :

Cerebro Spinal Meningitis & Suspects	18 (6)	Small Pox ... ..	2 (—)
Chicken Pox and Suspects	46 (24)	Contacts and Suspects	7 (5)
Diphtheria and Suspects	144 (210)	Tickbite Fever	2 (—)
Measles and Suspects	196 (84)	Trachoma	1 (—)
Mumps and Suspects	18 (25)	Typhus and Suspects	7 (9)
Poliomyelitis and Suspects	95 (—)	Typhoid and Suspects	— (84)
Scarlet Fever and Suspects	84 (76)	Veneral Disease Observation	4 (—)
		Whooping Cough	46 (13)

TOTAL : 670 (536)



## (c) AMBULANCE REMOVALS :

	European	Coloured	Native	Asiatic	Total
City Fever Hospital ... ..	503 (370)	— (84)	3 (3)	— (2)	506 (459)
Government Hospital ... ..	138 (50)	113 (148)	1,241 (540)	372 (192)	1,864 (930)
Other Hospitals ... ..	61 (79)	37 (109)	155 (634)	63 (352)	316 (1,174)
<b>TOTAL ... ..</b>	<b>702 (499)</b>	<b>150 (341)</b>	<b>1,399 (1,177)</b>	<b>435 (546)</b>	<b>2,686 (2,563)</b>

## (d) DISINFECTING STATION AND LAUNDRY :

## Municipal Departments :

City Fever Hospital ... ..	Disinfections ... ..	27,569	(31,447)
City Fever Hospital ... ..	Articles Laundered ... ..	145,327	(176,407)
City Baths ... ..	Articles Laundered ... ..	47,391	(48,147)
Ocean Beach ... ..	Articles Laundered ... ..	39,836	(36,394)
Other Departments ... ..	Articles Laundered ... ..	122,654	(111,308)
		<b>382,777</b>	<b>(403,703)</b>

## (e) (i) Routine :

Private Premises ... ..	Articles Disinfected ... ..	10,550	(65,464)
Private Premises ... ..	Rooms Disinfected ... ..	1,317	(2,741)
City Fever Hospital ... ..	Cubicles Disinfected ... ..	242	(780)

## (ii) Contacts :

Child Welfare Society ... ..	Articles Laundered ... ..	5,261	(5,824)
Durban Turf Club ... ..	Articles Laundered ... ..	2,954	(3,607)
Indian Depot Hospital ... ..	Articles Laundered ... ..	57,547	(52,746)
King Edward VIII Hospital ... ..	Articles Disinfected ... ..	53,189	(53,041)
King Edward VIII Hospital ... ..	Articles Laundered ... ..	1,371,591	(1,331,033)
King George V Hospital ... ..	Articles Laundered ... ..	524,914	(264,886)
Entabene Nursing Home ... ..	Articles Disinfected ... ..	—	(135,902)
		<b>2,027,565</b>	<b>(1,916,024)</b>

## FORMIDABLE EPIDEMIC DISEASES :

## Smallpox.

Five suspect cases were admitted to the City Fever Hospital but the diagnosis was confirmed in only one, who suffered from a modified form of the disease.

From the figures included below, it will be noted that over 100,000 vaccinations were performed by the Municipal Health and Native Administration Departments during the year.

In 1945, mass vaccination raised the general resistance potential of the population to a high level and as this protective factor diminishes in potency with time, it is necessary to prosecute the vaccination programme with undiminished vigour.

In July of last year, the Deputy Chief Health Officer, Union Health Department, Natal, was informed that there was no record of the Minister having authorised the employment of trained lay-vaccinators in this Department under the relevant regulations and that steps should be taken to grant the necessary authority, either individually or collectively in respect of staff engaged on vaccination. Subsequently, an application was forwarded to the Secretary for Health requesting authority for the employment of some seventy trained employees as public vaccinators. In reply, the Secretary advised that his Department was not prepared to authorise lay vaccinators to undertake the vaccination of all races and that their activities should be confined to Natives under the supervision of a Medical Officer.

This decision meant, in effect, that the Health Visitors of the Department—all trained nurses—could no longer be permitted to vaccinate European, Coloured or Asiatic children even under medical supervision, whereas, in point of fact, this had been part of their routine duties for some time past. As it was evident that restriction of staff to this degree would seriously interfere with the work of maintaining "mass immunity" against Smallpox, the City Council sought the Secretary for Health to review his ruling and obtain the Minister's approval for the system of employing lay-vaccinators as adopted in Durban. As an outcome of these representations, approval was given for the appointment of four specially-qualified Health Visitors to vaccinate non-Europeans provided submission to this procedure was voluntary.

However, in view of the constant threat of outbreaks of Smallpox in large urban areas in the Union, it is submitted that the Union Health Department should review its policy in regard to the employment of lay vaccinators and amend its regulations to enable local authorities to employ lay vaccinators in such numbers as will merit requirements during both epidemic and non-epidemic periods.

It is pleasing to record that since the Immunisation Van and Loudspeaker Unit was made available for service with the Non-European section of the community, much success has been achieved in popularising vaccination and immunisation among both Bantu and Indians. The increased amount of co-operation displayed, specially among the latter, is indicative of the extent to which old prejudices are dying out.

However, it is clear that vaccination is failing to reach a large proportion of the non-European workers who, owing to their working hours, are quite unable to take advantage of the facilities offered. As it is impracticable for the immunisation units to visit outlying areas on the return of the workers to their homes, the solution would appear to lie in the organisation of an industrial health service which is now under consideration.

Vaccinations carried out by the City Health and Native Administration Departments were :—

EUROPEAN	COLOURED	NATIVE	ASIATIC	TOTAL
1,918	985	91,463	13,244	107,610



## VACCINATIONS (By courtesy of the Deputy Chief Health Officer) :

The following vaccinations of infants and 12 year old children were carried out during the year :—

## Infants :

Births in vaccination register	1,683
Successfully vaccinated	1,459
Insusceptible to vaccination	118
Postponed owing to illness	10
Previously had Smallpox	Nil
Deaths of children under 2 years registered	111

## Vaccination (12 year old and others) :

Successfully vaccinated	2
-------------------------	---

## Infants :

Exemption certificates granted	25
Exemption certificates refused	2

## Indian Immigration Vaccination :

Births entered in register	1,847
Successfully vaccinated	170
Insusceptible to vaccination	3
Postponed owing to illness	1
Deaths under 2 years registered	435

## Indians (12 year old and others) :

Successfully vaccinated	Nil
-------------------------	-----

## VACCINATION BY CITY HEALTH AND NATIVE ADMINISTRATION DEPARTMENTS :

European	1,918
Coloured	985
Native	91,463
Asiatic	13,244
<b>TOTAL :</b>	<b>107,610</b>

## TYPHUS :

Although cases of the endemic or murine type were not uncommon, a total of 9 City Cases being notified, there were no cases of epidemic Typhus. The murine cases comprised seven Europeans, three of whom were employed by the Railway Administration, one Asiatic and one Bantu.

Imported cases—all of the murine variety—numbered 6, 3 of whom were Europeans, resident at Umkomaas, Tongaat and Ottawa respectively. Two Non-European cases, an Asiatic male and a Bantu female, resident at Tongaat and the other was a Bantu male from Umzinto.

Owing to the efficient rodent control measures carried out by the various authorities operating in the City area, it is not expected that the incidence of murine typhus will notably increase in the future. It will be of interest however, to review the possibilities in the light of developments over the last few years in the United States. Wiley in a paper entitled "Recent Developments in Typhus Fever Control" which was published in a recent issue (September, 1946) of the American Journal of Public Health, this summarises the position in that country :—

"Murine, or rat-borne, typhus fever in the United States increased steadily from 1913, when the first case was reported in Georgia, to 1940. During 1940 the reported cases dropped nearly a thousand to 1,845, but during the next four years increases of about a thousand cases a year were recorded (Figure 1). In 1944, more than 5,300 cases were officially reported to state health departments. The total reported cases for 1945 is 5,167, which represents the first decrease since 1940. Since reporting has been far from complete, it is believed that the 5,167 cases reported in 1945 may represent about 25,000 actual cases of murine typhus fever.

"Although typhus has been reported from 37 states and the District of Columbia during the last five years, over 67 per cent of the cases have been confined to 100 counties in nine southern and South-eastern states (Figure 2). These counties, however, have an incidence of 10 or more cases per year for the last five years and in one greater than 100 cases per year. Annual morbidity rates ranged up to more than 430 per 100,000.

"In the North, Typhus can be almost universally traced to very small areas of the business sections of towns or cities, and usually it will be found that cases were contracted in one or more food-handling establishments. There is little or no typhus traced to residential or rural sections north of about 33° north latitude. South of this line, however, especially in southwest Georgia, southeast Alabama and certain parts of Texas, typhus strikes anywhere and as much as half or more of the cases are contracted in residential and rural areas.

"Typhus is primarily a disease of rats, secondarily of man, but it is as debilitating to humans as, for example, typhoid fever and while the general public is not alarmed at the high incidence of typhus in certain sections, this disease is equally as important and should receive as much attention. Ectoparasites, principally fleas, are the vectors transmitting typhus from rat to rat and rat to man. It is not known whether typhus is transmitted directly by biting or indirectly as from infected flea excreta. It is believed, however, that among the ways that man may become infected with typhus fever are : ingestion of food infected by flea-faeces or rat-urine, inhalation of dust previously infected by rats or fleas and infection through the broken skin. Although it is very possible that a rat may be infected with the typhus Rickettsiae from another rat without an intermediate vector, the rat-flea seems to predominate as the means of transmission."

The principal method of control is, of course, the destruction of rodents but a tried and useful method is directed towards the destruction of the intermediate vector—the flea—rather than the host. It is here that "D.D.T." can play an important part by dusting all rodent harbourages with this pesticide.

During the year, the possibility of carrying out a survey to determine the percentage of infected rats in the City by means of the complement-fixation test was explored but, owing to the small number of human cases notified in the City, it is considered that this procedure is hardly worthwhile at this stage. Should, however, the number of cases increase in the future, an index of this nature might furnish useful evidence of the effectiveness of Departmental and other control measures.



## NOTIFIABLE INFECTIOUS DISEASES :

## TYPHOID FEVER :

No major outbreak occurred during the year and there was a well-marked decline in the incidence of this disease, 95 cases only being notified as against 210 last year. All sections of the population shared in the lessened incidence. Over the last five years the improving Typhoid situation is reflected in the following table of incidence :—

YEAR	European	Coloured	Native	Asiatic	Total
1944 ... ..	37	3	108	46	194
1945 ... ..	17	5	62	28	112
1946 ... ..	18	7	113	39	177
1947 ... ..	14	21	108	67	210
1948 ... ..	7	7	57	24	95

During the months of January and February, a small outbreak occurred in a block of flats in Carlisle Street. This outbreak comprised five Indian cases drawn from three families living in separate flats. The source of the infection was traced to a Native youth who, recently arrived in the City, had been engaged by the family first affected. This house-boy was shown to be both an intestinal and urinary "carrier" and, as two of the families were related and had visited each other, the method of spread of the infection to the second family was obvious. In the case of the third family, however, the method remained obscure until it was discovered that the "carrier" occasionally slept under a stairway adjacent to the back entrance of the flat occupied by the family. The "carrier" indulged an unfortunate habit of micturating at night on the back verandah and this proved the final clue in the solution of the problem as it was evident that, at some time, either foodstuffs, food utensils, or footwear served as a vehicle for the introduction of the infection into the flat.

## TYPHOID CONTROL :

Durban's freedom from milk-borne Enteric or Typhoid Fever is notable at this stage when two adverse factors are operating, i.e. :—

- the fact that both Capetown and Johannesburg have had recent outbreaks of milk-borne Enteric, which indicates that the general "Enteric potential" is high; and
- an exceptional number of positive vi-tests carried out on food, including milk-handlers, have come to light recently in Durban.

During the calendar year 1946, 2,158 food-handlers (mainly milk-handlers) were tested and only 28, i.e., 1.25 per cent., found to react positively. During 1947, 1,466 were tested and 10 reacted positively, i.e., 0.6 per cent. However, during January and February 1948, 202 were tested and 22 were found to react positively, i.e., 10.8%. In Pretoria, during 1945, the percentage was 8.2.

It is possible that this phenomenal rise in the occurrence of vi-positives is associated with an increase of infection in the Reserves, whence the bulk of food-handlers are recruited but, in any case, it is a fact which is of grave import to urban public health in that it indicates increased risk of milk-borne Enteric or Typhoid Fever.

Why in the face of this increased risk has Durban remained free of milk-borne Enteric? The first and principal reason is that so large a proportion, approximately 95%, of Durban's milk-supply is now being pasteurised before delivery. In addition, many people, who purchase the raw grade, boil their milk before use.

No South African city approximates and few anywhere in the world (excluding the U.S.A.) equal Durban's record in this respect.

Secondly, Durban's programme of routine vi-testing of milk-handlers definitely reduces the chances of an Enteric "carrier" being employed in the trade.

Thirdly, Durban's programme of routine health education of food-handlers still further reduces the chances of the spread of infection even where a potential "carrier" happens to be employed in food-handling.

Although useful in the search for potential "carriers," neither the vi-test nor health education, at its best, can insure against all the possibilities of contamination by infected milk-handlers.

Gross infection of a milk-supply occurs during the early stages of milk-handling, particularly the operations of milking and bulking, that is to say, the pre-pasteurisation stages. Pasteurisation, of course, kills this gross infection, but where the milk is not pasteurised, no such safeguard obtains.

During the year ending 30th June, 1945, Pretoria Municipality vi-tested 1,353 milk-handlers and 114 were found to react positively, i.e., 8.2%. Durban's corresponding figure for January/February, 1948, was 10.8%.

## VI-TESTING AND TYPHOID "CARRIER" CONTROL :

The vi-testing programme has proceeded steadily throughout the year and included employees in the following types of food-handling :—

- Dairies;
- Ice-cream factories;
- Milk-bars, cafes-de-move-on, tearooms, etc.; and
- Margarine factories.

After vi-testing, each employee is immunised against Typhoid Fever and thereafter receives a "booster" dose at two-yearly intervals. The subjoined table shows the number of tests carried out during the year :—

	European	Coloured	Native	Asiatic
Dairies ... ..	8	7	1,019	32
Tearooms, milk bars, etc. ... ..	52	—	127	145
Ice-cream factories ... ..	10	—	97	20
Margarine factories ... ..	11	—	49	—
Miscellaneous ... ..	—	—	54	9
Typhoid Contacts and ex-cases ... ..	2	—	45	38
Total ... ..	83	7	1,391	244
Vi-negative ... ..	81	7	1,305	238
Vi-positive ... ..	2	—	86	6



Out of 1,725 tested, 94 or 5.4% were vi-positive. One of the Typhoid contacts and ex-cases was a Native whose urine was found to contain Typhoid bacilli.

The percentage of vi-positives discovered in the three principal racial groups was as follows :—  
Europeans 2.4% ; Natives 6.2% ; Asiatics 2.4%

#### DISPOSAL OF VI-POSITIVE REACTORS :

Considerable difficulty was experienced in dealing with positive reactors—mostly Natives—for the following reasons :—

- (a) Persons trained, and regularly employed as food-handlers, resented being transferred to other types of employment ;
- (b) the Native Administration Department was often unable to find work for them in a non-foodhandling capacity ; and
- (c) they received no pay while out of work.

The Native Commissioner was approached with a view to giving " presumptive carriers " the Unemployment Benefit, but intimated that a Native is eligible only if he has previously been in employment in Durban for three months and has also been out of work for eight days. As Natives are usually tested on assumption of work few could qualify for the Benefit.

It has therefore been decided to seek provision ex Borough Fund, during the forthcoming year, for the purpose of preventing undue hardship on local Natives who react positively to the vi-test. It is proposed also to apply for a 50% Government refund for the expenditure involved as the treatment of such " carriers " under observation helps to prevent their returning to the Reserves as spreaders of Typhoid infection.

The Radiologist at Addington Hospital (Dr. Saacks) has most obligingly administered deep X-ray therapy to positive reactors in an attempt to reverse their vi-reaction with the following results :—

	No. Treated	No. appearing for subsequent vi-test	No. turning vi-negative	No. who remain vi-positive
ASIATICS ... ..	3	3	3	—
NATIVES ... ..	36	29	18	11

A number of those who ultimately turned vi-negative received two courses of deep therapy. During treatment, " carriers " were housed in one of the Corporation Bantu Hostels.

In the ensuing year, vi-testing will be extended to Native Eating Houses' caterers. With the consent of the Native Administration Department, it has been arranged that, as from July, 1948, before taking up permanent employment, new caterers and new assistant caterers must show negative reactions to the vi-test and must also be immunised against Enteric Fever.

#### POLIOMYELITIS :

After being free for two-thirds of the Corporate year from undue prevalence of epidemic or endemic disease, the last four months were notable for an extensive outbreak of Poliomyelitis. Fortunately, the disease was, generally speaking, of a mild character and usually unattended by permanent disability.

During the last few months of 1947, the incidence of Poliomyelitis throughout the Union was normally low but, in January 1948, there was a significant increase in the number of areas affected and cases notified. In February, the tempo quickened and during the next two months the epidemic broke out in full force, striking Johannesburg with particular violence. Strangely enough, although East London had experienced a minor outbreak of the disease in January, the Cape coastal towns remained virtually unaffected despite the influx of hundreds of visitors from the inland storm-centres.

Durban suffered a sharp outbreak of the disease which commenced in March, reached its peak in April, declined in May and ended in June. Only four cases were notified in July.

Three cases—two local and one imported—were notified on the same day in January. Although the diagnosis of one of the local cases was afterwards amended, the Department circularised all medical practitioners in the City area to remind them of the severe outbreak of the disease which had occurred in Great Britain in the summer of 1947 and to draw their attention to recent cases reported in East Africa, East London and Durban. This circular also embodied, for information, the resume of a memorandum on Poliomyelitis control issued in July, 1947, by Medical Officers of the British Ministry of Health.

Later, on 23rd February, 1948, a further circular was addressed to medical practitioners intimating that four further cases of Poliomyelitis had been notified in Durban and requesting a good look-out to be kept in view of the outbreaks in Lourenco Marques, Pretoria, Johannesburg and East London. Attention was drawn to current medical opinions on the subject, especially that published by Dr. Ritchie Russel, which stressed the relation between physical activity during the early stages of the disease and the danger of severe paralysis.

During the latter half of March, marked increase in the local incidence of the disease, particularly among the Europeans resident in the Old Borough, rendered it necessary to improve hospitalisation by transferring convalescent cases from Addington Hospital to the City Fever Hospital. This was effected in terms of a working arrangement between the Department and the Director of Provincial Medical and Health Services whereby, if necessary, a ward at the Fever Hospital would be placed at the disposal of the Provincial Authorities, together with the requisite catering facilities, subject to the necessary medical and nursing staffs being provided by the Administration.

All European cases were then admitted direct to the City Fever Hospital whilst non-Europeans went to McCord Zulu Hospital. An Orthopaedic Surgeon was engaged by the City Council to supervise special treatment.

Most cases in any one month were recorded during April. The epidemiological pattern persisted throughout, i.e., Europeans in the Old Borough under the age of six years were chiefly affected.

After the Easter vacation, all Government and Government-aided Schools (with the exception of Bantu schools) were closed for a period of one week which was later extended to three weeks. Bantu schools, not having closed during Easter, were allowed to remain open.

In addition to the routine investigation of notified cases, e.g., home-visiting, enquiry into possible sources of infection, examination of contacts and others, control measures were directed towards remedying defects in the environment, particularly as regards prevalence of flies and rodents and included the following :—

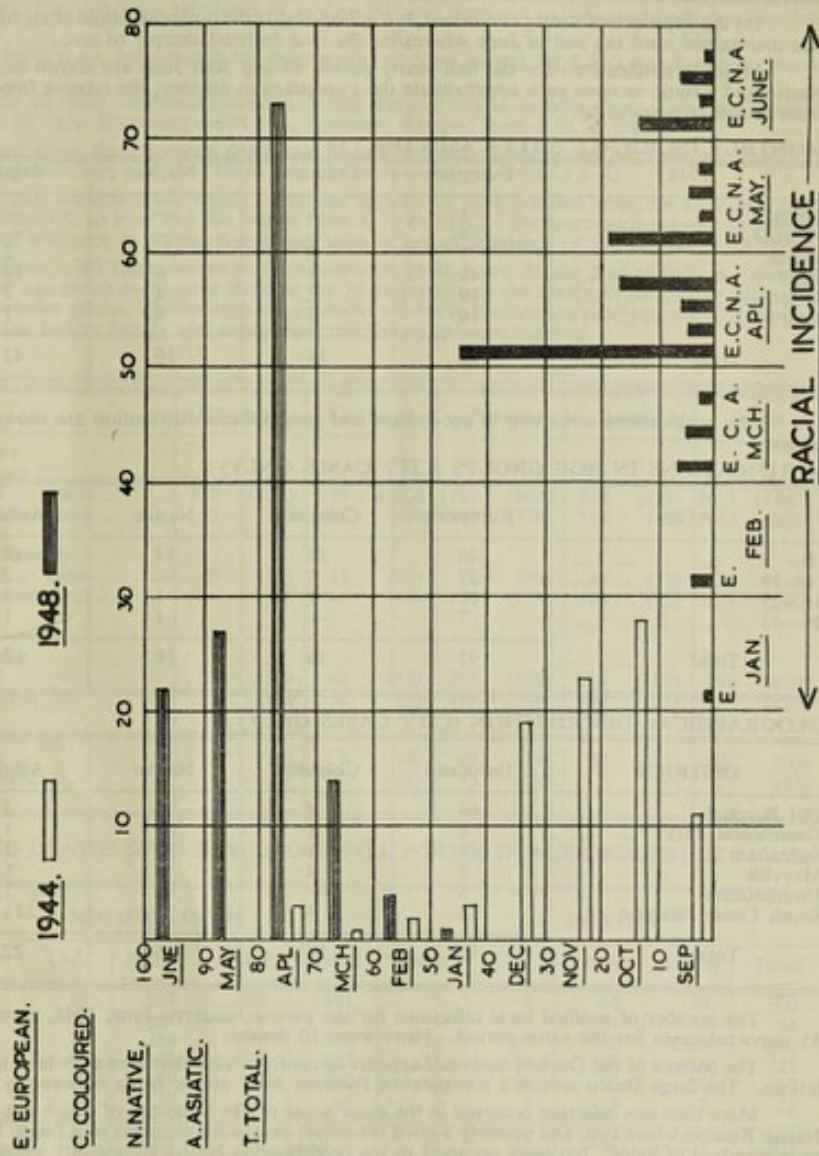
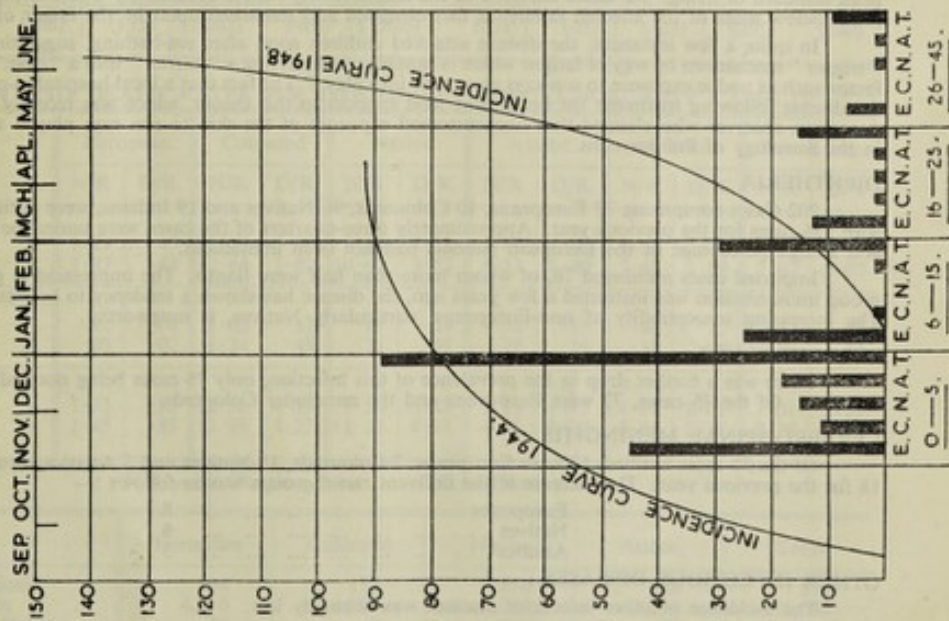
- (a) Beach Paddling Pools were closed to the public and the Municipal Swimming Baths were closed to children and adolescents up to and including the age of fifteen years ;
- (b) Copies of the Ministry of Health's pamphlet No. 673 (Health) dealing with Acute Poliomyelitis, were distributed to all general practitioners in Durban ;
- (c) Food-handler contacts were closely supervised and, where necessary, excluded from work ;
- (d) Close liaison was maintained with the Press and daily bulletins were published ;
- (e) Following the occurrence of Poliomyelitis in a child from Vereeniging, 48 hours after arrival in Durban, the Durban Hotel Association adopted a scheme of precautions for the guidance of all guests with children arriving in the City ; and
- (f) At a meeting of the Local Branch of the Medical Association of South Africa held during April, the preventative and clinical aspects of Poliomyelitis were discussed.



# POLIOMYELITIS.

## COMPARISON : 1944-1948.

### INCIDENCE PERIODS & AGE GROUPS.





During May, twenty-five City cases of Poliomyelitis were notified and the decrease in the incidence of the disease was well-marked by comparison with 73 in the previous month.

On the approach of wintry conditions, it was hoped that the outbreak would abate but, instead, the incidence was maintained until the end of June whereafter the rate declined sharply to zero.

Monthly notifications for the half-yearly period ending 30th June are shown hereunder. Although the Native and Asiatic sections each approximate the Europeans in number, the relative freedom of non-Europeans from attack is noteworthy.

#### MONTHLY INCIDENCE (CITY CASES ONLY) :

1948	European	Coloured	Native	Asiatic	Total
January ... ..	1	—	—	—	1
February ... ..	4	—	—	—	4
March ... ..	7	5	—	2	14
April ... ..	45	5	6	17	73
May ... ..	19	2	4	2	27
June ... ..	16	2	6	1	25
Total ... ..	92	14	16	22	144

City notifications according to age-groups and geographical distribution are shown in the accompanying tables :—

#### NOTIFICATIONS IN AGE GROUPS (CITY CASES ONLY) :

AGE	European	Coloured	Native	Asiatic	Total
0—5 ... ..	46	11	14	18	89
6—15 ... ..	27	2	—	2	31
16—25 ... ..	12	1	1	1	15
26—45 ... ..	7	—	1	1	9
Total ... ..	92	14	16	22	144

#### GEOGRAPHICAL DISTRIBUTION (CITY CASES ONLY) :

DISTRICT	European	Coloured	Native	Asiatic	Total
Old Borough ... ..	64	4	3	3	74
Greenwood Park ... ..	8	1	—	1	10
Sydenham ... ..	1	1	2	1	5
Mayville ... ..	2	4	8	5	19
Umhlatuzana ... ..	5	—	—	1	6
South Coast Junction ... ..	12	4	3	11	30
Total ... ..	92	14	16	22	144

The number of notified local infections for the period January—June, 1948, amounted to 144 ; against 45 imported cases for the same period. There were 10 deaths.

The pattern of the Durban outbreak appears to conform with that seen elsewhere in racially diverse populations. The large Bantu section's comparative freedom from attack being noteworthy.

More than one infection occurred in the same house in five instances, of which one occurred in the Inanda Native Reserve where two, and possibly a third (abortive) case, were members of a Bantu family enjoying a European standard of living. No cases occurred in the neighbouring Native community whose living standards were much below these of the affected family—a fact observed and remarked upon by the father of the patients.

In quite a few instances, the disease attacked children soon after sea-bathing, suggesting some kind of " trigger " mechanism by way of fatigue which is capable of converting a " carrier " into a " case." Does a dermal factor such as undue exposure to sun-rays also come into play ? The fact that a local hospital in-patient developed the disease following treatment for burns may lend support to this theory, which was recently advanced by an American observer who claimed that unaccustomed exposure of the skin to sun rays played a significant part in the aetiology of Poliomyelitis.

#### DIPHTHERIA :

202 Cases comprising 77 Europeans, 10 Coloureds, 96 Natives and 19 Indians, were notified as compared with 336 cases for the previous year. Approximately three-quarters of the cases were under the age of ten years and a high percentage of the European patients had not been immunised.

Imported cases numbered 76, of whom more than half were Bantu. The impression is gained that since group immunisation was instituted a few years ago, the disease has shown a tendency to become milder in type. The increasing susceptibility of non-Europeans, particularly Natives, is noteworthy.

#### SCARLET FEVER :

There was a further drop in the prevalence of this infection, only 76 cases being notified as against 86 for last year. Of the 76 cases, 72 were Europeans and the remainder Coloureds.

#### CEREBRO-SPINAL MENINGITIS :

Of the 35 cases notified, 13 were Europeans, 2 Coloureds, 15 Natives and 5 Asiatics, as against a total of 18 for the previous year. The increase in the different racial groups was as follows :—

Europeans ... ..	8
Natives ... ..	6
Asiatics ... ..	3

#### OTHER INFECTIOUS DISEASES :

The incidence of other infectious diseases was normally low.

A striking feature is the decline in the number of disinfections of private premises and articles therefrom and of cubicles disinfected at the City Fever Hospital. This is due to the lessened incidence of Diphtheria and the restricted admission of minor infections such as Measles and Whooping Cough.



## TUBERCULOSIS :

The attached vital statistics refer to the number of cases notified and deaths recorded in respect of both City and Imported cases. City cases are tabulated in age-groups, and analysed to indicate trends over the last seven years.

On the basis of death rates, tuberculosis has been more prevalent among the City's non-European population during the year.

The death rate for all races combined increased during the past twelve months, from 2.01 per thousand of the population to 2.18. The European death rate, however, dropped from 0.53 to 0.45.

Over the last seven years, the European death rate from Pulmonary Tuberculosis has increased from .32 to .43 per 1,000 of the population, and the Native rate has increased from 3.03 to 3.52.

Whilst mortality thus remains fairly steady, incidence appears to have doubled since the European notification rate advanced from .70 to 1.38 and the Native from 5.72 to 10.62. The increase, however, is apparent and reflects an increased efficiency in notification rather than in actual incidence of the disease.

The highest incidence in all races, occurs in the age-groups 25-45 years. In the case of Indians, however, notifications in the 15-25 age-group outnumber those in the 25-45 group and the deaths in the former age-group approximate those in the latter group. This exception is probably related to the housing shortage, the large number of children in the average Indian family and consequent conditions of overcrowding.

## STATISTICS :

	European	Coloured	Native	Asiatic	Total
(a) Notifications :					
(i) Pulmonary :					
Local ... cases ...	176 (153)	139 (122)	1163 (944)	543 (429)	2021 (1648)
Imported cases ...	55 (12)	21 (8)	1328 (770)	149 (43)	1553 (833)
(ii) Non-Pulmonary :					
Local ... cases ...	10 (15)	15 (11)	78 (99)	35 (37)	138 (162)
Imported cases ...	— (1)	— (1)	168 (173)	20 (25)	188 (200)
(b) Deaths :					
(i) Pulmonary :					
Local ... cases ...	55 (57)	42 (41)	385 (364)	216 (188)	698 (650)
Imported ... cases ...	11 (12)	12 (5)	489 (389)	39 (21)	551 (427)
(ii) Non-Pulmonary :					
Local ... cases ...	3 (6)	5 (4)	64 (59)	35 (17)	107 (90)
Imported ... cases ...	1 (1)	— (1)	75 (59)	1 (6)	77 (67)

## NOTIFICATIONS AND DEATHS OF TUBERCULOSIS (ALL FORMS) IN AGE-GROUPS (CITY CASES ONLY) :

AGE GROUPS	NOTIFICATIONS					DEATHS				
	Europ.	Col.	Native	Asiatic	Total	Europ.	Col.	Native	Asiatic	Total
0—5 ...	16	18	107	60	201	1	4	65	30	100
6—15 ...	7	26	148	79	260	1	—	21	32	54
16—25 ...	44	35	284	189	552	10	10	90	80	190
26—45 ...	62	51	522	177	812	27	22	189	85	323
46—65 ...	43	20	160	67	290	12	8	75	22	117
Over 65 ...	14	4	20	6	44	7	3	9	2	21
Total ...	186	154	1,241	578	2,159	58	47	449	251	805
	(168)	(133)	(1,043)	(466)	(1,810)	(67)	(45)	(423)	(205)	(740)

## NOTIFICATION AND DEATH RATES PER 1,000 OF THE POPULATION (CITY CASES ONLY) :

	European		Coloured		Native		Asiatic		All Races		Non-Europ.	
	N/R	D/R	N/R	D/R	N/R	D/R	N/R	D/R	N/R	D/R	N/R	D/R
Pulmonary :												
1947 ...	1.21	.45	11.49	3.86	8.65	3.33	3.67	1.60	4.54	1.79	6.32	2.51
1948 ...	1.37	.43	12.64	3.82	10.62	3.52	4.52	1.80	5.48	1.89	7.67	2.07
Non-Pulmonary :												
1947 ...	.12	.08	1.03	.37	.91	.54	.32	.15	.44	.22	.69	.38
1948 ...	.08	.02	1.34	.45	.71	.59	.29	.29	.38	.29	.53	.43
All Forms :												
1947 ...	1.33	.53	12.52	4.23	9.56	3.87	3.99	1.75	4.99	2.01	7.01	2.89
1948 ...	1.45	.45	13.98	4.27	11.33	4.11	4.81	2.09	5.86	2.18	8.20	2.50

N/R — Notification rate. D/R — Death rate.

	European	Coloured	Native	Asiatic	Total
Hospital Admissions ...	144	132	874	444	1,594
Clinic attendances ...	4,216	1,009	2,710	3,634	11,569
Patients leaving Durban...	49	9	845	70	973
Patients visited ...	3,509	1,936	5,057	3,503	14,005



## PULMONARY TUBERCULOSIS.

City :	EUROPEANS							COLOURED							NATIVES							ASIATICS						
	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948
Notifications ... ..	74	98	114	131	118	153	176	47	55	60	105	66	122	139	424	593	862	952	945	944	1163	249	325	410	435	527	429	543
Notification Rate per 1,000	.70	.93	1.05	1.19	.94	1.21	1.38	5.55	6.43	6.84	11.66	6.44	11.49	12.64	5.72	8.08	11.92	13.25	8.67	8.65	10.62	2.70	3.73	4.24	4.57	5.63	3.67	4.52
Deaths ... ..	34	39	43	42	47	57	55	33	38	46	43	44	41	42	225	227	366	446	461	364	385	182	174	232	233	245	188	216
Death Rate per 1,000 ...	.32	.36	.39	.38	.38	.45	.43	3.89	4.44	5.24	4.78	4.29	3.86	3.82	3.03	3.98	5.06	6.21	4.23	3.33	3.52	1.97	1.84	2.40	2.19	2.15	1.61	1.79
Imported :																												
Notifications ... ..	27	206	94	53	53	12	55	2	12	10	19	5	8	21	66	537	661	667	820	770	1328	14	75	78	53	58	43	149
Deaths ... ..	27	20	18	14	10	12	11	18	4	9	1	4	5	12	263	196	287	314	361	389	489	38	39	20	22	29	21	39

## NON-PULMONARY TUBERCULOSIS.

City :	EUROPEANS							COLOURED							NATIVES					ASIATICS								
	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948	1942	1943	1944	1945	1946	1947	1948
Notifications ... ..	6	1	1	10	2	15	10	9	2	2	7	10	11	15	32	45	34	88	55	99	78	39	19	19	41	32	37	35
Notification Rate per 1,000	.06	.01	.01	.09	.01	.12	.08	1.08	.23	.23	.77	.97	1.03	1.34	.43	.61	.47	1.22	.50	.91	.71	.42	.20	.19	.41	.28	.31	.29
Deaths ... ..	2	4	5	1	10	10	3	2	3	6	6	1	4	5	21	28	49	40	51	59	64	17	36	22	25	16	17	35
Death Rate per 1,000 ...	.02	.04	.05	.01	.08	.08	.02	.23	.35	.69	.66	.09	.38	.45	.28	.38	.67	.55	.47	.54	.59	.18	.38	.24	.25	.14	.14	.29
Imported :																												
Notifications ... ..	2	23	—	1	—	1	—	—	—	1	3	—	1	—	2	43	82	175	102	173	168	—	4	7	7	5	25	20
Deaths ... ..	4	2	1	3	4	1	1	1	1	1	1	2	1	—	38	29	34	39	29	59	75	2	1	2	5	1	6	1



### CITY HEALTH (TUBERCULOSIS) CLINIC :

The Clinic, designed in 1941, completed in 1945 and opened in 1946, following the closure of the anti-Tuberculosis Clinic at Addington Hospital. Sessions are held twice weekly for Europeans and Coloureds and for diagnostic purposes only. It is probable that, in the near future, non-European Clinics which are at present conducted at the McCord Zulu Hospital and at Springfield Hospital, will likewise be transferred to the City Health Clinic, involving four sessions per week.

The City Health Clinic has been operated under a temporary arrangement whereby, in effect, the building has been loaned to the Medical Superintendent of King George V Tuberculosis Hospital, whose staff provides the medical and radiological services.

Clinic nursing and clerical assistance has been provided by the City Health Department which also undertakes general administration.

This Clinic programme was designed to take over the limited services previously available at the Provincial general hospitals.

In 1946, it was anticipated that an early decision would be taken to transfer the Clinic to the Union Health Department, enabling attention to be given to the question of obtaining staff so that the Clinic might commence to carry out its full programme with as little delay as possible. Almost three years have been consumed in negotiations between the parties, who have agreed on the principle of transfer but have not yet reached a decision in regard to the staff required for both clinical and field duties.

As a result, the Clinic programme remains restricted to the investigation of all family contacts and a limited number of work-contacts.

### PRESENT CLINICAL SERVICES :

These remain diagnostic in function, as formerly :—

Name of Clinic	Races	Total Annual Attendances
City Health Clinic ... ..	Europeans ... ..	4,216
	Coloureds ... ..	1,009
McCord Hospital Clinic...	Natives ... ..	2,710
	Asiatics ... ..	3,634
	Total ... ..	11,569

Artificial pneumothorax-refill sessions are held at King George V and McCord Hospitals.

A special Clinic is held at Springfield Hospital for the fuller investigation of non-European cases of doubtful lung pathology ; both these services could be undertaken at the City Health Clinic.

During the year, the King George V Hospital staff has conducted chest X-ray surveys—by means of a mobile miniature X-ray plant—among some thirty industrial worker groups. The City Health Department's Health Education Section has assisted by means of preliminary and explanatory health talks accompanied by the showing of special films on Tuberculosis.

The Municipal Native Administration Department proposes to institute, in the near future, mass radiographical examination of Natives attending that Department for employment registration.

### TUBERCULOSIS HOSPITAL ACCOMMODATION :

The total number of beds in and near Durban occupied by Tuberculosis patients, both City and Imported cases, is 1,132, distributed as follows :—

Hospital	Races Admitted	No. of Beds
King George V Hospital and Springfield Hospital ...	European ... ..	140
	Coloured, Native, Asiatic ...	688
Indian Immigration Hospital	Native, Asiatic ... ..	75
F.O.S.A. Settlement ... ..	Asiatic ... ..	56
McCord Hospital... ..	Native, Asiatic ... ..	47
Umlazi Hospital ... ..	Coloured, Native, Asiatic ...	112
St. Aidan's Hospital ... ..	Asiatic ... ..	14
	Total : ... ..	1,132

Beds were available for the different races as follows :—

Europeans ... ..	140
Coloureds ... ..	66
Natives ... ..	600
Asiatics ... ..	326
	1,132

Approximately half the beds are occupied by City cases.

Approximately 2,000 beds are required to accommodate all Pulmonary cases. About one half of this number are needed for Native cases, assuming that all Native patients could be induced or compelled to remain in hospital.

Two years ago, there were only 359 beds available for tuberculosics in Durban. The number has thus been more than trebled through the acquisition of wards at Springfield Military Hospital, where a system of training non-European nurse-aides to compensate for the shortage of fully qualified nurses has been successfully organised.

Non-pulmonary cases of Tuberculosis continue to be admitted to the Provincial General Hospitals.

### TUBERCULOSIS STAFF AND ACTIVITIES :

The staff of the Tuberculosis Section remains the same as before, viz., one Medical officer, four European Health Visitors, four Indian and four Native Health Assistants. The Health Visiting staff, particularly the non-European staff, are hard pressed to cope with the field work. Apart from approximately 3,000 new cases during the year, who require to be interviewed, there are many previously notified cases to be followed-up, as well as many thousands of contacts for X-ray investigation.

Government Health Centres recently established in the Clairwood and Springfield areas, attend to the investigation of Tuberculosis contacts in their areas, which eases the situation to some extent. During the year, 14,005 home visits were made by the Health Visiting staff.

The European members of the staff assist the Care Committee of the Natal Anti-Tuberculosis Association, which meets regularly to arrange for the social welfare of patients and their dependants. The funds at the disposal of this Committee, although considerable, are quite inadequate to meet all genuine requirements.

The Friends of the Sick Association is represented on the Care Committee and, in addition, through its own numerous branches is rendering great assistance to numerous Indian tuberculosic families. The Friends of the Sick Association and the staff of this Department co-operate closely and it is hoped that, before long, the Association will obtain access to the promised office accommodation in the City Health Clinic premises.



A beginning has been made with the examination of work-contacts of notified cases. Large batches of employees—sometimes complete staffs—have been induced to attend the Clinic for mass radiography. Management have willingly co-operated in this programme. In addition, the Union Health Department has conducted chest X-ray surveys among industrial personnel by means of mobile mass X-ray units.

#### TUBERCULOSIS CONTROL AMONG NATIVES :

**Propaganda.** A programme of lecture-film demonstrations on the nature and prevention of Tuberculosis has been successfully organised for non-European audiences. This includes special loudspeaker warnings against spitting given to market crowds and in non-European shopping areas generally.

Experiences during recent years has shown that urban local authorities do not possess sufficient facilities for the efficient control of Native cases of Pulmonary Tuberculosis.

The Native, unlike the other three races in the Union, usually has two domiciles, one at his kraal in the Reserves and the other, a temporary and usually unsatisfactory dwelling in town. He is constantly on the move between the two.

When a Native develops Tuberculosis, he usually enters an urban hospital to begin with. As often as not and for various reasons, he decides to leave hospital. The hospital superintendent does not appear to possess the necessary legal powers for restricting the patient's movements and by the time the local authority is informed and enabled to act, the patient has usually decamped.

It is invariably a case of attempting to close the stable door after the horse has gone. Many of the patients who leave hospital in this way return to their kraals, travelling in public vehicles during the journey. Other patients state they intend returning to their kraals but instead of doing so, proceed to new and unknown addresses in town. Again, some patients return from their kraals after a brief sojourn.

It may be argued that a local authority could and should prevent this state of affairs by the application of Sections 25 and 29 of the Public Health Act. Such a policy is impracticable in view of (a) the large numbers of patients involved ; and (b) the need for dealing with the problem as a whole. During the last twelve months, nearly a thousand notified and probably as many "missed" cases left Durban for their kraals. The same process must be occurring in other towns. This is a grim problem and no time should be lost in finding a solution in the interests of public health control, i.e., suppression of infection as well as humanitarian consideration for the sick.

By reason of its general incidence, this problem should be tackled not on a local but on a regional or national basis.

Towards this end, the following suggestions are made :—

(a) One authority only, preferably the Union Health Department, should administer all aspects of specific Tuberculosis control, including the maintenance of diagnostic clinics and treatment in hospitals, but possibly excluding home-visiting in the large Municipal areas. Every case of Pulmonary Tuberculosis should be handled and controlled institutionally by this one authority from the time the patient is diagnosed until such time as he dies or recovers. The Public Health Act should be amended accordingly.

(b) A sufficient number of rural hospitals, or preferably Tuberculosis rural settlements equipped with isolation facilities, should be provided, so that the Native tuberculous in an urban hospital could, if desired, be transferred to an area nearer his home. His transfer would be so arranged as to avoid endangering the public health. This measure would tend to relieve bed-space in the urban Tuberculosis hospitals and would concentrate the control of communicable Tuberculosis in the hands of that authority best able to undertake it.

#### VENEREAL DISEASE :

Increased numbers attended both the European and Coloured Clinics at Addington Hospital and the non-European Clinic at Congella.

Return of the Municipal ward, presently loaned to the Provincial Administration, will relieve congestion at the latter Clinic. This transfer should automatically follow upon completion of the scheme for co-ordination of hospital services as between the Province and Municipality.

Since additional Clinics for Coloureds were instituted at Addington, including an evening session for the convenience of working people, Coloured attendances, both of male and female, have increased.

The lack of in-patient accommodation for Coloured and European females, about which repeated representations have been made, is still a serious handicap. In consequence, Coloured females have to be admitted to Native wards, to which many of them rightly object, whilst European females have necessarily to be treated as out-patients although they may be in a highly infectious condition.

A proposal to arrange for European and Coloured in-patient accommodation to be provided at Wentworth Hospital, when available, is not favoured in that it would involve :—

(a) a separation of the departments of out- and in-patient treatment ; and

(b) abandonment of the V.D. Block at Addington Hospital which was specially erected for the purpose some ten years ago.

Overcrowding at the non-European Clinic is partly due to patients by-passing rural hospitals (Dundee, Port Shepstone, Vryheid, Eshowe, etc.) in favour of treatment at Durban.

The number of European employers sending their servants and prospective employees for a pre-employment medical examination continues to increase. A number of cases of V.D. are thereby discovered which otherwise would go undetected and untreated. All clean cases are given "clearance" certificates and infective cases are treated, the employer being notified that they are unfit for domestic service.

The number of juveniles under the age of consent (16 years) found to be infected with V.D. continues to be a serious social problem. Some, even at this early age, have obviously joined the ranks of prostitutes, others are the victims of unbridled lechery. Such cases are referred to the Social Welfare agency. Effective police action is seldom taken owing to lack of proof of age and of corroborative evidence.

Penicillin has become the standard treatment for cases of Gonorrhoea, 95% of the acute cases being rapidly cured by it. Unfortunately, many cases do not present themselves until complications (epididymitis, etc.) supervene, when cure is more uncertain and the period of treatment prolonged.

Owing to the fact that Penicillin is not yet listed among the drugs issued free by the Government, it is impracticable to use it in all cases of Syphilis. This may not be altogether disadvantageous as the relative merits of Penicillin treatment as compared with the new arsenical drugs are not yet finally determined.

The trend of authoritative opinion is at present in favour of combined Penicillin and Arsenic in the treatment of Syphilis. Several years' follow-up of cases by repeated blood testing will be necessary before it can be established that Penicillin cures more cases than does Arsenic. The fact that the recommended curative dosage of Penicillin in Syphilis has gradually risen from one million units to six million indicates that the early estimates of its curative powers in Syphilis were too optimistic.

Obstacles in the way of V.D. control are social rather than medical, i.e., illiteracy, bad housing, poverty, lack of recreational facilities and alcoholism—all evils which must be drastically rectified before any real improvement in the V.D. situation can be expected.



## V.D. STATISTICS :

	EUROPEAN				COLOURED				NATIVE				ASIATIC				TOTAL				GRAND TOTAL
	City		Imported		City		Imported		City		Imported		City		Imported		City		Imported		
	M	F	M.	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
New Cases ... ..	434 (420)	86 (116)	579 (740)	7 (5)	166 (154)	88 (108)	59 (130)	43 (23)	6,234 (6,590)	2,026 (2,205)	2,800 (2,274)	1,363 (1,198)	637 (457)	194 (278)	187 (37)	43 (39)	7,471 (7,621)	2,394 (2,707)	3,625 (3,181)	1,456 (1,265)	14,946 (14,774)
Ward Admissions... ..	98 (80)	3 (—)	167 (243)	— (—)	73 (68)	24 (—)	18 (180)	6 (—)	1,397 (1,409)	983 (1,402)	1,156 (1,230)	1,276 (1,157)	34 (420)	21 (287)	15 (96)	2 (99)	1,602 (1,977)	1,031 (1,329)	1,356 (1,749)	1,284 (1,256)	5,273 (6,311)
Outpatient Attendances	3,243 (3,004)	1,305 (1,467)	1,449 (1,561)	20 (54)	1,797 (1,694)	2,956 (3,030)	210 (522)	520 (825)	28,565 (30,301)	11,954 (13,307)	10,787 (10,531)	6,214 (6,448)	2,192 (2,715)	757 (2,239)	425 (177)	103 (133)	35,797 (37,714)	16,972 (20,043)	12,871 (12,791)	6,857 (7,460)	72,497 (78,008)
Clinics held ... ..				297	(299)							565	(548)								862 (899)

## FOLLOW UP STATISTICS :

The following table reflects the activities of the European Health Visitor and the Native and Indian Health Assistants in the following up of cases, defaulters, absconders and contacts.

	NEW CASES	CONTACTS LOCATED	DEFAULTERS LOCATED	ABSCONDERS LOCATED	VISITS ...	CLINICS ATTENDED
European Health Visitor	73 (78)	32 (19)	457 (711)	17 (37)	1,659 (1,917)	132 (143)
Native Health Assistants	1,638 (1,514)	910 (905)	1,065 (1,143)	11 (8)	5,164 (4,989)	102 (92)
Indian Health Assistant	108 (104)	83 (78)	905 (923)	1 (—)	1,402 (1,624)	60 (58)
Total ... ..	1,819 (1,696)	1,025 (1,002)	2,427 (2,777)	29 (45)	8,225 (8,530)	294 (293)

## NATIVE ADMINISTRATION :

Of the 105,838 Natives examined during the year, the following V.D. Diagnoses were made :—  
 Balanitis, 369 (743).      Warts, 367 (62).  
 Vaccinations carried out, 75,601 (16,801).      Unfit for work, 2,950 (1,544).



V.D. STATISTICAL COMPARISONS 1945 TO 1948 :

	EUROPEAN				COLOURED				NATIVE				ASIATIC				TOTAL				GRAND TOTAL
	City		Imported		City		Imported		City		Imported		City		Imported		City		Imported		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
New Cases :																					
1945...	238	135	369	11	172	88	218	21	4,168	1,942	1,801	867	532	155	300	77	5,110	2,320	2,688	976	11,094
1946...	302	85	316	109	150	86	186	114	5,527	1,971	1,758	1,017	242	232	36	34	6,221	2,374	2,296	1,274	12,165
1947...	420	116	740	5	154	108	130	23	6,590	2,205	2,274	1,198	457	278	37	39	7,621	2,707	3,181	1,265	14,774
1948...	434	86	579	7	166	88	59	43	6,234	2,026	2,800	1,363	637	194	187	43	7,471	2,394	3,625	1,456	14,946
Ward Admissions :																					
1945...	15	—	95	—	42	34	66	26	1,675	1,159	805	852	161	235	95	108	1,893	1,428	1,061	986	5,368
1946...	20	—	94	—	68	—	54	—	1,750	732	1,259	779	255	231	84	94	2,005	1,051	1,343	1,021	5,420
1947...	80	—	243	—	68	—	180	—	1,409	1,042	1,230	1,157	420	287	96	99	1,977	1,329	1,749	1,256	6,311
1948...	98	3	167	—	73	24	18	6	1,397	983	1,156	1,276	34	21	15	2	1,602	1,031	1,356	1,284	5,273
Outpatient Attendances :																					
1945...	2,510	1,240	1,008	490	2,055	1,017	660	351	19,553	11,271	8,859	4,940	2,439	747	1,118	339	26,557	14,275	11,645	6,120	58,597
1946...	2,627	2,148	648	485	2,212	1,464	328	258	22,786	13,241	4,304	3,628	2,375	1,707	56	49	34,500	18,560	5,336	4,520	62,916
1947...	3,004	1,467	1,561	54	1,694	3,030	522	825	30,301	13,307	10,531	6,448	2,715	2,239	177	133	37,714	20,043	12,791	7,460	78,006
1948...	3,243	1,305	1,449	20	1,797	2,956	210	520	28,565	11,954	10,787	6,214	2,192	757	425	103	35,797	16,972	12,871	6,857	72,497



## FIELD HYGIENE :

During the year, every effort was made to intensify anti-pest measures with gratifying results, particularly as regards the roach and bug. The clearance of these pests from Municipal properties has been phenomenal. Tribute must be paid to the high efficiency of modern insecticides, containing D.D.T. and Benzene Hexachloride, now readily available in bulk.

## MOSQUITOES :

The anti-mosquito programme kept five European overseers and 60 non-European labourers fully occupied on ditching, draining, reclamation, bush clearing and oil spraying. Constant spotting of likely anopheline breeding places and collection of larval specimens were undertaken by 8 Native Health Assistants.

Of 9,748 anopheline larvae examined, only 16 were *A. Gambiae*, the Malaria vector. A search for adult *A. Gambiae* was unsuccessful. The following table shows the relative incidence of the various species :—

<i>A. Demeilloni</i> ... ..	2,686	<i>A. Funestus</i> Var ... ..	84
<i>A. Pretoriensis</i> ... ..	2,404	<i>A. Marshalli</i> ... ..	31
<i>A. Coustani</i> ... ..	1,735	<i>A. Longipalpis</i> ... ..	17
<i>A. Cincereus</i> ... ..	1,500	<i>A. Gambiae</i> ... ..	16
<i>A. Maculipalpis</i> ... ..	589	<i>A. Natalensis</i> ... ..	11
<i>A. Squamosis</i> Var. ... ..	511	<i>A. Keniensis</i> ... ..	3*
<i>A. Squamosis</i> ... ..	159	<i>A. Ardensis</i> ... ..	2

\* Doubtful.

The long-established technique of oil-spraying with its attendant messiness and transport difficulties is likely to be superseded by new methods. The coming year will see D.D.T. emulsions and phenolic larvicides subjected to comprehensive tests. If successful, the use of these new materials will mark a great advance in mosquito control.

## BUGS :

During the year, the Department abandoned the use of Hydrogen Cyanide fumigation for the control of bugs. Hydrogen Cyanide, in the first instance, was superseded by D.D.T. and later by the roach-killer described hereafter. In most barracks, bug and roach infestation run concurrently, so with this formula a double clearance is effected.

In properly-treated buildings, complete clearance of bugs for periods of 3 to 8 months is assured. After fumigation with Hydrogen Cyanide, in premises prone to bug invasion, re-infestation commences soon after ventilation.

Private contractors, however, who continue to use Hydrogen Cyanide, carried out 2,940 fumigations with this material during the year. With the highly effective insecticides available to-day, this record argues a lack of appreciation of modern insecticidal practice.

## GENERAL :

Fly- and flea-development, wherever located, has also responded to D.D.T. treatment. In two instances of tick infestation, Benzene Hexachloride gave good results.

## ROACHES :

With the advent of insecticides containing D.D.T. and Benzene Hexachloride, a most satisfactory solution to the roach problem becomes available.

In the past, using contact sprays, the roach programme had to be repeated at intervals of five weeks, not so much to eliminate the roach as to discourage its further increase. Now it is possible completely to clear roaches from treated areas and to maintain these areas free for periods up to three months. In a few instances, clearance has been obtained for six months or more. Thus, coupled with increased efficiency of kill, there is a saving in costs due to reduction in the number of treatments and of staff required.

This insecticide consists of 5% D.D.T. and 14% or 24% Benzene Hexachloride in toluene and paraffin solution and was first marketed by Klipfontein Organic Products, P.O. North Rand, Transvaal.

Its full success depends on proper application and calls for "wetting" or "splashing" the surfaces of existing and possible roach-harbours and "runs" as distinct from attacking the roach itself. The fluid should not be atomised. After successful treatment, a few days elapse before the last roach expires — then comes the lengthy period of complete freedom from the pest.

All anti-roach measures carried out by the Department have been on Municipal undertakings with the exception of isolated demonstrations on domestic premises to disprove claims of complainants that their premises do not breed roaches. Roach destruction on private property, apart from the house-holders' own efforts, remains the prerogative of private enterprise.

## PLAGUE AND RODENT CONTROL :

The rodent position in Durban remains well under control. The staff, unchanged from the previous year, comprises 4 European officials assisted by 7 trained Indians. The fostering of a competitive spirit amongst personnel has increased the amount of effective work performed.

The programme is based on routine destruction of rodents with special reference to potential points of entry and "colonisation" in industrial and commercial areas. Sampling for "Plague index" purposes is run concurrently.

Surveys of peri-urban areas are a routine feature and, when necessity arises, suitable action is taken against veld rodents.

During June, 1948, the anti-rodent staff assisted the Union Government Plague and Typhus Inspectors in the collection of live specimens for the purpose of research into Murine Typhus.

A satisfactory feature, from Durban's viewpoint, was the relatively few rodents trapped by these Government officials in comparison with their stated catches in other sea-ports of the Union.

Rodent-destructive measures were confined to the use of the poisons, phosphorous and barium and to trapping and gassing. The use of blood anti-coagulants was studied and will be tried as soon as Dicoumarin is available. In the following statistics, compare results with those of the previous year :—

	1946/47	1947/48
Total carcasses recovered ... ..	3,592	9,133
Total poison baits laid ... ..	136,815	67,733
Total traps set ... ..	10,441	16,374
Total premises trapped for "index" ... ..	803	1,606
Total rodents examined for <i>B. Pestis</i> ... ..	712	989



## S.A. INDUSTRIAL FAIR : OCTOBER, 1947 :

As industrial premises, especially those sited along the wharf fronts and railway sheds, must constitute Durban's biggest Plague risk, the opportunity was taken to demonstrate the epidemiology and control of this disease by organising an exhibit at the Fair.

The exhibit was made up as follows :—

(a) Protected by a large cage, a model house was "sectioned" to reveal the various typical rodent harbourages, their ports of entry, feeding-places and modes of travel. The introduction of a dozen live rats lent realism to the demonstration. Methods of rodent-proofing and elimination of harbourages were effectively displayed ;

(b) Stuffed specimens of rodents concerned in Plague transmission (kindly lent by the Transvaal Plague Laboratory) were shown ;

(c) Coloured drawings depicted :—

(i) the sources and usual channels of Plague travel in South Africa ; and

(ii) the part which fleas play in transmitting the disease.

(This exhibit was kindly provided by the South African Institute for Medical Research) ; and

(d) Microscopical specimens demonstrated the various organisms which are carried by rodents and cause disease in man.

From the numbers visiting the staff and the interest shown by the general public, it is clear that the display was very successful. It was, however, felt that if more representatives of large industries had examined the exhibit at close range, Durban's industrial rat population would have had to face a gloomier future.

The tendency to regard rat-prevalence as a necessary accompaniment of industry and its control as a matter solely for the local authority still persists among too many managements, although on the whole, co-operation of managements in public health programmes is steadily improving towards the high level necessary in a Plague exposed City and sea-port such as Durban.

## MAYDON WHARF :

The Maydon Wharf by reason of its being constructed on piles which prevent the fending-off of ships, can be regarded as the danger point for the introduction of Plague into Durban. Beneath the wharf, there are ample facilities for rat harbourage. As a consequence of these two factors, rodent control in this area demands special attention, which is given by three separate authorities acting in co-operation :—

(a) The Port Health Department attends to routine trapping at the various premises for Plague index ;

(b) The S.A.R. & H. is responsible for anti-rodent work on seventeen premises under its jurisdiction, including railway property, the grain elevator and the wharves ; and

(c) The City Health Department is concerned with "proofing" and elimination of rodent harbourage in privately-owned properties which number sixty-eight.

Close liaison between the Port and City Health Departments is maintained whilst staff of the Union Health Department has also been most helpful with advice where major "proofing" measures are indicated. Such co-operation is essential in prosecuting the rodent elimination programme.

Throughout the year, the City Health Department has pursued its policy of requiring :—

(1) Rodent-proofing of all new premises, also stores containing foodstuffs ;

(2) Elimination of harbourage on all properties ; and

(3) Proper storing and stacking on dunnage.

The following new buildings were erected during the last three years :—

	1945/46	1946/47	1947/48
Store-rooms and warehouses ... ..	6	7	3
New factories and extensions ... ..	6	5	11
Offices ... ..	3	3	2
Compounds ... ..	—	2	—
Mess and Change-rooms ... ..	4	7	6
<b>TOTAL</b> ... ..	<b>19</b>	<b>24</b>	<b>22</b>

A fair amount of progress was also noted in the provision of better office and living accommodation for Europeans and non-Europeans, but only when building control is easier can we expect to see improvements on a large scale.

Below are comparative statistics of anti-rodent work carried out by the Port Health Authorities during the last three years :—

Year	No. of Traps set	Lbs. of Poison Bait Laid	Rodents Recovered				Rodents examined by Laboratory
			Black Rats	Brown Rats	Mice	Total	
1945/46 ...	25,610	275	2,023	1,181	1,008	4,212	615
1946/47 ...	30,911	306	1,495	767	874	3,136	516
1947/48 ...	31,480	275	1,162	588	861	2,611	596

Calculations based on the above figures reveal that :—

(i) In 1945/46 6 traps  
1946/47 9.8 traps  
1947/48 12 traps } were set to catch one rodent.

(ii) (a) The trapping programme has increased from :—  
25,610 traps set in 1945/46 to  
31,480 traps set in 1947/48.

(b) The gross rodent catch has dropped from :—  
4,212 in 1945/46 to  
2,611 in 1947/48.



From the above, one must conclude that despite an intensified trapping campaign and an increase in premises alongside the wharf, there has been an actual reduction in the numbers of rodents recovered. This should serve to demonstrate that adequate attention is being paid to premises in this locality. However, until the Government has re-constructed the Maydon Wharf so as to be impervious to rodents, the Plague-control programme in this area remains an anxious responsibility, whether the source of infection is from overseas or the hinterland.

#### PLAGUE PRECAUTIONS :

##### Rodents :

Premises trapped for Plague index	1,606
Baits laid	67,733
Traps set	16,374
Cyanogas used : lbs.	822½
Rodent carcasses recovered	9,133
Rodents examined for B.Pestis	989

##### Mosquitoes :

Larvicide used : gallons	17,167
Ditches cleared : yards	494,104
Land cleared : acres	83
Larvae identified in Section Office	9,748
Disinfectant used : gallons	41½
Other spraying fluids (Pyagra, Jeyes, etc.)	44½

##### Roaches :

Sewer manholes sprayed	101,596
Stormwater manholes sprayed	73,669
Gutter-bridges manholes sprayed	42,030
Water valves, gullies, etc., sprayed	36,159
Drainage manholes	42,712
Spray used : gallons : Carbolic	7,019
Spray used : gallons : D. & B.	761
Spray used : gallons : Balala	294
Spray used : gallons : Other mixtures	68½
Powders used : lbs. : Roachine	27½

##### Bugs :

Premises fumigated by Section	10
Premises fumigated by private firms	2,940
Number of rooms treated with D. & B.	595
Number of rooms treated with Balala	2,422
Material used : gallons : D. & B.	123
Material used : gallons : Balala	300

##### Vehicles : Mileage :

Anti-Plague van NDC 4863	7,823
Anti-Malaria truck NDC 1163	8,119
Anti-roach van NDC 4876	19,209
General duties van NDC 907	11,592

##### Health Assistants :

Visits	13,305
Complaints investigated :	
Rodents	159
Mosquitoes	111
Roaches	11
Fleas and ticks	1
Bugs	1
Premises corrected :	
Rodents	72
Mosquitoes	212
Roaches	6

##### First Grade General Assistants :

Visits	8,864
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##### Native Health Assistants :

Visits to Municipal properties	6,220
Visits to non-European properties	6,958
Control advices given	1,701
Control advices complied with	2,580
Tubes of larvae for identification	1,217
Bottles of snails for identification	50

#### OTHER COMMUNICABLE AND PREVENTABLE DISEASES :

In March, 1946, a conference on Amoebiasis convened by the Secretary for Public Health in Durban was attended by representatives of various health bodies and the following resolution was adopted :—

"That this conference urges the need of further research in connection with this disease and in this connection particularly draws attention to the variations in the incidence of this disease in different parts of the Union and the relationship of the presence of *E. Histolytica* to the existence of clinical forms of intestinal disease in Man. For this purpose, this conference urges the institution of a programme of research in Durban and suggests the co-ordination of a programme of research by Health Centres, Hospitals and Laboratories."

As Amoebiasis control is now under discussion by the National Health Council, it is hoped that adequate research facilities will be implemented in the near future. Probably no area in the world offers a finer field for such research than the Natal Coastal Belt — both clinically and epidemiologically.

A rational approach to the subject of Amoebiasis control would appear to be measures based on the results of such research supplemented by a progressive programme of slum elimination, health education and improved nutrition. Judging from hospital returns, it is apparent that there has been no recent improvement in local incidence of the disease.

Among the de-tribalised Bantu population living in peri-urban shack settlements, the ravages of the disease are serious, creating a challenge which can only be met by radical social reconstructive measures aimed at the eradication of slums, malnutrition and ignorance of positive health practice.

Although notifiable for some years past, the disease ceased to be notifiable by Government Notice on the 28th November, 1947, not only in Durban but throughout Natal.



From the viewpoint of local authorities, notification of the disease had the disadvantage of rendering them liable for part-costs of hospitalisation—a procedure which, although essential for treatment of severe cases, does not function as a valid preventive or suppressive measure.

Negotiations are still in progress between the City Council and the Natal Provincial Administration in respect of the costs of treatment of notified cases admitted to hospital.

#### BILHARZIASIS CONTROL :

Local Authorities in the Durban region co-operate in carrying out of Bilharzia surveys in their respective areas with the object of taking concerted measures for the control of Bilharzia which is fairly prevalent in non-European areas.

The incidence of Bilharzia-carrying snails disclosed by a recent survey, suggests that snail-hosts of the parasite occur throughout the watersheds in the coastal region in and surrounding Durban.

The number and variety of those watersheds combine to prejudice the success of local treatment measures such as the application of copper sulphate to the margins of streams and pools, unless similar measures are uniformly carried out over an area at least five miles distant from the City Boundary, to link up with controlled areas in the City itself.

The difficulty and cost of carrying out such a programme of work would be prohibitive. It is agreed that better results would follow the provision of more swimming baths and paddling pools supplied with water from springs, bore-holes or other safe sources coupled with prohibition in regard to the use of infected streams and pools for such purposes.

Bilharzia control in the City thus links up with the programme of works for the establishment of swimming baths and paddling pools throughout the suburban districts.

Drainage and reclamation of low-lying and swampy areas, which are prosecuted in the City in connection with mosquito control and refuse disposal, contribute materially to the elimination of Bilharzia sources within the City itself.

#### IMMUNISATION :

Against Enteric or Typhoid Fever, Diphtheria, Whooping Cough and Smallpox. This free service continues to attract the attention of parents, but the drop in the total of complete immunisations against Diphtheria due to the fact that all school programmes have now been overtaken for the time being.

All Schools are, however, regularly visited to immunise new entrants, who have not previously been protected.

The allied sectional programme of collecting serum for the Vi-testing of food handlers, and convalescents from Typhoid fever, continues to be maintained.

The following table reflects the completed immunisations since the inception of the programme.

	EUROPEAN	COLOURED	NATIVE	ASIATIC	TOTAL
1944 ... ..	3,276	270	2,363	871	6,780
1945 ... ..	4,929	959	3,732	1,285	10,905
1946 ... ..	4,190	1,020	4,464	7,194	16,868
1947 ... ..	4,107	1,733	6,718	5,644	18,202
1948 ... ..	2,741	1,366	2,535	4,025	10,667

Individual immunisations for the year were as under :—

	European	Coloured	Native	Asiatic	Total
<b>Diphtheria :</b>					
Partial ... ..	2,442 (3,295)	1,177 (1,369)	1,806 (4,969)	3,789 (3,590)	9,214 (13,223)
Complete ... ..	1,690 (3,014)	1,206 (1,030)	1,261 (2,681)	3,232 (4,573)	7,389 (11,298)
<b>Whooping Cough :</b>					
Partial ... ..	1,584 (2,123)	272 (187)	78 (13)	372 (13)	2,306 (2,336)
Complete ... ..	931 (984)	128 (45)	16 (5)	435 (3)	1,510 (1,037)
<b>Enteric :</b>					
Partial ... ..	152 (111)	144 (916)	2,000 (5,054)	543 (1,604)	2,839 (7,685)
Complete ... ..	120 (109)	32 (658)	1,258 (4,032)	358 (1,068)	1,768 (5,867)
<b>Vi-Tests :</b>					
Positive ... ..	83 (65)	7 (170)	1,391 (1,469)	244 (197)	1,725 (1,901)
Reactors ... ..	2 (—)	— (10)	86 (19)	6 (1)	94 (30)
<b>Swabs taken ... ..</b>	201 (324)	19 (36)	87 (49)	67 (64)	374 (473)
<b>Vaccinations ... ..</b>	1,918 (2,213)	985 (303)	91,463 (11,512)	13,244 (2,387)	107,610 (16,415)

Notification rate for Diphtheria and Enteric per 1,000 of the population for the years 1943 to 1948.

	1943	1944	1945	1946	1947	1948
<b>Enteric :</b>						
European ... ..	·64	·34	·15	·14	·11	·06
Coloured ... ..	1·17	·34	·58	·68	1·98	·64
Native ... ..	2·13	1·49	·86	1·04	·99	·52
Asiatic ... ..	·75	·47	·28	·34	·57	·20
<b>Diphtheria :</b>						
European ... ..	2·77	3·84	2·33	1·23	1·23	·57
Coloured ... ..	2·81	8·44	4·01	1·66	2·26	·73
Native ... ..	·60	1·01	1·61	·59	1·00	·85
Asiatic ... ..	·16	·37	·37	·33	·39	·15



## WATER SUPPLY :

**Bacteriological.** The presence of high coliform counts in town water samples during the early part of the year caused the department considerable concern. Thorough investigation at that time showed that they were mainly due to intermediate types of *B. coli*, i.e., non-faecal and usually associated with faulty washers or corroded piping on private property.

At our request, the Government laboratory now performs the differential Coliform count as a routine. Three samples are taken each week from special washerless taps in the town while the fourth is recovered from the reservoir which serves them. In the event of a bad report it will henceforth be a much easier matter to determine the source of contamination.

**Chemical.** By and large, reports on the chemical analysis of Municipal water have been satisfactory but occasionally the Ammonia and Organic nitrogen contents have given rise to divergent opinions. It has been the practice to take samples for analysis from taps within the borough but on account of the vast reticulation of pipes it is not possible at any given time to determine the exact source of the specimen.

Accordingly, it has now been decided to test water as it leaves four reservoirs once monthly and in this way we shall, over a period of years, be able to build up a range of chemical normals for the different catchment areas. Once the range has been established it will be possible to recognise an abnormal result immediately, and, which is more important, be able to state which watershed is responsible.

An average of the Chemical analysis is as under (results expressed in parts of 100,000).

Colour ... ..	good	Sediment... ..	Nil
Turbidity ... ..	Nil	Reaction ... ..	0.060
Total Solids ... ..	8.880	Albuminoid Ammonia ... ..	0.005
Loss on ignition ... ..	1.840	Total hardness ... ..	3.120
Chlorine ... ..	2.130	Permanent hardness ... ..	1.430
Nitrates ... ..	0.024	Iron ... ..	trace
Nitrites ... ..	Nil	Poisonous metal ... ..	Nil

Four samples from various service points in the City are taken for analysis each week.

## NIGHTSOIL, ETC. (By courtesy of the City and Water Engineer) :

**Cemeteries.** The Municipal Cemeteries were properly conducted and maintained. Private cemeteries were regularly inspected and were generally found to be well conducted and maintained in good order.

**Interments.** There were 7,295 burials in Municipal cemeteries and 1,212 in private cemeteries. The total of 8,507 compares with 7,880 in the previous year.

**Cremations.** Cremations during the year totalled 669 of which 528 were European and 141 Asiatic. The total for the previous year was 507.

**Free Burials.** 206 Free burials consisting of 11 Europeans, 8 mixed, 2 Asiatics and 185 Natives, were carried out during the year as compared with a total of 206 for the previous year.

**Conservancy.** The number of pails in use at the end of the year was 13,009, being an increase of 945 over the previous year.

**Refuse Removal and Disposal.** The quantity of refuse removed during the year increased, and this is reflected in the total of 247,628½ cubic yards compared with 235,059 cubic yards removed during the previous year.

The disposal was carried out as in previous years, a small proportion by incineration at the Point Destructor and the remainder by tipping on low-lying and swampy areas such as Harris Park on the south bank of the Umbilo River, Brickhill Road, Brickfield Road and both banks of the Umgeni River.

Improved methods of fly control on Municipal Refuse Tips considerably reduced complaints during the year and the fly nuisance was negligible.

**Street Cleaning.** This service was carried out regularly and without interruption.

**Street Washing.** Experimental street washing on a small scale was undertaken towards the latter part of the year in the Central City and Beach areas and, in view of the excellent results obtained, it is intended to carry out large-scale operations when facilities become available.

**Dead Animals.** 483 Carcasses of dead animals were removed and disposed of during the year.

**Public Conveniences.** Conveniences are in course of construction at Montclair Sports Ground, Brighton Beach and Booth Road Bus Terminus, and these will soon be completed.

Public conveniences in the City, including those in public parks, etc., but excluding those on Government property at Railway Stations, are now 56 European and 57 non-European in number.

**Barracks Management (Magazine Barracks).** Routine measures of administration and control were carried out as in the past. Repairs and maintenance operations were carried out by the Construction and Water Divisions, and by the City Electrical Engineer's Department, throughout the year.

The construction of combination shower- and water-closets for each flat in the double-storey brick and hollow-block sections of the barracks is nearing completion.

**Drama Hall.** This building was constructed some nine years ago for the free use of residents of the Barracks. It was utilised during the year for various functions such as free bi-weekly cinema shows, Committee meetings, dramas, weddings, Health Department lectures, etc., and during the school term by the pupils of the Magazine Barracks Free School.

**Clinic.** Due to Health and Hygiene lectures given to the Barracks' residents, there were increased attendances at the Clinic during the year.

**Sports Ground.** The sports ground was improved during the year and was regularly used by the residents and their children for various sporting events.

**Meat Supplies.** The number of animals slaughtered during the year was as follows :—

	Bovines	Swine	Sheep and Goats
	73,989 (63,668)	46,330 (29,394)	123,391 (238,466)
Whole carcasses condemned :—			
	2,653 (2,657)	4,252 (2,536)	413 (950)
Portions of carcasses in lb. weight :—			
	300,564 (556,128)	117,545 (15,600)	171,436 (407,775)



## DAIRIES AND MILK :

Total number of dairy inspections .....	3,05
Letters and circulars sent to suppliers on various matters .....	4,012
Written notices sent out with instructions to remedy certain defects within a specified time .....	233
Personal notices given to remedy minor defects .....	464
Chemical tests : Total number tested .....	253
Number passed .....	246
Number failed .....	7
Bacterial tests "Plate Count" : Total No. tested .....	252
Total No. passed .....	74
Total No. failed .....	178
Biological tests for Tuberculosis : Total No. tested .....	99
Total No. positive .....	4
Total No. negative .....	95
Breed smear count or microscopic tests : Total No. tested .....	4,880
Mastitis test : Total No. tested .....	5,005
Sediment disc test : Total No. tested .....	1,749
Total No. clean .....	477
Total No. fair .....	610
Total No. dirty .....	662
Phosphatase test : Total No. tested .....	591
Total No. passed .....	577
Total No. failed .....	14

Grading of Milk. Working on a baseline of one million organisms per c.c. (Breed Count) and a Good : bad ratio of 2 : 1 as the standard set, the following results were obtained :—

## Milk from outside areas intended for pasteurisation :

Total No. of suppliers tested .....	1,320
Total No. of suppliers who passed grade .....	912 = 69%
Total No. of suppliers who failed grade .....	408 = 31%

## Milk after pasteurisation :

Total No. of suppliers tested .....	144
Total No. of suppliers who passed test .....	120 = 83%
Total No. of suppliers who failed test .....	24 = 17%

## VETERINARY SECTION :

**Breed Counts.** The Breed Smear test, used to ascertain the number of bacteria per c.c. of milk, has been regularly applied throughout the year to each supply reaching the depots. 1,000,000 organisms has been selected as a baseline between "good" and "bad" milks. Certain suppliers have provided consistently good milk, whilst others have had consistent failures, but on the whole the bacterial content appears to fluctuate with the seasons, poor results being obtained in summer—an average of 51% failures, and excellent ones in the cooler months—an average of under 20% failures.

**Mastitis.** In addition to applying a microscopical examination for Mastitis to individual milk samples, each supplier's bulk samples are now incubated for this test after plating for the Breed Count. An average of 29% positives has been found in these samples, which is a high incidence, considering these were not samples from individual cans, but pooled milk from the herd.

**Tuberculosis.** A dairy was found positive in October. The infected cows were traced by biological tests and this dairy now supplies milk for pasteurisation. Another dairy found positive in November has since gone out of business. In June, a third dairy was found to be positive. This dairy is supplying milk for pasteurisation, until the responsible cows have been traced.

**Clinical Inspections.** Clinical inspections were carried out on various herds, in and outside the Borough, and on up-country producers' animals, particularly for Mastitis, as well as for other diseases communicable to man.

**Milk Control.** The City Veterinary Medical Officer visited a number of producers in the districts of Richmond, Ixopo, Kokstad, Franklin, Creighton and Donnybrook for the purpose of Mastitis control, and general inspection and reported as follows :—

"The majority of producers in those areas have, for a long time, produced only industrial milk intended for condenseries and cheese factories situated in those areas. These factories did not require the milk to be produced in approved premises and, naturally, this led to the production of milk in most unorthodox ways and under most unhygienic conditions. Due to their close proximity to the factories, most of these producers did not trouble about cooling or sterilising facilities and these are to-day practically non-existent.

"In general, the position can be summarised as follows :—

"(a) **Milk Sheds.** Large, very old, dilapidated wood and iron structures; earthen floors with very primitive or no drainage system. Improper manure disposal. As most of the sheds have earthen floors, water cannot be used for flushing and only hard brooms are used causing the sheds and adjoining structures to become laden with manure particles and dust, and this is mostly responsible for the high bacterial content especially thermophiles in the pasteurised milk.

"(b) **Milk Rooms.** The standard of the majority can be regarded as fair and are kept clean.

"(c) **Cooling System.** Those, who supply direct to Durban depots, have efficient cooling systems in the form of immersion tanks mechanically cooled to  $\pm 37^{\circ}$ . However, it takes about 20 hours for the milk to reach Durban at about  $65^{\circ}$ - $70^{\circ}$  and, so if contaminated at source, such will cause spoilage for other supplies when bulked for processing. These producers supplying balancing stations have no cooling plants at all as this is carried out at the balancing stations.

"(d) **Sterilising Plants.** None at all. After sterilisation of cans at the depots and balancing stations, only hand-washing, using detergents, is carried out.

There are, of course, a few exceptions especially those producers who have been sending milk direct to Durban for a long time and whose premises, etc., compare very favourably with the structures as required by our By-laws.



"(e) **Mastitis.** The majority of herds are badly infected with this disease and, as pointed out many times previously, every endeavour should be made to control this insidious disease which renders milk of inferior quality. At Donnybrook, the position is as follows :—

"One producer has a well-equipped balancing-station and buys milk from about 50 producers in his vicinity. These supplies are delivered to his balancing station where immediate cooling is carried out and kept in refrigerated tanks, from which the milk is run into mobile insulated tankers at 37° and conveyed within a few hours to Durban when the temperature of the milk is still as low as 40°.

"The members of the Farmers' Association at Donnybrook feel that it is necessary for them to have a small mobile laboratory at that balancing station in which the individual supplies can be tested and, during my visit there, had requested me to explain what good purpose such a laboratory can serve.

"I explained to the Association that such a laboratory at the balancing station will serve the very useful purpose of (a) testing all producers' incoming milk for keeping quality (Breed Smear Count) ; (b) testing individual cows in all the herds for Mastitis.

"The members all seemed very anxious to progress in this direction and, from discussions which took place, they are prepared to spend a few hundred pounds for the erection of such a laboratory and employing a trained technician.

"If this is undertaken, it is a step in the right direction and other balancing stations will follow suit.

#### SUGGESTIONS :

"(i) **General.** Basic hygienic improvements. All stables with earthen floors be fitted with concrete floors with suitable gutters for drainage of fluid waste. A plentiful water supply (all these producers have strong water supplies) be laid on so that stables can be thoroughly flushed out. Other improvements can be carried out in slow stages.

"(ii) **Mastitis.** The erection of a small mobile laboratory by the Donnybrook Farmers' Association be encouraged and a learner Technician be appointed who can spend some time in this laboratory to become au fait with the various tests concerned whereafter the Mastitis control can be carried out in close collaboration with and under the direction of the City Veterinary Medical Officer of this Department."

#### BANG'S DISEASE :

A survey carried out by the City Veterinary Medical Officer disclosed the fact that Bang's Disease (Brucellosis in Man) was prevalent among town dairy herds to the extent of up to 30%.

The control of Bang's Disease in cattle essentially relates to the improvement of animal health which is (a) by statute, a function of the State and not of any local Authority ; and (b) already contemplated on a nationwide basis by the Government Departments of Agriculture and Health in collaboration.

Due recognition must be given to the economic pressures which have recently been operating in the dairy industry (particularly since the war) and which have so affected the cost-structure in local milk production as to compel all but four European "raw milk" dairymen to switch over to the pasteurised milk trade.

It is highly questionable whether, at this stage, an eradication policy could be recommended to the City Council on public health grounds because its effect would be to perpetuate the sale of a foodstuff which, despite the best possible precautions, carries an enhanced risk of communicable infection, particularly Typhoid, as compared with the alternative, pasteurised product. In the circumstances, Durban's milk policy should be dominated by the objective to ensure clean pasteurised milk which means concentrating available inspectional resources on "cleaning up" the farms which produce milk for pasteurisation. The achievement of this objective must be delayed if a considerable portion of those resources are to be diverted to "boost" the vending of a fractional (under 5%) supply of raw milk.

Furthermore, Council has approved the principle of inducing dairymen to transfer their herds out of town (where their persistence holds up the natural use of building land) into the country where feeding costs can be reduced and herds maintained on open range and free from the infections such as Bang's Disease, Tuberculosis and Mastitis, which attack artificially-fed and closely-herded dairy animals.

#### FOOD HYGIENE :

**Catering Trades.** The use of broken and damaged utensils in all branches of the catering trade has given rise to a certain amount of concern. Tests, so far carried out on various methods and materials for the cleansing and sterilising of kitchen utensils and crockery, indicate generally unsatisfactory standards of food utensil sanitation. A comprehensive programme of improvement is under consideration.

**Early Morning and Poultry Markets.** Arising out of the hygienic strictures passed by this Department on applications for licences by stall holders in the above markets, the City Council agreed to spend an amount of £18,250 on a progressive improvement programme whereby vermin-proof tables, washing facilities and drainage will be provided. An amount of £8,500 will be spent on progressive improvements of the Poultry Market.

**Grading of Fruit.** In the past years, a considerable quantity of fruit has been destroyed owing to "de-grading" by the Government Fruit Inspector. This year a different system was adopted enabling large quantities to become available for distribution. To quote an instance, of 66,004 boxes of grapes received at the City Market, over 16,000 were "de-graded" by the Government Fruit Inspector but, of these, only 411, i.e., 0.6% were finally condemned and destroyed by this Department as unfit for human consumption.

Under the system enforced by the Deciduous Fruit Board, all fruit regarded as "under grade" could not be sold, irrespective of whether the fruit was fit for human consumption or not, resulting in the loss of large quantities of reasonably sound fruit.

The new arrangement means that the Government Fruit Inspector is responsible merely for grading, whilst the question of whether the fruit is fit to be sold for human consumption remains to be decided by the City Health Department.

#### Condemnations : City Market :

Buck ... ..	Carcases ... ..	6	Green Beans ... ..	Pockets ... ..	66
Cabbages ... ..	Bags ... ..	47	Hare ... ..	...	1
Carrots ... ..	Pockets ... ..	30	Hams ... ..	...	6
Cream ... ..	Cartons ... ..	61	Lettuce ... ..	Bags ... ..	1
Ducks ... ..	Dressed ... ..	45	Marrow ... ..	Pockets ... ..	20
Eggs ... ..	Dozen ... ..	73	Onions ... ..	Bags ... ..	9
Fowls ... ..	Dressed ... ..	494	Potatoes ... ..	Bags ... ..	1
Fruit ... ..	Cases ... ..	17	Pigeons ... ..	...	15
Fruit ... ..	Trays ... ..	72	Sweet Potatoes ... ..	Pockets ... ..	18
Grapes ... ..	Boxes ... ..	419	Snoek ... ..	Lbs. ... ..	91
Giblets ... ..	Lots ... ..	10	Turkeys ... ..	Dressed ... ..	19
Guinea Fowl ... ..	...	19	Vegetables ... ..	Bags ... ..	2
Green Peas ... ..	Pockets ... ..	158	Venison ... ..	Lbs. ... ..	1,005



## Surrendered for Examination and Condemned as Unsound :

Antipaste ... ..	Jars ... ..	6	Marsh Mallows ... ..	Cartons ... ..	31
Asparagus ... ..	Tins ... ..	16	Mayonnaise ... ..	Bottles ... ..	12
Baby Food ... ..	Lbs. ... ..	10	Malt ... ..	Bag ... ..	1
Beans... ..	Lbs. ... ..	11	Mealie Meal ... ..	Packets ... ..	566
Beans... ..	Tins ... ..	47	Mealie Meal ... ..	Bags ... ..	11
Bicarbonate Soda ... ..	Cartons ... ..	1	Mealie Rice ... ..	Lbs. ... ..	149
Bran ... ..	Cartons ... ..	1	Mealie Rice ... ..	Bags... ..	8
Breakfast Food ... ..	Packets ... ..	171	Meal, Various ... ..	Tins... ..	2,497
Cake ... ..	Lbs. ... ..	8	Milk ... ..	Tins ... ..	1,546
Cheese ... ..	Lbs. ... ..	1	Millet Seed ... ..	Lbs. ... ..	205
Cherries ... ..	Tins ... ..	1,320	Mustard ... ..	Lbs. ... ..	8
Chocolate ... ..	Cartons ... ..	46	Onions ... ..	Lbs. ... ..	120
Corned Beef ... ..	Lbs. ... ..	50	Pancake Mixture ... ..	Packets ... ..	2
Corn Flakes ... ..	Cartons ... ..	55	Peas ... ..	Tins ... ..	18
Cocoa ... ..	Lbs. ... ..	37	Pea Flour ... ..	Tins ... ..	11
Coffee ... ..	Lbs. ... ..	14	Pickles ... ..	Jars ... ..	3,098
Crystallised Fruit ... ..	Cartons ... ..	43	Prunes ... ..	Lbs. ... ..	34
Cucumbers ... ..	Gallons ... ..	4	Raisins ... ..	Packets ... ..	32
Curry Powder ... ..	Lbs. ... ..	24	Rice ... ..	Lbs. ... ..	14
Dates... ..	Lbs. ... ..	6,365	Rusks ... ..	Lbs. ... ..	105
Dried Meat ... ..	Pockets ... ..	1	Sandwich Spread ... ..	Tins ... ..	39
Dripping ... ..	Lbs. ... ..	53	Salmon ... ..	Tins ... ..	540
Ducks ... ..	Dressed ... ..	6	Sardines ... ..	Tins ... ..	1,283
Epsom Salts ... ..	Boxes ... ..	7	Salt, Coarse ... ..	Bags ... ..	3
Fat ... ..	Lbs. ... ..	74	Samp ... ..	Bags ... ..	3
Fish ... ..	Tins ... ..	13,960	Sauerkraut ... ..	Gallons ... ..	4
Fish, Dried ... ..	Cartons ... ..	1	Sausages ... ..	Lbs. ... ..	43
Flour ... ..	Lbs. ... ..	10	Salad Dressing ... ..	Tins ... ..	37
Fowls ... ..	Dressed ... ..	298	Shortbread ... ..	Lbs. ... ..	26
Fruit Cocktails ... ..	Tins ... ..	21	Soup ... ..	Cubes ... ..	58
Fruit Chocolate ... ..	Boxes ... ..	18	Soupmix ... ..	Tins ... ..	7
Fruit, Dried ... ..	Lbs. ... ..	4,081	Snoek, Smoked ... ..	Lbs. ... ..	865
Fruit Rolls ... ..	Lbs. ... ..	105	Spaghetti ... ..	Cartons ... ..	4
Fruit ... ..	Tins ... ..	4,431	Sugar ... ..	Lbs. ... ..	6,232
Hams ... ..	Tins ... ..	5	Sweets ... ..	Lbs. ... ..	575
Ice Cream Mixture ... ..	Lbs. ... ..	55	Sweet Corn ... ..	Tins ... ..	291
Icing Sugar ... ..	Lbs. ... ..	53	Tea ... ..	1-lb. Packets ... ..	24
Jam ... ..	Tins ... ..	773	Tea ... ..	4-lb. Packets ... ..	83
Jam ... ..	50-lb. Tins ... ..	45	Tongues ... ..	Tins ... ..	2
Jelly Powder ... ..	Lbs. ... ..	32	Tomato Cocktails... ..	Tins ... ..	6
Laying Meal ... ..	Lbs. ... ..	155	Tomato Juice ... ..	Tins ... ..	184
Maize ... ..	Lbs. ... ..	2,229	Vegetables, Various ... ..	Tins ... ..	1,739
Maize Flour ... ..	Bags ... ..	8	Vermicelli ... ..	Packets ... ..	41
Maizeko ... ..	Cartons ... ..	5	Vikelp ... ..	Bottles ... ..	2
Macaroni ... ..	Cartons ... ..	5			

## SAMPLES OF FOODSTUFFS TAKEN (FOOD, DRUGS AND DISINFECTANTS ACT No. 13, of 1929) :

Article	No of Samples			Action Taken
	Total	Genuine	Deficient	
Milk ... ..	272	265	7	Prosecuted and fined £5, £5 £2, £3, £3 and £7 10s. 0d.
Ice Cream ... ..	23	21	2	Prosecuted and fined £10 and £10
Pies ... ..	1	1	—	
Cream ... ..	11	11	—	
Icing Sugar ... ..	1	1	—	
Tomato Ketchup ... ..	1	1	—	
Sausages ... ..	6	5	1	Prosecuted and fined £5.
Mealie Meal ... ..	1	1	—	
	316	306	10	

## FOOD POISONING :

Fourteen outbreaks of suspect food poisoning were notified to the Department during the present year. After investigation, it was concluded that whilst two were allergic reactions to mushrooms and crayfish respectively, five were constitutional disturbances unrelated to food-poisoning. One person, in this category, died but a post mortem failed to disclose a cause of death.

In the remaining seven outbreaks, the circumstances were as follows :—

(1). An employee at a local hotel, who suffered acute symptoms after eating an evening meal, suspected poisoning with criminal intent. No food or specimens were kept and he recovered within twenty-four hours, nevertheless the information was passed on to the C.I.D.

(2). Six members of a family suffered from gastro-enteritis after eating home-made cake. The father who had eaten no cake experienced no symptoms. One child had recently recovered from an external otitis but swabs did not reveal any Staphylococci. The cream-filling produced a heavy growth of Staphylococci on agar. It was surmised that the mother had conveyed infection to the cake-filling from the child's ear prior to resolution of the discharge.



(3). In midsummer, an adult suffered symptoms after eating meat sandwiches which had been kept in greaseproof paper for 18 hours. No part of the food was available for bacteriological examination. The sandwiches were probably contaminated during preparation and the long delay before consumption caused bacterial multiplication.

(4). Three members of a family of six became ill. The only foodstuff eaten exclusively by the sick persons was tinned beans. None were available for examination.

(5). Three persons in a family of five fell ill simultaneously. Cockroach powder was thickly strewn on a ledge overhanging the stove and despite failure to obtain specimens of vomitus, it was considered that the powder, which contained D.D.T., was the toxic agent.

(6). An elderly bachelor was taken ill with acute vomiting and diarrhoea. All cooking, dish-washing (when it was done) and food storage took place in a single room which was littered with tools, lumber, dirt and junk of every description. Such conditions were obviously conducive to food contamination.

(7). Three seamen who had eaten tinned caviare prior to arrival in port were all treated in hospital as cases of food-poisoning. The outbreak was investigated by the Port Health Authority.

Although none of the above outbreaks was serious, nearly all could have been prevented by hygienic handling and storage of perishable foods, especially in a sub-tropical climate.

In January, 1947, a large scale outbreak of arsenical poisoning occurred among Natives and Indians resident in and adjacent to the South Coast and Mayville areas of Durban. In the course of investigation, it was discovered that the first serious manifestation of this outbreak occurred some six weeks earlier, but the medical practitioner in attendance ascribed the condition to Polyneuritis. It is believed that if food-poisoning were made notifiable, practitioners would be more alert to the possibility that instances of multiple localised sickness, particularly among non-Europeans, was caused by food or drink poisoning. Later in the same year, numerous cases of poisoning, due to drink prepared in lead-coated containers, occurred among Natives in Durban. Although doubtless some of the early cases sought medical advice, the first intimation came from the general hospital where serious cases were admitted.

Delay in reporting cases of food and drink poisoning too often results in failure to secure remains of the food or drink partaken by the sufferers.

In the absence of an obligation to notify such cases under the Act, medical practitioners may be influenced merely to observe suspect cases of food and drink poisoning unless the circumstances are such as to warrant suspicion of criminal intent, whereupon the Police are informed. Hence many opportunities are lost to early and preventive public health intervention.

The idea that food and drink poisoning is mainly a matter for the police is obsolete as only a fractional proportion of cases are associated with criminal intent and, even where this element is present, early notification and intervention by the public health authority would assist rather than impede Police action.

The following are instances of food or drink poisoning in Durban and District over recent years :—

- 1937/48 : "Mystery Disease" : Toxic agent—Tri-ortho-cresol phosphate contained in cooking oil derived from drum contaminated by Apiol (68 persons).  
 1939 : Salmonella poisoning— not traced— suspected due to infected chicken eaten at a club luncheon (30 persons).  
 1941 : Staphylococcal poisoning— cream cake filling (60 persons).  
 1946 : Acute gastro-enteritis, ascribed to contaminated yellow mealie meal (Salmonellosis ?) imported from Argentine (Numerous Natives).  
 1947 : Arsenic poisoning due to contaminated salt (28 persons).  
 Poisoned brawn (Salmonellosis ?) (8 persons).  
 Lead poisoning due to drink made in lead-coated containers (Numerous Natives).  
 Arsenic in gelatine.  
 Arsenic in locust-bait bags used to dispatch vegetables, preventive action resulted in arrest of supplies and avoidance of poisoning.

#### ARSENIC IN GELATIN :

In October, 1947, an employee at an ex-Borough Jelly factory observed a foreign substance in a consignment of gelatin which had recently been landed at Durban. Chemical analysis revealed gross contamination with Arsenic, some samples showing 6.5% Lead Arsenate content.

The City and Union Health Departments investigated the matter and found that a large number of casks in this particular shipment were broken on delivery. As these had been off-loaded from a cargo ship alongside a consignment of Lead Arsenate, it was concluded that contamination had occurred at the docks. There was no Lead Arsenate on board the ship which brought the gelatin.

All broken casks of gelatin (involving 10,676 lbs.) were condemned as unfit for use in the preparation of foodstuffs. After sifting, the material was released by the Union Health Department, to a reputable firm which utilised it in the manufacture of hats and clothing. The balance of 22,119 lbs. contained in the unbroken casks was used in the preparation of edible jellies.

In view of the increasing frequency of food-poisoning, the Secretary for Health has been requested to declare food-poisoning a notifiable disease within the City of Durban, but with the proviso that the Local Authority would not be liable for the costs of hospitalisation.

Such a measure would result in timely investigation of outbreaks, examination of specimens (food, human discharges, etc.) and control of contaminated foodstuffs.

#### DRESSED POULTRY : CITY MARKET :

The numbers of dressed poultry condemned and destroyed over the last three years at the City Market are as follows :—

1945	...	...	...	...	771
1946	...	...	...	...	953
1947	...	...	...	...	950

Apart from the question of loss to the producer, the destruction of so much "first-class" protein foodstuff, particularly in times of meat scarcity, is a matter of concern to the consumer. Attempts to lessen the evil by better methods of packing and transport have hitherto proved unsuccessful. Assuming that transport services might improve in the future, there remains the likelihood of recurrent losses due to improper methods of packing and vagaries of climate.

A solution of this difficulty should be considered along the lines of :—

- amending the Abattoir By-laws with effect to prohibit the sale of dressed fowls in the City, excepting those which have been slaughtered and dressed in an approved abattoir and which bear a mark or stamp to indicate that they have been inspected by an approved veterinarian ; and
- extension and improvement of the present Poultry Killing Depot facilities at the City Market, including the provision of cold storage.



Proper public health control and inspection of poultry-killing becomes necessary in view of :—

(1). The liability of poultry to diseases, some of which are communicable to man whilst others render the carcass unfit for human consumption and which can be detected by skilled ante- or post-mortem inspection, e.g., Salmonellosis, Pullorum Disease, Psittacosis, Tuberculosis, Anthrax, Haemorrhagic Septicaemia, Pyaemia, Septicaemia, Infectious Bronchitis, Carcinoma, Leukaemia, Fowl Typhoid, Acute Enteritis, Peritonitis, Sarcomatosis, Saepingitis, Bruising, Tumours, etc. (Public Health Regulations re Poultry, U.S.A., 1928).

(2). The occurrence of those diseases among South African poultry.

(3). The growth of the poultry trade in Durban. In April last, almost 15,000 fowls (including ducks and turkeys) were handled at the Depot, and these are probably no more than one-sixth of the total number of dressed poultry passing into or through Durban cold storage; and

(4). The need for avoiding losses—through decomposition of dressed carcasses of poultry supplied from up-country.

That the subject is also a matter of interest to Government Departments appears from the following circular letter dated 10th May, 1947, received by me from the Secretary for Health :—

"I have to inform you that the Director of Veterinary Services has advised the Department that at a recent conference of senior veterinary officers of his Division, the question of the necessity for the introduction of regulations to govern the inspection of table poultry was discussed.

"This Department is aware that in larger towns the matter is controlled by Municipal by-laws, but a lot of poultry is slaughtered in smaller places and possibly in the rural areas for sale in the towns. This slaughtering is often done under very primitive conditions and there would appear to be need for controlling the matter by regulation.

"I shall be glad to be furnished with the views of your Council regarding the desirability of framing regulations under Section 115(g) of the Public Health Act No. 36 of 1919, to govern not only the inspection of poultry but also the conditions of slaughtering."

I doubt whether the Secretary for Health is correct in assuming that, in the larger towns, the matter, i.e., slaughter of poultry, is controlled by Municipal by-laws. In Durban, at any rate, there are no specific by-laws dealing with it and the only forms of control are (a) by-laws for the prevention of nuisance; and (b) by-laws re food inspection which are only applicable insofar as evidence of decomposition is concerned.

In the circumstances, I consider that it would be desirable for the Government to frame regulations under Section 115(g) of the Public Health Act No. 36 of 1919 to govern not only the inspection of poultry but also the conditions of slaughtering.

#### MATERNITY AND CHILD WELFARE :

The statistical report of the Family Health Service for 1947/48 reflects a further increase of the volume of work and, incidentally, in Infant and Maternal Mortality Rates. Most noticeable features are :—

- (a) An increase of 460 in the total number of registered births;
- (b) An increase of 3,648 in the number of attendances at all Clinics;
- (c) An increase in the Infantile Mortality Rate for all races;
- (d) An increase in the Maternal Mortality Rate for Europeans and Coloureds;
- (e) An increase in the number of cases of Ophthalmia Neonatorum from 126 (78 of which were Natives) to 173 (123 of which were Natives). Most Native babies were born in hospital. With the progressive improvement in prophylactic and curative drugs for Ophthalmia, it is somewhat difficult to account for this increase.

#### PERSONNEL : MEDICAL :

During the year, a second Clinical Medical Officer appointed from overseas stayed for only six months and left just when she was becoming familiar with the programme. Compared with Capetown, Durban's medical staff engaged on Family Health Services is most inadequate. In Capetown, there are 4 full-time Medical Officers and sufficient part-time Medical Officers to ensure the attendance of a Medical Officer at each clinic session. The populations of Capetown and Durban are almost equal in number.

#### NURSES :

There has been no increase in the number of Health Visitors although—as pointed out last year—the infant population has doubled since the present establishment was approved.

The total number of Health Visitors employed is less than half that employed in Capetown.

#### CLERICAL :

The clerical staff has not been increased. I have searched statistical and other annual records for something useful to comment upon but, on account of the relative inadequacy of the staff to undertake the basic programme, find myself unable to suggest any expansion on modern lines.

When re-organisation of the Family Health Service comes to be considered, possession by nurses of the Mothercraft Certificate for the purpose of carrying on the most important branch of Family Health—that of instructing individual mothers in the upbringing of their families—must be emphasised more especially in view of the shortage of doctors for them to consult when in difficulty. Reduction in the number of mothercraft-trained nurses proportionately to the number of births and the continued inadequacy of working premises have combined to embarrass the Family Health Service programme to the point of frustration.

A Family Health Service should be staffed by health specialists throughout and should operate in premises convenient to the local population requiring advice on family care, including infant feeding.

Although people have ready access to other departments for expert advice on the upbringing of the young of other animal species, facilities of the kind for their own families are seldom convenient or adequate.

It is impossible for two Clinical Medical Officers to see more than a fraction of the 109,000 people who attend the Clinic in one year. Therefore in the Municipal Clinic where expert advice should at all times be available, it is all the more necessary to recruit Health Visitors equipped with the Mothercraft qualification. The supply of Mothercraft-trained nurses, however, continues to be short, one result is that many people do not have the same confidence in the Child Health Clinic service as formerly. When they are not impressed by the advice given at overcrowded and understaffed Municipal clinics, they attend other Clinics set up by commercial firms and quite probably attend more than one of these.

The resulting confusion of advice is one of the evils which Child Health Clinics were originally organised to prevent.

With the clerical side of the service, similar difficulties prevail. During the year, clerical "time" was taken from normal duties to collect statistics for the purpose of applying for Government refund. The refund was obtained by the Municipality in respect of time spent by staff on clinical, but not home-visiting, duties.

It is unfortunate that no decision has yet been come to as to the future administration of Personal Health Services in Durban, whether by local or central Government. The present restrictions on the expansion of this important work here can only lead to a very large increase in remote costs—in health as well as cash.

Directors of Family Health Services today are only too well aware of present defects and deficiencies. With other thinking people, they realise that, historically, the world seems to be rounding what is known to Astrologers as a Cusp between two Ages, which would explain the present universal unrest that the passing era has been



characterised by gross materialism, that the coming Age will be more spiritual, that the watchword of the intervening period must be *Service*, and that while the next decade will give rise to many changes, the youth of the present time need help in matters of body, mind and spirit if world-wide peace rather than chaos is to reign in their time.

From this standpoint, they look round to see what is being done towards this end, and they see Family Health Services which deal with the body of the child albeit in a totally inadequate manner on account of reasons which have already been noted — but for the mind and spirit of the child what do they see? Even less.

Health Education for parenthood, supplemented by individual instruction at adequately staffed Child Health Clinics can be accepted as a solid foundation for any health scheme. To be effective, however, any such scheme must embrace many other allied activities and must give high priority to programmes of improvement in the human environment. But this is neither the time nor place to suggest ways and means for achieving a comprehensive scheme of health services.

Dr. K. McNeill now enters the last year of her long service with the Durban Municipality and, while preparing to pass into oblivion of retirement, she can only repeat the words of Cecil Rhodes when passing to a greater oblivion: "So much to do, so little done!"

	EUROPEAN CLINICS			NON-EUROPEAN CLINICS				GRAND TOTAL	
	Gale Street	Mobile Clinics	Total	Brook Street and Gale Street Centres and Mobile Clinics				1947-48	1946-47
				Coloured	Native	Asiatic	Total		
Total Number of Sessions	242	643	885	165	243	555	963	1,848	1,738
Total Sessions for Children	208	643	851	153	243	459	855	1,706	1,595
No. of ante-natal sessions	22	—	22	12	—	96	108	130	131
No. of post-natal sessions	12	—	12	—	—	—	12	12	12
Total Attendance at Clinics	*11,501	29,685	41,186	8,374	24,267	35,126	67,767	108,953	105,305
New cases out of above number	1,379	1,961	3,340	652	5,084	6,048	11,784	15,124	15,093
No. of Infants under 1 year attending clinic	779	1,393	2,172	754	2,556	1,627	4,937	7,109	6,467
Total attendance of Infants	5,930	13,159	19,089	3,142	10,656	10,329	24,127	43,216	41,124
No. of toddlers and pre-school children attending clinic	597	1,446	2,043	737	751	1,421	2,909	4,952	3,978
Total attendance of toddlers and pre-school children	2,121	9,907	12,028	3,025	3,363	11,200	17,588	29,616	29,664
No. of nursing mothers attending clinic	451	900	1,351	645	2,582	1,623	4,850	6,201	5,271
Total attendance of nursing mothers	3,195	6,458	9,653	2,149	10,258	10,565	22,972	32,625	30,692
No. of expectant mothers attending clinic	101	—	101	23	—	2,883	2,906	3,007	3,077
Total attendance of expectant mothers	157	—	157	34	—	3,232	3,266	3,423	3,688
No. of post-natal cases attending clinic	87	—	87	—	—	—	—	87	57
Total attendance of post-natal cases	98	—	98	—	—	—	—	98	140
No. of test feeds given	322	346	668	70	19	58	147	815	1,025
No. of mothers instructed in treatment of minor ailments	634	1,893	2,527	655	3,714	8,469	12,838	15,365	13,660
No. of health talks and demonstrations given	748	3,245	3,993	608	3,353	3,249	7,210	11,203	9,580

\* Of this figure 381 were children attended to at Nursery Schools and Homes for Protected Infants.

#### NUMBER OF CASES.

	European	Coloured	Native	Asiatic
Referred to Doctors	61	4	—	—
" " Hospital	33	30	468	607
" " Societies	6	4	1	22
Passed for Day Nursery	127	—	—	—

#### FOOD DISTRIBUTED.

	Gale Street and Mobile Clinics	Gale Street and Brook Street Centres and Mobile Clinics		
	Europeans	Coloured	Native	Asiatic
Number of cases receiving dried milk free	58	54	54	64
Amount of dried milk given free in lbs.	1,319	1,590	1,090	1,736
No. of cases receiving dried milk at cost and reduced prices	4	2	3	40
Amount of dried milk sold at cost and reduced prices in lbs.	48	8	61	1,303
Number of cases receiving cows' milk free	34	12	—	—
Amount of cows' milk given free in pints	11,153	4,444	—	—



## PHYSICAL CULTURE :

Physical Culture classes were held between 1st October and 31st December, 1947 :

Total No. of children attending	65
Total No. of attendances	209
Total No. of ante-natal cases attending	16
Total attendances of ante-natal cases	28

## SPECIMENS SENT FOR PATHOLOGICAL REPORT :

Total No. of stool specimens	518
Total No. of swabs	101

## EXAMINATION OF ENTRANTS TO SERVICE :

104 Female Entrants to the Municipal Service were medically examined.

## BIRTHS.

## Notifications :

	European	Coloured	Native	Asiatic	TOTAL	
					1947-48	1946-47
DURBAN	1,826	214	999	1,252	4,291	4,241
GREENWOOD PARK	278	17	205	441	941	881
SYDENHAM	39	105	261	772	1,177	1,118
MAYVILLE	51	80	1,050	941	2,122	1,993
UMHLATUZANA	171	14	171	241	597	520
SOUTH COAST JUNCTION	323	71	357	826	1,577	1,490
IMPORTED	2,688	501	3,043	4,473	10,705	10,243
	467	25	3,055	219	3,766	3,434
TOTAL	3,155	526	6,098	4,692	14,471	13,677

## Number of Illegitimate Births occurring among those notified :

	European	Coloured	Native	Asiatic	Total
DURBAN	27	47	662	20	756
GREENWOOD PARK	—	8	122	4	134
SYDENHAM	4	18	160	13	195
MAYVILLE	—	24	566	9	599
UMHLATUZANA	1	6	86	7	100
SOUTH COAST JUNCTION	2	7	185	21	215
IMPORTED	34	110	1,781	74	1,999
	3	11	1,402	8	1,424
TOTAL	37	121	3,183	82	3,423

## Stillbirths—Notifications :

	European	Coloured	Native	Asiatic	Total
DURBAN	32	9	76	35	152
GREENWOOD PARK	4	—	18	15	37
SYDENHAM	1	3	15	21	40
MAYVILLE	—	3	67	24	94
UMHLATUZANA	1	—	8	4	13
SOUTH COAST JUNCTION	8	1	39	35	83
IMPORTED	46	16	223	134	419
	6	1	181	10	198
TOTAL	52	17	404	144	617

## Number of Illegitimate Stillbirths occurring among those notified.

	European	Coloured	Native	Asiatic	Total
DURBAN	2	3	61	—	66
GREENWOOD PARK	—	—	11	—	11
SYDENHAM	—	1	11	—	12
MAYVILLE	—	2	58	—	60
UMHLATUZANA	—	—	5	—	5
SOUTH COAST JUNCTION	—	1	18	2	21
IMPORTED	2	7	164	2	175
	1	1	94	2	98
TOTAL	3	8	258	4	273



## Registrations :

	European	Coloured	Native	Asiatic	TOTAL	
					1947-48	1946-47
DURBAN ... ..	1,778	267	1,010	1,090	4,145	4,226
GREENWOOD PARK ... ..	264	20	201	576	1,061	1,004
SYDENHAM ... ..	42	110	240	957	1,349	1,331
MAYVILLE ... ..	46	82	1,096	995	2,219	2,173
UMHLATUZANA ... ..	152	22	181	298	653	663
SOUTH COAST JUNCTION ... ..	337	87	369	1,180	1,973	1,900
IMPORTED ... ..	2,619	588	3,097	5,096	11,400	11,297
	513	39	3,027	182	3,761	3,240
TOTAL ... ..	3,132	627	6,124	5,278	15,161	14,537

## Birth Rate (Rate per 1,000 of Population) :

	European	Coloured	Native	Asiatic	Total
1947-48 ... ..	20·45	53·50	28·29	42·45	30·93
1946-47 ... ..	22·01	54·07	26·71	42·96	31·09

## Number of Illegitimate Births occurring among those registered.

	European	Coloured	Native	Asiatic	Total
DURBAN ... ..	34	69	587	17	707
GREENWOOD PARK ... ..	2	6	98	11	117
SYDENHAM ... ..	1	23	134	18	176
MAYVILLE ... ..	1	27	534	16	578
UMHLATUZANA ... ..	1	6	78	3	88
SOUTH COAST JUNCTION ... ..	2	17	181	21	221
IMPORTED ... ..	41	148	1,612	86	1,887
	12	16	1,152	3	1,183
TOTAL ... ..	53	164	2,764	89	3,070

## Stillbirths—Registered :

	European	Coloured	Native	Asiatic	Total
DURBAN ... ..	28	11	89	40	168
GREENWOOD PARK ... ..	5	1	20	24	50
SYDENHAM ... ..	3	6	30	37	76
MAYVILLE ... ..	—	2	117	37	156
UMHLATUZANA ... ..	3	—	12	15	30
SOUTH COAST JUNCTION ... ..	4	4	44	70	122
IMPORTED ... ..	43	24	312	223	602
	5	2	220	10	237
TOTAL ... ..	48	26	532	233	839

## Number of Illegitimate Stillbirths occurring among those registered :

	European	Coloured	Native	Asiatic	Total
DURBAN ... ..	1	3	59	—	63
GREENWOOD PARK ... ..	—	—	11	1	12
SYDENHAM ... ..	—	1	17	—	18
MAYVILLE ... ..	—	1	55	—	56
UMHLATUZANA ... ..	—	—	8	—	8
SOUTH COAST JUNCTION ... ..	—	—	20	—	20
IMPORTED ... ..	1	5	170	1	177
	—	1	102	—	103
TOTAL ... ..	1	6	272	1	280



Stillbirth Rate or number of stillbirths per 1,000 live and stillbirths :

RACE	Number of Stillbirths	Number of Live Births	Total	Stillbirth Rate
EUROPEANS	43	2,619	2,662	16.1
COLOURED	24	588	612	39.2
NATIVES ...	312	3,097	3,409	91.4
ASIATICS ...	223	5,096	5,319	41.9

## INFANTILE DEATHS.

	European	Coloured	Native	Asiatic	Total
DURBAN ... ..	66	25	217	74	382
GREENWOOD PARK ... ..	3	4	57	57	121
SYDENHAM ... ..	—	6	83	96	185
MAYVILLE ... ..	1	8	466	95	570
UMHLATUZANA ... ..	3	2	81	27	113
SOUTH COAST JUNCTION ... ..	9	16	130	119	274
IMPORTED ... ..	82	61	1,034	468	1,645
	13	9	558	25	605
TOTAL ... ..	95	70	1,592	493	2,250

Infantile Mortality Rate or number of infant deaths per 1,000 live births :

RACE	NUMBER OF DEATHS			NUMBER OF LIVE BIRTHS			MORTALITY RATE	
	Male	Female	Total	Male	Female	Total	1947-48	1946-47
EUROPEAN...	50	32	82	1,341	1,278	2,619	31.3	26.8
COLOURED...	37	24	61	292	296	588	103.7	80.1
NATIVE...	549	485	1,034	1,548	1,549	3,097	333.8	320.5
ASIATIC ...	259	209	468	2,582	2,514	5,096	91.8	80.2

Number of Infants who died who had previously attended clinic or had been visited by a health visitor :—

European	Coloured	Native	Asiatic
3	1	4	21

ATTENDED ONLY				HEALTH VISITED ONLY				HEALTH VISITED AND ATTENDED			
Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic
2	1	3	15	—	—	—	1	1	—	1	5

## CAUSES OF INFANTILE DEATHS :

EUROPEANS :

CAUSES	WEEKS			MONTHS			TOTAL
	0—1	1—2	2—4	1—3	3—6	6—12	
Prematurity ... ..	31	4	—	—	—	—	35
Intra-cranial Haemorrhage ... ..	6	—	—	—	—	—	6
Congenital Malformations ... ..	3	4	1	1	—	3	12
Congenital Atelectasis ... ..	6	—	—	—	—	—	6
Gastro Enteritis ... ..	—	3	1	—	3	1	8
Bacillary Dysentery ... ..	—	—	—	1	—	—	1
Malnutrition ... ..	—	—	—	1	—	—	1
Broncho Pneumonia ... ..	—	1	2	1	1	—	5
Lobar Pneumonia ... ..	—	—	—	1	—	—	1
Status Epilepticus ... ..	—	—	—	—	—	1	1
Hepatitis ... ..	—	—	1	—	—	—	1
Acute Dermatitis ... ..	—	—	—	1	—	—	1
Acute Septicaemia ... ..	—	—	—	1	—	—	1
Other diseases peculiar to infancy ... ..	3	—	—	—	—	—	3
TOTAL ... ..	49	12	5	7	4	5	82



## COLOURED :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity ... ..	10	—	1	—	—	—	11
Intra-cranial Haemorrhage ... ..	2	—	—	—	—	—	2
Other Birth Injuries ... ..	1	—	—	—	—	—	1
Congenital Debility ... ..	1	1	—	—	—	—	2
Tetanus Neonatorum ... ..	1	—	—	—	—	—	1
Gastro Enteritis ... ..	—	—	—	1	3	3	7
Malnutrition ... ..	—	—	—	—	1	—	1
Bronchitis ... ..	1	—	—	—	1	1	3
Broncho Pneumonia ... ..	3	2	—	3	6	3	17
Post-operative Broncho Pneumonia ... ..	—	—	—	—	—	1	1
Lobar Pneumonia ... ..	—	—	—	—	1	—	1
Laryngitis ... ..	—	—	—	—	1	—	1
Asthma ... ..	—	—	—	—	—	1	1
Pulmonary Tuberculosis ... ..	—	—	—	—	—	1	1
Tubercular Peritonitis ... ..	—	—	—	—	—	1	1
Congenital Syphilis ... ..	—	1	—	—	—	—	1
Meningitis ... ..	—	—	1	—	—	—	1
Nephritis ... ..	—	—	—	1	—	—	1
Circulatory Failure ... ..	1	—	—	—	—	—	1
Peritonitis ... ..	—	1	—	—	—	—	1
Natural Causes ... ..	—	1	—	—	—	2	3
Other diseases peculiar to infancy ... ..	1	1	—	—	—	—	2
TOTAL ... ..	21	7	2	5	13	13	61

## NATIVES :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity ... ..	106	14	4	4	1	—	129
Intra-cranial Haemorrhage ... ..	27	1	—	—	—	—	28
Other Birth Injuries ... ..	3	—	—	—	—	—	3
Congenital Malformation ... ..	5	—	—	1	—	—	6
Congenital Atelectasis ... ..	10	—	—	—	—	—	10
Tetanus Neonatorum ... ..	—	—	2	—	—	—	2
Malena Neonatorum ... ..	1	—	—	—	—	—	1
Haemolytic Blood Disease ... ..	1	—	—	—	1	—	2
Congenital Debility ... ..	37	15	6	13	3	4	78
Gastro Enteritis ... ..	5	31	15	71	71	106	299
Amoebic Dysentery ... ..	—	—	—	—	2	—	2
Helminths ... ..	—	—	—	—	—	1	1
Peritonitis ... ..	—	—	—	—	—	1	1
Fatty Degeneration of Liver ... ..	—	—	—	—	1	1	2
Malnutrition ... ..	—	5	2	10	10	15	42
Nutritional Oedema ... ..	—	—	—	2	—	1	3
Fatty Degeneration of Liver ... ..	—	—	—	—	1	1	2
Malnutrition ... ..	—	5	2	10	10	15	42
Nutritional Oedema ... ..	—	—	—	2	—	2	3
Marasmus ... ..	—	—	—	1	—	—	1
Pellagra ... ..	—	—	—	1	1	2	4
Rickets ... ..	—	—	—	—	—	1	1
Bronchitis ... ..	—	—	—	2	—	—	2
Broncho Pneumonia ... ..	12	34	22	60	58	71	257
Lobar Pneumonia ... ..	1	—	—	5	6	9	21
Pleurisy ... ..	—	—	—	—	1	1	2
Abscess of Lung ... ..	1	—	—	—	—	1	2
Empyema ... ..	—	—	—	—	—	1	1
Diseases of Pharynx and Tonsils ... ..	—	—	—	—	—	1	1
Asthma ... ..	—	—	—	—	1	—	1
Influenza ... ..	—	—	—	3	—	20	23
Pulmonary Tuberculosis ... ..	—	—	—	—	2	10	12
Miliary Tuberculosis ... ..	—	—	—	2	—	8	10
Tuberculous Meningitis ... ..	—	—	—	1	—	—	1
Meningitis ... ..	—	—	—	1	1	4	6
Syphilis ... ..	—	—	—	1	—	—	1
Congenital Syphilis ... ..	9	1	1	5	4	2	22
Hydrocephalus ... ..	—	—	—	—	—	1	1
Diphtheria ... ..	—	—	—	—	1	1	2
Convulsions ... ..	—	—	—	—	—	1	1
Exfoliative Dermatitis ... ..	—	—	—	1	—	—	1
Nephritis ... ..	—	—	—	—	1	1	2
Pyelitis ... ..	—	1	—	—	—	1	2
Anuria ... ..	—	—	1	—	—	—	1
Mitral Stenosis ... ..	—	—	—	—	1	—	1
Anaemia of Unknown Origin ... ..	—	1	—	—	—	—	1
Status Lymphaticus ... ..	—	—	—	1	1	—	1
Other Diseases of Circulatory System ... ..	—	—	—	—	—	—	—
Cellulitis ... ..	1	1	—	—	—	—	2
Prolonged Labour ... ..	1	—	—	—	—	—	1
Exposure ... ..	1	—	—	—	—	—	1
Accidental Burns ... ..	—	—	—	—	—	1	1
Natural Causes ... ..	1	1	—	—	1	3	6
Other diseases peculiar to infancy ... ..	17	9	3	1	—	—	30
Unknown Causes ... ..	2	—	—	—	—	—	2
TOTAL ... ..	241	114	56	186	168	268	1,034



## ASIATICS :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity ... ..	57	11	6	—	2	1	77
Intra-cranial Haemorrhage ... ..	10	3	—	—	—	1	14
Other Birth Injuries ... ..	1	—	—	—	—	—	1
Congenital Malformations ... ..	4	—	—	—	1	—	5
Congenital Atelectasis ... ..	15	—	—	5	1	1	22
Congenital Debility ... ..	19	3	8	4	—	—	34
Tetanus Neonatorum ... ..	—	1	—	—	—	—	1
Intoxication due to Maternal Toxaemia	1	—	—	—	—	—	1
Gastro Enteritis ... ..	2	3	4	21	27	34	91
Dysentery (unspecified) ... ..	—	—	—	1	—	—	1
Malnutrition ... ..	1	2	6	10	3	9	31
Pellagra ... ..	—	—	—	—	—	1	1
Rickets ... ..	—	—	—	—	2	—	2
Bronchitis ... ..	2	—	6	18	—	7	33
Broncho Pneumonia ... ..	7	4	7	33	19	20	90
Lobar Pneumonia ... ..	—	2	—	4	6	10	22
Pleurisy ... ..	—	—	—	—	2	—	2
Whooping Cough ... ..	—	—	—	3	1	2	6
Asthma ... ..	—	—	—	—	—	1	1
Coryza ... ..	1	—	—	—	—	—	1
Tuberculous Meningitis ... ..	—	—	—	2	—	—	2
Meningitis ... ..	—	—	—	1	—	—	1
Nephritis ... ..	—	—	—	2	—	2	4
Mitral Stenosis ... ..	—	1	—	—	1	—	2
Congenital Syphilis ... ..	—	—	1	—	—	—	1
Chicken Pox ... ..	—	—	—	—	—	1	1
Septicaemia ... ..	—	—	—	—	—	2	2
Pyrexia ... ..	—	—	—	—	1	—	1
Jaundice ... ..	—	—	—	1	—	—	1
Convulsions ... ..	—	1	—	2	2	3	8
Natural Causes ... ..	3	—	—	2	—	3	8
Ill-defined Causes ... ..	1	—	—	—	—	—	1
	124	31	38	109	68	98	468

## FEEDING OF INFANTS WHO DIED FROM :

## ENTERITIS :

	European	Coloured	Native	Asiatic	Total
Breast Fed ... ..	3	2	4	9	18
Breast Fed and Dried Milk ... ..	1	2	5	5	13
Breast Fed and Cow's Milk ... ..	1	—	—	1	2
Breast Fed and Sweetened Condensed Milk	—	—	1	4	5
Breast Fed, Dried Milk and Cow's Milk ...	1	—	—	—	1
Breast Fed, Cereal and Cow's Milk ... ..	—	—	—	2	2
Breast Fed and Extras ... ..	—	—	—	1	1
Cow's Milk ... ..	—	—	1	1	2
Cow's Milk and Cereal ... ..	—	—	—	3	3
Cow's Milk and Sweetened Condensed Milk	—	—	—	1	1
Dried Milk ... ..	—	—	4	5	9
Dried Milk and Extras ... ..	—	—	—	1	1
Sweetened Condensed Milk ... ..	—	—	1	—	1
Cereal ... ..	—	—	—	1	1
Unable to trace ... ..	2	3	283	57	345
TOTAL ... ..	8	7	299	91	405

## MATERNAL MORTALITY :

	Number of Registered Deaths from Causes Due to Childbirth	Number of Births			Death Rate Calculated on Live Births	Death Rate Calculated on Live and Stillbirths	
		Live	Still	Total		1947-48	1946-47
Europeans ... ..	7	2,619	43	2,662	2.6	2.6	3.5
Coloureds ... ..	2	588	24	612	3.4	3.2	1.7
Natives ... ..	14	3,097	312	3,409	4.5	4.1	4.6
Asiatics ... ..	21	5,096	223	5,319	4.1	3.9	4.3



## Maternal Deaths attended by :

	European	Coloured	Native	Asiatic	Total
Doctor ... ..	5	—	—	6	11
Midwife ... ..	—	—	—	3	3
No midwife or doctor ... ..	—	1	1	4	6
Hospital or nursing home ... ..	2	1	10*(2)	4	17*(2)
No particulars ... ..	—	—	3	4	7
<b>TOTAL ... ..</b>	<b>7</b>	<b>2</b>	<b>14*(2)</b>	<b>21</b>	<b>44*(2)</b>

\* ( ) = Maternal Deaths not registered.

## Causes of Maternal Deaths :

	European	Coloured	Native	Asiatic	Total
Puerperal Sepsis ... ..	—	—	1*(1)	3	4*(1)
Toxaemia of Pregnancy ... ..	—	1	1	1	3
Eclampsia ... ..	4	—	1*(1)	5	10*(1)
Ectopic Gestation ... ..	—	—	2	—	2
Ante-partum Haemorrhage ... ..	—	—	—	5	5
Placenta Praevia ... ..	—	—	1	—	1
Post-partum Haemorrhage ... ..	—	—	—	3	3
Retained Placenta ... ..	—	1	—	—	1
Prolonged Labour ... ..	—	—	—	1	1
Obstructed Labour ... ..	—	—	1	—	1
Ruptured Uterus ... ..	—	—	4	—	4
Caesarian Section ... ..	1	—	3	—	4
Pulmonary Embolism ... ..	—	—	—	1	1
Abortion ... ..	2	—	—	1	3
Diabetes ... ..	—	—	—	1	1
<b>TOTAL ... ..</b>	<b>7</b>	<b>2</b>	<b>14*(2)</b>	<b>21</b>	<b>44*(2)</b>

\*( ) = Maternal Deaths not registered.

## SUPERVISION OF MIDWIVES :

## Midwives :

	European	Coloured	Native	Asiatic	Total
No. of trained midwives practising in Durban ...	15	2	—	—	17
No. of trained midwives who have ceased to practice in Durban ... ..	2	1	—	—	3
No. of untrained midwives practising in Durban ...	6	2	—	129	138
No. of untrained midwives deceased ... ..	—	—	—	3	3
No. of women practising midwifery who have been warned not to do so unless they apply to have their names put on the List ... ..	—	—	1	9	10

## Supervision of Midwives :

	European	Coloured	Native	Asiatic	Total
No. of midwives' appliances examined ... ..	72	32	—	1,165	1,269
No. of midwives' bags replenished ... ..	—	26	—	1,955	1,981
No. of midwives' dressings sterilised ... ..	—	34	—	2,645	2,679
No. of midwives' dressings sterilised after septic cases ... ..	—	—	—	14	14
No. of visits to midwives at their homes or at patients' houses ... ..	18	7	2	86	113

Certificated practising midwives' registers are examined every three months and their appliances every six months.

Uncertificated practising European and Coloured midwives' appliances and registers are examined every three months.

Uncertificated practising Native and Indian midwives' appliances are examined every month.

## Inspection of Registers of Nursing Homes and Lying-in-Homes :

	European	Coloured	Native	Asiatic	Total
No. of homes ... ..	13	—	2	1	16
No. of times visited ... ..	54	—	8	4	66



## Ante-natal Work :

	European	Coloured	Native	Asiatic	Total
No. of expectant mothers attending clinic ... ..	101	23	—	2,883	3,007
Total attendances ... ..	157	34	—	3,232	3,423
No. of ante-natal sessions ... ..	22	12	—	96	130
No. of ante-natal visits ... ..	255	19	444	1,692	2,410
No. of post-natal visits ... ..	4	10	2	31	47
<b>Other Visits :</b>					
No. of cases of Puerperal Sepsis ... ..	1	2	6	7	16
No. of visits to cases of Puerperal Sepsis ... ..	1	2	6	7	16
No. of maternal deaths ... ..	7	2	14	21	44
No. of visits to maternal deaths ... ..	11	4	14	21	50
No. of cases of Ophthalmia Neonatorum ... ..	21	3	123	26	173
No. of visits to cases of Ophthalmia Neonatorum ... ..	51	5	228	64	348
No. of Stillbirths ... ..	9	7	185	138	339
No. of visits in connection with Stillbirths ... ..	9	7	166	123	305
Other visits ... ..	42	—	—	8	50

## Tuition :

	European	Coloured	Native	Asiatic	Total
No. of lectures and demonstrations to untrained midwives ... ..	—	—	—	13	13
No. of times Maternity Film shown to Ambulance Men and Midwives ... ..	2	—	—	3	5
No. of lectures to Ambulance Men ... ..	2	—	—	—	2
No. of untrained midwives attending classes ... ..	—	—	—	14	14

## Ophthalmia Neonatorum :

Confinements attended by	European	Coloured	Native	Asiatic	Total
Hospital or Nursing Home ... ..	16	1	91	1	109
Doctor at home ... ..	1	—	—	—	1
Midwife at home ... ..	4	2	5	22	33
No. skilled attention ... ..	—	—	22	3	25
Insufficient address ... ..	—	—	5	—	5
<b>TOTAL</b>	<b>21</b>	<b>3</b>	<b>123</b>	<b>26</b>	<b>173</b>

## Causes of Disease :

	European	Coloured	Native	Asiatic	Total
Symptoms indicating maternal venereal disease	4	2	91	12	109
Other causes ... ..	17	1	32	14	64
	21	3	123	26	173
Referred to own doctor and hospital ... ..	3	1	12	7	23
Already under hospital treatment ... ..	2	1	22	3	28
Treated by Clinic ... ..	16	1	89	16	122
	21	3	123	26	173

## Ophthalmia Neonatorum Rate or number of cases of Ophthalmia Neonatorum per 1,000 live births :

	Number of Cases of Ophthalmia Neonatorum	Number of Live Births	Rate Calculated on Live Births
European ... ..	21	2,619	8.01
Coloured ... ..	3	588	5.1
Native ... ..	123	3,097	39.7
Asiatics ... ..	26	5,096	5.1



## IMMUNISATION :

	European	Coloured	Native	Asiatic	Total
No. of cases immunised against Diphtheria ...	2,096	2,135	3,025	5,993	13,249
Completed the course ... ..	901	1,081	1,232	2,778	5,992
No. of cases immunised against Whooping Cough	162	7	101	—	270
Completed the course ... ..	57	1	2	—	60
No. of cases immunised against Whooping Cough and Diphtheria ... ..	2,305	382	42	1,742	4,471
Completed the course ... ..	789	123	5	432	1,349
No. of cases immunised against Typhoid, General	329	205	3,708	1,085	5,327
Completed the course ... ..	166	41	1,301	392	1,900
No. of Food Handlers immunised against Typhoid	78	6	1,496	250	1,830
No. of cases vaccinated against Smallpox... ..	1,739	788	9,564	12,030	24,121

## HEALTH VISITORS' WORK.

## Infants Under 1 Year :

	European	Coloured	Native	Asiatic	Total
First visits—Feeding { Breast ... ..	1,175	327	3,401	3,100	8,003
Mixed ... ..	162	29	292	262	745
Artificial ... ..	325	21	80	209	635
TOTAL ... ..	1,662	377	3,773	3,571	9,383
Re-visits—Feeding { Breast ... ..	1,300	148	370	3,832	5,650
Mixed ... ..	1,012	130	648	2,764	4,554
Artificial ... ..	2,247	218	106	730	3,301
TOTAL ... ..	4,559	496	1,124	7,326	13,505

## Older Children :

	European	Coloured	Native	Asiatic	Total
First Visits ... ..	256	68	1,432	4,472	6,228
Re-visits ... ..	5,584	1,362	2,141	15,285	24,372
TOTAL ... ..	5,840	1,430	3,573	19,757	30,600
No. of above visits made to Protected Infants... ..	166	77	—	—	243

## Other Visits :

	European	Coloured	Native	Asiatic	Total
Infant Deaths ... ..	18	8	46	93	165
Infectious Diseases or Contacts ... ..	6	1	—	—	6
Reports on Insanitary Conditions ... ..	26	1	—	6	33
No. of visits to Nursery Schools and Homes for Protected Infants ... ..	34	—	42	15	91
TOTAL ... ..	83	10	88	114	295

## Lectures and Demonstrations :

	European	Coloured	Native	Asiatic	Total
Lectures and Demonstrations to Expectant Mothers	39	—	—	—	39
Lectures and Demonstrations to Students ... ..	380	—	—	—	380
TOTAL ... ..	419	—	—	—	419



## Students :

	European	Coloured	Native	Asiatic	Total
University Students ... ..	6	—	—	—	6
Health Visitor Students ... ..	8	—	—	—	8
Domestic Science Students ... ..	8	—	—	—	8
<b>TOTAL</b>	<b>22</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>22</b>

	European	Coloured	Native	Asiatic	Total
No. of Infants under 1 year Visited ... ..	2,142	460	4,354	4,476	11,432

## TOTAL VISITS :

First Visits—Infants ... ..	9,383
Re-visits—Infants ... ..	13,505
Older Children ... ..	30,600
Other visits ... ..	295
	<u>53,783</u>

## DENTAL CARIES :

	European	Coloured	Native	Asiatic	Total
No. of children found to be suffering from Dental Caries ... ..	106	8	42	55	211
No. of cases of Dental Caries which received attention ... ..	51	7	14	18	90

## DETAILS OF PATHOLOGICAL SPECIMENS :

	European	Coloured	Native	Asiatic	Total
<b>STOOL SPECIMENS :</b>					
Total No. of Stool examinations ... ..	363	52	61	42	518
Negative Results ... ..	211	23	21	9	264
<b>POSITIVE RESULTS :</b>					
Tape Worm Ova ... ..	—	1	1	—	2
Referred to own doctor or hospital ... ..	—	1	1	—	—
Round Worm (Ascaris) ... ..	42	10	17	25	94
Treated at Clinic ... ..	39	10	17	24	—
Referred to own doctor or hospital ... ..	3	—	—	1	—
Trichuris Trichiuris Ova (Whipworm) ... ..	10	3	7	2	22
Referred to own doctor or hospital ... ..	10	3	7	2	—
Entamoeba Histolytica ... ..	18	5	6	3	32
Notified and referred to own doctor or hospital ... ..	18	5	6	3	—
Entamoeba Coli Cysts ... ..	18	1	4	1	24
Referred to own doctor or hospital ... ..	18	1	4	1	—
Degenerative Amoeba (indeterminate Type) ... ..	8	—	—	—	8
Referred to own doctor or hospital ... ..	8	—	—	—	—
Giardia Lamblia Cysts ... ..	31	5	3	1	40
Referred to own doctor or hospital ... ..	31	5	3	1	—
Other Intestinal Flagellates ... ..	8	—	—	—	8
Referred to own doctor or hospital ... ..	8	—	—	—	—
<b>MULTIPLE INFECTIONS</b> ... ..	<b>17</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>24</b>
<b>SWABS :</b>					
Total No. of Swabs ... ..	30	10	36	25	101
Throat Swabs ... ..	4	2	1	5	12
Nasal Swabs ... ..	5	—	—	—	5
Aural Swabs ... ..	17	8	30	19	74
Vaginal Swabs ... ..	1	—	—	—	1
Eye Swabs ... ..	3	—	5	1	9
<b>RESULTS :</b>					
Positive ... ..	8	3	9	1	21
Negative ... ..	22	7	27	24	80



## PROSECUTIONS :

The subjoined table sets out the record of prosecutions instituted by the Department :—

SECTION CONTRAVENED	Brought Forward	New Cases	Total	Guilty	Not Guilty	With-drawn	Pending	Fines
<b>Public Health By-Laws :</b>								£ s. d.
<b>Nuisances :</b>								
Unclean Yards and Drains ... ..	7	14	21	14	—	3	4	69 0 0
Unclean Premises (1) ... ..	2	14	16	13	2	1	—	68 0 0
Unclean Privies ... ..	—	9	9	7	—	2	—	40 0 0
Defective Drains ... ..	—	1	1	1	—	—	—	5 0 0
Defective Privies ... ..	—	1	1	1	—	—	—	5 0 0
Defective Dwellings ... ..	6	31	37	29	—	6	2	166 0 0
Sleeping in unauthorised places ... ..	1	7	8	6	1	—	1	28 0 0
Depositing refuse on vacant land ... ..	—	1	1	—	—	—	1	—
Unlawful keeping of pigs ... ..	1	1	2	—	1	—	1	—
<b>Abattoir By-Laws :</b>								
Illegal introduction of meat into Durban	1	1	2	2	—	—	—	20 0 0
<b>Hairdressers :</b>								
Failure to wear overalls ... ..	—	4	4	4	—	—	—	10 0 0
<b>Manufacture and Storage of Food :</b>								
Unhygienic food handling ... ..	—	11	11	7	—	—	4	34 10 0
<b>Dairies and Milk Depots :</b>								
Unclean premises ... ..	—	1	1	1	—	—	—	5 0 0
Trading without registration ... ..	2	4	6	5	—	—	1	23 0 0
Unhygienic handling ... ..	2	2	4	2	—	—	2	6 0 0
<b>Midwifery :</b>								
Practising without authority (2) ... ..	—	1	1	1	—	—	—	—
<b>Public Health Act :</b>								
Rodent Infestation Regulations ... ..	—	1	1	1	—	—	—	12 10 0
Fumigation Regulations ... ..	—	4	4	4	—	—	—	28 0 0
<b>Infectious Diseases :</b>								
Withholding information ... ..	—	1	1	1	—	—	—	10 0 0
<b>Slums Act :</b>								
Zonal Regulations ... ..	—	12	12	3	—	2	7	20 0 0
<b>Food and Drugs Act :</b>								
Milk below chemical standard ... ..	—	14	14	10	—	3	1	31 0 0
Ice Cream ... ..	—	4	4	4	—	—	—	40 0 0
Sausages unfit for consumption ... ..	—	1	1	1	—	—	—	5 0 0
<b>Malaria Regulations :</b>								
Mosquito development ... ..	—	1	1	1	—	—	—	5 0 0
<b>Building By-Laws :</b>								
Unauthorised housing ... ..	2	1	3	1	—	1	1	5 0 0
<b>TOTAL</b> ... ..	24	142	166	119	4	18	25	636 0 0
<b>PREVIOUS YEAR</b> ... ..	17	155	172	137	4	7	24	725 0 0

(1). Suspended. (2). Cautioned and Discharged.

## OTHER MATTERS OF HEALTH AND SANITATION :

## Inspections by Health Inspectors :

Hotels, boarding and lodging houses ... ..	4,905	(4,484)
Restaurants, tea rooms and eating houses ... ..	3,003	(2,771)
Bakeries ... ..	60	(77)
Butcheries ... ..	803	(1,110)
Dairies and Milk Depots ... ..	3,041	(1,019)
Laundries ... ..	386	(404)
Markets ... ..	433	(317)
Offensive trades ... ..	97	(115)
General ... ..	36,599	(33,706)
European Health Assistants ... ..	16,173	(23,548)
Native Health Assistants ... ..	13,278	(17,610)
	<u>78,778</u>	<u>(85,161)</u>
Complaints received and investigated ... ..	2,851	(2,613)
Notices issued : Personal ... ..	4,427	(2,841)
Written ... ..	5,304	(4,849)
Reports on applications for licenses ... ..	12,843	(12,963)
	<u>25,425</u>	<u>(23,266)</u>



#### CAFES-DE-MOVE-ON :

For many years, the City Council has permitted several "cafe-de-move-on" businesses to operate in the City. Although this Department has always been opposed to such forms of trading, the licenses concerned have been regarded as personal to the present holders, and consequently, in the absence of any new licences, cafes-de-move-on would, in the course of time, tend to disappear.

A year or so ago, in an endeavour to secure hygienic improvement of the existing concerns, the City Council approved a set of conditions governing their conduct.

On account of licensees' inability to comply for one reason or another, with the Council's requirements it has since been necessary to waive objection to the applications for renewal of licences.

Subsequent to the introduction of the new conditions, it has been noted that applications for permission to conduct cafes-de-move-on are being received somewhat frequently and, although these have, generally, been refused by the Council, it is considered that the time has arrived when a definite policy should be adopted which will have for its objective :—

- (a) "freezing" the position to the extent of refusing any application for a new cafe-de-move-on business in the City ; and
- (b) withdrawal of existing cafes-de-move-on licences within a defined period.

The matter is now receiving the consideration of the City Council.

#### SANITARY CONVENIENCES FOR NON-EUROPEAN DOMESTICS :

Provision of sanitary conveniences for non-European domestics accommodated on premises in the suburban areas wherein a pail removal service is now receiving attention and notices are being served on property owners to make the requisite provision.

In the past lack of removal services retarded the provision of additional latrine accommodation for domestics and, in the post-war period, even now, progress in this direction depends upon the supply of building materials and the expansion of removal services.

#### INTRODUCTION OF UNSTAMPED MEAT INTO THE CITY :

The general meat shortage has encouraged attempts to introduce into the City meat which has been prepared under unhygienic conditions and without submission of viscera for examination at the Municipal Abattoir. This illegal traffic in possibly contaminated and diseased meat is a matter of serious health concern. Traffickers are, for the most part, well skilled in concealing their operations and detection is therefore exceedingly difficult. Nevertheless, Health Inspectors have been on the watch and have taken prosecutions where conclusive evidence could be obtained.

#### UNAUTHORISED SCHOOLS :

Several unauthorised schools have been established by the non-European community recently and almost without exception, in buildings which are structurally unsuitable and lacking in water supply and sanitary facilities.

In addition to service of notices on the authors to abate sanitary nuisance, the existence of these unauthorised schools has been reported to the Chief Inspector of Indian Education, for necessary attention.

#### ANNUAL RENEWAL OF TRADING LICENCES :

Following upon a joint discussion between the Licensing and Health Department, an improved procedure has been evolved in connection with the renewal of trading licences, whereby the Health Department's work of sanitary assessment will be simplified and spread over a longer period. These arrangements will release staff conveniently for the correction of health nuisances at their peak during summer which also, heretofore, was the period of peak demand for licence assessments.

#### MOSQUITO NUISANCES :

Despite years of "propagandist" effort many occupiers of property remain negligent in observing the simple precautions necessary to obviate mosquito nuisances on their premises.

Failure to exercise routine supervision of premises is particularly noticeable when rains succeed prolonged dry spells. Gutters become choked with leaves ; tins and other water-retaining litter create ideal mosquito breeding conditions.

Effective control of mosquito nuisances in the built-up areas essentially depends on the whole-hearted co-operation of the public.

Unless occupiers see to it that breeding places are eliminated they must expect annoyance to themselves and to their neighbours.

In addition to investigation of complaints and enforcement of remedial measures, every effort is made by means of health educational propaganda to impress upon the public the need for constant vigilance to prevent the development of mosquito breeding places.

#### CONTROL OF JUNK YARDS :

Following upon promulgation of Ordinance No. 12 of 1945, consideration is at present being given to the advisability of introducing By-laws, empowering the City Council to control depositing and storage of disused vehicles or machinery and second-hand building materials upon premises in the City, in terms of Section 13 of the Ordinance.

Accumulation of junk is classifiable under two categories, viz. :—

- (a) Promiscuous dumping, resulting in creation of "eye-sores" but lacking in health hazards ; and



- (b) Organised collection and dealing, under authority of a trading licence.

Properly conducted and suitably sited junk yards are necessary to and inseparable from the growth and development of the City.

Apart from the aesthetic aspect, there are strong health objections to the indiscriminate location of organised junk yards throughout the City, principally on the grounds of rodent harbourage.

Consequently, it is considered that any legislation to control depositing and storing of disused vehicles or machinery and second-hand building materials should :—

- (a) specify that such activities should be restricted to zones approved for the purpose ; and  
(b) prohibit the depositing and storing of junk materials on premises without approved zones.

#### HYGIENE, SANITATION AND BUILDING PLANS :

There has been further increase in activity in regard to the Building Trade and the position is steadily improving. Plans received show an increase of 954 over the previous year and final approval was given in respect of 3,350 amounting to £5,731,643 as against £4,666,068, an increase of £1,065,575.

Co-operation with other officials and the public was maintained throughout the year.

The monthly and regional distribution was as under :—

MONTH	Old Borough	Green- wood Pk.	Syden- ham	Mayville	Umhla- tuzana	S.C. Junction	Total
<b>1947 :</b>							
July ... ..	70	66	20	31	14	32	233
August ... ..	62	62	31	26	24	64	269
September ... ..	94	74	48	47	29	66	358
October... ..	97	60	34	39	19	57	306
November ... ..	75	60	43	39	19	57	293
December ... ..	78	77	49	38	23	46	311
<b>1948 :</b>							
January ... ..	64	57	23	41	12	46	243
February ... ..	92	91	33	50	16	82	364
March ... ..	112	93	41	44	16	75	381
April ... ..	99	76	38	45	20	88	366
May ... ..	92	85	29	40	23	82	351
June ... ..	86	61	28	41	14	79	309
<b>TOTAL ... ..</b>	<b>1,021</b>	<b>862</b>	<b>417</b>	<b>481</b>	<b>229</b>	<b>774</b>	<b>3,784</b>



PLANS APPROVED FOR ALL BUILDINGS :

Month	DWELLINGS							FLATS				ADDITIONS TO DWELLINGS AND FLATS		STORES, SHOPS AND OFFICES		ADDITIONS TO STORES, SHOPS AND OFFICES		CLUBS, HALLS AND HOTELS		ADDITIONS TO CLUBS, HALLS AND HOTELS		TOTAL No. of PLANS	TOTAL ESTI-MATED COST		
	No. of Plans	Cost	2 Rms	3 Rms	4 Rms	5 Rms	6 & over	No. of Plans	Cost	1 Rm	2 Rms	3 Rms	4 Rms	No. of Plans	Cost	No. of Plans	Cost	No. of Plans	Cost	No. of Plans	Cost	No. of Plans	Cost	No. of Plans	Cost
1947 :	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	
July ...	78	178,674	3	5	24	41	5	5	94,160	—	62	9	—	92	18,162	7	65,385	35	24,119	2	31,800	5	1,305	224	413,605
August	100	198,528	14	17	25	38	6	2	31,637	—	48	—	2	124	17,262	21	134,313	43	18,755	2	3,679	2	490	294	404,664
Sept. ...	102	204,864	13	11	30	42	6	4	27,740	—	22	4	1	109	17,719	14	155,485	27	11,726	3	26,651	3	3,187	262	447,372
October ...	113	231,433	10	16	38	37	12	3	13,175	—	—	8	2	155	34,364	16	115,121	41	18,519	1	2,300	3	1,130	332	416,042
Nov. ...	89	180,967	12	8	22	38	9	2	29,000	—	18	—	—	94	18,342	10	116,029	25	8,371	1	16,265	6	6,726	227	375,700
Dec. ...	66	132,989	9	6	18	26	7	3	48,525	6	27	6	—	101	15,729	10	120,186	31	7,082	1	4,500	3	740	215	329,751
1948 :																									
Jan. ...	85	187,386	6	4	18	48	9	1	2,800	—	1	—	1	115	24,904	17	374,994	34	11,720	3	21,401	3	23,545	258	646,750
Feb. ...	95	216,670	5	4	34	42	10	1	26,500	2	—	16	—	142	27,646	7	87,648	22	9,050	3	5,812	6	3,004	276	376,330
March	123	472,877	15	6	93	93	15	7	149,710	4	69	22	6	143	28,863	13	63,582	45	12,964	—	—	3	3,750	334	731,746
April ...	137	296,581	10	11	39	64	13	6	31,808	1	9	10	1	158	41,622	20	144,941	47	36,218	—	—	9	4,797	377	555,967
May ...	107	238,562	6	10	34	51	6	1	78,320	30	20	—	—	112	23,893	20	185,611	40	28,574	1	42,118	5	13,685	286	610,763
June ...	116	272,431	7	11	34	54	10	1	39,750	—	12	12	—	91	19,571	24	71,309	28	8,659	3	7,465	2	3,768	265	422,953
TOTALS	1,211	£2,811,962	110	109	409	574	108	36	£573,125	43	288	87	13	1,436	£288,077	179	£1,634,604	418	£195,757	20	£161,991	50	£66,127	3,350	£5,731,643



## INDUSTRIAL HYGIENE :

All factories, large departmental stores, shops, restaurants and public conveniences were regularly visited and a close watch maintained on the accommodation provided for female employees. Managements generally have responded to any suggestions for improvements.

Police action against vagrant women, who frequent the public conveniences, has been the means of considerable improvement.

Assistance has also been given at film shows, lectures and talks and many industries have been contacted and demonstrations arranged. The larger hotels were also visited and food-handler talks arranged with the management.

In order to ascertain the most suitable subjects within the scope of Health Education, house-to-house visits were made to the Coloured community and programmes arranged accordingly.

Activities of the section are reflected as under :—

Visits and inspections	... ..	1,145
Visits to public conveniences	... ..	377
Visits to factories and shops	... ..	190
Visits to schools	... ..	26
Visits to hotels and boarding houses	... ..	60

## PUBLIC HEALTH EDUCATION :

### NEW FEATURES : EUROPEAN SCHOOLS :

For the first time, European school children received health film instruction. On two mornings, a centrally-situated playhouse, accommodating 1,270, was placed at the disposal of the Department free of charge. Disney Cartoon health films, together with documentary health films, were displayed. All schools with suitable assembly halls received demonstrations on their premises. Non-European school programmes have already been fully developed.

### LUNCH-HOUR SHOWS :

(a) **Europeans.** Short programmes for commercial groups were arranged from 1.10 p.m. to 1.50 p.m., in the Art Gallery and Caxton Hall. On each occasion, business houses were personally canvassed, resulting in excellent attendances.

(b) **Non-European.** Non-Europeans, other than those housed in industrial or Municipal compounds, could not attend evening film shows because of dispersing to out-lying homes. This difficulty was overcome by organising lunch-hour shows wherein managements invariably co-operated. There was some difficulty of improvising black-out for windows of all sizes. The programme presented two major themes — Tuberculosis and Venereal Diseases — sandwiched between Disney Cartoon health films. The shows were much appreciated.

(c) **Hotel non-European Personnel.** This group was not available either at night or during lunch-hours. Accordingly, arrangements were made for showing films during free afternoon periods. The venues were garages and this programme emphasised the necessity for personal hygiene in food-handling.

(d) A health film programme in the series of public addresses given by Departmental Heads was shown one evening in the Council Chamber to "capacity" seating. The City Medical Officer of Health gave a preliminary talk on the aims of Health Education, followed by Disney Health Cartoons and a film on Nutrition.

The attached statistics reflect the considerable expansion of the Section's activities and despite the temporary ban imposed for Poliomyelitis control.

### MASS X-RAY PROPAGANDA :

Talks on Tuberculosis X-ray and its implications supported by diagrams and films were given to prepare non-Europeans for the ordeal of X-raying by the Union Health Department's miniature mobile unit. The first preparatory talk was so successful that out of 1,500 Bantu, there was only one refusal. All such surveys are now preceded by similar shows put on by the City Health Educational Unit.

### KING GEORGE V TUBERCULOSIS HOSPITAL :

**Problem of Bantu Absconders.** Films and illustrated talks were given to ambulant Tuberculosis patients to deter them from absconding. The Bantu Lecturer also visited wards and gave instruction on the avoidance of infection. Visiting relatives were warned against influencing patients to abscond. These homilies were gratefully received by both patients and relatives and have now become part of the routine programme.

### LITERATURE :

An attractive original "Greeting Card to Mothers" added to the Section's library of health literature. It advises the mother that immunisation against Diphtheria is essential from the age of nine months onwards. Every notified European and Coloured birth is followed up with a greeting card.

No Zulu literature on the subject being obtainable in the Union, a suitable leaflet on "Bilharzia Control" was published for local needs.

### FILM LIBRARY :

Films have been imported from England, United States of America and Canada, including the complete "Disney" Health Series. Enquiries are addressed to health-film productions in all parts of the world, including India, in an endeavour to acquire an adequate film library.

The routine programme now includes :—

(a) **"Loudspeaker"** talks in Zulu, Hindustani and Tamil in every district given to industrial groups, domestic servants, queues at food depots, at all Municipal compounds, barracks and married quarters, industrial compounds and shack settlements — the latter receiving particular attention.

(b) **Visual Education**, available for all racial groups, including European Women's Institutes, Church Associations and suburban communities in local assembly halls, non-European compounds, church groups, night schools, open-air shows, domestic servants and other local groups.

A Lecturer is in daily attendance at the Registration Offices of the Native Administration Department to instruct Natives seeking work on the maintenance of health and prevention of disease.



## PUBLIC HEALTH EDUCATION :

## ATTENDANCE IN RACES AND DISTRICTS :

	European	Coloured	Native	Asiatic	Total
Old Borough ... ..	9,450	769	190,765	39,971	240,955
Greenwood Park ... ..	516	—	17,624	12,068	30,208
Sydenham ... ..	25	303	5,481	12,950	18,759
Mayville ... ..	150	—	29,173	16,376	45,699
Umhlatuzana ... ..	662	—	18,071	7,369	26,102
South Coast Junction ...	732	—	30,699	17,914	49,345
	11,535	1,072	291,813	106,648	411,068

## STATISTICS OF TALKS AND FILMS :

SUBJECT	Old Borough		G.W. Park		Sydenham		Mayville		Umhlatuzana		S. Coast Junction		Total	
	T.	F.	T.	F.	T.	F.	T.	F.	T.	F.	T.	F.	T.	F.
Bilharzia ... ..	36	7	31	2	18	2	20	3	32	—	56	3	193	17
Cleanliness brings Health ... ..	—	28	—	2	—	3	—	3	—	5	—	4	—	45
Domestic Servants ... ..	28	—	4	—	3	—	—	—	5	—	—	—	40	—
Environmental Sanitation ... ..	—	1	—	—	—	1	—	—	—	—	—	1	—	3
Food Handler Hygiene ... ..	4,978	—	66	—	17	—	37	—	24	—	39	—	5,161	—
Food and Nutrition ... ..	—	5	—	—	—	1	—	—	—	1	—	2	—	9
Human Body ... ..	—	41	—	6	—	9	—	5	—	5	—	11	—	77
Infant Care ... ..	—	3	—	—	—	—	—	—	—	1	—	—	—	4
Infectious Diseases ... ..	5,481	—	116	—	57	—	161	—	120	—	155	—	6,090	—
Immunisation ... ..	5,431	—	107	—	56	—	155	—	112	—	134	—	5,995	—
Insect carriers of Diphtheria ... ..	—	29	—	2	—	1	—	1	—	3	—	3	—	39
Isishimuyana ... ..	15	—	5	—	7	—	23	—	9	—	10	—	69	—
It might be you ... ..	—	24	—	4	—	4	—	3	—	4	—	6	—	45
Malaria ... ..	—	36	—	5	—	4	—	2	—	5	—	9	—	61
Nutrition ... ..	29	15	4	2	3	—	10	—	13	1	18	7	77	25
Personal Hygiene ... ..	159	6	25	1	51	1	59	1	29	—	86	2	409	11
Pest Control ... ..	142	2	64	—	45	4	62	—	49	—	83	—	445	6
Smallpox ... ..	—	29	—	7	—	3	—	7	—	3	—	10	—	59
Transmission of Diseases ... ..	—	16	—	3	—	2	—	3	—	2	—	4	—	30
Tuberculosis ... ..	5,377	52	49	7	36	7	98	2	30	5	67	8	5,657	81
Typhus ... ..	—	2	—	—	—	1	—	—	—	—	—	1	—	4
Veneral Disease ... ..	5,391	11	35	—	21	—	56	1	51	—	61	3	5,615	15
What is disease ... ..	—	20	—	3	—	2	—	3	—	1	—	6	—	35
Worms ... ..	13	—	5	—	1	—	7	—	6	—	11	—	43	—
Water ... ..	—	24	—	3	—	2	—	1	—	4	—	4	—	38
X-ray ... ..	21	—	—	—	1	—	34	—	—	—	13	—	69	—
TOTAL ... ..	27,101	351	511	47	316	47	722	35	480	40	733	84	29,863	604

T. = Talks. F. = Films.

## LABORATORY SERVICES :

By the purchase of further equipment during the year, the pathologist (part-time) has brought his laboratory up to the level of requirement for :—

- the testing of water by the latest methods (including differentiation of organisms of faecal origin) and
- the testing of blood sera for the Rh factor.

Whether Governmental, Provincial or Municipal, a laboratory staffed and equipped from public funds, has the advantage in a great many respects over a private undertaking, particularly in regard to financial backing, and the freedom to undertake some private work, but the Municipal Pathologist has carried out the spirit and letter of his contract in that he has set up entirely at his own expense a laboratory to do Municipal public health examinations and moreover, has given a service far in excess of scheduled requirements. The work has been done by him personally and not merely supervised.

## STOOL EXAMINATIONS FOR THE FAMILY HEALTH SERVICE SECTION :

This service has shown a steady increase, and it would appear that it has now become an important part of the activities of this section. It is quite evident that there is a high rate of worm infestation in the child population of Durban. Many of them harbour more than one variety. Another interesting finding is the comparatively large number of children who have Giardiasis. Cases of Amoebiasis (*E. Histolytica*) were only occasionally found, though infestation with *Amoeba Coli* were numerous.

## FOOD POISONING OUTBREAKS :

During the year, 42 examinations were carried out, either on foodstuffs or excreta. In several instances the causative organism was isolated.

## CROCKERY :

36 tests were made on cups and glasses to ascertain if the cleansing process had been adequate. In not a few instances it obviously was inefficient.

## VI TESTS FOR ENTERIC CARRIERS :

The large number of these tests done over the year reveal that approximately 10% were found positive. This does not mean of course that all these are active carriers. The test, however, picks out those who may be carriers, and until a better test is forthcoming, this together with immunisation is as far as we can go to check the spread of Enteric through the Control of food-handlers.



Blood sera for the Vi test were also tested for Syphilis, and, in a few instances, a positive result was obtained. The great majority of the individuals Vi-tested were natives employed by dairies. Others were persons serving food in tea-rooms.

#### INFECTIOUS DISEASE HOSPITAL :

The Medical Officer in Charge of this hospital has had the co-operation of this laboratory in the diagnosis of some of his more difficult cases. The specimens submitted have usually been spinal fluids and blood.

#### DIPHThERIA CONTACTS :

A large number of throat swabs from contacts have been examined over the year, but the positives found have been surprisingly few. Ear discharges are an exception. Quite a number of these have been found positive.

#### GENERAL AND CONSULTATIVE :

#### AMOEBIC DYSENTERY :

During the year the Pathologist was responsible for pointing out that the acute case is not a public health hazard in regard to the spread of the disease.

Opportunity is here taken to stress again that the acute fulminant case is quite uncommon among Europeans. The reason why the Bantu gets acute amoebic dysentery so frequently is due to an insufficiency of protein in his diet, to his habit of diet, and especially to his habit of consuming highly-intoxicating spirits. The cases among native men far exceed those in native women which fact supports the part played by strong alcohol. Shack settlements will not themselves lead to more amoebic dysentery than will ordinary native kraals where sanitation is non-existent, but they will lead to more cases of the acute disease if these settlements are allowed to become drinking dens. In fact it may be said that from the purely public health viewpoint, the trouble is not so much how the urban native is housed, but how he spends the money he earns. If he cannot, or will not, buy a sufficiency of protein and his appetite for strong drink is allowed to go unchecked, then the cost to the province of hospital services will show no remission.

#### SUGGESTED SOLUTION OF THE URBAN NATIVE PROBLEM :

Since this problem is intimately bound-up with public health, it falls in the province of a public health official to suggest means for dealing with it.

It is felt that the time has arrived to deter natives from flocking to urban areas in ever-increasing numbers. The way to do this is to collect all those who are unemployed into labour battalions. Those coming out of gaol will also be put under this kind of discipline. After a period of three to six months, the best of them can be drafted to industry if the latter have suitable accommodation for them. These battalions can in the meantime be used for Provincial and urban labour. No native from the reserves should be allowed to go straight into employment. This will require a big organisation, but unless something of this kind is done, we are going to be continually beset with this shack settlement problem, and an ever-increasing demand for police to deal with native crime. In the end something on the above lines will have to be undertaken.

#### SANDWORM INFECTION :

From enquiries made and from the interrogation of cases, there seems little doubt that the majority of these people are picking up infection on the South Beach. There is a large area of sand opposite the bathing booths which is above the spring-tide level and which therefore never gets washed out or purified by salt water. Hordes of people lie about on this stretch of sand on Sundays and holidays in their scant bathing costumes. Many of them bring their dogs. It is suggested that three feet of sand be removed from this area by means of bulldozers and thereafter, it be fenced in. At the entrance gate, a notice should be put up warning the public not to allow dogs into this area, on account of the risk of their bringing in sandworm infection. The public could be relied on to make it hot for anyone who infringed this request. A watchman would therefore not be necessary. This proposal would obviate the difficulty of excluding dogs from the Beach altogether. This highly polluted area of sand must be cleaned and unless an enclosure is made and respected, it is certain to become re-infected.

#### STAFF LIST :

The establishment of the Department consists of :—

##### Administration :

1 City Medical Officer of Health ... ..	Gunn, Dr. G. H. (M.D., D.P.H.)
1 Deputy City Medical Officer of Health ... ..	English, Dr. G. D. (M.B., Ch.B., D.P.H., D.T.H. & H.)
1 Administrative Officer ... ..	Boutle, R. E. (R.S.I.)
1 Assistant Administrative Officer ... ..	Thomson, A. H. (R.S.I.)
1 Chief Clerk ... ..	Tedder, H. M. (R.S.I.)
6 Senior Clerks	
13 Clerical Assistants	
2 Lady Assistants	
1 Chief Typist	
1 Senior Typist	
10 Typists	
1 Enquiry Clerk	

##### Non-European :

1 Indian Office Assistant  
7 Indian Messengers

##### Epidemiology and Endemiology :

1 Assistant Medical Officer of Health ... ..	Hooper, Dr. D. H., (M.B., Ch.B., D.P.H.)
(and T.B. Officer)	
1 Radiographer (Senior)	
1 Radiographer (Junior)	
1 General Assistant	

##### Non-European :

5 Indian Health Assistants  
1 Indian Messenger  
4 Bantu Health Assistants  
2 Night Watchmen (Bantu)  
3 Bantu Cleaners

##### Disinfecting Station, Ambulance and Laundry :

1 Superintendent  
7 General Assistants

##### Non-European :

62 Indian Assistants  
3 Bantu Ambulance Attendants

##### Health Inspection :

1 Assistant Medical Officer of Health ... ..	Edwards, Dr. H. S. (M.B., Ch.B., D.P.H.)
1 Chief Health Inspector ... ..	Michie, A. A. (R.S.I.)
1 Deputy Chief Health Inspector ... ..	Bawden, F. G. (R.S.I.)
8 Health Inspectors (1st Grade)	
12 Health Inspectors (2nd Grade)	
9 Health Inspectors (3rd Grade)	
8 Assistant Health Inspectors	
15 Health Assistants	
3 Lady Assistants	



**Health Visiting :**

- 1 Chief Health Visitor
- 1 Senior Health Visitor
- 35 Health Visitors
- 9 Clinic Assistants

**Non-European :**

- 6 Indian Clinic Assistants
- 5 Indian Messengers
- 4 Bantu Health Visitors
- 1 Bantu Cleaner

**Family Health Services :**

- 1 Assistant Medical Officer of Health ... .. McNeill, Dr. K. (M.B., Ch.B., D.P.H.)
- 1 Clinical Medical Officer ... .. Chapman, Dr. L. E. J. (M.B., Ch.B., B.Sc., D.P.H.)
- 1 Clinical Medical Officer ... .. Roirdan, Dr. P. (M.B., Ch.B.)
- 1 Pathologist ... .. Sampson, Dr. B. F. (M.R.C.S., L.R.C.P., M.B., B.Sc.)
- 1 Physical Culturist

**Field Hygiene :**

- 1 Health Inspector (allocated from Inspectorate)
- 1 Senior Assistant Supervisor
- 1 Assistant Supervisor
- 5 General Assistants (1st Grade)
- 8 General Assistants (2nd Grade)
- 1 Assistant Chemist

**Non-European :**

- 3 Indian Sirdars
- 6 Indian Field Assistants
- 34 Indian Labourers
- 8 Bantu Health Assistants
- 29 Bantu Labourers

**Non-European Health Services :**

- 1 City Venereologist ... .. Wallace, Dr. G. D. H. (M.D., D.P.H., M.R.C.S., L.R.C.P.)
- 1 Bantu Medical Officer ... .. Dhlamini, Dr. C. N. (M.D., L.R.C.P., L.R.F.P.S.)

**Non-European :**

- 1 Indian Health Assistant
- 6 Bantu Health Assistants ... ..
- 3 Bantu Clerks
- 4 Bantu Nurses (Female)
- 2 Bantu Laboratory Assistants
- 1 Bantu Clinical Assistant
- 3 Bantu Orderlies
- 1 Bantu Cleaner

**Health Education :**

- European staff drawn from other sections.
- 1 General Assistant

**Non-European :**

- 1 Indian Lecturer
- 1 Indian Health Assistant
- 1 Bantu Lecturer
- 2 Bantu Health Assistants

**City Fever Hospital :**

- 1 Assistant Medical Superintendent ... .. Casson, Dr. M. (M.D., M.R.C.S., L.R.C.P.)
- 1 Matron ... .. Ewels, Miss E. M.
- 1 Assistant Matron
- 1 Night Superintendent
- 6 Ward Sisters
- 4 Staff Nurses
- 1 Seamstress
- 1 Cook Housekeeper

**Non-European :**

- 1 Indian Cook
- 21 Indian Orderlies
- 1 Indian Maid
- 1 Indian Messenger
- 7 Bantu Watchmen
- 6 Bantu Maids
- 4 Bantu Kitchen Attendants

**REPORT B.****SLUMS AND HOUSING :**

As in previous years, an acute shortage of housing accommodation for all races has prevailed.

A rapid increase in population, especially amongst Natives, is evident and a corresponding shortage of Native housing ensures gross overcrowding of sub-standard dwellings.

In January, 1946, a survey of Native shack dwellings disclosed the following orientation of shacks at the end of the year :—

South Coast Junction	...	...	...	577
Umhlathuzana	...	...	...	145
Mayville	...	...	...	5,161
Sydenham	...	...	...	132
Greenwood Park	...	...	...	137
Old Borough	...	...	...	119
Total	...	...	...	6,271

Allowing five persons per family, the following is an estimate of the Native population living in shack-type dwellings so congested and unserviced as to cause a grave public health nuisance :—

South Coast Junction	...	...	...	2,885
Umhlathuzana	...	...	...	725
Mayville	...	...	...	25,805
Sydenham	...	...	...	660
Greenwood Park	...	...	...	685
Old Borough	...	...	...	595
Total	...	...	...	31,355

The above figures are very conservative as many shacks are multi-roomed and house several families. This applies particularly to the Mayville area.

In most instances, there is an almost complete absence of basic sanitary services such as water supply, nightsoil and refuse removal.



**SLUM AREAS : CENTRAL :**

Direct action for the removal of slum buildings has not been possible owing to the continuance of Council's intermission of all demolitions pending return to normal condition. In order to effect some improvements, however, action has been intensified under the Regulations for Control and Inspection of Premises in Defined Zones, framed under Section 32 of the Slums Act. Despite high building costs and attendant shortage of materials, many properties have been structurally improved.

In the Central Zones Nos. 4, 5, 6 and 7, some thirteen sets of premises were demolished and replaced in each instance by modern premises such as blocks of flats, service stations and bungalow-type dwellings. A fair amount of work is still in hand involving dwellings and trading premises.

**SUBURBAN ZONES :**

Slum Zone No. 8 situated on North bank of Umgeni River, has remained almost unchanged. Basic sanitation has been the keynote but due to the fact that no new houses under the sub-economic schemes have been available, no demolition of shacks has been possible.

Slum Zone No. 9 situated in Mayville area straddles Booth Road. This shack settlement area is well known as a menace to the entire community through grossly insanitary conditions resulting from the presence of over 30,000 Natives.

The clearance of this area is dependent upon the negotiations at present proceeding with the Government for the acquisition of certain Umlazi Mission Lands on the Southern boundary of the City.

The re-housing of these Natives under "controlled squatting" conditions with water, sanitary services, health clinic and access roads will be a useful interim measure in the programme of finally housing a large Native population under proper conditions.

Slum Zone No. 10. This zone lies in the Bluff Valley and has not deteriorated to any great extent. The shack dwellers are mostly Natives and the ultimate clearance of this area also depends upon the acquisition of land at Umlazi Native Reserve or elsewhere for re-housing.

Slum Zone No. 11. This area has recently been scheduled for declaration as an industrial area and the work of providing sewerage is well in hand. The retention of the present buildings in the area will prove uneconomical. Several large properties have already changed hands and are being converted to serve industry and commerce.

The "clearance" of this zone will automatically solve itself as soon as the area is fully sewered.

**GENERAL :**

The problem of housing non-Europeans, particularly Natives, remains unsolved. The influx of Natives may be due to families of Natives employed in the City, following the "bread-winner" to town. The question of accommodation naturally arises and the family is offered a room in one of the multi-roomed structures in the "shack" areas.

With the passage of time, this family tires of paying rent and, with building material accumulated in the meantime, they in turn build a multi-roomed shack and "take in" boarders, thereby augmenting their income.

Land for shack-building is made available, in most instances, by Indian market-gardeners who find they cannot reap any crops from their lands with large numbers of Natives in the vicinity and decide that "Native farming is more profitable than banana farming."

The provision of basic sanitation in the form of an adequate water supply, nightsoil and refuse removal service, is in most instances impossible as the terrain does not permit of making access roads and water mains are too far away at present to be tapped.

To minimise the Typhoid and Smallpox potential, mobile clinics carry out immunisation programmes and Health Education with satisfactory results.

**APPLICATIONS FOR DEMOLITION :**

During the twelve months ending 30th June, 1948, 114 applications to demolish or convert existing dwellings were considered by this Department. Applications are forwarded to this Department for a report to the Natal Housing Board via the City and Water Engineer's Department.

In most instances, it was proposed to replace sub-standard dwellings with modern and larger dwellings.

Departmental recommendations were always qualified by the provision that suitable alternative accommodation had to be provided for tenants affected.

**PROSECUTIONS :**

Six prosecutions were instituted for contraventions of the Zonal Regulations, resulting in fines totalling £62 0s. 0d.

**NEW HOUSING ESTATE : EUROPEAN :****Partly Paid Housing Schemes :**

No. of houses completed	453
No. of houses commenced	11
No. of houses awaiting commencement	61

**Flats for Ex-Volunteers :**

Umbilo Road completed	48
Kenneth Gardens completed	228
Kenneth Gardens under construction	54

**Flats for Women :**

Rapson Road completed	55
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**Housing for Ex-Volunteers :****Woodlands Scheme :**

Houses completed	200
Houses under construction	38
Houses awaiting construction	62

**Sherwood and Virginia Estate Housing Schemes :**

Drainage, earthworks and road formations are continuing.



## INDIAN :

## Springfield Sub-Economic :

Completed ... ..	490
Under construction ... ..	158

## Springfield Plots available :

For Economic Houses ... ..	90
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## COLOURED :

## Sparks Estate :

Sub-Economic under consideration ... ..	24
Economic under consideration ... ..	24

## NATIVE :

## Chesterville (Blackhurst) Scheme :

No. of houses completed ... ..	1,268
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## Merebank Native Men's Hostel :

10 Blocks now completed = 3,048 beds.

## MAGAZINE BARRACKS :

To date, eleven blocks of flats have now been provided with separate lavatory and ablution accommodation.

Apart from the above, no major improvements have been effected in any of the barracks in which Indian employees are housed.

Council has however acquired a large area in Mayville and are considering housing Indian employees in this area.

Medical clinics and health educational programmes are being carried out with satisfactory results.

## HOUSING OF NATIVES :

Existing Native housing comprises the following :—

- (i) Municipal Villages and Hostels ;
- (ii) Industrial compounds ;
- (iii) Private residential premises ;
- (iv) Slum and shack settlements.

## MUNICIPAL NATIVE HOUSING COMPRISES :

## Locations for Housing Families :

Lamont ... ..	480 houses
Baumannville ... ..	120 houses
Jacobs ... ..	64 houses
Chesterville ... ..	1,268 houses

## Locations for Native Males :

Somtseu Road ... ..	3,674 beds
Merebank ... ..	3,048 beds
Dalton Road ... ..	1,656 beds
Jacobs ... ..	625 beds

## Hostels for Native Males :

Bell Street ... ..	1,374 beds
Ordinance Road ... ..	440 beds

## Hostels for Native Females :

Grey Street ... ..	520 beds
Jacobs ... ..	64 beds

## WATER SUPPLY :

	LOCATIONS			
	Lamont	Baumannville	Jacobs	Chesterville
Houses with water laid on ...	120	120	—	1,268
Houses with communal supply	360	—	64	—
No. of communal taps ...	31	—	4	—

## ABLUTION, WASHING AND SANITARY ACCOMMODATION :

	Lamont	Baumannville	Jacobs	Chesterville
Houses with showers ... ..	100	120	—	—
Houses with bathrooms ... ..	380	—	—	1,268
Showers for males ... ..	—	—	6	—
Showers for females ... ..	—	—	6	—
Washing gullies ... ..	380	120	2	1,268
Latrines (pail) ... ..	—	—	—	—
Latrines (pit) ... ..	360	—	—	—
Latrines (waterborne) ... ..	120*	120	—	1,268
Latrines (for males) ... ..	—	—	6	—
Latrines (for females) ... ..	—	—	6	—

\* The work of providing full sewerage facilities is well in hand.



## HOSTELS FOR MEN :

	Merebank	Somtseu Road	Dalton Road	Bell Street	Jacobs	Ordinance Road
Latrines ... ..	210	235	66	42	72	13
Urinals ... ..	60	13	6	7	54	—
Showers ... ..	260	216	38	38	48	9
Washing Areas ... ..	60	21	11	22	5	3
Water taps ... ..	306	50	50	36	58	7
Fireplaces ... ..	64	62	26	15	16	15
Kitchens ... ..	2 (large)	10	5	—	1	—
Kitchen taps ... ..	168	24	17	—	7	—
Dining Halls ... ..	4	3	2	—	1	—

## HOSTELS FOR WOMEN :

	Grey Street	Jacobs
Latrines ... ..	37	5
Showers and baths ... ..	23	3
Washing areas ... ..	6	1
Water taps ... ..	42	8
Fireplaces ... ..	36	4
Kitchens ... ..	1	—
Kitchen taps ... ..	6	—
Dining Halls ... ..	1	—

## PROPOSED ADDITIONAL ACCOMMODATION :

Lamont Location ... ..	1,083 houses
Merebank Hostel ... ..	992 beds
Somtseu Road (casuals) ... ..	968 beds
Jacobs Extension ... ..	1,000 beds

## ACCOMMODATION OTHER THAN MUNICIPAL :

Industry and Commercial (excluding S.A.R. and D.C.) ... ..	17,000
Domestic servants ... ..	23,000
Licensed premises ... ..	12,500
Shanty settlements ... ..	32,000
Miscellaneous including floating population ... ..	10,000
Estimated Native population ... ..	109,473

## NATIVE ACCOMMODATION :

INSTITUTION	Beds Available	Departmental	Staff	Free Beds	Beds available for Letting	Beds Let
		<i>Debited</i>	<i>Paid</i>			
Somtseu Location ... ..	4,456		64	56	4,336	4,336
Dalton Road Location ... ..	1,656		40	—	1,616	1,616
Bell St. Togt. Barracks... ..	2,540	20	43	—	2,477	2,477
Jacobs Location (Men)... ..	625		24	—	601	601
Jacobs Location (Women) ... ..	64		1	1	62	62
Grey Street Women's Hostel ... ..	520		17	1	502	502
Ordinance Rd. Barracks ... ..	440		10	4	426	426
S. J. Smith Hostel... ..	2,688		43	—	2,645	2,267
	12,989	20	242	62	12,665	12,287

S. J. Smith Hostel : Beds still to be handed over by Contractor = 1,440.

INSTITUTION	Houses Available	Departmental	Staff	Free Houses	Houses Available for Letting	Houses Let
		<i>Debited</i>	<i>Paid</i>			
Lamont Location ... ..	480		4		476	476
Chesterville Location ... ..	1,268		13	(1 Clinic) (2 Offices)	1,252	1,252
Jacobs Location ... ..	64				64	64
Baumannville Location ... ..	120		7		113	113
	1,932		24	3	1,905	1,905

**Casual Accommodation.** In addition to the above, 17,305 casual tickets for males and 15,385 for females were issued for accommodation in the casual wards at Somtseu Road Location and the Native Women's Hostel respectively during May, 1948.



## CONCLUSIONS :

- (1). There has been no improvement in the housing shortage for all races ;
- (2). There is still a steady influx of all races, principally Bantu ;
- (3). New housing programmes are hopelessly out of proportion to new demands arising from (2) above ;
- (4). The population at present living in slums is very conservatively assessed at 32,000 ;
- (5). The Regulations for the Control and Inspection of Premises in Defined Zones (framed under the Slums Act) have very materially assisted this Department in effecting improvements to premises and to housing conditions generally.
- (6). The statistics of New Housing Estates completed and under construction are indeed gratifying.

## APPRECIATION :

I wish to express my appreciation of the loyal services rendered by my staff.

My thanks are also conveyed to you, Sir, and to the other members of the City Council for the courtesy and assistance extended to me throughout the past year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

G. H. GUNN, M.D., D.P.H.,

City Medical Officer of Health.







