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

Contributors

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CITY OF DURBAN

BUREAU OF HYGIENE & TROPICAL DISEASES
10 FEB 1948

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 30th JUNE, 1946

HAYNE & GIBSON (PTY) LTD.,
DURBAN
1947

CITY HEALTH DEPARTMENT.

1st August, 1946.

To His Worship the Mayor and
City Councillors of the City of Durban.

Ladies and Gentlemen,

I have the honour to present the Forty-fifth Annual Report of the activities of the City Health Department during the year ended 30th June, 1946.

CLIMATIC DATA. **Latitude :** 30 degrees. **Longitude :** 31 degrees.

Temperature : (Statistics kindly supplied by the City and Water Engineer) :—

	Mean Temperature	Humidity	Rainfall
1945 :			
August	64·7	80·0	0·58
September	70·5	80·3	0·53
October	70·2	80·0	1·71
November	73·3	77·0	1·05
December	76/0	72·0	2·84
1946 :			
January	78·7	85·0	4·47
February	77·0	73·0	3·29
March	76·2	80·0	5·79
April	73·7	81·9	4·10
May	64·6	76·0	0·43
June	61·1	77·0	0·57

AREA OF MUNICIPALITY. The area of Durban and suburbs, inclusive of townlands, is 44,889 acres. The City is built on ground rising from sea level and backed by hills running north and south, the soil of the valleys being very fertile.

ANNUAL RATEABLE VALUE :

Gross value of land	£31,421,430	(£21,371,930)
Gross value of buildings	£36,971,640	(£35,386,100)
TOTAL (including agricultural and undeveloped areas)	£68,393,070	(£56,758,030)

For the year under review, the rates imposed were 7¼d. on land and 3¼d. on buildings (including water rate).

REPORT "A."

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

POPULATION :

	Census May, 1946	Estimate as at 30th June, 1946
European	124,792	125,056
Coloured	10,206	10,249
Native	108,866	108,930
Asiatic	113,440	113,901
TOTAL	357,304	358,136

The principal Vital Statistics for the year, corrected for outward transfer and adjusted to the Census figure are as follows :—

	European	Coloured	Native	Asiatic	TOTAL
Population Estimate 30/6/46	125,056	10,249	108,930	113,901	358,136
Estimate 30/6/45	(109,460)	(8,986)	(71,856)	(99,156)	(289,458)
Birth Rates	18·42 (21·32)	48·59 (48·96)	25·07 (33·23)	42·59 (46·36)	28·99 (33·71)
Death Rates	9·27 (9·48)	19·32 (23·60)	27·54 (40·43)	16·92 (19·72)	17·55 (21·11)
Infantile mortality Rates per 1,000 live births	32·50 (29·99)	102·08 (131·81)	359·18 (388·70)	90·83 (99·19)	151·12 (155·02)
Percentage of Illegitimate to live births	3·05 (3·64)	31·32 (30·91)	57·77 (58·85)	1·99 (1·26)	18·41 (17·25)
Death Rate Pulmonary T.B. per 1,000 of population	0·37 (0·38)	4·29 (4·78)	4·25 (6·21)	2·15 (2·19)	2·23 (2·58)

BIRTHS. The following births were registered in Durban during the year (figures for previous year in brackets) :—

	Europeans	Coloureds	Natives	Asiatics	TOTAL
Local Births	2,304 (2,334)	498 (440)	2,371 (2,388)	4,851 (4,597)	10,384 (9,759)
Local Illegitimate Births	82 (85)	156 (136)	1,578 (1,405)	97 (58)	1,913 (1,684)
Still Births	55 (67)	11 (25)	314 (264)	267 (204)	647 (560)

BIRTH RATES :

	Europeans	Coloureds	Natives	Asiatics	TOTAL
	18·42 (21·32)	48·59 (48·96)	25·07* (33·23)	42·59 (46·36)	28·99 (33·71)

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

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

European ... ... 9·9 (11·8)
Coloured ... ... 30·9 (25·4)
Asiatic... ... ... 27·9 (26·6)

Illegitimacy accounted for 3·64 (2·7) per cent. of the total European births, 31·4 (15·4) for Coloureds, 56·7 (60·1) for Natives and 1·5 (0·6) for Asiatics.

DEATHS (figures for 1944/45 in brackets) :—

	European	Coloured	Native	Asiatic	TOTAL
Local Deaths, all ages	1,159 (1,038)	198 (212)	3,000 (2,905)	1,927 (1,956)	6,284 (6,111)
Non-local Residents	241 (222)	20 (20)	1,678 (1,620)	140 (155)	2,079 (2,017)

DEATH RATES :

	European	Coloured	Native	Asiatic	TOTAL
	9·27 (9·4)	19·32 (23·6)	27·54 (40·4)	16·92 (19·7)	17·55 (21·1)

INFANTILE MORTALITY :

	European	Coloured	Native	Asiatic	TOTAL
Local Deaths...	76 (70)	46 (58)	947 (929)	412 (456)	1,481 (1,513)
Deaths of infants whose mothers came to Durban for confinement or were brought in suffering from illness which caused death	8 (15)	2 (5)	320 (524)	24 (24)	354 (568)

The European infantile mortality rate per 1,000 for the year is 32·98 (29·99), Coloured 92·36 (131·81), Native 346·75 (388·70) and Asiatic 84·93 (99·19).

Causes of death were as follows :—

	European	Coloured	Native	Asiatic	TOTAL
Congenital Causes	12 (16)	11 (8)	232 (118)	67 (103)	322 (245)
Prematurity	27 (24)	11 (8)	44 (80)	46 (47)	128 (159)
Diarrhoea, etc.	10 (6)	9 (18)	291 (281)	79 (70)	389 (375)
Bronchitis and Pneumonia ...	8 (10)	7 (12)	263 (330)	147 (171)	425 (523)
Others	19 (14)	8 (12)	117 (120)	73 (65)	217 (211)
	76 (70)	46 (58)	947 (929)	412 (456)	1,481 (1,513)
Births : Male	1,198 (1,217)	268 (233)	1,337 (1,234)	2,474 (2,335)	5,277 (5,019)
Female	1,106 (1,117)	230 (207)	1,394 (1,154)	2,377 (2,262)	5,107 (4,745)
Infantile Deaths : Male ...	43 (41)	25 (32)	536 (486)	209 (218)	813 (777)
Female ...	33 (29)	21 (26)	411 (443)	203 (238)	668 (736)
Still Births : Local	55 (67)	11 (25)	314 (264)	267 (204)	647 (560)
Imported ...	6 (4)	1 (2)	205 (170)	15 (6)	227 (182)
Illegitimate Births : Local ...	82 (85)	156 (136)	1,578 (1,405)	97 (58)	1,913 (1,684)
Imported	13 (8)	17 (11)	1,099 (1,068)	6 (4)	1,135 (1,091)

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	60	36	8·3	16	25	20·7	594	479	35·8	235	228	24·1	905	768	26·6
1— 2	9	7	0·7	6	9	7·5	184	176	12·0	91	109	10·4	290	301	9·4
2— 5	5	3	1·3	2	1	1·5	44	53	3·2	49	52	5·2	100	109	3·3
0— 5	74	46	10·3	24	35	29·7	822	708	51·0	375	389	39·7	1,295	1,178	39·3
5—15	4	4	1·3	4	1	2·5	49	51	3·3	54	44	5·1	111	100	3·3
15—25	18	14	2·7	9	5	7·1	147	128	9·2	118	100	11·3	292	247	8·6
25—45	76	61	11·8	26	28	27·3	437	231	22·3	131	135	13·8	670	455	17·9
45—65	217	129	29·9	32	11	21·7	219	90	10·3	199	138	17·5	667	368	16·5
Over 65	301	215	44·0	13	10	11·7	63	55	3·9	161	83	12·6	538	363	14·4
Total	690	469	—	108	90	—	1,737	1,263	—	1,038	889	—	3,573	2,711	—

DEATHS FROM CERTAIN MAIN CAUSES : EUROPEANS.

DISEASE	Number of Deaths	Percentage of Total Deaths
Infective intestinal diseases (Enteric Fever, Dysentery, Diarrhoea and Enteritis)	23 (12)	1·9 (1·2)
Cancer	169 (148)	14·6 (14·3)
Heart and circulatory system	372 (289)	32·1 (27·8)
Disease of the nervous system	79 (99)	6·8 (9·5)
Diseases of birth and early infancy	53 (86)	4·6 (8·3)
Pneumonia and Bronchitis	56 (61)	4·8 (5·8)
Pulmonary Tuberculosis	52 (42)	4·5 (4·0)
Other Tuberculosis	2 (1)	0·2 (0·09)
Urinary and genital system	71 (72)	6·1 (6·8)

MAIN CAUSES OF DEATH : CITY CASES ONLY (figures for 1944/45 in brackets) :—

	European	Coloured	Native	Asiatic
1. **Cancer :** Site of Disease :				
Buccal Cavity and Pharynx	5 (1)	— (—)	— (—)	— (1)
Oesophagus	5 (5)	— (1)	— (—)	— (—)
Stomach and Duodenum	43 (60)	— (2)	4 (5)	10 (22)
Rectum	11 (5)	— (—)	2 (2)	— (—)
Liver	11 (7)	— (2)	12 (6)	— (1)
Pancreas	10 (5)	— (—)	4 (2)	— (—)
Other Digestive Organs	8 (—)	— (—)	— (—)	— (—)
Larynx	3 (7)	— (1)	— (—)	— (1)
Lung	21 (7)	— (—)	2 (1)	3 (—)
Uterus	12 (8)	2 (—)	3 (1)	2 (2)
Other Female Genital Organs	6 (5)	1 (1)	2 (—)	5 (2)
Breast	13 (10)	2 (2)	4 (1)	1 (—)
Prostate	1 (4)	1 (—)	1 (1)	— (2)
Male Genital Organs	1 (1)	— (—)	— (—)	— (—)
Male and Female Urinary Organs	8 (12)	— (2)	1 (6)	2 (3)
Other Organs	11 (11)	— (—)	3 (3)	2 (4)
TOTAL	169 (148)	6 (11)	38 (28)	25 (38)
2. **Diseases of the Heart**	166 (123)	13 (13)	109 (68)	163 (120)
3. **Bronchitis and Pneumonia**	56 (62)	18 (23)	580 (626)	485 (514)
4. **Influenza**	3 (1)	3 (—)	4 (2)	— (—)
5. **Typhoid**	— (2)	— (1)	38 (19)	9 (6)
6. **Appendicitis**	2 (4)	— (—)	2 (3)	2 (2)
7. **Tuberculosis**	52 (42)	44 (43)	508 (446)	275 (233)
8. **Diabetes**	16 (23)	3 (—)	2 (—)	12 (11)
9. **Apoplexy**	36 (55)	3 (1)	16 (14)	31 (36)
10. **Diseases of the Kidneys :**				
Nephritis	49 (41)	5 (8)	37 (38)	63 (65)
Other Diseases of Kidneys	17 (21)	2 (1)	4 (7)	3 (8)
11. **Diseases of the Liver**	14 (11)	— (2)	17 (17)	22 (16)
12. **Accidents of Parturition**	7 (5)	2 (1)	22 (13)	18 (25)
13. **Old Age**	33 (37)	3 (3)	15 (33)	34 (54)
14. **Suicide :**				
Poisoning	7 (10)	2 (—)	4 (—)	11 (4)
Hanging or Strangulation	4 (2)	— (1)	2 (5)	9 (4)
Drowning	9 (—)	— (—)	1 (—)	3 (2)
Firearms	4 (—)	— (—)	— (1)	— (—)
Cutting or Piercing Instruments	2 (—)	3 (—)	55 (—)	2 (1)
15. **Accidents :**				
Railways	6 (3)	— (2)	16 (3)	1 (1)
Motor-driven Vehicles	15 (9)	2 (—)	15 (20)	4 (9)
Absorption of Gases	— (—)	1 (—)	1 (1)	1 (1)
Burns	5 (2)	4 (2)	14 (15)	34 (47)
Injuries by Firearms	— (—)	— (—)	3 (1)	— (—)
Cutting or Piercing Instruments	2 (—)	— (—)	1 (1)	— (—)
Fall	12 (13)	1 (3)	11 (17)	2 (1)
Drowning	4 (5)	3 (—)	10 (8)	13 (6)
Other	2 (4)	— (3)	5 (9)	1 (—)

CAUSES OF DEATH.

Code	DISEASE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
	Infective and Parasitic Diseases :								
001	Typhod Fever	—	—	38	9	—	—	34	1
008	Cerebro Spinal Meningococcal Meningitis	—	—	1	2	—	—	1	—
011	Whooping Cough	1	—	5	1	—	—	1	—
012	Diphtheria	7	1	7	10	—	—	5	—
014	Tetanus	1	—	14	8	—	—	5	1
015	Tuberculosis of Respiratory System	47	44	461	245	10	4	361	29
016	,, ,, Central Nervous System	2	—	22	10	2	1	10	—
017	,, ,, Intestines & Peritoneum	2	—	10	3	2	—	10	—
018	,, ,, Vertebral Column	1	—	2	—	—	—	2	—
019	,, ,, Other Bones and Joints	—	—	—	1	—	—	1	—
020	,, ,, Skin	—	—	—	1	—	—	1	—
021	,, ,, Lymphatic System	—	—	1	—	—	—	—	—
023	,, ,, Other Organs	—	—	2	—	—	—	—	—
024	,, ,, Acute Miliary	3	1	10	1	—	1	5	1
025	,, ,, Chronic Miliary	2	—	4	—	—	—	—	—
032	Dysentery, Bacillary	2	2	76	13	—	—	65	2
033	,, Amoebic	1	4	116	7	—	—	70	1
035	,, Other Protozoal	1	—	—	—	—	—	—	—
036	Malaria	4	—	—	—	—	—	1	1
042	Aneurysm of the Aorta	—	—	2	—	—	—	—	—
043	Congenital Syphilis	—	—	18	1	—	—	15	—
044	Other Forms	1	2	10	3	—	—	27	—
047	Others	—	—	1	—	—	—	—	—
048	Influenza with respiratory complications specified	2	3	—	—	—	—	—	—
049	Influenza without Respiratory complications specified	1	—	4	—	1	—	—	—
050	Smallpox	—	—	2	—	—	2	—	—
053	Acute Poliomyelitis and Polioencephalitis	2	—	—	2	—	—	1	—
054	Acute Lethargic (or endemic) Encephalitis	2	—	—	—	—	—	3	1
065	Typhus unspecified	—	—	—	—	—	—	—	1
071	Bilharzia	—	—	—	1	1	—	1	—
	Cancer and Other Tumours :								
100	Cancer and other malignant tumours of the bucal cavity—Pharynx	5	—	—	—	—	—	—	—
101	Oesophagus	5	—	—	—	—	—	—	—
102	Stomach and Duodenum	43	—	4	10	12	—	5	2
103	Rectum	11	—	2	—	2	—	3	—
104	Liver	11	—	12	—	—	—	8	—
105	Pancreas	10	—	4	—	3	—	4	—
106	Other Digestive Organs	8	—	—	—	—	—	—	—
107	Larynx	3	—	—	—	1	—	—	—
109	Lung	21	—	2	3	3	—	—	—
110	Uterus	12	2	3	2	1	—	2	—
111	Other Female Genital Organs	6	1	2	5	1	—	2	—
112	Breast Male or Female	13	2	4	1	2	—	1	—
113	Prostate	1	1	1	—	2	—	3	2
114	Other Male Genital Organs	1	—	—	—	—	—	—	—
115	Male and Female Urinary Organs	8	—	1	2	3	—	1	—
117	Brain and other parts of the Nervous Sys.	1	—	—	—	—	—	—	—
118	Bones	3	—	3	1	—	—	—	1
119	Other and Unspecified Organs	7	—	3	2	—	—	1	—
	Tumours :								
134	Other Female Genital Organs	2	—	—	—	—	—	—	—
135	Brain and other parts of Nervous System	1	—	1	—	—	—	1	—
136	Other and Unspecified Organs	4	—	—	2	—	—	1	—
	Rheumatism, Diseases of Nutrition and of the Endocrine Glands, other General Diseases and Vitamin-deficiency Diseases:								
149	Acute Rheumatic Fever	1	1	2	1	1	—	5	—
150	Chronic Rheumatism	—	2	1	1	—	1	—	—
152	Diabetes	16	3	2	12	4	—	—	2
163	Malnutrition	1	1	80	31	—	1	103	3
164	Other General Diseases	—	—	2	—	—	—	1	—
167	Beri-beri	—	—	6	1	—	—	3	—
168	Pellagra	—	—	—	—	—	—	2	—
169	Rickets	—	—	—	6	—	—	—	—
	Diseases of the Blood :								
203	Pernicious Anaemia	3	—	3	4	—	—	—	—
206	Other and Unspecified Anaemias	—	—	—	6	—	—	5	—
207	Leukaemic	4	—	—	4	3	—	2	—
210	Banti's Disease	—	—	—	—	—	—	1	—
211	Other Diseases of the Spleen	—	—	—	—	—	—	1	—
251	Chronic Alcoholism	1	—	—	1	2	—	—	—
258	Unspecified Poisoning	2	—	2	8	1	—	4	—

Code	DISEASE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
	Diseases of the Nervous System :								
301	Encephalitis—Other Forms	—	—	—	—	—	—	—	1
302	Meningitis Pneumococcal	2	—	2	—	1	—	—	—
303	Other Forms	4	—	9	10	1	—	3	4
304	Diseases of the Medulla on Spinal Cord	1	—	—	—	—	—	—	—
305	Cerebral Haemorrhage	36	3	16	31	7	—	6	1
306	Cerebral Embolism	27	2	8	12	10	—	1	—
307	Hemiplegia	1	2	—	10	3	—	2	—
308	Mental Disorders and Deficiency ...	—	—	—	1	—	—	—	—
309	Epilepsy	1	—	4	4	2	—	—	—
310	Convulsion in Children under 5 years...	—	—	2	4	—	—	—	—
312	Neuritis (non-Rheumatic)	—	—	—	1	—	—	—	—
313	Paralysis Agitans	5	—	—	—	—	—	1	—
315	Other Diseases of the Nervous System	—	—	—	—	1	—	—	1
317	Diseases of the Ear and the Mastoid Process	2	—	1	2	—	—	1	—
	Diseases of the Circulatory System :								
351	Other Pericarditis	—	—	2	—	—	—	2	—
352	Acute Endocarditis	6	—	3	8	—	—	3	—
353	Valvular Disease specified as Sequelae of Rheumatic Fever	3	—	2	6	1	—	1	—
354	Other Forms	13	2	8	13	3	—	5	—
355	Acute Myocarditis	—	—	—	5	—	—	1	—
356	Chronic Myocarditis	7	4	15	30	7	—	7	1
357	Other Chronic Myocarditis	109	5	66	74	21	—	15	—
358	Diseases of Coronary Arteries	2	1	—	11	—	—	1	2
359	Heart Disease specified as Rheumatic...	6	—	5	8	—	—	1	—
360	Not specified as Rheumatic	20	1	8	8	6	—	13	1
361	Aneurysm except of Heart	3	—	4	—	—	—	2	—
362	Arterio-Sclerosis	131	6	18	40	13	—	8	1
363	Gangrene	—	—	3	1	1	—	—	1
364	Other Diseases of the Arteries	6	—	1	2	2	—	3	—
366	Diseases of the Lymphatic System ...	—	—	3	—	—	—	1	—
367	High Blood Pressure	7	—	—	18	—	—	—	—
368	Other Diseases of the Circulatory System	59	4	23	40	8	—	29	12
	Diseases of the Respiratory System :								
400	Diseases of the Nasal Fossae and Annexia	—	—	—	1	1	—	—	—
401	Diseases of the Larynx	—	—	4	—	—	—	—	—
402	Acute Bronchitis	5	—	14	100	—	—	1	1
403	Chronic Bronchitis	8	—	9	57	2	—	1	1
404	Broncho Pneumonia	26	16	489	230	8	—	176	7
405	Lobar Pneumonia	12	2	59	89	—	—	24	2
406	Pneumonia Unspecified	5	—	9	9	—	—	3	—
407	Empyema	1	2	—	—	1	—	—	—
408	Other Unspecified Forms of Pleurisy ...	2	—	4	4	—	—	—	—
409	Haemorrhagic Infection of Lungs ...	15	—	9	4	2	—	1	—
410	Chronic or Unspecified Congestion of Lungs	9	1	27	10	2	—	2	—
411	Asthma	20	—	8	28	1	—	1	2
413	Miners' Phthisis without Tuberculosis...	6	—	—	—	—	—	—	—
414	Miners' Phthisis with Tuberculosis ...	—	—	—	—	—	—	1	—
415	Other Occupational respiratory Diseases	2	—	—	1	—	—	—	—
417	Abscess of the Lung	2	—	5	1	—	—	7	—
418	Other Diseases of the Respiratory System (non-Occupational)	3	—	3	1	2	—	4	—
	Diseases of the Digestive System :								
450	Diseases of the Teeth and Gums	—	—	—	2	—	—	—	—
452	Other Diseases of the Pharynx & Tonsitis	—	—	1	1	—	—	—	—
454	Diseases of the Oesophagus	—	—	—	—	—	—	2	—
455	Stomach Ulcer	5	—	1	3	1	—	—	1
456	Duodenum ,, ...	7	—	1	4	3	—	1	—
457	Other Diseases of the Stomach	—	—	2	—	—	—	3	—
458	Diarrhoea Enteritis (under 2 years) ...	18	9	506	122	7	2	172	6
459	Diarrhoea Enteritis (2 years and over)	2	2	23	24	—	—	11	1
460	Ulceration of the Intestines	—	—	—	—	—	—	2	—
461	Appendicitis	2	—	2	2	—	—	1	3
462	Hernia	1	2	3	2	1	—	—	—
463	Intestinal Obstruction	2	—	4	2	—	—	3	—
465	Other Diseases of the Intestines	1	2	4	—	—	—	—	—
	Cirrhosis of Liver :								
466	With mention of Alcoholism	3	—	5	1	1	—	—	—
467	Without mention of Alcoholism	8	—	6	10	—	—	4	—
468	Acute Yellow Atrophy of the Liver ...	1	—	3	3	2	—	2	—
469	Other Diseases of the Liver	2	—	3	8	1	—	5	—
471	Cholecystitis without record of Biliary Calculi	1	—	—	—	—	—	1	—
472	Diseases of the Pancreas	2	—	—	—	—	—	1	—
473	Peritonitis without stated cause	4	2	4	4	1	—	4	—

Code	DISEASE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
	Diseases of the Urinary and Genital Systems:								
500	Acute Nephritis	10	1	12	29	3	—	12	2
501	Chronic Nephritis	39	4	25	34	10	—	20	3
502	Nephritis not stated to be Acute or Chronic	4	2	—	—	1	—	3	—
503	Pyelitis, Pyelonephritis and Pyelocystitis	4	—	4	1	1	—	2	—
504	Others	9	—	—	2	1	—	4	—
505	Calculi of the Urinary Passages	—	—	—	—	1	—	—	—
506	Cystitis	1	—	1	2	—	—	—	—
509	Hypertrophy	1	—	—	1	—	—	—	—
510	Others	2	2	—	—	—	—	—	1
511	Diseases of other Male Genital Organs	—	—	1	1	—	—	—	—
512	Diseases of the Ovaries, Fallopian Tubes	1	1	2	2	—	—	—	—
515	Other Diseases of the Female Genital Organs	—	—	1	—	—	—	1	—
550	Post Abortive Infection—Spontaneous	—	—	1	—	—	—	—	—
551	Abortion induced for reasons other than Therapeutic	—	—	—	—	—	—	1	—
552	Abortion without mention of Septic conditions	—	—	—	—	—	—	1	—
554	Ectopic Gestation	1	—	2	—	—	—	—	—
555	Haemorrhage from Placenta Praevia	—	—	—	1	—	—	1	—
556	Haemorrhage from premature separation of Placenta	—	—	—	2	1	—	—	—
557	Other Haemorrhage of Pregnancy	—	—	—	1	1	—	2	—
558	Eclampsia of Pregnancy	—	—	4	6	—	—	1	2
560	Acute Yellow Atrophy of Liver pregnancy	—	—	—	—	—	—	—	—
561	Other Toxaemias of Pregnancy	—	—	1	—	—	—	1	—
562	Other Diseases & Accidents of Pregnancy	—	—	1	1	—	—	—	—
565	Other Haemorrhages during Childbirth	—	—	—	—	—	—	1	1
566	Other Haemorrhages after Childbirth	1	—	4	—	—	—	1	—
567	General or Local Puerperal Infection	1	—	—	—	—	—	—	—
570	Puerperal Eclampsia	—	2	—	—	—	—	—	—
573	Other Puerperal Toxaemias	—	—	3	1	—	—	2	—
574	Other Accidents of Childbirth	4	—	7	6	—	—	9	3
	Diseases of the Skin and Cellular Tissues :								
600	Carbuncle Boils	—	—	—	3	—	—	—	1
601	Cellulitis, Acute Abscess	—	—	—	2	—	—	—	—
602	Other Diseases of the Skin	2	—	—	—	—	—	3	2
	Diseases of the Bones—Organs of Movement:								
650	Osteomyelitis and Periostitis	—	—	—	2	—	—	—	—
651	Other Diseases of the Bones	—	—	—	—	1	—	1	—
	Congenital Malformations :								
701	Spina Bifida and Meningocele	1	2	2	—	—	2	—	—
702	Congenital Malformations of Heart	—	—	—	2	—	—	—	—
709	Unspecified Congenital Malformations	—	—	—	—	—	—	1	—
	Diseases Peculiar to the First Year of Life :								
750	Congenital Debility	5	6	245	75	—	—	86	5
751	Premature Birth	30	11	58	42	2	2	32	2
752	Intra Cranial or Spinal Haemorrhage due to Injury at Birth	4	3	9	5	1	—	8	—
753	Other Birth Injuries	1	—	3	—	—	—	—	—
754	Asphyxia during or after Birth	—	—	3	6	—	—	1	—
758	Other Specified Diseases	6	1	29	22	1	1	7	—
	Senilitay, Old Age :								
800	Senility (age 65 and over)	33	3	15	34	3	—	16	1
	Violent or Accidental Deaths :								
850	Suicide by Poisoning (corrisve substances)	5	1	4	8	1	—	2	—
851	Analgesic, narcotic and Sporific Drugs	—	1	—	3	—	—	—	—
852	Other unspecified Poisons (liquid or solid)	2	—	—	—	—	—	1	—
854	Motor Exhaust Gases	2	—	—	—	—	—	—	—
855	Other Poisonous Gases	1	—	—	6	—	—	—	—
856	Hanging or Strangulation	4	—	2	9	2	—	—	—
857	Drowning	—	—	1	3	—	—	—	—
858	Firearms and Explosives	4	—	—	—	1	—	—	—
859	Cutting or Piercing Instruments	1	—	—	—	1	—	1	1
860	Jumping from High Places	1	—	1	—	—	—	2	—
863	Other or Unspecified Means	—	1	1	—	—	—	—	—
865	Homicide by Firearms	3	—	—	—	1	—	—	—
866	Homicide by Cutting or Piercing Instruments	2	3	55	2	1	1	14	—
867	Homicide by Other or Unspecified Means	3	—	8	2	—	—	5	—
868	Accidents on Railways	6	—	16	1	1	—	2	—
869	Collisions with Trains	—	—	—	—	—	1	—	—

Code	DISEASE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
870	Collisions with Motor-driven Road Vehicles	—	—	1	—	—	—	2	—
871	Other Accidents	15	2	15	4	3	—	14	1
872	Collisions with Trains	—	—	2	—	—	—	—	—
873	Collisions with Trams, Trolleybuses	1	—	4	—	—	—	3	—
874	Other Accidents	3	1	3	1	—	—	7	—
875	Collisions excluding Motor-driven Road Vehicles	—	—	1	—	—	—	—	—
877	Other Accidents (including pedal cycles)	—	—	1	—	—	—	—	—
881	Accidents in Quarries	—	—	—	—	—	—	1	—
886	Accidents caused by Machinery	2	—	—	—	—	—	1	—
887	Food Poisoning	—	—	4	—	—	—	—	—
888	Accidental absorption of Poisonous Gases	—	1	1	—	2	—	—	—
889	Other Acute Accidental Poisoning	—	—	1	1	—	—	—	—
891	Accidental Burns	5	4	14	34	—	—	6	6
892	Accidental Mechanical Suffocation	—	—	2	3	—	—	3	—
893	Accidental Drowning	4	3	10	13	10	2	—	1
894	Accidental Injury by Firearms	—	—	3	—	—	—	—	2
895	Accidental Injury by Cutting or Piercing Instrument	2	—	1	—	—	—	—	—
896	Accidental Injury by Fall	12	1	11	2	4	1	3	—
897	Accidental Injury by Landslide	1	—	3	1	—	—	1	—
902	Excessive Heat	—	—	—	1	—	—	—	—
903	Lightning	—	—	1	—	—	—	—	—
904	Other Accidents due to Electric Currents	1	—	1	—	—	—	—	—
905	Attack by Venomous Animals	—	—	—	1	—	—	—	—
906	Anaesthetic Accidents	1	—	1	—	—	—	—	—
908	Other and Unspecified Accidents	—	—	1	—	—	—	—	—
950	Sudden Death	—	—	—	—	1	—	—	—
951	Ill-defined Causes	7	—	19	39	—	2	12	5
952	Found Dead—Causes Unknown	1	1	3	—	—	—	3	—
953	Other Deaths from Unknown or Unspefied Causes	1	1	—	11	—	2	—	1
	TOTALS	1,159	198	3,000	1,927	241	20	1,678	140

TOTAL DEATHS—Borough ... 6284. Imported ... 2,079.
TOTAL DEATHS.—8363.

2.—INFECTIOUS DISEASES NOTIFIED DURING THE YEAR (figures for 1944/45 in brackets) :—

	European		Coloured		Native		Asiatic	
1. Enteric or Typhoid Fever :								
Local Cases	18	(17)	7	(5)	113	(62)	39	(28)
Imported Cases	21	(16)	1	(1)	122	(34)	13	(9)
Deaths (Local)	—	(2)	—	(1)	38	(19)	9	(6)
Deaths (Imported)	—	(1)	—	(—)	34	(32)	1	(6)
2. Cerebro-Spinal Meningitis :								
Local Cases	10	(11)	1	(4)	26	(25)	6	(13)
Imported Cases	1	(2)	1	(—)	8	(10)	1	(1)
Deaths (Local)	—	(—)	—	(—)	1	(—)	2	(2)
Deaths (Imported)	—	(—)	—	(—)	1	(—)	—	(—)
3. Scarlet Fever :								
Local Cases	99	(131)	1	(5)	1	(4)	—	(—)
Imported Cases	12	(12)	—	(—)	5	(1)	—	(—)
4. Diphtheria :								
Local Cases	154	(255)	17	(36)	64	(116)	38	(37)
Imported Cases	39	(49)	2	(5)	33	(33)	9	(14)
Deaths (Local)	7	(6)	1	(1)	7	(9)	10	(2)
Deaths (Imported)	—	(3)	—	(—)	5	(11)	—	(—)
5. Erysipelas :								
Local Cases	10	(17)	—	(1)	2	(—)	—	(—)
Imported Cases	4	(1)	—	(—)	2	(1)	—	(—)
Deaths (Local)	—	(—)	—	(—)	—	(—)	—	(—)
Deaths (Imported)	—	(—)	—	(—)	—	(—)	—	(—)
6. Poliomyelitis :								
Local Cases	3	(55)	1	(2)	3	(26)	5	(11)
Imported Cases	2	(28)	—	(1)	—	(13)	—	(4)
Deaths (Local)	2	(3)	—	(—)	—	(5)	2	(4)
Deaths (Imported)	—	(2)	—	(—)	1	(1)	—	(3)
7. Gon. Ophthalmia :								
Local Cases	—	(6)	—	(2)	12	(56)	3	(27)
Imported Cases	—	(—)	—	(—)	—	(—)	—	(—)
8. Leprosy :								
Local Cases	—	(—)	—	(—)	5	(7)	—	(1)
Imported Cases	—	(—)	—	(—)	4	(2)	—	(—)

	European		Coloured		Native		Asiatic	
9. Puerperal Sepsis :								
Local Cases	4	(3)	1	(—)	5	(6)	3	(12)
Imported Cases	—	(—)	—	(—)	2	(—)	1	(—)
Deaths (Local)	1	(—)	—	(—)	—	(2)	—	(8)
Deaths (Imported)	—	(—)	—	(—)	—	(6)	—	(—)
10. Trachoma :								
Local Cases	—	(—)	—	(1)	—	(—)	—	(—)
Imported Cases	3	(—)	—	(—)	1	(3)	—	(2)
11. Typhus :								
Local Cases	11	(1)	—	(—)	—	(6)	2	(2)
Imported Cases	9	(—)	—	(—)	1	(4)	3	(—)
Deaths (Local)	—	(1)	—	(—)	—	(—)	—	(—)
Deaths (Imported)	—	(—)	—	(—)	—	(2)	1	(—)
12. Encephalitis :								
Local Cases	—	(3)	1	(—)	4	(1)	—	(—)
Imported Cases	1	(—)	—	(—)	—	(—)	—	(—)
Deaths (Local)	2	(—)	—	(—)	—	(—)	—	(1)
Deaths (Imported)	—	(—)	—	(—)	—	(—)	1	(—)
13. Smallpox :								
Local Cases	—	(1)	—	(17)	6	(114)	2	(195)
Imported Cases	1	(—)	—	(2)	12	(178)	3	(25)
Deaths (Local)	—	(1)	—	(6)	2	(39)	—	(47)
Deaths (Imported)	—	(1)	—	(1)	2	(53)	—	(9)
14. Relapsing Fever :								
Local Cases	—	(—)	—	(—)	—	(—)	—	(—)
Imported Cases	—	(1)	—	(1)	1	(—)	—	(—)
15. Ophthalmia Neonatorum :								
Local Cases	16	(—)	4	(—)	62	(—)	33	(—)
Imported Cases	—	(—)	—	(—)	1	(—)	—	(—)
16. Amoebic Dysentery :								
Local Cases	760	(429)	45	(27)	1,419	(828)	81	(34)
Imported Cases	185	(110)	7	(30)	538	(85)	15	(5)
Deaths (Local)	1	(2)	4	(2)	116	(186)	7	(7)
Deaths (Imported)	—	(1)	—	(—)	70	(93)	1	(5)
17. Polioencephalitis :								
Local Cases	1	(—)	—	(—)	—	(—)	—	(—)
Imported Cases	—	(—)	—	(—)	—	(—)	—	(—)

DEATH RATES FOR DYSENTERY AND GASTRO ENTERITIS FOR THE PAST FIVE YEARS :

CITY CASES ONLY.

	European	Coloured	Native	Asiatic	All Races	Non-Eur.
Dysentery :						
1942	·11	·82	3·14	·36	1·02	1·56
1943	·25	2·45	5·66	2·01	2·30	3·55
1944	·14	1·03	6·11	·76	1·90	2·95
1945	·03	1·00	4·08	·23	1·13	1·80
1946	·04	·61	1·87	·19	·67	1·01
Gastro-Enteritis (under 2 years) :						
1942	·24	2·59	5·47	1·53	2·12	3·25
1943	·12	2·92	6·62	2·46	2·31	4·32
1944	·11	2·51	7·76	1·41	2·54	4·01
1945	·05	2·56	6·44	·91	2·01	3·20
1946	·16	·93	4·93	1·17	1·98	2·94
Gastro-Enteritis (2 years and over) :						
1942	·05	·47	·65	·60	·40	·62
1943	·07	·58	·80	·78	·51	·79
1944	·02	·11	1·45	·61	·57	·93
1945	·01	·11	·84	·21	·23	·47
1946	·02	·21	·22	·23	·16	·22
All Dysenteries :						
1942	·40	3·88	9·28	2·49	3·54	5·43
1943	·44	5·95	13·08	5·25	5·12	8·66
1944	·27	3·65	15·24	2·77	5·00	7·89
1945	·09	3·67	11·36	1·35	3·37	5·47
1946	·22	1·75	7·02	1·59	2·81	4·17

DEATH AND INCIDENCE RATE PER 1,000 OF THE POPULATION FOR ENTERIC AND DIPHTHERIA.

	European		Coloured		Native		Asiatic		All Races		Non-Eur.	
	Death Rate	Incid. Rate	Death Rate	Incid. Rate	Death Rate	Incid. Rate	Death Rate	Incid. Rate	Death Rate	Incid. Rate	Death Rate	Incid. Rate
Enteric :												
1942	·09	1·17	·12	1·42	·54	2·28	·11	·24	·22	1·15	·29	1·14
1943	·06	·64	·23	1·17	·46	2·13	·16	·75	·21	1·09	·23	1·35
1944	·05	·34	—	·34	·51	1·49	·11	·47	·19	·69	·28	·89
1945	·02	·15	·11	·58	·51	·86	·11	·28	·19	·39	·27	·53
1946	—	·16	—	·72	·37	1·10	·09	·37	·14	·53	·14	·73
Diphtheria :												
1942	·02	2·48	·12	3·07	·05	·85	—	·03	1·03	·29	·02	·59
1943	·09	2·77	·23	2·81	·03	·60	·03	·01	1·30	·23	·04	·49
1944	·06	3·84	—	8·44	·22	1·01	·02	·09	2·09	·28	·11	1·02
1945	·05	2·33	·11	4·01	·12	1·61	·02	·37	·07	1·55	·07	1·05
1946	·07	1·34	·10	1·75	·07	·62	·09	·36	·07	·82	·09	·55

INFECTIOUS DISEASES ADMITTED TO CITY FEVER HOSPITAL, CONGELLA, DURING THE YEAR.

	European	Coloured	Native	Asiatic	TOTAL
C.S. Meningitis	8 (22)	— (—)	— (3)	— (1)	8 (26)
Chickenpox	67 (44)	— (9)	— (159)	— (6)	67 (218)
Diphtheria and Suspects	211 (300)	— (5)	— (10)	— (8)	211 (323)
Measles	29 (57)	— (—)	— (66)	— (1)	29 (124)
Mumps	21 (13)	— (—)	— (7)	— (—)	21 (20)
Pertussis	3 (20)	— (4)	— (20)	— (1)	3 (45)
Rubella	6 (1)	— (—)	— (—)	— (—)	6 (1)
Scarlet Fever and Suspects	95 (128)	— (—)	— (—)	— (—)	95 (128)
Smallpox	— (1)	— (20)	20 (233)	5 (204)	25 (458)
Smallpox Suspects	— (1)	— (4)	11 (126)	2 (19)	13 (150)
Smallpox Contacts	— (—)	— (10)	19 (145)	1 (58)	20 (213)
Trachoma	2 (—)	— (—)	— (—)	— (1)	2 (1)
Typhus	9 (7)	— (—)	— (—)	— (—)	9 (7)
Whooping Cough	8 (10)	— (—)	— (—)	— (—)	8 (10)
Gonoccocic Infection	3 (—)	— (—)	— (—)	— (—)	3 (—)
TOTALS	462 (604)	— (52)	50 (769)	8 (299)	520 (1,724)

AMBULANCE REMOVALS :

The following table sets out the number of cases conveyed in the Infectious Diseases Ambulance :

	European	Coloured	Native	Asiatic	TOTAL
City Fever Hospital	391 (546)	— (49)	11 (391)	6 (292)	408 (1,278)
Government Hospital	57 (109)	128 (86)	378 (562)	125 (196)	688 (953)
Other Hospitals	56 (28)	85 (23)	235 (351)	204 (127)	580 (529)
TOTALS	504 (683)	213 (158)	624 (1,304)	335 (615)	1,676 (2,760)

DISINFECTING STATION AND LAUNDRY :—

Municipal Departments—			
City Fever Hospital	Disinfections	44,227	(38,109)
City Fever Hospital	Articles laundered	114,848	(182,555)
City Baths	Articles laundered	57,860	(66,874)
Ocean Beach	Articles laundered	44,052	(42,669)
Other Departments	Articles laundered	104,156	(87,049)
TOTALS		365,143	(417,256)
(a) **Routine :**			
Private Premises	Disinfection of Articles	85,978	(109,822)
Private Premises	Disinfection of Rooms	3,641	(3,294)
(b) **Contract :**			
Child Welfare Soceity	Articles laundered	6,483	(4,999)
Durban Turf Club	Disinfections	3,888	(5,880)
Entabeni Nursing Home ...	Disinfections	217,650	(239,205)
Indian Depot Hospital ...	Articles laundered	59,574	(63,679)
King Edward VIII Hospital	Articles laundered	1,295,421	(1,290,819)
King Edward VIII Hospital	Disinfections	50,232	(48,158)
King George V Hospital ...	Articles laundered	148,165	(167,547)
S.A.W.A.S. Residential Club	Articles laundered	164,034	(435,830)
TOTALS		2,835,066	(2,369,251)

3. TUBERCULOSIS :

1.—VITAL STATISTICS—

(a) **Notifications :**

	European	Coloured	Native	Asiatic	TOTAL
(a) **Notifications :**					
(i) *Pulmonary :*					
Local	118 (131)	66 (105)	945 (952)	527 (453)	1,656 (1,641)
Imported	53 (53)	5 (19)	820 (667)	58 (53)	936 (792)
(ii) *Non-Pulmonary :*					
Local	2 (10)	10 (7)	55 (88)	32 (41)	99 (146)
Imported	— (1)	— (3)	102 (175)	5 (7)	107 (186)
(b) **Deaths :**					
(i) *Pulmonary :*					
Local	47 (42)	44 (43)	461 (446)	245 (233)	797 (764)
Imported	10 (14)	4 (1)	361 (314)	29 (22)	404 (351)
(ii) *Non-Pulmonary :*					
Local	10 (1)	1 (6)	51 (40)	16 (25)	78 (72)
Imported	4 (3)	2 (1)	29 (39)	1 (5)	36 (48)

Realising the urgent need for additional Tuberculosis beds, particularly for non-European patients, the City Council, during the early part of the war, resolved to provide 200 additional Tuberculosis beds for Native and Indian patients. Whilst the City Council undertook to provide these beds, it was arranged that they would be administered by, and in conjunction with, existing Government hospitals. For various reasons, unpredictable at the time, it was found necessary to modify the original scheme repeatedly, until eventually the provision of these additional wards became impracticable because firstly, building costs had risen to a prohibitive figure ; secondly, the war appeared to be drawing to an end, thus offering reasonable prospects of obtaining military hospitals for civilian purposes ; and thirdly, a very acute shortage of nurses had developed during the war years.

Since the termination of hostilities, the Union Government has assumed responsibility for providing further hospital accommodation for Tuberculosis, and has acquired Springfield Military Hospital which is now administered in conjunction with King George V Hospital.

How many beds does Durban require for its own City cases ? This may best be assessed by adopting the well-known formula applicable to European countries, viz. : One bed for every death occurring the previous year. During the year 1945/46, there were 875 " City " deaths and 440 " Imported " deaths in Durban. Allowing for a modification in this formula and for the preponderance of non-European cases, it is safe to state that Durban requires 1,000 Tuberculosis beds for City cases only. As there are already in existence approximately 270 beds for City patients, a further 730 are required for City cases only.

In planning Tuberculosis hospital requirements in Durban, however, it is essential to make provision for imported cases as well, and as hospital facilities in Durban improve, the proportion of imported cases to City cases is certain to increase. During the year, approximately 600 Tuberculosis cases left Durban. Most of these were imported cases and one of the main reasons for their leaving Durban was the lack of hospital accommodation. Add this number to the 440 " imported " deaths which occurred last year and we find that approximately a further 1,000 beds will be required. If provision is not made for these imported cases, there will not be sufficient accommodation for City cases.

To sum up, approximately 1,600 more beds are required over and above the existing number.

It would appear likely that the acquisition of military hospitals for Tuberculosis patients will go a long way towards remedying the position. For instance, it is probable that Springfield Military Hospital will provide an additional 800 beds.

At the outbreak of war, the main difficulty regarding Tuberculosis control was the shortage of hospital beds. During the war years, however, a progressive shortage of civilian nurses developed,and the termination of hostilities did nothing to relieve the situation. It would appear therefore that the main deficiency during the next few years is likely to be the shortage of nurses rather than a shortage of beds.

Tuberculosis Staff and Activities.—The staff of the Tuberculosis Section of the City Health Department has remained the same numerically as in the previous years, viz. : One Medical Officer, two Clerks, one Typist, four European Health Visitors, four Indian and four Native Health Assistants.

The Health Visitors and Health Assistants have visited every notified City case (1,755) and also quite a large number of cases for whom the City is not financially liable. Every notified case is entered in the Register, and a personal file kept for each patient's records. The majority of the home contacts of these cases have been induced to attend the various clinics for fluoroscopy of X-raying, and in this way numerous early, and not a few advanced, cases have been located.

Of late, more attention has been paid to patients' contacts at their places of employment. This introduces a very wide field of examination, which can only be dealt with practically and economically when our miniature radiography is in full operation.

In recent years City notifications have been more than double the City deaths in number. Last year the figures were 1,755 and 875 respectively. This means that the total number of patients requiring attention, mainly by the Health Visitors, is increasing at a rapid rate. The work of the Health Visitors is increased by the number of active cases who require to remain on the hospital waiting lists for prolonged periods. Inadequate hospital facilities is taking a heavy toll among the non-European community whose facilities for home isolation are practically non-existent.

European members of the staff are members of the Care Committee of the Natal Anti-Tuberculosis Association. This Committee meets once or twice monthly and dispenses relief to patients and their dependants, mainly in the form of cash-grants towards rents or in the form of foodstuffs.

Applications for assistance are increasing each year, and, in consequence, available funds are proving inadequate. During the last year, Native patients have become more aware of the fact that they are entitled to some form of assistance so that demands from Native cases can be expected to show a sharp rise in future.

Health visitors also make the necessary arrangements for having child contacts admitted to the Preventoria in Queenstown and in Pietermaritzburg.

During the year the Health Education section of this Department has given 1,273 health talks and 20 film-shows on the dangers and control of Tuberculosis. These have been given mainly to non-Europeans, who evince a keen appreciation of this type of education and propaganda. Assisted by the Native Health Assistants of the Tuberculosis Section, they have also successfully " put over " several talks to Native patients in hospital wards with the object of preventing Native patients from absconding from hospital.

DEATHS AND NOTIFICATION RATES (City Cases Only) : TUBERCULOSIS.

	European		Coloured		Native		Asiatic		All Races		Non-Eur.	
	Death Rate	Notification Rate	Death Rate	Notification Rate	Death Rate	Notification Rate	Death Rate	Notification Rate	Death Rate	Notification Rate	Death Rate	Notification Ratee
Pulmonary												
1946	·37	·94	4·29	6·44	4·25	8·71	2·15	4·63	2·23	4·62	3·22	6·60
1945	·38	1·19	4·79	11·68	6·26	13·25	2·35	4·57	2·64	5·67	4·0	8·39
Non-Pulmonary :												
1946	·01	·01	·01	·98	·47	·55	·15	·29	·22	·28	·21	·41
1945	·01	·09	·66	·77	·55	1·23	·25	·41	·22	·51	·39	·76
All Forms :												
1946	·38	·95	4·39	7·42	4·72	9·26	2·30	4·92	2·45	4·90	3·43	7·01
1945	·39	1·28	5·45	12·45	6·81	14·48	2·60	4·98	2·86	6·18	4·39	9·15

DEATHS FROM PULMONARY TUBERCULOSIS IN AGE GROUPS (City Cases only) :—

	European	Coloured	Native	Asiatic	TOTAL
Under 1	1 (—)	3 (3)	10 (7)	2 (3)	16 (13)
1— 2...	— (1)	3 (3)	26 (21)	7 (3)	36 (28)
3— 5...	— (1)	3 (2)	14 (17)	5 (9)	22 (29)
6—15...	— (—)	— (4)	25 (22)	12 (25)	37 (51)
16—25...	5 (3)	6 (10)	83 (82)	96 (82)	190 (177)
26—45...	12 (13)	15 (15)	223 (203)	95 (91)	345 (322)
46—65...	23 (14)	11 (5)	65 (83)	25 (17)	124 (119)
Over 65	6 (10)	3 (1)	15 (11)	3 (3)	27 (25)
TOTALS	47 (42)	44 (43)	461 (446)	245 (233)	797 (764)

TUBERCULOSIS :

City Health (T.B.) Clinic.—This building was designed in 1941, building operations commenced in 1943 and were completed in April, 1945.

The X-ray set was ordered from overseas in 1942. A portion of this, the power unit, arrived about the middle of 1944, and the remaining portion, the camera section, was delivered in July, 1945. By October, the set was fully installed, tested and found to be working properly. The set is designed to undertake both full-size and 35 m.m radiography, but it is intended, later on, to substitute the camera portion for a 70 m.m. film unit.

Although the X-ray set had arrived, there was delay in delivery of the dark-room equipment. This was eventually installed in February, 1946.

Most of the other equipment—medical, laboratory and furniture—has now arrived.

Staffing of the Clinic has presented considerable difficulty. In July, 1945, the City Council approved the proposal that King George V Hospital should provide the medical, radiological and radiographical staffs on a part-time basis, and that the City Health Department would administer the Clinic and provide the balance of the staff, viz. : administrative, clerical, clinical and health-visiting.

Negotiations with the Government on this point were rather protracted. In November the Secretary for Public Health indicated that the Government had certain far-reaching proposals to make regarding the control of Tuberculosis generally and requested the City Council to hold in abeyance its proposals regarding the staffing of the Clinic.

In March, 1946, as no progress had been made, further representations were mady by the City Council to the Minister of Health and Housing. As a result, meetings were convened where the future administration of the Clinic was discussed, firstly the Under-Secretary of Health in April, and subsequently with the Minister of Health and Housing in May, 1946.

At these meetings between the City Council and the Government, it was agreed to give consideration to two proposals, firstly that the Government should purchase the City Health Clinic from the City Council, and secondly that the sectional, medical and health-visiting staff of the City Health Department engaged in Tuberculosis work should be given an opportunity of transferring to the Government service as part of the clinic establishment. No finality has yet been reached in this connection.

Present Clinic Facilities.—As in previous years, the following routine Out-Patient Clinics were held in Durban for both City and Imported cases :—

Hospital Clinic	Races Catered For	Total Attendances
Addington	European	2,542
	Coloured	2,165

Hospital	Races Catered For	Total Attendances
King Edward VIII ...	Natives and Asiatics ...	254
McCord's	Natives	2,392
	Asiatics	4,897

In addition to the above, unofficial clinics have been conducted each week at King George V Hospital. These have been much appreciated by patients as well as by this Department.

In April, 1946, the Provincial Secretary requested that the Clinics at the Provincial Government Hospitals Addington and King Edward VIII be transferred to the new City Health Clinic. As the Clinic had not yet commenced to operate, this request could not be complied with.

In May, 1946, the Clinic at King Edward VIII Hospital was suddenly closed down. Fortunately, this Department was able to refer City cases to the McCord Clinic, but the closure of the King Edward VIII Clinic meant that numerous ex-City out-patients were deprived of free X-ray facilities.

In June, this Department was notified that it was intended also to close down the Addington Hospital Clinic at the end of July, 1946.

Present Hospital Facilities.—The total number of tuberculosis hospital beds in and around Durban is much the same as previously :—

Hospital	Cases Admitted	No. of T.B. Beds
King George V	Europeans, Coloureds, Asiatics	129
McCord's	Natives, Asiatics	60
Indian Immigration	Natives, Asiatics	94
St. Aidan's	Asiatics	12
Umlazi Mission	Natives, Asiatics	20
Fosa Settlement	Asiatics	44
	TOTAL (approx.)	359

In May, 1946, King George V Hospital acquired a number of beds at the adjacent Springfield Military Hospital, and commenced admitting Native patients to these wards. Most of these admissions were drawn from the wards at King Edward VIII Hospital.

All the beds referred to above are for both City and ex-City. Usually, a little more than half of the total number of beds are occupied by City cases.

A few City patients are also accommodated temporarily at Addington and King Edward VIII Hospitals in Durban and occasional cases are sent to Nelspoort, Springkell, Nongoma and other institutions outside Durban. The number of cases sent to hospitals outside Durban is negligible, owing to the long waiting lists for these hospitals. But apart from this fact, the large majority of cases, particularly non-Europeans, are very averse to leaving Durban and prefer to await their turns for admission to hospitals in Durban itself.

General Remarks Regarding Tuberculosis Hospital Accommodation in Durban.—For many years the number of hospital beds available for Durban cases has been hopelessly inadequate. During these years the City population has steadily increased whilst, on the other hand, the number of Tuberculosis beds remained stationary. Then came the war, and with it a further population increase due to a large influx of European and Native war workers, evacuees, etc. The resultant overcrowding coupled with the scarcity and high costs of protective foods have played a very large part in increasing the already high incidence rate of Tuberculosis particularly non-Europeans.

NOTIFICATIONS AND DEATHS—TUBERCULOSIS —ALL FORMS—CITY AND IMPORTED
1930—1946

(Corrected for outward transfer only)

YEAR	EUROPEANS				COLOUREDS				NATIVES				ASIATICS				ALL RACES			
	Notification		Deaths		Notification		Deaths		Notification		Deaths		Notification		Deaths		Notification		Deaths	
	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported	City	Imported
1937	68	8	36	—	38	2	20	—	287	91	162	193	160	8	133	7	553	109	320	179
1938	71	8	42	—	66	5	30	—	402	130	149	351	231	22	122	20	770	166	343	371
1939	109	9	50	18	45	2	16	3	376	43	101	274	263	15	163	16	793	69	330	331
1940	89	5	38	6	60	5	29	4	427	13	187	290	293	15	157	17	869	36	411	317
1941	89	20	41	17	37	2	36	7	486	10	262	316	277	7	231	23	889	39	570	363
1942	80	29	36	31	56	2	35	22	476	68	246	301	288	14	199	40	880	113	516	414
1943	99	229	43	22	57	12	41	5	636	580	255	225	371	79	210	40	1,165	900	549	292
1944	115	94	48	19	62	11	52	10	896	743	415	321	429	85	254	22	1,502	933	769	372
1945	141	54	43	17	112	22	49	2	1,040	842	486	353	494	60	258	27	1,787	978	836	399
1946	120	53	57	14	76	5	45	6	1,000	922	512	390	559	63	261	30	1,755	1,043	875	440

4.—VENEREAL DISEASES.

The European and Coloured V.D. Clinics (both out- and in-patients) are situated in the Special V.D. block at Addington Hospital and are staffed by the Provincial Authorities. A lady Health Visitor from the City Health Department is in charge of the preventive side of the work including the " follow-up " of contacts and defaulters.

The Non-European Clinics (out-patients) are conducted by the City Health Department at the City Fever Hospital, Congella, where, with the exception of the City Venereologist, the entire staff is non-European. These latter include three Bantu trained nurses, two Dispensers, three Orderlies, five Clerks and Cleaners and one Indian and five Bantu Health Assistants. The Bantu Medical Officer also works full-time at the Clinic.

The non-European in-patient clinic is conducted by the Provincial Administration, King Edward VIII Hospital, Congella.

During the year special clinics have been instituted for Coloureds at Addington and are being well attended. In-patient facilities for female Europeans and Coloureds is lacking owing to shortage of nursing staff. At Congella about 80 patients of each sex are accommodated in the V.D. Wards.

Evening clinics for workers unable to attend during the day are in operation both at Addington and Congella. At certain times of the day, the Congella non-European Clinic is uncomfortably crowded. This is mainly due to the fact that all the in-patients (daily average 160) are being treated by the intensive method, whereby they receive an injection every day instead of once a week as formerly.

Patients from outside the City boundaries further congest the Clinic. They constitute about one-fourth of the total. These patients frequently by-pass other hospitals, District Surgeons, Clinics, etc., and come down to the City even when only out-patient treatment is needed. Ever-increasing numbers of patients attend the clinics.

Effects of the health educational programme are evident in the numerous patients who present themselves for examination or request a blood test because they have learnt that their sexual partners are under treatment. Another increasing class of patient is that of women have have failed to bear children or who have had a series of miscarriages and who come to ask for injections following successful results amongst their friends. Others have heard the daily routine V.D. talks given over the loud-speaker unit by the City Health Department. The treatment of V.D. has radically improved within the last few years, firstly with the introduction of the sulpha group of drugs which are a great advance on the older methods, secondly with the intensive methods of the treatment of syphilis and, thirdly, with the advent of penicillin which has proved to be a cure both for gonorrhoea and syphilis. As soon as ample, regular and cheap supplies of the drug become available, Penicillin will become the rountine method of treating gonorrhoea. Representations have been made to the Union Health Department to put it on the list of drugs supplied free to V.D. Clinics.

During the year, several requests were received from industrial firms, orphanages and schools to conduct mass blood-testing surveys of their employees or inmates. On several occasions a mobile injection team from the Clinic has been sent out under the supervision of the European V.D. Health Visitor. Many employers, commercial and domestic, send their servants for examination and certification before engaging them.

The V.D. Department continues to work in the closest co-operation with numerous outside organisations —Child Welfare, Educational, Native Affairs, etc.—besides the other City Health Departments, the South African and City Police in connection with criminal cases of rape and variously under the Children's Act, the Social Welfare Services to whom are reported cases of juvenile sexual delinquency, the various hospitals who refer patients from their wards or out-patient departments, the Prisons Department, the Local Health Commission and other health centres from and to whom patients are referred with details of diagnosis and previous treatment.

In spite of all these agencies, the " social " education of the non-European is going to be a long and arduous task before effective results are achieved. Few highly educated and civilised nations have yet made much impression on the volume of venereal disease in their countries. In South Africa with its backward population the task is still more difficult.

In the urban areas and to an increasing degree in the rural areas, sexual promiscuity seems to be almost the universal practice with hardly any inhibitions, religious or traditional. The attitude of the average Bantu patient, male or female, towards V.D. seems to be one of amusement, indignation against the offending partner is rarely expressed and fear of the consequence of infection is rarely a source of anxiety. The remedy for this state of affairs is not by any means entirely a medical or public health responsibility, economic factors, housing, recreational facilities and elementary education must all form part of the programme for controlling these diseases.

V.D. STATISTISTICS—1945—46

	Congella Native and Asiatic				Addington European and Coloured				McCords European and Coloured				All Races				Grand Total	
	City		Imported		City		Imported		City		Imported		City		Imported		City	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
New Cases ...	5,527 (4,625)	1,971 (2,056)	1,758 (2,138)	1,017 (1,280)	452 (220)	171 (174)	502 (490)	223 (9)	242 (143)	232 (139)	36 (126)	34 (124)	6,221 (5,015)	2,374 (2,369)	2,296 (2,754)	1,274 (1,403)	8,517 (7,769)	3,648 (3,772)
Ward Admissions	1,750 (1,954)	732 (759)	1,259 (811)	779 (988)	— —	88 (10)	— —	148 (111)	255 (75)	231 (28)	84 (56)	94 (20)	2,005 (2,039)	1,051 (787)	1,343 (978)	1,021 (1,008)	3,348 (3,017)	2,072 (1,895)
Clinics Held ...		535 (459)				299 (263)				51 (69)				— —				885 (791)
Outpatient Attendances	27,786 (20,222)	13,241 (10,462)	4,304 (10,183)	3,628 (8,834)	4,839 (3,251)	3,612 (2,422)	976 (1,785)	743 (1,564)	2,375 (1,054)	1,707 (742)	56 (1,127)	49 (663)	34,500 (24,527)	18,560 (13,626)	5,336 (13,095)	4,520 (11,061)	39,836 (37,622)	23,080 (24,687)

5.—FIELD HYGIENE SECTION.

The year under review was most interesting from a pest control point of view as immediately following the cessation of hositilities many anti-pest preparations—poisons, sprays, insecticides—appeared on the market. All were carefully investigated and recorded. Researches on cockroach control were of particular interest. Since August, 1938, over 300 separate experiments, using advertised products, have been carried out in all types of foci and on all species of roaches.

Field Hygiene programmes were directed mainly against rodents, cimex, mosquitoes and roaches and were integrated with the findings of the District Health Inspection Staff.

Plague and Rodent Control.—A close watch for Plague infection was maintained throughout the year. A trained staff of Indian Field Assistants (6) sampled the entire industrial and commercial areas by means of trapping and gassing ; special attention being given where rodent carcases were found in and near harbourages. It is doubtful if a plague-infected rat will take bait, but trapped specimens were nevertheless examined for both B. Pestis and " flea " index.

During the year systematic poison-baiting of drainage schemes in built-up areas was maintained and these, together with beach-front rubbles, open spaces, Victoria Embankment, etc., were treated every three months. Hitherto such baits as bread and mealie-meal with barium carbonate or phosphorous have been used. The wheat shortage, however, enforced the use of mealie-meal, prepared as dry porridge ("putu") and Barium Carbonate. Following a visit and demonstration by the Senior Ecologist, S.A.I.M.R., it is intended to adopt pre-baiting as a rountine procedure.

It is noteworthy that rat complaints diminish in the wake of quarterly poison-baiting programmes.

The by-laws have now been amended to proivde that rodent-free certificates must be furnished before any building may be demolished.

Statistical :

Total rodents destroyed	6,223*
Total Number of poison baits laid	355,873
Total number of traps set	18,843
Total number of premises trapped for plague and flea index	930
Total number of rodents examined in laboratory	961

* These carcases were picked up.

Although Durban is surrounded by an area which is naturally free of rodents, the possibility of colonisation or invasion of multi-mammates or water-rats (Otomys) is carefully watched. Occasional infestations are found and speedily dealt with.

Mosquitoes.—Once again the City has enjoyed a year free from any threat of malaria, despite weather conditions which were perhaps more favourable to malaria propagation than previous years.

Anti-malaria measures included " species " sanitation as the first line of defence supported by routine programmes of oiling, ditching, draining and reclamation. Many of the old mosquito-breeding foci have been permanently eliminated and the fact that no malaria vectors were detected within the boundary limits indicates a most satisfactory position.

Development of the new airport on the southern boundary of the City called for a special survey of this zone for Yellow Fever vectors and other anti-amaryl measures. To date excellent progress has been maintained in this connection but much remains to be done. The close proximity of a large non-European housing scheme to the Aerodrome favours breeding of the Yellow Fever vector—" Ardes Aegypti."

During the year the following programmes were undertaken :—

Drains cleared	600,318 yards
Anti-malaria oil used	7,856 gallons
Larvae examined in laboratory	3,258
Land cleared of vegetation (sundry small plots)	68 acres (approx.)

Roaches.—A wide field of research and experiment has been covered in roach control and many new methods and preparations were submitted to field tests.

Although all four species are known in Durban two are predominant, *i.e.*, the Periplannetta Americana and Blatella Germanica. The latter is a prolific breeder and favours sewers for harbourage and feeding. It must be stressed, however, that the Germanica species are not confined to sewers. They are equally attracted to any moist and warm foci, hence their ready invasion of household kitchens. Conscientious roach control by householders is necessary to supplement the sewer control programme.

Control Measures.—Insecticides used in roach control can be divided into three groups :—

(*a*) Liquid sprays ;
(*b*) Powders ; and
(*c*) Baits.

Liquids.—These are designed to act as " contact " sprays and as fumigants after atomisation or volatisation. A combination of both functions is sometimes achieved.

In assessing the efficiency of many practical tests carried out with liquid sprays, the criterion of suitability for field work is the factor contact with rapid " knockdown " qualities. Roaches do not re-act to residual films left by such sprays as were tested. In view of the fact that exposure to *at least* 180 grammes of Cyanide per 1,000 cu. ft. for 4 to 5 hours is required to kill roaches, it is clear that any such atomised spray to be effective as a roachicide must, at the same time, be too dangerous to use. However, it is understood that lethal " smokes " used, according to fumigation technique, may be available in the near future.

If no " knockdown " factor is present in the spray roaches will travel great distances before dying.

Powders.—Without exception, powder preparations are useless when damp or wet. The usual powder base is a scheduled posion (Sodium Silico Fluoride) and the powder type of insecticide is thus restricted to dry foci.

Baits.—The roach is essentially a nocturnal feeder and as such ranges far afield and favours a variety of feed. Any poison bait to be effective must first of all be attractive. If intended for use in sewers, it must withstand heat radiated from manhole covers and chemical interaction with sewer gas.

Equipment.—Of the many types of pumps and applicators, those characterised by simplicity of design and operation are preferable. Foci to be treated are often inaccessible and away from electric power, thus narrowing the field of choice to small hand-operated equipment.

Many liquid insecticides have cresyllic or carbolic acid as a base. Pumps must be made of a material not susceptible to the corrosive action of this acid and must be of simple design with spares available for replacement.

Summary.—With respect to :

(*a*) **Equipment.**—Hand-operated, manageable pumps of simple type assuring a good " wetting " or " contact " spray are preferable ;
(*7*) **Material.**—Any liquid contact spray with a rapid " knockdown " factor is suitable.

Apathy on the part of the majority of householders in conducting regular and active roach control measures can only be explained on the assumption that existing methods are too " troublesome" for general adoption. Perhaps insecticidal " smokes " used as a fumigant may supply the answer.

Departmental control measures comprise regular and systematic spraying of foci such as sewers, storm-water drains, gutter-bridges, culverts and the many Municipal-owned and occupied premises.

Science has not yet provided private enterprise with the ideal means for solving this problem of the private householder. The Department's inspectional staff is every ready to advise and demonstrate control measures.

Statistical.—

Sewer-manholes sprayed	70,645
Stormwater-manholes sprayed	82,507
Gutter-bridges sprayed	49,508
Water-valves sprayed	60,126
D.C. premises treated	111
Private properties treated	21,932
Gallons of spray fluid	5,776
Total number of foci treated	284,829

Having regard to the fact that upwards of a score of roaches are killed by each treatment, it will be appreciated that the control programme contributes materially in keeping down these pests, but again it must be emphasised :—

(1) That the ready and constant co-operation of householders is necessary ; and
(2) That the ideal insecticide has not yet been evolved or, at least, become available.

Cimex (Bed Bugs).—The control of this pest relates to :—

(1) Actual work carried out departmentally ; and
(2) Supervision of work carried out by private enterprise.

With regard to (1), activities are limited strictly to Municipally-owned or occupied premises, particularly in the Indian Sub-Economic housing schemes. In these schemes it is incumbent upon all tenants, immediately they are allotted a house, to have their furniture and personal effects fumigated by cyanide. The usual practice is to place these articles in one or two rooms of the house and treat with HCN (180 grammes per 1,000 cu. ft.).

The programme also includes control work in Native quarters, etc., attached to the larger Municipal institutions, such as beer halls and police barracks.

With regard to the supervision of private enterprise, the position is that before the promulgation of the present Government Hydrogen Cyanide regulations, the fumigator was obliged to give 24 hours notice of any intended fumigation.

At present, however, departmental supervision is confined to inspection of fumigation registers and the " follow-up " of particular operations selected for investigation. Private fumigators have, as a rule, co-operated with the Department in maintaining an efficient fumigation service.

D.D.T. and Kindred Preparations.—The Department continues to follow closely all literature and information in regard to these preparations. It is possible that highly important advances in technique and efficiency may be achieved by the use of D.D.T. and Gammexane " smokes " which are now under test overseas on a large scale.

Sectional equipment has been kept up-to-date to undertake any type of work entailing the use of these preparations.

With regard to the efficacy of D.D.T. preparations, sectional experiments have proved that it is an ideal material for the control of slow-moving pests whose harbourages or habitats are restricted to a short radius of personal environment. It is particularly useful in preventing re-infestation of Native quarters and, coupled with preliminary cyanide fumigation, has proved effective in treating recognised harbourages.

This Department carried out 153 HCN fumigation treatments whilst private enterprise catered for 4,356 cyanide fumigations.

The following is a summary of the Field Hygiene Section's activities during the year :—

Rodents :	
Premises trapped for plague index	930
Baits laid	355,873
Traps set	18,843
Cynogas used : lbs.	1,709
Rodents destroyed	6,223
Rodents sent to Laboratory, Government	326
Rodents sent to Laboratory, Field Hygiene	634
Mosquitoes :	
Larvacide used : gallons	7,856½
Ditches cleared : yards	600,318
Land cleared : acres	68
Disinfectant used : gallons	281
Other spraying fluids	89½
Larvae examined in Departmental Laboratory	3,258
Cimex :	
Premises fumigated by City Health Department	153
Premises fumigated by private enterprise	4,356

Roaches :

Sewer manholes sprayed	70,645
Stormwater manholes sprayed	82,507
Gutter-bridges sprayed	49,508
Corporation properties sprayed	31
Government properties sprayed	1
Private properties sprayed	21,932
Spray fluid : gallons	5,865
Powder : lbs.	20

Vehicles—Mileage :

Anti-malaria Sanitation : NDC 739	9,470
Anti-plague : NDC 439	5,793
General	24,135

General Assistants :

Visits	22,703

Complaints Investigated :—

Rodents	594
Mosquitoes	262
Roaches	31
Flies	41
Fleas and Ticks	38

Premises corrected :—

Rodents	186
Mosquitoes	274
Roaches	8
Flies	30
Fleas and Ticks	18

Native Health Assistants :

Visits to Corporation premises	6,463
Visits to non-European premises	9,814
Control advices given	1,622
Control advices complied with	1,026
Tubes of larvae collected for examination	677

REGIONAL DISTRIBUTION OF MOSQUITO LARVAE FROM JULY 1st, 1945 TO JUNE 30th, 1946

DISTRICT NUMBER ...	1	2	3	4	5	6	7—8	9	10	11	12	13	14	15	16	17	18	
VARIETY	Bluff	South Coast	Con-gella	Cato Manor	Black hurst	Spring-field	Central	Point	Sea Cow Lake	Umhla-tuzana	Umbilo	Con-gella	Botanic Gardens	Berea	Grey-ville	East Vlei	G.W.P. DNorth	TOTAL
Coustani	—	182	—	261	9	34	2	—	23	261	—	—	—	—	—	—	106	878
Demeilloni	—	13	—	319	24	18	54	—	41	132	—	—	—	—	—	—	73	674
Maculipalpis	—	16	—	103	18	20	29	—	3	134	—	—	—	—	—	—	52	375
Pretoriensis	—	11	—	302	58	69	—	—	95	101	—	—	—	—	—	—	99	735
Cinerius	—	—	—	93	2	12	—	—	10	55	—	—	—	—	—	—	83	255
Gambiae	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Marshaili	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Squamosis Var	—	12	—	37	5	—	5	—	—	3	—	—	—	—	—	—	9	71
Squamosis	—	83	—	35	15	—	—	—	4	14	—	—	—	—	—	—	43	194
Seesoni Var	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
Natilensis	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	3
TOTAL	—	317	—	1,150	131	153	90	—	176	703	—	—	—	—	—	—	468	3,188

6.—EPIDEMIOLOGY : FORMIDABLE EPIDEMIC DISEASE.

The previous year's epidemic, when 327 local cases of Smallpox were notified, carried over into the present but tailed off rapidly. There were 8 cases in the first quarter, none thereafter. The collapse of the outbreak was due to the prompt isolation of cases to direct contact and the rise in mass immunity due to the successful completion of a mass vaccination programme. It is intended to maintain this immunity by means of systematic health education and regular monthly vaccinations at Native hostels and compounds. The Native Administration Department assist by inspecting all Bantu males appearing for registration and vaccinating those who require it.

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 :—

Vaccinations : Infants (1945-46)	**Durban**
Births in Vaccination Register	3,214
Successfully vaccinated	1,084
Insusceptible to vaccination	59
Postponed owing to illness	14
Previously had Smallpox	Nil.
Deaths of infants under 2 years registered	103
Vaccination : 12-year-olds and others :	
Successfully vaccinated	5
Insusceptible to vaccination	—
Postponed owing to illness	—
Infants :	
Exemption Certificates granted	24
Exemption Certificates refused	1
Exemption Certificates refused in terms of Section 100 (2) of the Public Health Act No. 36 of 1919	16
Indian Immigration Vaccination :	
Births entered in Register	4,330
Successfully vaccinated	271
Insusceptible to vaccination	2
Postponed owing to illness	4
Deaths under 2 years (registered)	721
Indians : 12 years old and others	
Successfully vaccinated	1

Vaccinations by the Medical Officer, Native Administration Department, were as follows :—

Number of Natives examined	91,259
Number of Natives vaccinated	33,958
Number of Natives unfit	1,342

Typhus.—Of the 8 cases notified during the year, 3 were vermin-infested and had had contact with one another. They were recorded as being of the epidemic variety, despite mildness of symptoms.

The remaining 5 cases were distributed irregularly over the year, gave no history of contact with previous cases and gave rise to secondary cases. It is now fairly certain, although in a few cases there was no supporting serological evidence, that these cases were of murine origin. The routine control measures for epidemic Typhus were instituted in every cases.

No notifications of Plague, Asiatic Cholera, Yellow Fever and African Sleeping Sickness were received during the year.

OTHER NOTIFIABLE DISEASES.

Typhoid Fever.—The incidence has risen from that of 112 local in 1944/45 to 175 this year and was sporadic except for two localised outbreaks involving 2 and 4 cases respectively. The former was caused by drinking contaminated water and the latter through " case-contact " in a general hospital.

The majority of cases occurred as the result of unhygienic conditions in the outer areas where non-Europeans squat under conditions of serious congestion and insanitation, which aggravate as time marches on and housing lags behind. Comparing the incidence in Chesterville Location with that in its immediate environs, one realises that, given proper housing and sanitary conditions, the non-European will rarely contract the disease.

Sporadic cases occur in built-up areas abutting bushlands as a result of faecal fouling of the bush by vagrants

Typhoid Incidence per 1,000 Population :

European	Coloured	Native	Asiatic	All Races
0·16	0·72	1·10	0·37	0·53

District Incidence (Durban Borough) :

DISTRICT	No. of Cases	Incidence per 1,000 population
Old Borough	52	0·28
Greenwood Park	12	0·46
Sydenham	22	0·59
Mayville	56	0·94
Umhlatuzana	16	0·92
South Coast Junction	17	0·44

Diphtheria.—The local incidence of this disease has dropped most substantially this year, there being a total of 295 cases as compared with last year's figure of 444. This has happened at the end of a war when local residents are being thoroughly intermingled with persons from overseas, the City population is increasing rapidly, Natives are migrating into the town in large numbers, and all dwellings, whether hotels, boarding houses, flats or private houses, are filled to capacity.

These factors favour increased incidence yet the reverse has happened. Before attributing this favourable result to the expanding immunisation programmes it must be kept in mind that Diphtheria tends to appear in waves and the present period might well be at the bottom of the incidence curve. Racial incidence of the disease during the past eight years :—

YEAR	European	Coloured	Native	Asiatic	TOTAL
1939	266	21	24	29	340
1940	194	21	16	23	254
1941	228	18	42	8	296
1942	262	26	63	14	365
1943	295	24	44	15	378
1944	416	74	73	36	599
1945	255	36	116	37	444
1946	165	18	74	41	298

Amoebic Dysentery.—Notifications showed little difference from those for the six months ending June, 1945, indicating this to be a typical endemic disease. In view of the persistently high incidence, the " follow-up " of persons employed in handling food for public consumption was attempted as an experiment. Private practitioners or patients themselves have been offered courses of Diodequin in an attempt to clear up the " carrier " state as judged by disappearance of symptoms and of E. Histolytica in the stools.

Co-operation of European stall holders at the City Market was sought to begin with. They were interviewed, fully acquainted with modes of transmission of the disease and offered free service in regard to examination of stools and treatment. However, the experiment failed through lack of co-operation, thus serving to emphasise the environmental and health educational aspects of control.

With regard to the part played by hospitalisation in the control of Amoebiasis, the position is—according, to the weight of medical opinion—that hospitalisation plays an insignificant, if any, part in *preventing* the spread of Amoebic Dysentery because :—

(*a*) The acute state of the disease (dysenteric) is *not* the infectious stage ; and

(*b*) the infectious case is not the acute case which seeks admission to hospiatl to obtain treatment, but instead is the " cyst-passer " who in the majority of cases, enjoys normal health.

If " cyst-passers " could be admitted to hospital for the purpose of undergoing some treatment which would render them " cyst-free," then only could a clear-cut preventive function be claimed for hospitalisation.

Nevertheless, many patients suffering from dysentery, whether Amoebic or Bacillary, do require hospital treatment because they are ill and weak and have no facilities for home-nursing. Therefore, it must be conceded that hospitalisation has a useful function to fulfill in any anit-amoebic programme. But there is from the medical viewpoint, the anomaly that this function in the case of Amoebic Dysentery is curative and not preventive in purpose.

According to Section 26 of the Public Health Act, which regulates the matter, the purpose of hospitalisation authorised by that section is essentially preventive.

The fact remains, however, that the Government have decided to regard hospitalisation of Amoebic Dysentery as coming within the ambit of Section 26 of the Act.

Assuming that the hospitalisation of Amoebic Dysentery is a necessary feature of a control programme, it does not follow that it is necessary to the extent shown in the returns from local hospitals. In existing circumstances, doubtless it is necessary to the extent disclosed, but it is considered that the adoption of oral, ambulant treatment would greatly reduce the numbers seeking in-patient treatment. The oral treatment in question is that which employs tablets of diodoquin alone or supplemented by tablets of emetine-bismuth-iodide. The former drug is equally useful in controlling acute bacillary dysentery.

Because of the scarcity and high cost of diodoquin, it has not yet been possible to organise out-patient clinical treatment for Amoebic Dysentery but the question of hospital costs is most materially affected by the possibility that such treatment will greatly reduce the number of acute and debilitated cases requiring hospital treatment.

Thus, clinical out-patient treatment of Amoebic Dysentery is likely to take first place in the control programme in the near future. It becomes a preventive measure in the sense that it will obviate the need for many sufferers to seek admission to hospital and, as a corollary, the need to set aside hospital space—already overcrowded—for the receiption of such cases.

It may well be that, to begin with, the cost of oral, ambulant treatment would equal, if not exceed, that of hospitalisation, but this initial stage of high cost would inevitably be succeeded by a phase of diminishing costs tending in a few years to the irreducible minimum.

From this viewpoint, a local authority would be justified in favouring expenditure on positive rather than upon doubtful measures of prevention. At the same time if a properly co-ordinated programme of prevention was being undertaken by all concerned, few local authorities would hesitate to accept the fractional liability which hospitalisation would then represent.

On the evidence of his local researches, Dr. B. F. Sampson, Consulting Pathologist, estimates that approximately 50 per cent. of local Bantu may harbour the infective " cyst " of Amoebiasis. For the other racial groups the percentages are : Indian 9 European 15. Even if hospitalisation could render a " cyst-passer " no longer infectious, systematic prevention could not be achieved by such means.

Dr. Sampson also estimates that probably less than 50 per cent. of cases notified from hospitals as Amoebaisis actually manifest symptoms of that disease, although they are " cyst-passers."

The disease is spread by passage of " cysts " from a "carrier " to another person directly or indirectly through the medium of food or water. It is a typical food-borne disease which can be prevented by measures designed to influence both the environment and personal factors concerned in its transmission. As with Tuberculosis, however, poverty, ignorance and insanitation play important parts in the process of spread. Like

Tuberculosis, Amoebiasis may be described fairly as a " social " disease which defies control merely by isolation of sufferers in hospital and which, equally with Tuberculosis, requires the largest measure of financial support from the Government in order to ensure control and prevention.

On the subject of the free hospitalisation policy in respect of infectious diseases which has for so long obtained in Durban, attention must be drawn to the altered circumstances of to-day. Protection by immunisation against such diseases as Diphtheria, Scarlet Fever ,Whooping Cough and Typhoid is now available at free public clinics. The difficulty and cost of maintain isolation hospital services have greatly increased in recent years. It is considered that the re-organised and strengthened City Health Department could sustain the additional administrative and field work which would be involved in (*a*) control of home-isolation for cases of a type formerly hospitalised, and (*b*) recovery of costs from persons liable in terms of the Public Health Act, the Master and Servants Act and the Indian Immigrants Act.

To recapitulate —

(1) Hospitalisation does play an important part in the control of Amoebiasis although not by way of limiting or preventing the spread of infection but by way of suitably dealing with sufferers from the dysenteric type of the disease who are ill weak and have no facilities for home-nursing or treatment.

(2) There is need for the organisation of " out-patient " or " ambulant sick " clinics in conjunction with general hospitals and at other strategic points for the purpose of administering oral curative treatment to early or mild cases of Amoebic and Bacillary Dysentery in order that severe and debilitated cases may be prevented and the demand for hospitalisation lessened.

(3) The acceptance by a local authority of liability for hospitalisation of its local cases of Amoebic Dysentery should be made under cover of a general programme of Amoebic Control for its own and adjacent areas concerted unde rthe aegis and with the powerful financial support of the Central Government (or the Provincial Administration acting on its behalf) whereunder all aspects of Amoebic Control will be developed and co-ordinated.

Durban Incidence :

	European	Coloured	Native	Asiatic	TOTAL
Six months ending June, 1945	429	27	828	34	1,318
July, 1945, to June, 1946	816	54	1,583	88	2,541

Acute Anterior Poliomyelitis.—Following up on the epidemic of 1944/45, this disease has shown only sporadic incidence during the twelve months under review. In no instance could " case contact " be established as a cause in the spread, cases, in fact, were distributed widely apart.

European	Coloured	Native	Asiatic	TOTAL
5	1	2	6	14

Other Infectious Diseases.—The incidence of other infectious diseases has remained consistently low.

Plague.—There were no cases or suspect cases of human or animal Plague during the year. The customary control of premises on the Maydon Wharf zone were carried out and the firms concerned were advised on all measures to be taken regarding the elimination of rat harbourages (existing and potential), rodent destruction and rodent-proofing of premises.

Generally, the firms concerned have been co-operative but some difficulties were experienced on premises other than food stores.

Mr. Davis, Chief Rodent Officer for the Union of South Africa, inspected the area in June and stated that the rodent population was not as high as he had expected. He confirmed the policy of requiring that every new building erected in the area should conform in every detail with rodent-proofing specifications and that rodent destructive measures, including poison-baiting and gassing, should be employed in yards, warehouses, drains and sewers. In older premises, reliance should be placed on regular trapping and correct stacking of goods. These measures are in line with the policy of the City Health Department and will continue to be effectively maintained.

Beneath the Maydon Wharf itself, Mr. Davis found extensive rat colonisation. In this connection Dr, F. W. P. Cluver, Deputy Chief Health Officer, Union Health Department, stated that the Union Government were giving a high priority rating to reconstruction of the Wharf such that conversion of the dock into a solid rodent-proof structure should not be long delayed.

7.—IMMUNISATION.

The work of this section has expanded considerably during the year, thanks partly to the acquisition of the Mobile Immunisation Clinic, and the issue of Immunisation Badges.

Mobile Immunisation Clinic.—A single-decker bus was converted into a Mobile Clinic which included the following facilities : A large medicine cupboard, wash-hand basin with tank and drainage, an enamelled table, a couch and seating accommodation for the staff.

A waiting room is provided in the rear compartment where parents are interviewed. The exterior of the bus is painted in cream with blue beading, and displays captions in three languages descriptive of the services rendered by the Mobile Clinic.

Apart from the health education value of the captions, the Mobile Clinic has been extremely useful in the suburbs and on school premises.

" **Imadi** " **Badges.**—Neat badges were designed by a member of the City Health Department staff with the idea of stimulating children's interest in protection against diphtheria. The badge may be worn only by those who have been completely immunised and thenceforth they beco ne members of the IM=(Immunised) ; A=(Against) ; DI=(Diphtheria) CLUB.

Badges for Coloured, Asiatic and Bantu children are in course of preparation.

The routine programmes maintained by the Immunisation Section includes :—

(i) Collection of serum for Vi-testing from—

(*a*) Dairy personnel ;
(*b*) employees in milk-bars, tea rooms ;
(*c*) prospective foodhandlers who have recently suffered from Typhoid Fever.

(ii) Free immunisation of Durban residents against Diphtheria, Typhoid, Smallpox, Whooping Cough.

(iii) Personal canvassing at private homes (anti-Diphtheritic immunisation) where—

(*a*) There are new-born children ;
(*b*) children have not appeared for second or third inoculation.

(iv) Making appointments for immunisation with—

(*a*) Schools (anti-Diphtheritic).
(*b*) Locations (vaccination, anti-Diphtheritic, anti-Typhoid) ;
(*c*) dairies and other food-handling premises (Vi-testing, anti-Typhoid).

(v) Keeping of records.

Statistical.—(*a*) Over the past 3 years the numbers of persons immunised against Diphtheria, are as follows :

	European	Coloured	Native	Asiatic	TOTAL
July, 1943—June, 1944	2,894	254	39	5	3,192
July, 1944—June, 1945	3,696	877	1,800	646	7,019
July, 1945—June, 1946	3,391	882	917	6,026	11,216

General.—(*b*) Progress is reflected in the following table :—

	European	Coloured	Native	Asiatic	TOTAL
Diptheria :					
Partial	4,244 (5,528)	1,140 (702)	1,612 (78)	7,954 (39)	14,950 (6,347)
Complete	3,391 (2,741)	882 (252)	917 (31)	6,026 (13)	11,216 (3,037)
Whooping Cough :					
Partial	1,025 (1,715)	140 (98)	79 (—)	53 (8)	1,297 (1,819)
Complete	394 (276)	61 (4)	25 (—)	18 (1)	498 (281)
Enteric :					
Partial	146 (859)	35 (46)	1,002 (8,995)	149 (4,188)	1,332 (4,088)
Complete	405 (259)	131 (14)	3,522 (2,332)	1,140 (857)	5,198 (3,462)
Vi-tests	103 (3)	— (2)	1,755 (834)	169 (36)	2,027 (875)
Diphtheria Swabs	275 (517)	50 (71)	23 (41)	52 (41)	400 (670)
Vaccinations	1,992 (—)	147 (—)	13,846 (—)	389 (—)	16,374 (36,129)

8.—UMGENI WATER SCHEME.

A.—Table Mountain.

B.—Durban Heights.

A.—During the year, four general inspections were made by a Medical Officer and staff of the City Health Department. The following matters received particular attention :—

Housing.—At the permanent camps the old " beehive " type of corrugated iron hut, which was badly ventilated and lighted, has been gradually replaced by the wattle and daub type with thatched roof. These look presentable and are eminently suited to the local climate.

Special huts were erected for cooking the main meals, but despite repeated warnings the Native finds it hard to discard his ingrained habit of lighting fires in the living quarters.

The " beehive " hut is still retained as temporary accommodation for gangs employed on road work or on the pipeline.

Enteric Control.—(*a*) **Latrines :** A special type of privy for non-Europeans was designed and put into operation at the camps. Although lids were provided they disappear as fast as they are fixed into position, the reason being that they offer a readily available source of firewood. It has been suggested that metal covers be used instead.

Nevertheless the hygiene overseer, Mr. Dubois, has kept a watchful eye on the latrines in general and limed them thoroughly every week and had new pits dug whenever necessary.

(*b*) In October, 1945, a large number (633 non-Europeans and 6 Europeans) were inoculated against Enteric Fever by the Mobile Immunisation Unit. No form of compulsion was used. All foodhandlers, *i.e.*, cooks, were inoculated.

Malarial Control.—Throughout the year pools were sprayed with anti-mosquito oil, the programme being intensified during the summer months. No outbreaks of malaria occurred.

Typhus Control.—Two disinfectors, lent by the City Health Department, were used fairly regularly for disinfestation purposes (one was loaned to the Contractors). No lice were discovered during inspections but it proved impossible to inspect every employee. Monthly disinfestation of all non-European clothing during the winter season was insisted upon. No cases of Typhus were reported.

Rodent Control.—Stores, shed and the bush were closely examined for rat harbourage. Advice has reguarly been given as to the necessity for correct stacking of goods and the practice of proper trapping and poisoning methods.

The Hygiene Overseer has kept up-to-date with his bush-clearing programme and also attended to rodent elimination in dwellings.

Non-European Nutrition.—During the early part of 1945 it was evident that the dietary scale of the non-European employees was neither balanced nor adequate. It was decided to obtain meat from Durban and deliver it to the various camps, and to plant a vegetable garden sufficient to meet all local requirements for fresh vegetables.

By October, 1945, the meat distribution scheme was in full swing, but owing to the lateness of the rains, ploughing and the planting of vegetables had only just been begun. During the next two months the local store, where Native employees were in the habit of supplementing their diet, was unable to obtain supplies of vegetables owing to a general shortage.

As a result, the City Health Department was called upon, in January, 1946, to investigage an outbreak of deficiency disease. On 11th January an inspection was carried out and between 14 and 20 cases of scruvy were detected.

Large supplies of Vitamin C tablets were forwarded to the dam and distributed to all Native labourers. The outbreak subsided by the 25th January, 48 cases in all having been reported.

Vitamin tablets were regularly issued until about the end of February by which time the garden was producing sufficient vegetables to cope with the demands of all camps at Table Mountain. Meanwhile the Resident Engineer was fully informed as to which vegetables should be cultivated in quantity and how they should be cooked in order to preserve the maximum content of Vitamin C.

First Aid Equipment.—At the tunnel camps, where men are employed on outlying hazardous jobs, it was obvious that complete first-aid outfits were essential. With the much appreciated assistance of the St. John Ambulance Division C.P.S. boxes at the City Stores Department were equipped and dispatched along with manuals to the Umgeni Dam.

At present there is one first aid box at each tunnel face (excepting where tunnel faces are in juxtaposition) and the Hygiene Overseer is responsible for ensuring that the full equipment is stocked.

Hospital Admission Rates.—These are only available for the six months ending 30th June, 1946. There is no record of the number of working days lost per patient. Nevertheless the following figures give some idea of the general state of health among the Bantu employees :—

The average monthly number of non-European labourers ... ... = 1,036
Admitted to hospital for 6 months (Workmen's Compensation cases) ... ... = 54
Annual admission number would therefore approximate ... ... = 108

$$\therefore \text{Annual admission rate} = \frac{108 \times 100}{1036} = 10{\cdot}4 \text{ per cent.}$$

Admitted to hospital during 6 months ending June, 1946 (ordinary illness) ... ... = 74
Annual admission number would therefore approximate ... ... = 148

$$\therefore \text{Annual admission rate} = \frac{148 \times 100}{1036} = 14{\cdot}3 \text{ per cent.}$$

B.—**Durban Heights :** Two inspections were carried out during the year, the first on 7th February, 1946, and the second on 17th May, 1946.

Housing.—On the whole, housing was fairly satisfactory, but in a few instances recommendations had to be made regarding insufficient ventilation and floor space in the temporary hutments.

Latrines and Water Supply.—Were both satisfactory.

Rodent Control.—It was explained that materials in the lumber room and foodstore should be stacked so that inspection and control could easily be carried out and that doors, wall-plates and skirtings should be suitably proofed against rodents.

Hygiene Assistants.—Two non-Europeans were given an intensive two weeks course of instruction at the City Health Department in the prevention and eradication of rodents, flies, bugs, lice and mosquitoes. The Resident Engineer states that they have carried out their duties admirably and have been a distinct asset to the works.

Immunisation.—The entire staff were inoculated against Typhoid Fever by the Mobile Immunisation Unit on 17th and 28th May. During the previous year, all were vaccinated against Smallpox.

Nutrition.—The City and Water Engineer was provided with minimum ration scales for non-European labourers. No cases of malnutrition from this area have been reported.

Health Education.—Pamphlets on nutrition, infectious disease, etc., were supplied to the foremen for distribution.

First Aid Equipment.—As in the case of the Table Mountain scheme a fully equipped first aid box, complete with instructions, was issued to the Engineer in charge.

9.—HEALTH EDUCATION.

An Assistant Medical Officer of Health (Dr. H. S. Edwards) was put in charge of this section of Public Health activities which was revived and re-organised two years ago. More extensive programmes of lecture-film demonstration were developed for Bantus and Asiatics.

" Visual " education has been a weekly feature covering the subjects of Sex Hygiene for adolescents, Personal Hygiene, Isitshimuyana, and Diphtheria in addition to the routine subjects of V.D., T.B., Infectious Diseases, Domestic Hygiene and Nutrition.

The loudspeaker unit continues to prove itself a publicity medium per excellence and so well is it now known that wherever it is stationed appreciative crowds gather and listen intently to some new aspect of the prevention of disease and the promotion of health.

The Unit has undoubtedly been responsible for improving attendances at the various clinics. In addition to its " Wayside " sessions for industrial groups, talks were given to beerhall customers and foodhandler groups both domestic and commercial.

Several radio broadcasts were given on nutrition and the care of cripples.

Films on Nutrition and Malaria have been acquired for the Film Library—village halls, parks and open spaces were utilised for demonstration purposes.

Numerous pamphlets on V.D., T.B., Flies, Fleas, Lice, Mosquitoes, Worms, Sneeze, Refuse, Nutrition and Food Hygiene were distributed.

Durban's pioneering efforts in health education are earning recognition far afield as borne out by letters of appreciation from Cape Town to Rhodesia. The field of opportunity is still far from being fully exploited. It is intended to integrate visual educational methods more closely with all sectional activities, particularly Family Health Service (Child Hygiene) as soon as suitable films are available.

DISTRICT SANITATION.

Inspectional Dispositions.—Under the Departmental re-organisation scheme approved by the City Council on 28th September, 1945, the City has been divided into eighteen health districts. Each district will be staffed by a Health Inspector assisted by a junior Health Inspector or Health Assistant. Health visiting programmes will, incidentally, be more or less, similarly organised.

Food Shops.—During the period of hositilities, the Department was obliged to modify its high pre-war standard of structural requirements in connection with food shops to meet prevailing conditions relating to shortage of materials, building control policy and temporary absence of staff on active service.

Concurrent with the return of more settled conditions in regard to labour and material factors, the Department will press forward with a programme designed to bring such premises up to the desired structural standard.

Demolition of Buildings : Anti-Rodent Measures.—In terms of a recently promulgated amendment to the City Building By-laws, no person may proceed to demolish any building unless a certificate has first been obtained from the City and Water Engineer certifying freedom from rodent infestation.

The City and Water Engineer is guided in the issue of certificates by the advice of this Department, and the close contact maintained between the two departments has already been productive of satisfactory results in preventing the dispersal of rodent population of buildings undergoing demolition.

Waste Water Disposal.—Considerable difficulty continues to be experienced in the suburban areas in the disposal of domestic waste waters.

The greater part of the outer areas is, as yet, unsewered. Although the City and Water Engineer is prepared to render every assistance by permitting discharge of domestic waste water into the Corporation's storm-water drainage system, after suitable filtration, the fact remains that stormwater drains in many localities are non-existent. Where the soil is of an impermeable character, generally in non-European occupied areas, waste water disposal is, in present circumstances, the cause of persistent sanitary nuisance due to stagnation on the property concerned or discharge into the surface drainage ditches of roads.

Sanitary Conveniences for Builders' Employees.—Investigation of fly and other sanitary nuisances in a number of instances disclosed that the source of the trouble emanated from failure of certain building contractors to make the requisite latrine accommodation for non-European employees, resulting in the extensive fouling of vacant lands.

Apart from representations to the offenders the aid of the City and Water Engineer was invoked with the object of preventing future occurrences of the kind.

Deterioration of Housing.—During the past five or six years, there has been steady deterioration of many dwelling premises in the City.

Rigid control of corrugated iron, still in extremely short supply, has enforced continuous patching of roofs which, in normal times, would have long since been renewed and a goodly percentage of roofs are literally on " their last legs." The position is well illustrated by the fact that, immediately following upon rainfall, the Department is inundated with complaints regarding leaking roofs. A vast amount of dwelling reconstruction or re-conditioning is accumulating and even after return to normal in the supply of essential building materials, some considerable time must elapse before the arrears can be overtaken.

Overcrowding of Dwellings and Illegal Use of Structures for Human Habitation.—Although complaints concerning overcrowded dwellings are being received with ever-increasing frequency, the prohibiting legislation is unenforceable in the existing chronic stage of housing shortage.

It is now common to find garages, sub-floor and sub-stair spaces being utilised for the accommodation of human beings, generally Natives, and such action as is possible is taken to secure vacation of this type of improvised housing, wherever discovered.

Food Wastage.—An analysis of 60 cubic yards of domestic refuse from a typically middle-class residential district of the City, carried out by the City and Water Engineer, revealed that it contained the following foorstuff which could be classified as suitable for human consumption :—

Brown bread	33 lbs.
Assorted vegetables	31 lbs.
Cheese	½ lb.
Mealie meal	1½ lbs.

When it is realised that the City produces 17,000 cubic yards of refuse monthly, of which 11,000 cubic yards derive from middle class suburbs and similar localities, the extent of food wastage is obvious.

JULY—1945—1946—JUNE

VENUE	Venereal Disease		Tuberculosis		Infectious Disease		Immunisation		Handler		Control		Nutrition		Personal Hygiene		Sex Hygiene	Worm	Domes. Hygiene	Vi-testing	Care Cripples Diphtheria		Shiman	D.S.	TOTALS	
	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Talks	Talks	Talks	Films	Talks	Talks	Talks	Talks	Films
Old Borough	1,345	18	1,130	16	1,515	21	1,539	16	1,483	—	128	17	53	25	29	5	4	3	8	24	29	14	11	74	7,360	147
Old Borough, 1944/45	439	30	290	30	404	26	318	17	297	2	40	—	4	1	—	—	—	—	34	—	—	—	—	—	1,826	106
Greenwood Park ...	38	—	24	—	51	—	69	—	44	—	20	—	23	2	24	—	—	4	3	2	2	11	1	27	341	4
Greenwood Park 1944/45	6	2	6	2	39	2	11	2	7	—	6	—	—	—	—	—	—	—	5	—	—	—	—	—	80	8
Sydenham	19	—	9	—	35	—	35	—	30	—	19	—	19	1	19	—	—	15	2	—	—	10	1	—	213	2
Sydenham, 1944/45 ...	6	—	4	—	16	1	13	1	12	—	4	—	—	—	—	—	—	—	6	—	—	—	—	—	61	2
Mayville	28	2	26	1	35	3	35	3	25	—	16	1	45	1	1	—	3	13	2	—	—	31	4	1	265	10
Mayville, 1944/45 ...	6	1	5	1	11	2	7	2	5	4	12	—	—	—	—	—	—	—	12	—	—	—	—	—	58	10
Umhlatuzana	37	3	21	2	53	2	53	2	35	—	6	1	24	1	6	—	1	2	—	—	—	11	4	7	260	11
Umhlatuzana, 1944/45	6	—	1	—	10	—	9	—	6	—	7	—	—	—	—	—	—	—	4	—	—	—	—	—	43	—
South Coast Junction	78	1	63	1	73	2	68	2	58	—	22	3	38	3	5	1	3	5	4	—	3	69	—	—	486	16
Do. do, 1944/45	27	2	30	1	44	2	38	1	18	—	10	—	2	2	—	—	—	—	10	—	—	—	—	—	179	8
TOTALS	1,545	26	1,273	20	1,762	28	1,799	23	1,675	—	211	22	202	33	84	6	11	42	19	26	34	146	21	109	8,925	192
TOTALS, 1944/45 ...	490	35	336	34	524	33	396	23	345	6	79	—	6	3	—	—	—	—	71	—	—	—	—	—	2,247	134

ATTENDANCES :

	European	Coloured	Native	Asiatic	TOTAL
Old Borough	810	925	136,684	1,216	139,635
Old Borough, 1944/45	1,334	639	35,173	3,359	40,505
Greenwood Park	58	55	14,494	1,434	16,041
Greenwood Park, 1944/45	80	—	4,124	387	4,591
Sydenham	—	40	7,664	3,048	10,752
Sydenham, 1944/45	—	—	1,016	89	1,105
Mayville	—	50	26,133	2,540	28,723
Mayville, 1944/45	—	20	2,438	2,295	4,753
Umhlatuzana	36	20	20,190	895	21,141
Umhlatuzana, 1944/45	75	30	411	385	901
South Coast Junction	60	180	20,965	3,354	24,559
South Coast Junction, 1944/45	—	—	7,541	1,976	9,517
TOTALS	964	1,270	226,130	12,487	240,851
TOTALS, 1944/45	1,489	689	50,703	8,491	61,375

10.—INDUSTRIAL HYGIENE.

Miscellaneous.

Factories.—Cloakroom and restroom facilities provided at factories visited throughout the year have on the whole been well maintained. Improvements in regard to cleanliness, repainting and minor repairs have been taken up with works managers concerned.

Shops.—In the central area, firms have maintained a good standard of cleanliness and comfort throughout the year. Smaller concerns also maintained a good standard. Where rebuilding or renovation programmes were contemplated, efforts have been made to keep temporary accommodation as clean as possible.

Public Conveniences.—The maintenance of these premises has been generally good.

(*a*) A survey of Native eating-houses was made in order to arrange food-handler talks to the Bantu employees. A report on conditions found was made to the Chief Health Inspector.

(*b*) Part-time driving was done earlier in the year on the loud-speaker unit and several talks were given at the Cato Manor and Springfield Indian Housing schemes on flies, food handling and general cleanliness.

(*c*) Some of the larger food factories have been visited and immunisation talks given to employees.

(*d*) Hotels and tearooms throughout Durban have been visited and pilot talks given prior to the immunisation units arrival in connection with anti-typhoid protection of employees.

(*e*) Butcheries, poultry dealers' and fishmongers' premises throughout the town have been visited to distribute foodhandler pamphlets and to arrange for a lecture-film demonstration to these non-European foodhandler groups.

(*f*) Nursing homes have been visited to distribute pamphlets on Anti-Diphtheria immunisation to expectant and nursing mothers.

(*g*) At several large clothing factories, food handling and general domestic hygiene talks have been given to female employees.

(*h*) Bantu and Asiatic schools have been visited and Domestic Hygiene talks given. All such schools were covered during the year. A start has been made with a talk on Sex Hygiene at Bantu Schools for girls over 14 years of age. Similar talks have been given to two European student-groups and to a group of women.

(*i*) Daily appointments were made for the Bantu health assistant lecturer.

(*j*) General assistance was given in connection with " Diphtheria Week "—in connection with advertising window display and various other items.

The attached figures show the number of talks and approximate number of listeners at lecture-demonstrations during the past year.

HEALTH TALKS.

NATIVES		ASIATICS		COLOUREDS		FOOD HANDLERS		EUROPEANS	
Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
2 talks	17 schools	8 talks	10 schools	8 talks	2 schools	2 talks	8 talks	3 talks	5 talks
65	3,533	545	875	1,020	500	210	264	150	335

TOTAL : 7,497 persons.

11.—CLEANSING SECTION (by courtesy of City and Water Engineer).

The following information is supplied in respect of Cleansing Services in the City for the past year :—

Cemeteries.—The Municipal Cemeteries have been properly conducted and maintained in good order. An additional 50 acres of ground has been acquired at Red Hill and 9 acres at Stellawood are also being purchased, thus ensuring the prolonged life of these cemeteries for many years.

Private cemeteries have been strictly supervised and burials and cremations have generally been well conducted and the cemeteries properly maintained.

Interments.—6,798 burials took place in Municipal and 1,161 in private cemeteries. The total of 7,959 compares with 8,405 in the previous year.

Free Burials.—The free burials authorised by the Department totalled 200, consisting of 14 Europeans, 3 Mixed, 1 Asiatic and 182 Native compared with 226 in the previous year.

Cremations.—507 cremations, 340 European and 167 Asiatic were carried out compared with 489 in the previous year.

Cleansing Services.—All the Cleansing Services were carried out regularly and efficiently during the past year.

Conservancy.—The service continues to expand, and the figure of 11,597 pails at present in use shows an increase of 473 over the previous year's 11,124 pails.

Refuse Removal and Disposal.—The total amount of refuse collected and tipped shows a decrease of 1,101 cubic yards on that of the previous year, viz. : 215,458 cubic yards in 1945/46 as against 216,559 cubic yards in 1944/45. This is undoubtedly due to the gradual return to normal after the war years.

The practice of disposing of a small portion of household refuse at the Point Destructor continues, but the major part of the disposal was distributed over the three main tip sites : J. M. Harris Park, Brickfield Road and Argyle Road. Reclamation of land at these sites is proceeding satisfactorily, and it is anticipated that in the not too far distant future suitable playing fields will be available for the community in general.

The Department is still able to afford facilities for the disposal of Trade and Industrial wastes at J. M. Harris Park.

Street Cleansing.—This was continued as in previous years. Council approval has been obtained for the Department to carry out a more extensive cleansing programme and it is hoped to launch a campaign shortly embracing the provision of additional street litter receptacles, propaganda and a small amount of street washing.

Dead Animals.—During the past year 296 carcases were removed and disposed of compared with 384 in the previous year.

Barracks Management.—No change has taken place in the housing conditions in the various barracks used for the accommodation of Corporation Indians. The Council has authorised the expenditure of £40,000 for the improvement of sanitary conditions at the Magazine Barracks by installing individual sanitary and bathing facilities for each flat. It is anticipated that the work in this connection will be commenced early in the next financial year.

Acting on behalf of the Social Welfare Department of the Government, the Barracks Supervisor, assisted by certain members of his staff, has sold large quantities of foodstuffs at very reasonable prices to the inmates of the barracks.

The library, which was requested by the Durban Indian Municipal Employees' Society was erected some time ago, but has not yet commenced to function, although arrangements are in hand for the provision of equipment and staff.

The Medical Clinic at the Magazine Barracks is functioning satisfactorily and is proving a great benefit to the inmates, especially women and children.

In so far as entertainments are concerned, the Drama Hall at the Magazine Barracks is fulfilling a very useful purpose. During the day it is being used as a school and frequent use is made of it during the evenings for concerts, etc.

Public Conveniences.—There were no new Public Conveniences erected during the past year, but those under the control of the Department were maintained in a satisfactory condition.

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

	Bovines	Swine	Sheep and Goats
Slaughtered	72,603 (62,796)	52,231 (65,496)	240,124 (258,519)
Whole Carcasses Condemned	2,611 (1,835)	3,776 (2,898)	1,387 (1,180)

Portion of Carcasses, Weight in lb.—This includes the viscera of the carcasses treated in terms of Government Notice No. 1455 of 1933.

Bovines	Swine	Sheep and Goats
735,286 (74,107)	11,817 (822)	580,705 (238,589)

Routine health supervision over butcher's shops, cold storages, markets, meat transport vehicles continues to be maintained at high level of efficiency.

12.—MILK SUPPLIES.

Despite unsatisfactory conditions, more particularly in respect of the difficulty of obtaining certain food concentrates and the high price of food-stuffs generally, dairy stock has been kept in remarkably good condition.

Matters were made more difficult for the dairymen in that replacements and additions to herds were made only at much enhanced prices and additional animals increased feeding costs—the milk supply was maintained by tapping more distant areas in the milk-shed.

Three producer-distributor dairymen changed over to pasteurisation and two more closed down altogether. This trend away from raw milk to the pasteurised trade is noted in other large Union centres and is attributable to economic forces which favour open range dairying practice. Of the amount of milk consumed in Durban, some 19,000 gallons daily, 15,000 gallons is pasteurised, and of the remaining 4,000 gallons, 1,200 is heat-treated, leaving 2,800 gallons consumed in the raw state.

In the near future, the milk produced at five other dairies, amounting to approximately 1,000 gallons daily will also be pasteursied thus leaving 1,800 gallons unprocessed.

Fly Development.—At dairies has been less prevalent than in previous years, thanks to proper disposal of manure, attention to breeding places and the use of residual D.D.T. insecticide.

MILK EXAMINATIONS.

Sediment Disc Test.—1,960 supplies of milk received at the various depots from rural producers have been tested by this method. Much improvement in cleanliness is manifest since the inauguration of this test as judged by the amount of visible dirt in the prepared discs. While previously only some 50 per cent. could be classed as clean, to-day the proportion is over 80 per cent.

Personal supervision has a great bearing on the factor of cleanliness. Unless milk production is efficiently supervised at all times, the best results cannot be obtained.

Phosphates Test.—259 samples of milk were subjected to this test, which ascertains whether the pasteuring process was efficient. In 14 instances, the milk was found to be insufficiently treated, and the causes were investigated and remedied. Unfortunately, owing to the non-arrival of essential testing materials which had long been on order from America, this work had to be abandoned for about 3 months.

Bacterial Examinations.—Of 280 bacterial tests made during the year by means of the plate count, 27 per cent were satisfactory in respect of both total organisms and coliform counts. 42 per cent. did not comply with either standard, but in these the bacterial content was fairly low in the great majority of cases. Of the remaining 31 per cent. the larger number of about 26 per cent. failed in respect of the coliform count. Upon investigation, the cause was found to be due largely to insufficiently cleansed milk utensils.

The condition of any milk utensil that has not been properly cleansed and sterilized can be readily detected by means of the Carbol-Fuchsim Stain test.

Breed-count or Direct Microscopic Count.—597 milk smears have been examined by this method, which is most useful and can be readily carried out. Bacteria counts, to be a reliable guide to the cleanliness and keeping quality of milk, should be frequently and regularly made. The plate count for this purpose is somewhat cumbersome and expensive, and further, owing to the time-factor involved (48 hours) the requisite information is belated. Nor does this test identify the types of bacteria which may be present, whether thermaduric or pathogenic.

For this purpose the Breed-count is eminently satisfactory and can be applied daily with ready results. It is valuable for tracing troubles in the production line of the plant, from production through the various stages to distribution.

The lack of supervision among dairymen is not uncommon as is shown by the results of milk analysis which are uniformly good when the element of personal supervision is in evidence and the reverse when it is lacking.

When supervision is left to employees, satisfactory results cannot be expected.

Grading.—All incoming " producer " supplies were regularly submitted to the Sediment Disc Test, which affords a good guide as to the methods practised at the various sources of production. Dirty discs are evidence of faulty handling of milk, leading to the production of an inferior or low grade product, unfit in some instances for processing and pasteurising.

It is considered that such a state of affairs could be remedied by grading all supplies and fixing prices in accordance with quality grades.

The Disc Test could be used as a " pilot " test to be supplemented by the Breed-count and the Acidity test. There is at present no price incentive for a low-grade producer to improve his supplies.

VETERINARY.

Tuberculosis.—The position regarding this disease can be considered satisfactory. All 93 samples of milk taken from various producer-distributor dairies and subjected to the Biological Test during the year have produced negative results. A similar position has obtained for the past three years.

Milk from producer-distributor dairies is subjected to this test twice yearly. Further, no animal has been removed from any of the dairies on account of exhibiting clinical symptoms of the disease. No doubt, this disease exists but could only be made apparent by the application of a Tuberculin test. In the case of reactors, lesions would be of a localised and limited character.

Mastitis.—As far as advanced clinical cases are concerned this condition has been much less frequent as owners have found that treatment is uneconomical unless taken in hand at the earliest stages of the disease. If treatment is delayed, structural alteration takes place in the udder, with destruction of the milk-secreting membrane. The damaged mammary tissue is replaced by fibrous material resulting in part or whole destruction of one or more quarters of the udder. It is found that the causal organism is much more common than was supposed. It is confined to a diseased udder, but is present in many samples of milk obtained from apparently healthy quarters giving apparently normal milk. In the majority of cows, the presence of the mastitis organism in the udder would not cause any disturbance during the lifetime of the animal, but on the other hand it might become active and flare up to cause a mastitis at any time, this being dependent upon the power of resistance to disease possessed by the animal. It is considered that prophylactic or preventive measures are of more importance than curative.

13.—OTHER FOODSTUFFS.

Ice Cream Distribution.—The use of unsatisfactory galvanised trays by ice cream manufacturers and vendors in the distribution of ice cream is now being eliminated in favour of trays made of stainless steel. It is hoped that, before the end of the year, the use of galvanised trays will be completely abolished. Stainless steel is still in short supply. All firms concerned have placed their orders for stainless steel trays.

Vi-testing.—All employees engaged in the handling and distribution of producer-distributor supplies of milk and also of ice cream re Vi-tested as a routine procedure for the detection of the Enteric Carrier state and immunised against Enteric Fever.

FOOD HYGIENE SECTION.

Condemnations City Market :

Beans, green	597 pockets	Cauliflowers	1 crate, 11 lots
Beans, green	5 bags	Carrots	3 bags, 2 pockets
Brains, Sheep	1 tray	Cucumbers	75 pockets, 3 bags
Cabbages	1 bag	Chillies	13 pockets

Ducks, dressed	52
Eggs	86 dozen
Fruit, dried	23 cases
„ crystalised	1 carton
Fowls, dressed	814
Fowls, guinea	8
Fowls, live	51
Giblets	15 lots
Granadillas	4 trays
Hares	4
Honeycomb	2 boxes
Mushrooms	1 box, 1 lot
Onions	1 bag
Pigeons	13
Potatoes	140½ bags
Potatoes, sweet	1 bag
Peas, green	40 bags
Peas, green	261 pockets
Raisins	48 lbs.
Turkeys, dressed	6
Tomatoes	63
Tongues, calves	1 tray
Venison	2,176 lbs.
Venison, carcases	25

Condemnations—Native Meat Market :

Beef	500 lbs.

Foodstuffs Surrendered for Examination and Condemned :

Apricot Jam	1 tin
Apricots, canned	1 tin
Brono Gravy Powder	22 cartons
Buckwheat	5 lbs.
Biscuits	2 tins
Beans, baked	6 ints
Beans, curried	3 tins
Chow-chow	1 bottle
Coffee	60 by 1 lb. pkts.
Cheese	566 lbs.
Carrots, tinned	9 tins
Custard Powder	4 tins
Chocolates	8 ctns., 12 boxes
Cornflour	1 case
Cafe-au-lait	2 tins
Ducks, dressed	1
Duck, Bombay	1 bale
Dates	2 cases
Fish, pickled	10 caks
Fowls, dressed	330
Fruit, dried	24 cases 3 packets
Gravy Powder	1 carton
Groceries	2 cartons
Golden Syrup	13 bottles
Hams, cooked	74 lbs.
Incumba infants food	13 cases
Jellies	28 packets, 1 ctn.
Liver Polony	25 lbs.
Mortella	12 lbs.
Maltabella	12 cartons
Mealie Meal	51 lbs.
Mincemeat	1 tin
Milk, Horlicks	720 bottles
Meal, unsifted	1 pocket
Muscatels	8 packets
Maize	1 bag
Milk, condensed	12 tins
Oatmeal	1 packet
Potatoes	3 bags
Onions, pickled	8 bottles
Piccallili	1 bottle
Pilchards	24 tins
Pickles, mixed	19 bottles
Puree, Tomato	20 tins
Raisins	3 cases
Silver Side	24½ lbs.
Sweets	30 lbs.
Sweets	4 cases
Sweets	560 packets
Soup, hydrated	1 tin
Sardines	71 tins
Soup, tinned	20 tins
Sugar	4 pockets
Snoek, dried	1 bag, 1 box
Tea, worst	25 lbs.
Tamrind	15 cases
Treacle	1 tin
Weetbix	4 packets

Outbreak of Food-poisoning Among Natives.—Between 9th and 16th May, some 120 Natives were admitted to Durban hospitals suffering from acute gastro-enteritis of a type usually associated with food-poisoning.

The symptoms, although acute at the outset, rapidly subsided and patients were discharged after two or three days' residence in hospital. There were no after-effects.

There were only a few female cases, the vast majority being adult males housed in compounds and receiving a cash allowance in lieu of rations.

The cause of the outbreak was obviously an irritant ingested in food or drink a short time before the onset of symptoms.

Both ordinary and substitute foodstuffs of the cereal type favoured by Natives were subjected to both chemical and pathological examination with negative results for metallic, mineral, alkaloidal or ptomaine poisons except for a suspicious result in the biological tests on an extract of malted millet seed. Field data appeared to strengthen the suspicion to a point justifying the seizure and detention of all stocks of malted millet.

Later investigations, however, weakened the malted millet theory of causation and pointed strongly to contamination of a brew or series of brews of " Isitshimiyane " prepared in the Greenwood Park district and consumed mainly in that district and in the Sydney Road area. It is known that dangerously toxic substances such as Carbide Wood Spirit, etc., are sometimes added to " Isitshimiyane " in order to add " potency."

The probability, however, is great that it is probable that the use of this " brew " was abandoned as soon as its toxic effects became manifest.

In February last, a somewhat similar outbreak occurred in a section of the Witwatersrand caused by municipal beer brewed from malted mabela. The mabela in question was found to be contaminated with an organism which possibly could have caused the symptoms. No connection could be traced between this particular consignment of mabela and stocks of this cereal held in Durban.

It is on record that in nearly 50 per cent. of food-poisoning outbreaks, the causative factor defies positive identification.

Control measures included the detention, storage and testing of millet stocks.

Destruction will be resorted to only if evidence of toxic contamination emerges on test.

The assistance of the Government Mycologist (Dr. Wager) in connection with the search for toxic weeds or fungi among cereal samples is gratefully acknowledged.

In the course of the investigation, appreciable quantities of lead were found in the discharges of certain " control " patients not suffering from gastro-enteritis. Although a small variable quantity of lead is a normal constituent of the human tissues, the quantities found raised the suspicion that some degree of lead absorption was associated with the use of lead-lined petrol tins commonly used by Natives as food and drink containers. At least one recent case of death from lead poisoning was attributed to this cause.

Immediate steps were taken to reiterate a warning to Natives by means of the " loud-speaker " van and radio, against the use of such containers as food utensils.

The outbreak appeared to have burnt itself out by Thursday, 16th May, and although it is believed that a number of cases did not seek admission to hospital, there were no known fatalities.

Field investigations to identify the ultimate cause are still proceeding, but with no positive result so far.

Twenty-three special chemical analyses of cereals, discharges, etc., some being very complicated, were undertaken by the City Analysts (Messrs. Harding-Kloot and Martin). The toxic agent has not, however, bee positively identified.

SAMPLES OF FOODSTUFFS TAKEN (Food and Drugs Act 13 of 1929) :

	Number Taken	Number Genuine	Number Defective	ACTION TAKEN
Ice Cream	19	15	4	2 cases warned, 1 repeat sample taken, 1 fined £3.
Strawberry Jam	1	1	—	—
Sausages	19	17	2	2 Prosecuted, fined £5 each.
Farm Butter	9	9	—	—
Sausage Preservative ...	1	—	—	Unofficial.
Tomato Sauce	1	1	—	—
Sandwich Paste	1	1	—	—
Sardines	1	—	—	Unofficial.
Pea Flour	3	2	1	Referred to Union Health, incorrectly labelled.
Coffee Mixture	4	4	—	—
Mealie Meal	1	1	—	—
Curry Powder	2	2	—	—
Mustard	1	1	—	—
Potato and Butter	1	—	—	Unofficial.

OUTBREAK OF (FOOD-POISONING) GASTRO-ENTERITIS : 10/5/46.

Samples taken :

Isitshimyane	1
Urine...	14
Native Beer	5
Bird Seed Mixture	3

WATER UPPLY.

Chemical and Bacteriological Analysis :

(*a*) **Bacteriological.**—The usual high standard was maintained throughout the year. Regular weekly bacteriological examinations are made at the Government Laboratory involving 208 samples.

(*b*) **Chemical** (results expressed in parts of 100,000) :

Colour—Good. Sediment	nil.
Turbidity—nil. Re-action	0·9
Total Solids	11·40
Loss on Ignition	1·84
Choline	2·84
Nitrites and Nitrates	nil.
Saline Ammonia	0·002
Albuminoid Ammonia	0·006
Total Hardness	3·51
Permanent Hardness	1·43
Iron	Trace
Poisonous Metals	nil.

52 Samples were submitted to the City Analyst for chemical exmination during the year and the usual high standard was maintained.

14.—FAMILY HEALTH SERVICES.

The figures in the statistical report show that much work passes through the Family Health (Child Hygiene) Section of the City Health Department. They show, *inter alia*, that the infantile death-rate, which is taken as an index of infant morbidity, continues to be low.

The real proof of the value of Child Health activities is to be found, not in the number of clinics scattered over the City, or in the numbers of children attending such clinics, but in the condition of health of children at the school-entrance age.

Last year in the provinces of Natal, Cape and the Transvaal almost half the number of European school children examined showed evidence of one or other of the following : Malnutrition, defects of teeth, ear, nose and throat, eyes and vision, skin, heart and spleen, anaemia, bilharzia, verminous conditions and defective intelligence.

This number does not include those suffering from one decayed tooth or minor postural defects, all of which are minor manifestations of malnutrition. It does not include children in orthopaedic and other hospitals suffering from the sequels of Tuberculosis and other constitutional diseases, nor does it take into account the number of children who have died in the period from birth to school age, *i.e.*, from 4 to 6 per cent. It is simply a record of the condition of health of the surviving children who are in a condition to attend school. The defects enumerated are all preventable.

This means that in the pre-school age-group, although practically every baby is born healthy, the care they receive is such that about 5 out of every 100 babies born have died and about 50 of every 100 remaining children are physically or mentally defective in some degree.

Thus, unless further measures are taken to secure a basic foundation of health timeously, the country must expect to multiply the number of curative institutions to deal with preventable diseases.

There is a pressing need for amalgamating all activities which deal with the health of children and to revise training of health visitors.

The first essential in securing an efficient service and adequate staff training is to have all activities administered by one authority or, alternatively, to have all activities co-ordinated through one institution such as an Institute of Child Health.

In the present state of national health service, it would seem that hospitals must play so important a role that they should be used as the basis for developing better health services.

A service which has as its basic idea the establishment of the positive condition of health must be one which cares for the health of children through all the periods of growth from conception to adolescence.

The present system of child care was started " in the middle " with school inspection. Much ill-health was noted in schools. As the causes could be traced back to the care of the baby, services were started to deal with infant care. Wherever such activities have been organised, they have lowered the local infant mortality rate. The health of school entrants has, however, shown little improvement because the child at its most important period of growth—from 2 to 7 years—is virtually " neglected " from a health point of view.

This constitutes a missing link in the present chain of child health activities.

Another is the fact that midwifery has been carried out as a separate activity, not as part of a co-ordinated scheme of health service. A third concerns the training of health visitors.

The present system of child care includes :—

(*a*) **Care for the Expectant Mother.**—Expectant mothers go to hospitals to be medically examined and to a Child Health Clinic to receive instruction in the hygiene of pregnancy and the art of preparing for the proper care of the coming baby. The important subject of physical culture for expectant mothers is largely neglected by both institutions.

(*b*) **Care of the Mother at the Time of Confinement.**—In hospitals and nursing homes, care is given to the mothers but, during their tendays stay in hospital, they receive little or no instruction in the handling of their babies. The unsatisfactory results of this omission are seen daily at Child Health Clinics.

(*c*) **Care of the Baby and Toddlers.**—Child Health clinics are supposed to care for children from birth to school age. Actually they do excellent work with babies and toddlers up to about eighteen months in which branch the staff has usually been efficiently trained.

(*d*) **Care of the Pre-school Child.**—No special provision is made for the child at this stage of growth. Nursery schools are not officially recognised as being a necessary part of a child health scheme. Lack of care at this most important period of growth destroys the value of the whole system.

(*e*) **Care of the School Child.**—School clinics are largely concerned with patching up defects which would not have occurred had there been an efficient service dealing with the pre-school child.

Training of the Clinic Staff.—Health visitors are the backbone of a Child Health Service. Therefore, their training for this work must be one which makes them competent health instructors.

It is recognised that ill-health is largely the outcome of inadequate health knowledge. But the training of health instructors at present is concentrated on ill-health rather than as it should be upon conceptions of positive health.

Present Training of Health Visitors.—Many health visitors hold four certificates, *i.e.*, general nursing, midwifery, mothercraft and public health. It takes about six years to get these qualifications, at the end of which they fall short of being ideal health instructors by reason of the following defects in their training :—

1. **General Training.**—In this four years' course, pupils are instructed in anatomy and physiology and in the diseases which affect the human body and how to nurse them. They become efficient nurses, but they have yet learned little about the condition of positive health. They have nursed people through acute illnesses, but not through the period of convalescence.

   Pupil nurses are instructed in invalid cooking, but neither school girls nor nurses are trained in general dietetics, in household management, in wise spending, in physical culture, in mothercraft or in social welfare.

   There is little in this four year's course of training which enables nurses to be instructors in positive *health.*

2. **Midwifery.**—A six months' course for a general trained nurse. Pupil midwives learn the physiology of pregnancy, how to conduct a normal confinement and to detect abnormalities of pregnancy. They learn enough about infant feeding to carry a mother through the first ten days after her confinement.

   While such midwives are able to conduct a maternity case successfully, they have little knowledge of the important household details in which mothers—especially those of first babies—require instruction, such as preparation of clothes, cots, baths, etc. They would not be able to instruct an expectant mother to deal with the different emergencies connected with the feeding of a baby.

   Many midwives pass through their training without—(*a*) Having handled a case of abortion or of puerperal sepsis as these cases are nursed in general wards ; or (*b*) seeing an ante-natal case of venereal disease, Ophthalmia Neonatorum and Pemphigus Neonatorum, because these cases are treated in another department.

   They appear to be taught very little about the feeding and care of premature babies, or of babies up to 18 months of age.

   Midwives are therefore not equipped to function as health instructors.

3. **Mothercraft.**—In this four months' course, pupils are taught about the physical health of the child from conception. Mothercraft-trained nurses can teach the hygiene and care of pregnancy and the feeding and care of babies up to eighteen months, including that of the premature baby.

   Mothercraft-trained nurses are equipped for health instruction, but only for one growth period.

4. **Public Health.**—(The Health Visitors' and School Nurses' Certificate).—In this twelve months' part-time course, students receive a smattering of knowledge of general hygiene and sanitation.

   As students, they visit various clinics, *e.g.*, Child Health, Tuberculosis, Venereal Disease, School Medical, etc. The course is mainly theoretical—no practical knowledge of the subject is imparted. There is but little instruction in social welfare.

   The course is a useful one. It enables nurses to assist doctors in clinical work, but does not teach the nurse to be a health instructor.

Wherein the Knowledge of Health Visitors is Still Defective.—Health visitors, who have had nearly six years of study, are equipped to help in any medical clinic in carrying out the directions given by the doctor. Where no doctor is in charge, they are competent to advise in the feeding and care of infants and toddlers up to eighteen months.

More than that, however, is required by the modern health visitor. Health visitors should be able to give detailed instruction to mothers on all matters concerning the physical and mental health of the child at clinics and in the homes.

Despite her six years' training, a health visitor is not equipped to help mothers with household care management, with wise buying for a family or with general dietetics and cookery. Similarly with child guidance and physical culture.

Such defects in training are crucial in their effects in practice. As a result mothers are searching round for assistance which is not forthcoming. In desperation they buy abstruse books on psychology and " try it out " on their children—with results which are often disastrous.

The Remedy.—There must be some remedy other than adding domestic science, child psychology and physical culture on to a course which already lasts six years.

It is suggested that a comprehensive and efficient Child Health Service, including the training of efficient health visitors could be organised in conjunction with the following services and institutions :—

1. **A Maternity Service.**—This service would have as its pivot a Maternity Hospital with general maternity wards, wards for treating venereal disease cases during pregnancy and at confinement —including treatment for Ophthalmia Neonatorum, wards for ante-natal treatment such as toxaemias of pregnancy, abortion, etc., wards for puerperal sepsis and other infections.

   Connected with the hospital would be :—

   An **Ante-natal Clinic** dealing with the health of the expectant mother and her instruction in mothercraft.

   A **Post-natal Clinic** where all cases would be examined at certain intervals after confinement.

   A **Family Spacing Clinic** so necessary for the rearing of healthy families.

   A **Physical Culture Clinic** for expectant and nursing mothers.

   A **District Service.**

2. **A Service for Infants and Toddlers up to 18 Months.**—This service would have as its pivot a Mothercraft Institution having dietetic wards for babies up to eighteen months.

   Connected with this institution would be a series of Infant Clinics for babies up to eighteen months.

   From these clinics home visiting would be carried out for the purpose of **following-up** all patients from the Maternity Hospital or Mothercraft Home and for giving home instruction in infant feeding and care and in general hygiene.

   The staff of this section would be responsible for the running of all homes catering for children up to 18 months, such as Day Nurseries, etc.

3. **A Children's Service.**—This service would have as its pivot a Children's Hospital, having wards for all diseases peculiar to childhood. The hospital would have an out-patient department for treating minor ailments and for diagnosing the more serious diseases.

   Connected with this hospital would be a clinic for pre-school children, where a check-up on the health of pre-school children would be conducted at stated intervals and a Clinic for school children for checking up in the same way—the ailments so found could be treated in the out-patient department.

   There would be Nursery Schools connected with this service. There would also be a Posture Clinic with physical culture suitable for all ages and a Psychological or Child Guidance Clinic.

   From these clinics and hospitals, home visiting of pre-school children not attending nursery schools would be carried out and through amalgamation with the Hospital Almoners' Service, all cases leaving hospital would be **followed-up** in their homes and attended to till well.

   At both the Mothercraft Institution and the Children's Hospital, immunisation would be carried out as a routine.

   The staff of this section would be responsible for the running of all institutions, hostels, etc., taking in children over 18 months of age.

4. **A Dental Service.**—This service would have as its pivot a Dental Clinic for attention to mothers and children and from which dental hygiene would be taught to health visitors.

Nurses trained in such a series of services would make valuable health instructors, especially if the entrance qualifications was made the matriculation certificate taken in domestic science.

All pupil midwives would have instruction in mothercraft while working in the dietetic wards and would also be able to have experience of infant clinics and the home visiting of babies up to 18 months.

While in the Children's Hospital student nurses would receive training in Child Health and Psychology and by attending the various clinics attached to the hospital would be able to see and work in a complete health service for children as well as learning to nurse children, not only through an illness, but right back to health.

They would receive instruction in Social Welfare through the Social Service connected with the hospital through an Almoner's office. With a service such as this, it would be possible to keep all children's homes under supervision or preferably to control all institutions in which children are housed.

Conclusions.—An efficient Child Health Service could be carried on by amalgamating Child Health activities through a Child Health Institute staffed by experts from which the following services would work in conjunction :—

(*a*) A Materinity service.

(*b*) A Mothercraft service dealing with the dietetic difficulties in babies up to 18 months.

(*c*) A Children's service dealing with the health of toddlers, pre-school children and school children.

(*d*) A Dental service for mothers and children.

All health visitors should be trained in every branch of the above services and would have to take as their entrance examination the matriculation certificate in domestic science.

All pupils training in midwifery should receive training in mothercraft as part of their midwifery training ; and a training for general and fever nursing should be carrried out as at present in hospitals for adults.

The training of doctors in this connection also needs revision.

The provision of health centres providing :—

(*a*) All clinical services ;

(*b*) Several materinity and children's beds ;

(*c*) Residential quarters for nursing staff ;

would supply most of the necessary facilities for staff training as well as efficient Family Health Service facilities.

The following schedules reflect the activities of the Child Hygiene Section :—

	EUROPEAN CLINICS			NON-EUROPEAN CLINICS				Grand Total
	Gale Street	Mobile Clinics	Total	Brook Street and Gale Street Centres and Mobile Clinics				
				Coloured	Native	Asiatic	Total	
Total Number of Sessions	284	533	817	114	192	535	841	1,658
Total sessions for children	247	533	780	102	192	440	734	1,514
No. of ante-natal sessions	25	—	25	12	—	95	107	312
No. of post-natal sessions	12	—	12	—	—	—	—	12
Total Attendance at Clinics ...	11,969*	28,280	40,249	5,595	13,369	25,558	44,522	84,771
New cases out of above number ...	2,120	1,998	4,118	525	2,772	5,001	8,298	12,416
No. of infants under 1 yr. attending clinic	428	1,211	1,639	327	1,514	1,264	3,105	4,744
Total attendance of infants ...	5,496	11,160	16,656	1,856	5,719	7,453	15,028	31,684
No. of toddlers and pre-school children attending clinic ...	447	1,268	1,715	308	343	975	1,626	3,341
Total attendance of toddlers and pre-school children...	3,478	10,375	13,853	2,375	1,993	8,223	12,592	26,444
No. of nursing mothers attending clinic	326	866	1,192	257	1,208	1,508	2,973	4,165
Total attendance of nursing mothers	2,681	6,741	9,422	1,316	5,657	6,591	13,564	22,986
No. of expectant mothers attending clinic	102	—	102	29	—	2,847	2,876	2,978
Total attendance of expectant mothers...	181	—	181	53	—	3,291	3,344	3,525
No. of post-natal cases attending clinic	58	—	58	—	—	—	—	58
Total attendance of post-natal cases	100	—	100	—	—	—	—	100
No. of test feeds given	242	394	636	58	36	79	173	809
No. of mothers instructed in treatment of minor ailments ...	575	1,339	1,914	425	1,985	4,835	7,245	9,159
No. of health talks and demonstrations given	922	3,645	4,567	667	1,099	1,558	3,324	7,891

* Of this figure 804 were children attended to at Nursery Schools and Homes for Protected Infants.

IMMUNIZATION.

	EUROPEANS			
	Infants	Children	Adults	Total
No. of cases immunized against Diphtheria	15	84	1	100
Of these the following completed the course	6	39	1	46
No. of cases immunized against Whooping Cough	—	74	—	74
Of these the following completed the course	—	32	—	32
No. of cases who received combined Diphtheria and Whooping Cough Immunization	206	281	1	488
Of these the following completed the course	150	217	1	368
No. of cases immunized against Typhoid	2	5	3	10
No. of cases vaccinated against Smallpox	554	58	15	627

NUMBER OF CASES.

	European	Coloured	Native	Asiatic
Referred to Doctors	71	4	—	1
„ „ Hospital	41	41	334	549
„ „ District Nurses	—	—	—	—
„ „ Societies	11	13	13	24
Passed for Day Nursery	89	7	7	—

ORTHOPAEDIC CASES.

(From July, 1945, to May, 1946.)

	European
First Visits	142
Revisits	803
Clinics	159

EXAMINATION OF ENTRANTS TO SERVICE.

79 Female entrants to the Municipal Service were medically examined.

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	34	56	20	43
Amount of dried milk given free in lbs.	670	1,532	337	1,636
No. of cases receiving dried milk at cost and reduced prices	6	6	—	33
Amount of dried milk sold at cost and reduced prices in lbs.	156	131	—	885
Number of cases receiving cow's milk free	37	14	—	—
Amount of cow's milk given free in pints	11,298	2,984	—	—

BIRTHS.

Notifications :

	European	Coloured	Native	Asiatic	Total
DURBAN	1,610	202	1,248	1,105	4,165
GREENWOOD PARK	223	15	157	364	759
SYDENHAM	36	68	207	557	868
MAYVILLE	52	58	1,017	819	1,946
UMHLATUZANA	163	13	150	147	473
SOUTH COAST JUNCTION	201	50	314	768	1,333
	2,285	406	3,093	3,760	9,544
IMPORTED	349	18	2,057	173	2,597
TOTAL	2,634	424	5,150	3,933	12,141

Number of **Illegitimate Births** occurring among those notified :

	European	Coloured	Native	Asiatic	Total
DURBAN	44	49	747	16	856
GREENWOOD PARK	3	2	83	2	90
SYDENHAM	1	13	125	8	147
MAYVILLE	1	19	552	8	580
UMHLATUZANA	2	1	75	6	84
SOUTH COAST JUNCTION	3	3	170	16	192
	54	87	1,752	56	1,949
IMPORTED	7	6	868	9	890
TOTAL	61	93	2,620	65	2,839

Stillbirths—Notifications :

	European	Coloured	Native	Asiatic	Total
DURBAN	34	5	92	43	174
GREENWOOD PARK	9	—	5	17	31
SYDENHAM	—	3	23	22	48
MAYVILLE	—	—	66	26	92
UMHLATUZANA	4	—	12	5	21
SOUTH COAST JUNCTION	3	2	31	44	80
	50	10	229	157	446
IMPORTED	3	—	151	11	165
TOTAL	53	10	380	168	611

Number of **Illegitimate Stillbirths** occurring among those notified.

	European	Coloured	Native	Asiatic	Total
DURBAN	3	2	53	2	60
GREENWOOD PARK	—	—	2	—	2
SYDENHAM	—	1	13	—	14
MAYVILLE	—	—	43	—	43
UMHLATUZANA	—	—	5	—	5
SOUTH COAST JUNCTION	—	—	18	1	19
	3	3	134	3	143
IMPORTED	—	—	59	—	59
TOTAL	3	3	193	3	202

Registrations :

	European	Coloured	Native	Asiatic	Total
DURBAN	1,645	222	952	1,099	3,918
GREENWOOD PARK	205	28	151	508	892
SYDENHAM	45	79	214	863	1,201
MAYVILLE	42	70	967	987	2,066
UMHLATUZANA	182	26	148	304	660
SOUTH COAST JUNCTION	185	73	299	1,090	1,647
	2,304	498	2,731	4,851	10,384
IMPORTED	360	37	2,567	189	3,153
TOTAL	2,664	535	5,298	5,040	13,537

	European	Coloured	Native	Asiatic
Birth Rate	20·8	53·6	27·5	47·5

Number of **Illegitimate Births** occurring among those registered.

	European	Coloured	Native	Asiatic	Total
DURBAN	67	69	639	17	792
GREENWOOD PARK	5	6	94	13	118
SYDENHAM	2	24	117	15	158
MAYVILLE	1	30	515	19	565
UMHLATUZANA	4	5	78	3	90
SOUTH COAST JUNCTION	3	22	135	30	190
	82	156	1,578	97	1,913
IMPORTED	13	17	1,099	6	1,135
TOTAL	95	173	2,677	103	3,048

Stillbirths—Registered :

	European	Coloured	Native	Asiatic	Total
DURBAN	39	5	93	38	175
GREENWOOD PARK	7	—	14	27	48
SYDENHAM	1	2	21	45	69
MAYVILLE	—	1	130	63	194
UMHLATUZANA	5	1	18	12	36
SOUTH COAST JUNCTION	3	2	38	82	125
	55	11	314	267	647
IMPORTED	6	1	205	15	227
TOTAL	61	12	519	282	874

Number of **Illegitimate Stillbirths** occurring among those registered :

	European	Coloured	Native	Asiatic	Total
DURBAN	4	—	67	—	71
GREENWOOD PARK	—	—	10	—	10
SYDENHAM	—	1	15	—	16
MAYVILLE	—	1	73	—	74
UMHLATUZANA	—	1	10	—	11
SOUTH COAST JUNCTION	—	1	19	—	20
	4	4	194	—	202
IMPORTED	1	—	85	—	86
TOTAL	5	4	279	—	288

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

RACE	Number of Stillbirths	Number of Live Births	Total	Stillbirth Rate
EUROPEANS	55	2,304	2,359	23·3
COLOUREDS	11	498	509	21·6
NATIVES ...	314	2,731	3,045	103·1
ASIATICS ...	267	4,851	5,118	52·1

INFANTILE DEATHS.

	European	Coloured	Native	Asiatic	Total
DURBAN	55	15	152	113	335
GREENWOOD PARK	5	4	40	26	75
SYDENHAM	1	8	64	70	143
MAYVILLE	3	9	513	92	617
UMHLATUZANA	5	3	50	13	71
SOUTH COAST JUNCTION	7	7	128	98	240
	76	46	947	412	1,481
IMPORTED	8	2	320	24	354
TOTAL	84	48	1,267	436	1,835

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	
EUROPEAN ...	43	33	76	1,198	1,106	2,304	32·98
COLOURED ...	25	21	46	268	230	498	92·36
NATIVE	536	411	947	1,337	1,394	2,731	346·75
ASIATIC ...	209	203	412	2,474	2,377	4,851	84·93

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

European	Coloured	Native	Asiatic
1	5	10	4

ATTENDED ONLY				HEALTH VISITED ONLY				HEALTH VISITED AND ATTENDED			
Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic
—	—	10	4	—	5	—	—	1	—	—	—

CAUSES OF INFANTILE DEATHS.

EUROPEANS :

CAUSE	WEEKS			MONTHS			TOTAL
	0—1	1—2	2—4	1—3	3—6	6—12	
Prematurity	26	1	—	—	—	—	27
Intra-cranial Haemorrhage	2	—	—	—	—	—	2
Other Birth Injuries	1	—	—	—	—	—	1
Malaena Neonatorum	—	—	—	1	—	—	1
Congenital Malformations	4	2	—	1	—	—	7
Congenital Atelectasis	4	—	—	—	—	—	4
Congenital Debility	—	—	—	1	—	—	1
Intoxication due to maternal toxaemia ...	1	—	—	—	—	—	1
Gastro Enteritis	—	—	—	1	6	2	9
Bacillary Dysentery	—	—	—	—	1	—	1
Hernia	—	—	—	1	—	—	1
Intestinal Obstruction	—	—	—	—	1	1	2
Nephritis	—	—	—	—	1	—	1
Malnutrition	—	—	—	—	1	—	1
Broncho Pneumonia	2	—	—	1	2	3	8
Mastoiditis	—	—	—	1	—	1	2
Tuberculous Meningitis...	—	—	—	—	1	—	1
Diphtheria	—	—	—	—	—	1	1
Encephalitis	—	—	—	—	—	1	1
Meningitis	—	—	—	—	1	1	2
Natural Causes	1	—	—	—	—	—	1
Ill-defined Causes	—	1	—	—	—	—	1
TOTAL	41	4	—	7	14	10	76

COLOUREDS :

CAUSE	WEEKS			MONTHS			TOTAL
	0—1	1—2	2—4	1—3	3—6	6—12	
Prematurity	10	1	—	—	—	—	11
Malaena Neonatorum	2	—	—	—	—	—	2
Congenital Malformations	1	—	—	1	—	—	2
Congenital Debility	6	—	2	1	—	—	9
Other Diseases Peculiar to Infancy	—	—	—	—	—	1	1
Gastro Enteritis	—	—	—	3	2	4	9
Malnutrition	—	—	—	—	—	1	1
Broncho Pneumonia	—	—	—	3	1	3	7
Pulmonary Tuberculosis	—	—	—	1	1	—	2
Diphtheria	—	—	—	—	—	1	1
Convulsions	—	—	—	—	—	1	1
TOTAL	19	1	2	9	4	11	46

NATIVES :

CAUSE	WEEKS			MONTHS			TOTAL
	0—1	1—2	2—4	1—3	3—6	6—12	
Prematurity	36	3	5	—	—	—	44
Intra-cranial Heamorrhage	9	1	—	1	—	—	11
Malaena Neonatorum	3	1	1	—	—	1	6
Congenital Malformations	3	1	2	1	—	—	7
Congenital Atelectasis	2	—	—	—	—	—	2
Congenital Debility	122	34	18	27	8	—	209
Tetanus Neonatorum	—	6	—	—	—	—	6
Other Diseases peculiar to Infancy	9	8	1	2	—	—	20
Gastro Enteritis	7	15	8	62	98	98	288
Amoebic Dysentery	—	—	—	1	—	2	3
Other Diseases of the Intestines	—	—	—	—	—	1	1
Malnutrition	—	—	1	10	3	11	25
Nutritional Oedema	—	—	—	1	2	7	10
Bronchitis	—	1	—	4	1	3	9
Broncho Pneumonia	5	15	15	60	59	85	239
Lobar Pneumonia	—	1	3	4	5	2	15
Pleurisy	1	1	—	—	—	1	3
Tuberculous Meningitis	—	—	—	—	2	2	4
Pulmonary Tuberculosis	—	—	—	—	—	8	8
Tubercular Peritonitis	—	—	—	1	—	—	1
Miliary Tuberculosis	—	—	—	—	—	3	3
Congenital Syphilis	4	1	1	5	2	1	14
Diphtheria	—	—	—	—	1	2	3
Whooping Cough	—	—	—	—	—	1	1
Meningitis	1	—	—	—	—	1	2
Tetanus	1	—	—	—	—	—	1
Pericarditis	—	—	—	—	—	1	1
Infanticide	1	—	—	—	—	—	1
Accidental Burns	—	—	—	—	—	3	3
Natural Causes	2	—	—	1	1	—	4
Ill-defined Causes	1	—	—	—	1	1	3
TOTAL	207	88	55	180	183	234	947

ASIATIC :

CAUSE	WEEKS			MONTHS			TOTAL
	0—1	1—2	2—4	1—3	3—6	6—12	
Prematurity	33	6	2	5	—	—	46
Intra-cranial Haemorrhage	6	—	—	—	—	—	6
Malaena Neonatorum	3	—	—	—	—	—	3
Congenital Malformations	2	—	1	—	3	—	6
Congenital Ateleotasis	5	—	—	—	—	—	5
Congenital Debility	30	12	7	5	—	1	55
Other Diseases perculiar to Infancy	—	2	1	2	—	—	5
Gastro Enteritis	—	—	5	18	22	30	75
Bacillary Dysentery	—	—	—	—	—	2	2
Dysentery (unspecified)	—	—	—	—	—	1	1
Amoebic Dysentery	—	—	—	—	—	1	1
Helminths	—	—	—	—	—	1	1
Other Diseases of the Intestines	—	—	—	—	—	1	1
Nephritis	—	—	—	—	—	1	1
Malnutrition	—	—	1	2	2	1	6
Rickets	—	—	—	—	1	—	1
Bronchitis	3	3	1	13	17	18	55
Broncho Pneumonia	2	3	4	22	19	26	76
Lobar Pneumonia	—	—	2	4	2	8	16
Pleurisy	2	—	—	5	4	2	13
Coryza	4	2	2	2	—	—	10
Influenza	1	—	—	1	—	—	2
Pulmonary Tuberculosis	—	—	—	—	1	—	1
Tuberculosis Meningitis	—	—	—	—	—	2	2
Tuberculosis of Abdomen	—	—	—	—	1	—	1
Congenital Syphilis	—	—	—	—	—	1	1
Diphtheria	—	—	—	—	—	2	2
Meningitis	—	—	—	—	1	2	3
Convulsions	—	1	1	—	2	—	4
Diseases of the Skin	—	—	1	—	—	—	1
Natural Causes	—	2	3	1	—	—	6
Ill-defined Causes	1	—	—	2	1	—	4
TOTAL	92	31	31	82	76	100	412

FEEDING OF INFANTS WHO DIED FROM :

ENTERITIS :

	European	Coloured	Native	Asiatic	Total
Breast fed	—	—	5	11	16
Breast fed and sweetened condensed milk	—	—	—	2	2
Breast fed and cereal	—	—	2	1	3
Breast fed and extras	—	—	—	3	3
Cow's milk	—	—	1	2	3
Cow's milk and cereal	2	3	2	1	8
Dried milk	4	—	4	1	9
Dried milk and cereal	—	—	1	—	1
Sweetened condensed milk	—	—	—	4	4
Sweetened condensed milk and cereal	—	1	—	—	1
Unable to trace	3	5	273	50	331
TOTAL	9	9	288	75	381

MALNUTRITION, NUTRITIONAL OEDEMA AND RICKETS :

	European	Coloured	Native	Asiatic	Total
Cow's milk and cereal	—	—	1	—	1
Sweetened condensed milk	—	—	1	—	1
Unable to trace	1	1	33	7	42
TOTAL	1	1	35	7	44

MATERNAL MORTALITY:

	Number of 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		
Europeans	4	2,304	55	2,359	1·73	1·69
Coloureds	2	498	11	509	4·01	3·92
Natives	24	2,731	314	3,045	8·79	7·88
Asiatics	12	4,851	267	5,118	2·47	2·34

N.B.—**Late Registration.**—A European maternal (Puerperal Sepsis) which occurred during 1943 was registered during 1946.

Maternal Deaths attended by :

	European	Coloured	Native	Asiatic	Total
Doctor	—	—	—	—	—
Midwife	—	—	—	3	3
Born at home—removed to hospital	—	—	3	1	4
No midwife or doctor	—	—	—	1	1
Hospital or nursing home	4	2	17	6	29
No particulars	—	—	4	1	5
TOTAL	4	2	24	12	42

Causes of Maternal Deaths :

	European	Coloured	Native	Asiatic	Total
Puerperal Sepsis	—	—	3	1	4
Toxaemia	—	1	2	1	4
Anaemia of Pregnancy	—	—	—	2	2
Pernicious vomiting of Pregnancy	—	—	1	—	1
Eclampsia	1	1	3	2	7
Ruptured Ectopic Pregnancy	1	—	4	—	5
Post Partum Haemorrhage	—	—	2	2	4
Placenta Praevia	—	—	1	—	1
Abortion	—	—	3	—	3
Septic Abortion	—	—	—	1	1
Caesarian Section Operation	—	—	1	—	1
Ruptured Uterus	—	—	—	2	2
Pulmonary Embolism	1	—	1	—	2
Post Partum Meningitis	1	—	—	—	1
Obstructed Labour	—	—	1	—	1
Puerperal Mania	—	—	—	1	1
Tuberculosis	—	—	1	—	1
Dysentery—Bacillary and Amoebic	—	—	1	—	1
TOTAL	4	2	24	12	42

SUPERVISION OF MIDWIVES.

Midwives :

	European	Coloured	Native	Asiatic	Total
No. of trained midwives practising in Durban ...	29	2	—	—	31
No. of trained midwives who have ceased to practise in Durban	10	—	—	—	10
No. of trained midwives unable to trace	1	—	—	—	1
No. of untrained midwives practising in Durban ...	6	2	—	145	153
No. of untrained midwives who have ceased to practise or who cannot be traced	—	—	—	7	7
No. of untrained midwives whose names have been removed from the List	—	1	—	—	1
No. of untrained midwives deceased	—	—	—	5	5
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	2	7	10

Supervision of Midwives :

	European	Coloured	Native	Asiatic	Total
No. of midwives' appliances examined	91	19	—	1,394	1,504
No. of midwives' bags replenished	—	19	—	2,061	2,080
No. of midwives' dressings sterilised	—	22	—	2,521	2,543
No. of midwives' bags sterilised after septic cases ...	1	—	—	3	4
No. of visits to midwives at their homes or at patients' houses	15	11	1	71	98

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	15	—	3	1	19
No. of times homes visited	44	—	7	3	54

Ante-natal Work :

	European	Coloured	Native	Asiatic	Total
No. of expectant mothers attending clinic	102	29	—	2,847	2,978
Total attendance	181	53	—	3,291	,3525
No. of ante-natal sessions	25	12	—	95	132
No. of ante-natal visits	307	87	548	760	1,702
No. of post-natal visits	10	6	8	19	43
Other Visits :					
No. of cases of Puerperal Sepsis	2	1	4	5	12
No. of visits to cases of Puerperal Sepsis	2	1	6	6	15
No. of maternal deaths	4	2	24	12	42
No. of visits to maternal deaths	4	2	24	14	44
No. of cases of Ophthalmia Neonatorum...	16	5	79	26	126
No. of visits to cases of Ophthalmia Neonatorum ...	47	18	133	70	268
No. of Stillbirths	19	9	209	134	371
No. of visits in connection with Stillbirths	19	9	234	149	411
Other visits	35	—	32	2	69

OPHTHALMIA NEONATORUM.

Confinements Attended by :

	European	Coloured	Native	Asiatic	Total
Hospital or Nursing Home	8	5	42	8	63
Doctor at Home	2	—	—	—	2
Midwife at Home	5	—	—	18	23
No Skilled Attention	1	—	32	—	33
TOTAL	16	5	74	26	121

Causes of Disease :

	European	Coloured	Native	Asiatic	Total
Of Syphilitic Origin	—	1	—	—	1
Of Gonorrhoeal Origin	3	—	45	9	57
Cause Unknown	13	4	29	17	63
TOTAL	16	5	74	26	121

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	16	2,304	6·9
Coloured	5	498	10·04
Native	74	2,731	27·09
Asiatics	26	4,851	5·35

HEALTH VISITORS' WORK.

Infants Under 1 Year :

		European	Coloured	Native	Asiatic	Total
First visits—Feeding	Breast	1,023	368	3,589	1,462	6,442
	Mixed	96	42	193	123	454
	Artificial	179	60	73	66	378
TOTAL		1,298	470	3,855	1,651	7,274
		European	Coloured	Native	Asiatic	Total
Re-visits—Feeding	Breast	1,479	370	658	3,180	5,687
	Mixed	771	131	758	2,623	4,283
	Artificial	1,985	444	92	766	3,287
TOTAL		4,235	945	1,508	6,569	13,257

Older Children :

	European	Coloured	Native	Asiatic	Total
First Visits	537	230	1,571	1,719	4,057
Re-visits	6,554	2,160	2,618	8,439	19,771
TOTAL	7,091	2,390	4,189	10,158	23,828
No. of above visits made to Protected Infants	205	41	—	—	246

Other Visits :

	European	Coloured	Native	Asiatic	Total
Infant Deaths	19	7	59	39	124
Infectious Diseases or Contacts	12	7	6	22	47
Reports on Insanitary Conditions	7	—	2	1	10
No. of visits to Nursery Schools and Homes for Protected Infants	80	—	—	—	80
Lectures and Demonstrations to Students	48	—	5	—	53
Lectures and Demonstrations to Expectant Mothers	34	—	—	—	34
TOTAL	200	14	72	62	348

	European	Coloured	Native	Asiatic	Total
No. of Infants under 1 year Visited	1,492	675	4,030	2,038	8,235

TOTAL VISITS.

First Visits—Infants	7,274
Re-visits—Infants	13,257
Older Children	23,828
Other Visits	348
TOTAL	44,707

Dental Caries :

	European	Coloured	Native	Asiatic	Total
No. of children found to be suffering from dental caries	85	40	50	39	214
No. of cases of dental caries which received attention	61	9	3	5	78

15.—PROSECUTIONS.

Summary for Year 1945/46.

LEGISLATION CONTRAVENED	Brought Forward	New	Total	Guilty	Not Guilty	With-drawn	Pend-ing	Fines
Public Health By-laws.								
Nuisances :								
Use of Foodshops/Store for Sleeping	—	3	3	3	—	—	—	£18 0 0
Unclean yards and drains ...	6	12	18	18	—	—	—	88 0 0
Unclean premises	—	5	5	4	—	—	1	6 0 0
Defective drain	2	4	6	5	—	1	—	16 0 0
Defective privies	—	7	7	5	—	1	1	(1) 34 10 0
Defective dwellings	4	21	25	23	—	—	2	(2) 135 10 0
Discharge of foul water into street	—	1	1	1	—	—	—	3 0 0
Inadequate water supply ...	—	1	1	—	—	—	1	—
Fly Development	—	9	9	9	—	—	—	41 0 0
Mosquito Development ...	—	2	2	2	—	—	—	8 0 0
Keeping of animals so as to be a nuisance	—	2	2	2	—	—	—	12 10 0
Disposal of carcase	—	1	1	1	—	—	—	2 0 0
Manufacture, Storage and Sale of Food :								
Unhygienic handling	—	15	15	14	1	—	—	44 0 0
Hairdressers :								
Failure to wear overalls ...	—	2	2	2	—	—	—	9 0 0
Dairies and Milk :								
Trading without Registration	—	2	2	2	—	—	—	8 0 0
Illegal introduction of milk into Durban	—	2	2	—	—	—	2	—
Milk below bacterial standard	4	32	36	34	—	—	2	88 10 0
Building By-laws :								
Unauthorised buildings as dwellings	1	1	2	2	—	—	—	9 0 0
Public Health Act :								
Rodent infestation regulations	1	4	5	5	—	—	—	(3) 58 0 0
Fumigation regulations ...	1	—	1	1	—	—	—	5 0 0
V.D.								
Failure to attend clinic ...	—	1	1	1	—	—	—	(4) 10 0 0
Zonal regulations—slums ...	21	103	124	114	—	4	6	(5) 902 0 0
Foods, Drugs and Disinfectant Act :								
Milk below chemical standard	—	3	3	2	—	—	1	9 0 0
Sausages below standard ...	—	2	2	2	—	—	—	10 0 0
Ice cream below standard ...	—	1	1	—	—	—	1	—
TOTAL	40 (21)	236 (239)	276 (260)	252 (204)	1 (7)	6 (9)	17 (40)	1,517 0 0 (1,509 0 0)

(1) £20 suspended
(2) £5 suspended.
(3) £15 suspended.
(4) £10 or 6 weeks (fine not paid)
(5) £110 suspended.

16.—OTHER MATTERS OF HEALTH AND SANITATION.

Inspections by Health Inspectors :

Hotels, boarding and lodging houses	3,364	(1,992)
Restaurants, tearoom and eating houses	2,167	(1,636)
Bakeries	79	(33)
Butcheries	1,225	(503)
Dairies and milk depots...	1,997	(1,183)
Laundries	397	(253)
Markets	267	(390)
Offensive trades	161	(106)
General	28,462	(17,625)
	38,146	(23,721)

Complaints received and investigated	3,071	(3,341)
Notices issued—Personal	2,139	(1,767)
Notices issued—Written	4,184	(3,066)
Reports on applications for licences	11,605	(11,019)
	20,999	(19,193)

Health Scrutiny of Building Plans.—There has been further increase in activity in regard to the building activities and the position is steadily improving.

In addition to numerous preliminary lay-outs, the number of plans officially submitted to this Department was 2,301 as compared with 1,838 plans during 1944/45. Final approval was given in respect of 1,965 plans (£3,555,965).

Values, however, show a continued increase, the relative figure being as follows :—

1944/45...	£1,352,158
1945/46...	£3,555,965

Distribution of plans :—

Old Borough	629
Greenwood Park	494
Sydenham	246
Mayville	368
Umhlatuzana	147
South Coast Junction	417
TOTAL	2,301

Normal site- and building-inspections were carried out in all parts of the City, often in co-operation with architects, owners and co-officials of the Municipal Service. Many building schemes in embryo have been examined.

Co-operation with other officials and property owners has been a prime factor in attaining improvements, sometimes on matters outwith the scope of by-laws and regulations.

LABORATORY SERVICES (by Consulting Pathologist) :

During the year consultation took place with the Medical Officer of Health on many subjects connected with public health, quite apart from conferences called for the purpose of determining the cause of outbreaks of illness of food poisoning type, and of discussing what could be done about the heavy carrier rate of amoebiasis in the Bantu people in and outside the City. In fact, as time went on, consultation was sought not only by the Medical Officer of Health, but by his heads of departments on many subjects, ranging from the reaction of vaccination to questions of specificity of the Wassermann reaction. During outbreaks of illness such as Glanular Fever, Enteric and Food Poisoning, consultation took place almost daily.

The Pathologist also went over the whole plant of water purification in and outside the City, and issued a report thereon.

Amoebic Dysentery.—In a survey carried out by the Pathologist among Natives working in, and those employed outside, the City, a carrier rate of 17 per cent. was found. As this was a single stool survey, it is necessary to treble the percentage found in order to approximate the true rate. By this means we arrive at the figure of 51 per cent. Now when it is realised that the Bantu population is always on the move in and out of the City, some idea of the difficulty of dealing suppressively with this disease can be imagined. In fact, it becomes evident that the best we can do will be to test the obvious type of food handler, and if positive, have the individual treated.

But far greater co-operation by the public is necessary for carriers of a disease like amoebiasis, than it is for a disease like diphtheria. In other words, it is much easier to take a swab than to get a stool specimen from an individual who is not ill.

In the matter of the treatment of a carrier, Diodoquin, unfortunately, is a little expensive, but it remains to be shown what is better than two courses of this compound, for a person who does not wish to be put off work, nor to be put to any inconvenience whatsoever.

One often hears it stated by certain medical practitioners that nine out of every ten Europeans in Durban, or 90 per cent., have amoebiasis. But in the survey above-mentioned only 5 per cent. of Europeans were found to harbour the pathogenic species E. histolytica. This finding has since been amply confirmed by thousands of stool examinations carried out at the Government Laboratory, since the survey was completed. If, of course, by amoebiasis they include the species E. Coli, the percentage would have to be considerably raised, but that addition would not bring it anywhere near 90 per cent.

Diseases of Food Poisoning Type in the Bantu.—Periodic outbreaks of exhaustive diarrhoea and vomiting are not uncommon in these people, but it is often exceedingly difficult to nail down the cause. One of the reasons is that they are inveterate drinkers of strong spiritous liquor, and besides the fact that they are not particular over the containers they brew it in, they often add ingredients that no human bowel could possibly tolerate. Finally, it is useless to try to find out how they made any particular brew. They know it is illegal, and will therefore divulge as little as possible. Sometimes, it is due to the action of the spirit on the lead lining of the containers, and in one outbreak we were able to prove this.

The consumption of spiritous liquor often precipitates acute amoebic dysentery in those who previously harboured the parasite in an asymptomatic form. Sometimes they indulge even when the disease is in an advanced stage, and are then very liable to get a perforation.

It is interesting to speculate how much of the general illness among Natives in this Province has this consumption of augmented spiritous liquor as the underlying cause. Coupled with their unbalanced diet it must sure be not inconsiderable.

Enteric.—There would appear to be some evidence that Typhoid Fever is a much less serious illness to-day than it was, say, 40 years ago. That does not mean that fatal or severe cases are not seen to-day. But taken all over, and considering the fact that so many have only a mild illness, one gets the impression that the disease is losing virulence, somewhat in the same way as we know has happened with Scarlet Fever.

Furthermore, there appears to be some reason for saying that the carrier rate is falling also. There is no doubt that Vi positives are not so numerous to-day as they were five years ago.

Whether the subsidence in virulence and in the carrier rate is only apparent and not real one cannot be sure. We certainly treat the disease far better to-day than formerly, but for all that there still remains the impression that it has become milder in virulence. One cannot help but notice what a large number of cases there are which become afebrile at the end of the second week, even in the uninoculated. We may, in fact, be ascribing to the efficacy of treatment what in reality has another explanation altogether.

Laboratory.—During these twelve months, the post of Consulting Pathologist did not carry any obligation to carry out laboratory tests in his private laboratory. But in spite of this, 1,094 specimens were examined, and before the post was changed in character, this total had grown to over 1,200. These tests were almost entirely confined to Vi-tests for Enteric carriers. The remainder were for Diphtheria carriers, and tests on millet for suspected vegetable poison.

TABLE SHOWING PARTICULARS OF PLANS, 1945—46.

(See page 80 year ended 30th June, 1945.)

Month	Dwelling		Flats		Additions to Dwellings and Flats		Stores, Shops, Factories and Offices		Additions to Stores, Shops, Offices and Factories		Clubs, Halls and Hotels		Additions to Clubs, Halls and Hotels		TOTAL	
	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
		£		£		£		£		£		£		£		£
1945 :																
July ...	48	78,279	1	14,000	52	8,699	4	54,883	18	23,062	1	128,560	Nil	—	124	307,483
August	38	66,305	1	12,000	26	4,038	1	7,000	9	17,463	—	—	2	258	77	107,064
Sept. ...	97	317,044	9	153,227	119	16,701	11	40,919	12	18,215	2	9,614	3	1,864	253	557,584
October	68	106,811	4	133,777	66	11,834	3	64,164	15	22,923	4	50,281	4	560	164	390,350
Nov. ...	87	145,975	3	21,400	101	24,224	3	3,500	10	9,754	3	75,437	5	3,575	212	283,865
Dec. ...	37	78,637	—	—	38	7,570	10	69,861	7	4,188	4	30,250	1	90	97	190,596
1946 :																
January	86	150,927	4	30,600	75	16,214	4	74,190	20	27,460	3	5,600	8	24,108	200	329,099
February	79	141,477	3	66,900	72	14,642	7	36,120	22	26,369	6	104,390	4	14,005	193	403,903
March	33	55,712	5	26,570	31	8,409	2	55,000	12	19,062	—	—	1	1,500	84	166,253
April ...	78	142,097	1	10,695	98	17,455	9	57,124	22	27,795	2	8,180	2	6,905	212	270,251
May ...	33	61,148	3	12,900	53	8,813	5	19,287	8	2,327	—	—	1	99	101	113,573
June ...	78	142,730	1	2,800	116	19,966	15	132,665	33	120,926	1	3,350	4	13,507	248	435,944
TOTAL ...	762	1,148,142	35	493,869	847	158,564	74	614,715	188	319,544	26	415,662	35	66,471	1,965	3,555,965

17.—STAFF LISTS :

The establishment of the Department consists of :—

Administration :

1 City Medical Officer of Health	Gunn, Dr. G. H., M.D., Ch.B., D.P.H.
1 Deputy Medical Officer of Health	English, Dr. G. D., M.D., Ch.B., D.P.H., D.T.M.
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	
14 Clinical Assistants	**Non-Europeans :**
2 Lady Assistants	1 Indian Office Assistant
1 Chief Typist	7 Indian Messengers.
1 Senior Typist	
9 Typists	
1 Enquiry Clerk.	

Epidemiology and Endemiology :

1 Assistant Medical Officer of Health (& T.B. Officer)	Hooper, Dr. D. H., M.B., Ch.B., D.P.H.
1 Radiographer (Senior)	
1 Radiographer (Junior)	**Non-European :**
1 General Assistant.	5 Indian Health Assistants
	1 Indian Messenger
	6 Bantu Health Assistants.

Disinfecting (and Ambulance) Station and Laundry :

1 Superintendent	**Non-European :**
7 General Assistants.	61 Indian Assistants
	3 Bantu Ambulance Attendants.

Health Inspection :

1 Assistant Medical Officer of Health	Edwards, Dr. H. S., M.D., 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.
7 Health Inspectors (1st Grade)	
11 Health Inspectors (2nd Grade)	
9 Health Inspectors (3rd Grade)	
8 Assistant Health Inspectors	
12 Health Assistants	
1 Health Assistant (Lady).	

Veterinary Hygiene :

1 Veterinary Officer	Harber, Lt.-Col. A. F., M.R.C.V.S.

Health Visiting :

1 Chief Health Visitor	**Non-Europeans :**
1 Senior Health Visitor	5 Indian Clinic Assistants
29 Health Visitors	5 Indian Messengers
1 Health Visitor (Orthopaedic)	2 Bantu Nurses
8 Clinic Assistants	1 Bantu Cleaner.

Family Health Service :

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 (Vacant).	
1 Physical Culturist (Vacant).	

Laboratory Services :

1 Pathologist (part-time)	Sampson, Dr. B. F., M.R.C.S., L.R.C.P., M.B., B.Sc.

Field Hygiene :

1 Health Inspector	**Non-European :**
1 Senior Assistant Supervisor	3 Indian Sirdars
1 Assistant Supervisor (Field)	6 Indian Field Assistants
5 General Assistants (1st Grade)	34 Indian Labourers
8 General Assistants (2nd Grade)	8 Bantu Health Assistants
	30 Bantu Labourers.

Non-European Health and Medical Services :

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

Non-European :

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

Health Education :

European staff drawn from other sections.

Non-European :

2 Bantu Health Assistants

City Fever Hospital :

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

Non-European :
1 Indian Sirdar
25 Indian Orderlies
1 Indian Female Maid
2 Bantu Nurses
11 Bantu Watchmen and Labourers
6 Bantu Female Maids.

Europeans	182
Bantu	89
Indian	155
	426

ADMINISTRATION :

During the year under review, a comprehensive re-organisation scheme was submitted to and approved by the City Council. The Department is now comprised of ten divisions :—

1. Administration
2. Epidemiology and Endemiology
3. Health Inspection
4. Health Visiting
5. Family Health Service
6. Public Health Education
7. Laboratory Services
8. Field Hygiene
9. Non-European Health and Medical Services
10. City Fever Hospital.

CO-ORDINATION OF HOSPITAL SERVICES :

No progress was made with regard to finalising the scheme of co-ordinating hospital services. The non-European section of the City Fever Hospital was taken over by the Provincial Administration as from the 1st August, 1944. Shortage in the supply of trained nurses continues to be the most pressing problem in respect of fever hospitalisation.

SLUMS AND HOUSING :

Due to prevailing emergency and restrictive conditions in the building industry with attendant high costs, Durban's housing problems are still far from solution.

Influx of all races, though mainly Natives, continues without respite. New housing programmes completed and under construction are insufficient to cope with the influx apart from the established slum population.

Congestion has worsened in the already overcrowded sub-standard dwelling structures, chiefly in the form of building-on and additional rooms.

During January, 1946, a survey of Native shack dwellers disclosed a population and distribution as follows :

District	No. of Families
South Coast Junction	377
Umhlatuzana	31
Mayville	4,998
Sydenham...	56
Greenwood Park	31
	5,493

These figures disregard isolated shacks occupied by Natives and are concerned only with such concentrations of huts deemed to constitute a settlement.

Estimating an average of rather less than 5 members per family, it is computed that a Native population of 30,000 is living under conditions highly conducive to the prevalence of Typhoid Fever, the Dysenteries, Typhus, Tuberculosis and Venereal Disease.

25,000 of the above-mentioned Natives reside in the Mayville area.

Present indications are that the number of families will exceed 6,000 by the end of 1946.

Housing Survey.—The cross-sectional housing survey undertaken by the Natal University College has not yet been completed. Pending its availability, the following estimate of housing requirements may be taken :—

Economic :	Dwellings (Houses or Flats)
European	3,000
Coloured	1,200
Asiatic	3,800
	8,000

Sub-Economic :	
European	500
Coloured	1,800
Native	7,200
Asiatic	14,000
	23,500

In the 1943/53 Current and Post-war Housing Programme, the City and Water Engineer has made provision to cover most of these requirements.

Slum Areas :

(*a*) **Central Areas.**—Council's emergency ban intermission on the demolition of dwellings still obtains so that no direct action for the removal of slum buildings has been undertaken. Action to effect repairs and maintenance of dwellings, however, continues to be exerted in terms of the Regulations for the Control and Inspection of Premises in Defined Zones framed under Section 32 of the Slums Act.

As a result, certain owners of defective premises in the various defined zones, considering that repairs to be uneconomic, have as an alternative demolished their sub-standard dwellings.

Demolitions and replacements are summarised below :—

Demolitions	Replacements
25 Houses	Flat blocks involving 52 self-contained flats

Work on additional flats, houses and trading premises is under way.

(*b*) **Suburban Areas :**

Slum Zone 8, situated on the north bank of the Umgeni River, has undergone a satisfactory change during the year under review. When " proclaimed," the zone comprised 140 shacks mostly occupied by Indian families. With few exceptions, all were of the " squatter " type and eligible for acceptance in the Council's Sub-Economic Schemes.

By arrangement with co-operating owners, 48 shacks have been demolished and the dehoused persons accommodated in the Springfield Indian project. A further reduction is planned for the ensuing year.

Slum Zone 9, the Booth Road area in Mayville, where 25,000 Natives are living under grossly insanitary conditions, persists as a menace to the entire community. Clearance of this large shack settlement depends upon the acquisition by the City Council of portion of the Umlazi Mission Reserve which abuts the southern boundary of Durban. Negotiations with the Government are pending and, if successful, shack dwellers in Mayville will be induced to rebuild at Umlazi on prepared and health serviced sites on a " temporary " housing scheme basis.

This basis will ensure remedy of the basic defects of shack settlement, *i.e.*, multi-roomed dwellings, and the absence of proper roads, water supply, sanitation and health service institutions such as clinics, ablution and laundry facilities.

In **Slum Zone 10,** located in the Bluff Valley, shack settlement has not yet reached alarming proportions. The population is predominently Bantu and clearance of the area is also bound up in the acquisition of land in the Umlazi Mission Reserve.

In **Slum Zone 11,** the Karim Lane area, land values have great appreciated over the past few years. Its development will best be effected by private enterprise. A recent survey shows that, with few exceptions, owners are preparing or have completed plans for the erection of flat blocks and trading or industrial premises. However, until this section is sewered, major schemes are impracticable owing to Building By-law restrictions. As owners concerned are anxious to exploit the enhanced values of their properties, a rapid clearance of this slum can be expected when sewerage becomes available.

Prosecutions.—100 prosecutions were instituted under the Slum Zonal Regulations. Fines imposed totalled £716 10s. 0d.

New Housing Estate.—During the year, progress with provision of new Municipal housing was recorded as follows :—

(1) **European :**

Partly-paid Housing Scheme—

Number of houses completed	103*	(255)
Number of houses commenced	38	
Number of houses awaiting commencement	1	

Flats for ex-Volunteers—

Umbilo Raod, completed	30
Umbilo Road, nearing completion	18
Selborne Road, under construction	282

Flats for Women—

Rapson Road. Conversion to flats. Work nearly completed	7

Woodlands Housing Scheme :—

Houses completed	40
Houses almost completed	10
Houses ready for roofing or further advanced	50

Sherwood and Virginia Estate Schemes—

Road hardening works and stormwater drainage completed or in progress.

(2) **Indian :**

Springfield Sub-Economic—

Houses completed	207*	(428)
Houses under construction	62	

(3) **Coloured—**

Sparks Estate—

Road hardening and stormwater drainage completed.

(4) **Native—**

Chesterville (Blackhurst) Scheme—

Number of houses completed	325*	(1,265)

Merebank Native Men's Hostel—

Two blocks completed, comprising 960 beds. Occupation delayed pending completion of dining hall and other offices. Three blocks under construction. Completed scheme will accommodate 4,800 Natives.

* These figures are totals to date.

Magazine Barracks.—No change has taken place in the housing conditions in the various barracks used for the accommodation of Corporation Indian employees. The City Council has authorised the expenditure of £40,000 for the improvement of conditions at the Magazine Barracks by the installation of individual sanitary and bathing facilities for each flat.

The Medical Clinic at the Magazine Barracks is functioning satisfactorily.

A Health Education programme, supported by film shows, is being developed.

Housing of Natives.—Existing Native housing comprises the following :—

(*a*) Municipal villages and hostels ;
(*b*) Industrial Compounds ;
(*c*) Private residential premises ;
(*d*) Slum settlements.

Municipal Native Housing comprises :—

1. (*a*) **Locations for Housing Families—**

Lamont	480	houses
Baumannville	120	,,
Jacobs	64	,,
Chesterville	1,265	,,

(*b*) **Locations for Native Males—**

Somtseu Road	3,674	beds
Dalton Road	1,656	,,
Jacobs	625	,,

(*c*) **Hostels for Native Males—**

Bell Street	1,374	beds
Ordnance Road	440	,,

(*d*) **Hostels for Native Females—**

Grey Street	520	beds
Jacobs	64	,,

2. (*a*) **Water Supply :—**

	LOCATIONS			
	Lamont	Baumannville	Jacobs	Chesterville
Houses with water laid on	100	120	—	Complete water and sewerage services
Houses with communal supply	380	—	64	
No. of communal taps	31	—	4	

(*b*) **Ablution, Washing and Sanitary Accommodation :**

	Lamont	Baumannville	Jacobs	Chesterville
Houses with showers	100	120	—	—
Houses with bathrooms	380	—	—	1,265
Showers for males	—	—	6	—
Showers for females	—	—	6	—
Washing gullies	380	120	2	1,265
Latrines (pail)	100	—	—	—
Latrines (pit)	380	—	—	—
Latrines (waterborne)	—	120	—	1,265
Latrines (for males)	—	—	6	—
Latrines (for females)	—	—	6	—

At Lamont work on provision of full sewerage facilities is now in hand.

3. (*a*) **Hostels for Males :—**

	Somtseu Road	Dalton Road	Bell Street	Jacobs	Ordnance Road
Latrines	235	66	42	72	13
Urinals	13	6	7	54	—
Showers	216	38	38	48	9
Washing Areas	21	11	22	5	3
Water taps	50	50	36	58	7
Fireplaces	62	26	15	16	15
Kitchens	10	5	—	1	—
Kitchen taps	24	17	—	7	—
Dining Halls	3	2	—	1	—

(*b*) **Hostels for Females :—**

	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	—

4. **Proposed Additional Accommodation :—**

Lamont Location	1,083 houses
Merebank Hostel for males	4,040 beds
Somtseu Road—additions	250 „
Jacobs—extensions	1,000 „

5. **Accommodation Other than Municipal :—**

(*a*) Industrial and commercial (exlcuding S.A.R. and Durban Corp.)	16,000
(*b*) Domestic Servants	21,000
(*c*) Licensed premises	11,000
(*d*) Shanty settlements	30,000
(*e*) Miscellaneous, including floating population	9,000

Native population is estimated at 99,138.

CONCLUSIONS :

(*a*) The general housing shortage persists for all races.

(*b*) Influx of all races, principally Bantu, is unabated.

(*c*) New housing programmes completed cannot cope with increase of population.

(*d*) Natives living in slum settlements total 30,000 and their number continues to increase.

(*e*) Approximate estimates of housing requirements are given, pending completion of survey now being undertaken by Economic Division of the Natal University College.

(*f*) Notwithstanding existing restrictions, the Regulations for the Control and Inspection of Premises in Defined Zones (framed under the Slums Act) have contributed materially to improvement of housing conditions.

(*g*) Prosecutions undertaken indicate that the Department has striven for improvements despite the difficult times ; and

(*h*) The statistics of new housing estates completed and under construction during the year are very gratifying.

APPRECIATION :

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

My thanks are also conveyed to you, Sir, and to the other members of the City Council for 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., Ch.B., D.P.H.

City Medical Officer of Health.

SCHOOL OF HYGIENE
& TROPICAL DISEASES
9 FEB 1918