

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

Contributors

Durban (South Africa). Public Health Department.

Publication/Creation

[Durban] : [The Corporation], [1953]

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CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 30th JUNE, 1953





22501417687

City Health Department,

640 Smith Street,

DURBAN

1st August, 1953.

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

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present the Fifty-First Annual
Report of the activities of the City Health Department for
the year ending 30th June, 1953.

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

My thanks are also conveyed to you, Sir, and to the
other members of the City Council for the courtesy and assis-
tance extended to the Acting City Medical Officer of Health
(Dr. G.D.English) and myself throughout the past year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

G.H. Gunn
G.H. Gunn, M.D., D.P.H.,

CITY MEDICAL OFFICER OF HEALTH



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CITY HEALTH DEPARTMENTREPORT 'A'

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FIFTY-FIRST ANNUAL REPORT OF THE CITY MEDICAL OFFICER
OF HEALTH.

CLIMATIC DATA: Longitude 30 degrees: Latitude 31 degrees

METEOROLOGICAL OBSERVATIONS

Month		Baro- meter	Temperatures		Relative Humi- dity	Rainfall total for month	No. of days on which rain fell
			Max.	Min.			
1952							
July	Mean	30.246	73.04	56.85	73.77	1.00"	8
	Max.	30.508	83.00	65.00	95		
	Min.	29.842	63.00	49.00	40		
1953							
January	Mean	29.977	83.6	72	76.9	12.54"	17
	Max.	30.250	90	75	96		
	Min.	29.778	75	68	55		

Total rainfall for the year was 35.94 inches

AREA OF MUNICIPALITY: The area of Durban and suburbs inclusive of Town-lands is 44,927 acres or 70.20sq. miles.

ANNUAL RATEABLE VALUE:

	1953	1952
Gross value of land	52,637,520	52,340,940
Gross value of buildings	64,919,600	61,455,300
	<u>117,557,120</u>	<u>113,796,240</u>

For the year under review, the rates imposed were 7½d. on land and 3½d on buildings (including water rate).

* * *

REPORT "A"

1. VITAL STATISTICS: (Figures in brackets represent those of the previous year).

POPULATION:

Census	Estimated as at 30.6.1953			% of Total	% of Total
May 1951	Male	Female	Total	1953	1952
European 129,227	66,793	70,460	137,253	30.3	30.3
Coloured 14,895	8,159	9,038	17,197	3.7	3.5
Native 134,273	99,295	48,935	148,230	32.4	32.1
Asiatic 144,916	78,440	75,876	154,316	33.6	34.1
	252,687	204,309	456,996	100.0	100.0

The following represents the ratio of the sexes:-

European	...	...	1000 Males to 1055 Females
Coloured	...	...	1000 " " 1103 "
Native	...	...	2029 " " 1000 "
Asiatic	...	...	1034 " " 1000 "

The principal vital statistics for the year corrected for outward transfer are as follows:-

	European	Coloured	Native	Asiatic	Total
Population (Estimated as at 30.6.1953)	137,253 (133,261)	17,197 (15,521)	148,230 (141,174)	154,316 (149,732)	456,996 (439,686)
Birth Rates.....	20.33 (20.23)	45.00 (54.25)	28.08 (29.45)	34.83 (37.10)	38.67 (30.13)
Death Rates	8.54 (9.14)	13.14 (12.76)	22.89 (22.82)	8.81 (10.33)	13.46 (14.06)
Infantile Mortality (Rate per 1000 live Births) ...	23.30 (21.51)	83.98 (59.38)	336.06 (302.86)	61.02 (71.47)	141.73 (133.13)
Percentage of Illegitimate to live Births .	1.16 (2.45)	26.61 (23.87)	51.84 (47.54)	1.82 (2.27)	19.21 (17.88)
Death Rate: Pulmonary T.B. per 1000 of the population	.18 (.26)	1.68 (1.80)	2.17 (2.81)	.28 (.70)	.91 (1.28)

BIRTHS: The following births were registered in Durban during the year
(Corrected for outward transfer).

	European	Coloured	Native	Asiatic	Total
Local Births	2790 (2696)	774 (842)	4163 (4157)	5375 (5555)	13.102 (13.250)
Local Illegitimate Births...	45 (66)	206 (201)	2158 (1976)	98 (126)	2.507 (2.369)
Still Births	26 (42)	23 (19)	312 (279)	272 (242)	633 (582)
Birth Rates	20.33 (20.23)	45.00 (54.25)	28.08 (29.45)	34.83 (37.10)	28.67 (30.13)

Compulsory registration of Native Births became effective on July 1st, 1952, but, despite this, only 6 more births were recorded than in the previous year.

	European	Coloured	Native	Asiatic	Total
BIRTHS:					
Male	1383 (1406)	375 (429)	2126 (2078)	2662 (2736)	6546 (6649)
Female	1407 (1290)	399 (413)	2037 (2097)	2713 (2819)	6556 (6601)
DEATHS:					
Male	671 (701)	114 (115)	1921 (1743)	725 (865)	3431 (3424)
Female	501 (517)	112 (83)	1472 (1478)	635 (681)	2720 (2759)
INFANTILE DEATHS:					
Male	33 (35)	38 (27)	775 (657)	179 (215)	1025 (934)
Female	32 (23)	27 (23)	624 (597)	149 (173)	832 (816)
STILL BIRTHS:					
Local	26 (42)	23 (19)	312 (279)	272 (242)	633 (582)
Imported	5 (9)	1 (2)	293 (174)	26 (29)	325 (214)
ILLEGITIMATE BIRTHS:					
Local	45 (66)	206 (201)	2158 (1976)	98 (126)	2507 (2369)
Imported	18 (12)	20 (11)	2104 (1791)	10 (12)	2152 (1826)

There were 1017 female to every 1000 Male births.
Rates of natural increase being excess of births over deaths per 1000
of the population are as follows:-

European 11.8 (11.1)
Coloured 31.9 (41.5)
Native 5.2 (-)
Asiatics 26.0 (27.0)

INFANTILE DEATHS AND CAUSES: 0 TO 5 YEARS.

Cause	WEEKS			MONTHS			YEARS					Total
	0-1	1-2	2-4	1-3	3-6	6-12	2	3	4	5		
<u>EUROPEAN:</u>												
Asphyxia Neon	5	-	-	-	-	-	-	-	-	-	-	5
Atelectasis	13	-	1	-	1	-	-	-	-	-	-	15
Anaemia	-	-	-	-	-	1	-	-	-	-	-	1
Accidents	1	-	-	-	-	-	-	2	-	-	-	3
Birth Injury	2	-	-	-	-	-	-	-	-	-	-	2
Bronch. Pneumonia	-	-	-	1	2	1	3	-	-	-	-	7
Congenital Debility	2	1	-	1	-	-	-	-	-	-	-	4
Diphtheria	-	-	-	-	-	-	2	-	-	-	-	2
Diseases peculiar to first year of life	2	1	-	-	-	-	-	-	-	-	-	3
Epilepsy	-	-	-	-	-	-	-	-	1	-	-	1
Gastro-Enteritis	-	-	-	2	-	1	3	-	-	-	-	6
Icterus Gravis	1	-	-	-	-	-	-	-	-	-	-	1
Jaundice	-	1	1	-	-	-	-	-	-	-	-	2
Prematurity	16	-	1	-	-	-	-	-	-	-	-	17
Spina Bifida	-	-	-	1	-	-	-	-	-	-	-	1
Tetanus	-	-	-	-	-	-	-	-	1	-	-	1
Unclassified	1	-	-	-	2	3	2	-	2	2	-	12
Total:	43	3	3	5	5	6	10	2	4	2	-	83

Previous Year: 40 3 1 3 5 9 7 2 4 75

<u>COLOURED:</u>												
Asphyxia Neon	1	-	-	-	-	-	-	-	-	-	-	1
Atelectasis	1	-	-	-	-	-	-	-	-	-	-	1
Accidents	-	-	1	-	-	-	-	1	1	-	-	3
Broncho Pneumonia	-	-	2	1	5	3	5	1	-	-	-	17
Bacillary Dysentery	-	-	-	-	-	1	1	-	-	-	-	2
Birth Injury	3	-	-	-	-	-	-	-	-	-	-	3
Congenital Debility	1	-	1	-	-	1	-	-	-	-	-	3
Convulsions	-	-	-	-	-	1	-	-	-	-	-	1
Diphtheria	-	-	-	-	-	1	1	1	1	-	-	4
Gastro-Enteritis	-	1	1	2	3	8	10	1	-	-	-	26
Jaundice	2	-	-	-	-	-	-	-	-	-	-	2
Malnutrition	-	-	-	-	-	1	-	1	-	-	-	2
Otitis Media	-	-	-	1	1	-	-	-	-	-	-	2
Prematurity	8	2	-	-	-	-	-	-	-	-	-	10
Tuberculosis, Pulm.	-	-	-	-	1	-	-	1	-	-	-	2
Tuberculosis, Other	-	-	-	-	-	2	1	-	-	-	-	3
Unclassified	-	-	1	-	1	4	1	4	1	1	-	13
Unknown	-	-	1	1	1	-	-	-	-	-	-	3
Total	16	3	7	5	12	22	19	10	3	1	-	98

Previous Year 17 4 3 5 9 14 17 6 5 - 80

<u>NATIVE:</u>												
Atelectasis	33	1	-	-	1	-	-	-	-	-	-	35
Accidents	-	-	-	1	-	-	4	5	3	1	-	14
Anaemia	1	-	-	1	1	-	2	-	1	-	-	6

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Cause	WEEKS			MONTHS			YEARS					Total
	0-1	1-2	2-4	1-3	3-6	6-12	2	3	4	5		
NATIVE:												
Bronchitis	-	2	-	-	1	3	1	-	-	-	7	
Broncho Pneumonia	10	12	8	66	71	104	131	48	7	3	460	
Congenital Debility	3	5	1	2	-	2	-	-	-	-	13	
Congenital Malfor- mation	3	-	-	-	-	-	-	-	-	-	3	
Cerebro Spinal Meningitis	-	-	-	1	-	-	-	-	-	-	1	
Congenital Syphilis	5	2	4	4	2	-	-	-	-	-	17	
Convulsions	1	1	1	-	-	1	2	-	1	-	7	
Dysentery Amoebic	-	-	-	1	-	4	13	3	1	-	22	
Dysentery Bacillary	-	-	-	3	1	8	13	-	-	-	25	
Diphtheria	-	-	-	-	-	2	10	4	3	-	19	
Empyema	-	-	-	-	-	1	1	-	-	-	2	
Gastro-Enteritis	13	21	17	128	117	177	234	20	3	-	730	
Intracranial Haemorrhage	21	3	1	1	-	-	-	-	-	-	26	
Influenza	-	-	-	-	-	1	-	-	-	-	1	
Lobar Pneumonia	-	1	-	5	5	6	2	-	-	-	19	
Malnutrition	1	1	-	9	10	16	59	7	-	2	105	
Meningitis	1	-	-	-	3	5	1	1	-	-	11	
Measles	-	-	-	-	2	3	10	2	-	-	17	
Mongolism	-	-	-	-	1	-	-	-	-	-	1	
Otitis Media	-	-	-	-	-	-	-	-	-	-	-	
Mastoiditis	-	-	-	8	8	12	21	2	1	-	52	
Other diseases of early infancy	16	5	2	3	2	-	-	-	-	-	28	
Prematurity	122	14	5	3	-	-	-	-	-	-	144	
Starvation	-	-	-	2	-	-	1	-	-	-	3	
Tuberculosis-Pulm	-	-	-	3	5	13	29	16	3	1	70	
Tuberculosis-Other	-	-	-	4	7	8	19	2	1	2	43	
Typhoid	-	-	-	-	-	1	2	-	-	-	3	
Whooping Cough	-	-	-	-	1	2	7	1	-	-	11	
Unclassified and Unknown	19	5	6	12	12	15	33	32	5	1	142	
Ill defined	15	6	6	30	28	56	121	17	4	2	285	
Total	264	79	51	287	278	440	716	160	33	12	2320	
Previous Year	280	97	60	311	251	442	489	62	33	28	2035	

ASIATIC

Atelectasis	13	1	-	-	-	-	-	-	-	-	14
Accidents	-	-	-	1	-	-	1	1	1	1	5
Bronchitis	1	1	-	6	4	10	7	1	-	-	30
Broncho Pneumonia	7	4	5	14	14	20	64	19	8	1	156
Congenital Debility	6	5	3	1	-	-	1	-	-	-	16
Cerebro Spinal Meningitis	-	-	-	-	1	1	-	-	-	-	2
Convulsions	2	-	-	-	2	1	2	-	-	-	7
Dysentery Bacillary	-	-	-	1	-	-	1	-	-	-	2
Diphtheria	-	-	-	-	-	1	3	2	3	1	10
Erysipelas	-	-	-	2	-	-	-	-	-	-	2
Gastro-Enteritis	-	1	3	23	13	27	37	9	2	-	115
Hydrocephalus	-	-	-	1	-	-	-	-	-	-	1

Causes	WEEKS			MONTHS			YEARS				Total
	0-1	1-2	2-4	1-3	3-6	6-12	2	3	4	5	
ASIATIC (contd)											
Intracranial											7
Haemorrhage	6	-	1	-	-	-	-	-	-	-	22
Icterus Gravis	7	6	2	5	-	2	-	-	-	-	15
Lobar Pneumonia	2	-	-	2	1	3	4	-	3	-	22
Malnutrition	-	-	-	9	1	3	6	2	1	-	4
Meningitis	-	-	-	-	1	2	1	-	-	-	3
Otitis Media	-	-	-	-	1	-	1	1	-	-	67
Prematurity	59	3	3	2	-	-	-	-	-	-	2
Spina Bifida	-	-	1	1	-	-	-	-	-	-	5
Tuberculosis-Pulm	-	-	-	-	-	-	1	1	2	1	11
Tuberculosis-Other	-	-	-	-	-	-	7	1	2	1	9
Whooping Cough	-	-	-	-	-	4	3	2	-	-	28
Unknown											17
Unclassified	-	-	-	-	-	-	10	8	7	3	
Ill defined	4	-	-	1	1	-	10	1	-	-	
Total	107	21	18	69	39	74	59	48	29	8	572
Previous Year	125	34	36	80	78	91	97	61	15	14	631

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Native deaths from Malnutrition, Gastro-Enteritis, and Broncho Pneumonia.
Geographical and monthly distribution.

MALNUTRITION:

	1952						1953						Tot
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mch	Apr	May	June	
Old Borough	1	3	-	3	-	-	3	1	-	2	1	4	18
Greenwood Park	-	1	-	-	1	1	1	1	-	1	-	-	6
Sydenham	-	-	-	-	1	-	1	-	-	-	-	1	3
Mayville	1	4	1	6	2	2	8	9	9	10	2	6	60
Umhlatuzana	-	1	-	-	1	2	-	-	2	3	1	4	14
South Coast Junction	-	-	1	2	-	-	2	1	1	3	1	1	12
Total	2	9	2	11	5	5	15	12	12	19	5	16	113

GASTRO-ENTERITIS:

Old Borough	3	3	2	2	6	4	5	7	4	8	3	10	57
Greenwood Park	1	2	-	2	2	1	2	3	7	2	2	1	27
Sydenham	-	2	1	2	3	3	5	5	3	1	1	1	27
Mayville	26	21	37	41	64	73	73	66	31	29	37	23	527
Umhlatuzana	1	1	3	-	1	4	4	4	1	4	3	1	27
South Coast Junction	4	3	6	3	10	6	10	14	9	5	4	4	77
Total	35	32	49	50	86	91	99	99	55	49	50	40	737

BRONCHO PNEUMONIA:

	1952						1953						Total
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
Old Borough	2	3	6	1	3	3	5	5	10	7	5	-	50
Greenwood Park	-	-	1	1	1	1	1	2	2	-	6	3	18
Sydenham	-	-	-	1	2	1	1	2	3	2	-	2	14
Mayville	15	17	24	16	33	28	30	25	33	25	34	18	298
Umlatuzana	1	1	2	1	1	1	4	3	-	3	3	2	22
South Coast Junction	6	9	3	2	3	1	3	6	8	7	8	4	60
Total	24	30	36	22	43	35	44	43	56	44	56	29	462

* * *

2. INFECTIOUS DISEASES: NOTIFICATIONS AND DEATHS

	European		Coloured		Native		Asiatic		Total	
<u>ANTHRAX:</u>										
<u>Notifications.</u>										
Imported Cases	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)
No deaths recorded										
<u>CEREBRO SPINAL MENINGITIS:</u>										
<u>Notifications</u>	7	(9)	-	(1)	12	(10)	8	(6)	27	(26)
Local Cases	1	(3)	-	(-)	9	(9)	-	(2)	10	(14)
Imported Cases										
<u>Deaths</u>										
Local	1	(-)	1	(-)	4	(5)	2	(1)	8	(6)
Imported	1	(-)	-	(-)	2	(2)	-	(-)	3	(2)
<u>DIPHTHERIA:</u>										
<u>Notifications</u>										
Local Cases	39	(50)	26	(7)	76	(103)	49	(51)	190	(211)
Imported Cases	49	(16)	1	(1)	46	(52)	11	(4)	107	(73)
<u>Deaths</u>										
Local	2	(4)	5	(-)	19	(19)	11	(11)	37	(34)
Imported	1	(2)	-	(-)	26	(26)	2	(2)	29	(30)
<u>ERYSIPELAS:</u>										
<u>Notifications</u>										
Local Cases	-	(9)	1	(1)	1	(3)	1	(-)	3	(13)
Imported Cases	-	(3)	-	(-)	2	(1)	-	(-)	2	(4)
<u>Deaths</u>										
Local	-	(-)	-	(-)	-	(-)	2	(-)	2	(-)
<u>ENCEPHALITIS:</u>										
<u>Notifications</u>										
Local Cases	7	(5)	3	(-)	13	(5)	1	(4)	24	(14)
Imported Cases	3	(1)	-	(-)	7	(1)	2	(4)	12	(6)
<u>Deaths</u>										
Local	1	(1)	1	(1)	3	(-)	1	(-)	6	(2)
Imported	1	(-)	-	(-)	-	(-)	1	(3)	2	(4)
<u>FOOD POISONING:</u>										
<u>Notifications</u>										
Local	-	(-)	-	(-)	-	(-)	-	(-)	2	(-)
No Deaths recorded	1	(-)	-							
<u>LEPROSY:</u>										
<u>Notifications</u>										
Local Cases	-	(-)	-	(1)	8	(7)	2	(-)	10	(8)
Imported Cases	1	(-)	-	(-)	7	(5)	1	(-)	9	(5)
No Deaths recorded										

Disease	European		Coloured		Native		Asiatic		Total	
<u>LEAD POISONING:</u>										
<u>Notifications</u>	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)
Local Cases	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)
No Deaths recorded										
<u>POLIOMYELITIS:</u>										
<u>Notifications</u>	4	(21)	-	(1)	1	(3)	1	(2)	6	(27)
Local	4	(21)	-	(1)	1	(3)	1	(2)	6	(27)
Imported Cases	3	(10)	-	(-)	2	(2)	-	(1)	5	(13)
<u>Deaths</u>	1	(-)	-	(1)	-	(-)	-	(-)	1	(1)
Local	1	(-)	-	(1)	-	(-)	-	(-)	1	(1)
Imported	-	(1)	-	(-)	-	(-)	-	(-)	-	(1)
<u>PUERPERAL SEPSIS:</u>										
<u>Notifications</u>	-	(-)	-	(-)	2	(-)	-	(-)	2	(-)
Local Cases	-	(-)	-	(-)	2	(-)	-	(-)	2	(-)
Imported Cases	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)
No Deaths recorded										
<u>SCARLET FEVER:</u>										
<u>Notifications</u>	90	(105)	2	(2)	-	(-)	1	(-)	93	(107)
Local Cases	90	(105)	2	(2)	-	(-)	1	(-)	93	(107)
Imported Cases	15	(21)	-	(-)	-	(-)	-	(-)	15	(21)
No Deaths recorded										
<u>TRACHOMA:</u>										
<u>Notifications</u>	2	(-)	-	(-)	-	(-)	-	(-)	2	(-)
Imported Cases	2	(-)	-	(-)	-	(-)	-	(-)	2	(-)
No Deaths recorded										
<u>TYPHOID:</u>										
<u>Notifications</u>	4	(9)	-	(1)	53	(54)	16	(37)	73	(101)
Local Cases	4	(9)	-	(1)	53	(54)	16	(37)	73	(101)
Imported Cases	10	(3)	1	(1)	121	(141)	14	(35)	146	(180)
<u>Deaths</u>	-	(-)	-	(-)	11	(10)	-	(2)	11	(12)
Local	-	(-)	-	(-)	11	(10)	-	(2)	11	(12)
Imported	-	(1)	-	(1)	12	(24)	-	(2)	12	(28)
<u>UNDULANT FEVER:</u>										
<u>Notifications</u>	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)
Local Cases	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)
No Deaths recorded										

* * *

2. INFECTIOUS DISEASES.

Apart from tuberculosis and the venereal diseases, the incidence of infectious disease in the City during the year under review was low. There were no major outbreaks of any of the notifiable infections. The incidence of smallpox and typhus was nil and the number of cases reported for nearly all the other infections showed a decline on last year's figures. Concurrent with this favourable state of affairs in Durban, however, an outbreak of milk-borne typhoid fever at Pietermaritzburg (where large quantities of milk are supplied to Durban) and a severe epidemic of malaria in Zululand caused much concern to the City Health authorities during the summer months. Fortunately, in neither instance was there any spread of the disease to Durban.

Hospital Admissions

540 European City cases of infectious disease were admitted to the Wentworth Hospital during the year as against 599 last year and 565 the year previous. The total admissions of local cases to the Infec-

tious Disease Section of the King Edward VIII non-European Hospital numbered 1,054 as against 1,199 last year.

Typhoid.

73 City cases were notified which represents an appreciable drop on last year's figure of 101. The number of Bantu cases, however, remained constant at approximately last year's total and the improvement was mainly due to a lessened incidence in the Indian community.

Towards the end of 1952, a small localised outbreak of typhoid fever affecting only Bantu occurred in the Durban North area. the number of definite cases reported were four, two of which were fatal. There were at least five other suspicious cases involved in this outbreak: one of these was probably a mild case which recovered without medical attention; another: a fatal case in a child - was probably misdiagnosed as suffering from tuberculous meningitis. The remaining three sickened after their departure to the Mapamulo district.

The fact that the outbreak was confined to Bantu strongly suggests that the source of the infection was on of the traditional food-stuffs favoured by this group, to wit, 'mahewu' brewers were operating in the vicinity. Both were admitted to hospital for examination and one, whose brew was held in particularly high esteem by the local Bantu, was diagnosed as a typhoid 'carrier'. This worthy explained that it was his custom to prepare the 'mahewu', allow it to ferment overnight and then to give the preparation a good stir with his bare hands on awakening the following morning!

After this 'carrier' had been traced, no further typhoid cases occurred in Durban North.

During December and January, Pietermaritzburg experienced an epidemic of milk-borne typhoid fever numbering 73 cases with one death. It was known that, for some weeks prior to the outbreak, heavy consignments of 'producer' milk had been conveyed from this area to a distributing depot in Durban. In fact, during the four weeks before the enforced pasteurisation of all milk supplies delivered to the Pietermaritzburg depot, some fifty-thousand gallons of milk had been received by the distributor in Durban. In the circumstances, it was comforting to be assured that for several months past no samples of milk collected from Durban distributors, including the one at risk, had shown evidence of under-pasteurisation.

In view, however, of the situation in Pietermaritzburg, it was deemed advisable to intensify all precautionary control measures. Towards this end, all three dairy inspectors assisted in carrying out the extra inspections required at City depots and at the premises of raw milk dairymen supplying milk to Durban. As an added precaution, samples of milk were collected daily from all milk depots in the City and submitted to the Phosphatase Test.

It is pleasing to record that no typhoid cases, traceable to its milk supply, occurred in Durban - the incidence of this disease in the City during this period being the lowest for the previous five years.

During February 1953, the daughter of a Bantu farm labourer, a child aged nine years, was admitted to hospital and diagnosed as suffering from typhoid fever. On investigation, it was discovered that the patient lived in quarters only a few hundred yards from the dairy premises of a fairly large producer-distributor of raw milk who operated outside the City boundaries but who had hundreds of clients within the City. Precautionary measures included a directive to the proprietor to heat-treat his milk for a period of three weeks. Though the source of infection was not traced, there was no spread of the disease among either the residents of the farm or consumers.

This short record conveys an inadequate impression of the amount of staff work involved in carrying out the precautions and of the anxious concern felt at the time as to the possibilities of the situation.

Diphtheria.

The progressive decline in the number of notifications noted over the previous three years was maintained during 1952/53 when 190 cases were notified as against 211 last year. There was a significant drop in the number of cases amongst Bantu children.

Scarlet Fever.

A total of 92 cases were notified, all of whom with the exception of 2 Coloured cases, were Europeans. Last year, 107 cases were recorded.

Anterior Poliomyelitis.

Only 6 cases were notified comprising 4 Europeans, 1 Indian and 1 Bantu. Imported cases numbered 5. There was one death amongst the local cases. Most of the cases occurred during the second half of the year.

Cerebro-Spinal Meningitis.

27 cases were notified as against 26 in the previous year. The racial group mainly affected was the Bantu.

Encephalitis.

In comparison with the previous year, the number of notifications was doubled, 24 cases being reported. These comprised 7 Europeans, 3 Coloureds, 1 Indian and 13 Bantu. Measles was responsible for one case in each of the four racial groups whilst two cases followed attacks of mumps. The remaining cases were of a doubtful or unknown aetiology.

* * *

IMMUNISATION

The various clinics were well attended by all races throughout the year.

The figures for 1952/53 are much higher than those for 1951/52 by reason of the fact that at the beginning of the year 1951 there were 62 European, 10 Coloured, 26 Bantu and 74 Asiatic schools and creches as compared with 80 European, 11 Coloured, 26 Bantu and 95 Asiatic (plus 37 'platoon' sessions) in 1953. Whilst this increase in the number of schools strained the staff resources, it ensured that a greater number of unprotected young children were immunised.

The immunisation of the pre-school child remains a problem which especially relates to the Bantu and Asiatic community. After intensive health talks, mothers bring their babies for their first injection but so often fail to return for the subsequent injections.

Early in 1952, Health Visitors immunised the babies in their homes in the Cato Manor area but this service was discontinued when home-visiting in that area was suspended in November 1952 following unrest amongst the Bantu.

Set out below is a table reflecting the details relative to the various departmental programmes:-

	E	C	N	A	Total
<u>Diphtheria Control</u>					
1st injection	390	528	3,808	6,116	10,842
2nd injection	343	723	4,125	8,101	13,292
3rd injection	10	85	2,100	1,804	3,999
Booster	332	223	67	665	1,287
	1,075	1,559	10,100	16,686	29,420

<u>Diphtheria & Whooping Cough Control</u>					
1st injection	916	279	101	157	1,453
2nd injection	854	202	56	103	1,215
3rd injection	948	191	45	76	1,260
	2,718	672	202	336	3,928

<u>Typhoid Control</u>					
1st injection	48	6	1,954	109	2,117
2nd injection	12	1	1,374	69	1,456
Booster and food-handlers	55	12	2,675	251	2,993
	115	19	6,003	429	6,566

Complete and Partial Immunisation

	<u>Diphtheria</u>		<u>Combined</u>		<u>Typhoid</u>		<u>Total</u>	
	Par- tial	Com- plete	Par- tial	Com- plete	Par- tial	Com- plete	Par- tial	Com- plete
Euro- pean	733 (1,461)	342 (2,813)	1,770 (950)	948 (380)	48 (26)	67 (23)	2,551 (2,437)	1,357 (3,216)
Col- oured	1,251 (381)	308 (468)	481 (317)	191 (112)	6 (3)	13 (1)	1,738 (701)	512 (581)
Bantu	7,933 (2,494)	2,167 (1,732)	157 (102)	45 (38)	1,954 (1,561)	4,049 (1,667)	10,044 (4,157)	6,261 (3,437)
Asia- tic	14,217 (5,528)	2,469 (6,001)	260 (294)	76 (86)	109 (40)	320 (91)	14,586 (5,862)	2,865 (6,178)
	24,134 (9,864)	5,286 (11,014)	2,668 (1,663)	1,260 (616)	2,117 (1,630)	4,449 (1,782)	28,919 (13,157)	10,995 (13,412)

Smallpox Control.

	E	C	N	A	Total
Vaccinations by Department	1,571	930	5,016	9,293	16,810
Vaccinations by Native Adminis- tration Department	1	-	123,461	-	123,461
	1,571	930	128,477	9,293	140,271

Immunisation: P.T.A.P. and A.D.F./D.F.

In November 1951, the Department carried out a test in the use of P.T.A.P. and A.D.F./D.F. immunising material. The test was conducted in two groups which were equal in respect of sex and age constitution. Twenty individuals of the same race in each sex- and age-group from six months to 15 years of age, year by year, were tested. The children were examined on the first and second day after the injections and details of the reaction, if any, were noted.

The test was completed in November 1952 and showed the following results:-

- (1) There was definitely a greater incidence of reaction to the A.D.F. injection than to the first P.T.A.P. in all ages and in both sexes.
- (2) The second injection of D.F., and the second injection of P.T.A.P., however, gave approximately the same number of reactions - the majority of which were slight.
- (3) As a result of the fairly severe reactions to the first A.D.F. injection, both parents and teachers were loath to continue with the second injection of the course.
- (4) The A.D.F. material was found to be less practicable than the P.T.A.P. when immunising large numbers because of the thick consistency which necessitated considerable pressure in injection and because of the delay resulting from blocked needles.
- (5) School absentees were more marked among the children receiving the A.D.F. injection than among those who were injected with P.T.A.P.

Institute of Family and Community Health (by courtesy of the Medical Officer in Charge).

Vaccinations and Immunisations: Period 1/7/52 to 30/6/53.

	Woodlands		Merebank		Lamontville
	E	C	A	N	N
Vaccination	7	56	125	45	1,760
Diphtheria	2	66	75	56	1,927
Combined Diphtheria and Whooping Cough	16	32	152	72	768
T.E.	-	12	25	15	125
	25	166	377	188	4,580

	Total
Vaccinations	1,993
Diphtheria	2,126
Combined Diphtheria and Whooping Cough	1,040
T.E.	177
	<u>5,336</u>

All the immunisations reflected above refer to completed courses. A record of cases only partially immunised is unfortunately not available.

* * *

3. TUBERCULOSIS

Vital Statistics

(1) The numbers of known cases of pulmonary tuberculosis in Durban are as follows:-

878 Europeans: 598 Coloureds: 3,020 Bantu: 2,323 Asiatics:
All races - 6,819

(2) Notifications of new City cases totalled 2,022 (214 of these being non-pulmonary cases) as compared with 2,033 during the previous year.

Imported cases in Durban numbered 1,985 (of which 232 were non-pulmonary cases) as compared with 1,628 last year. This large increase in imported cases has occurred in recent months, involves Natives predominantly and is almost certainly due to the increased facilities for

diagnosis and treatment offered by the Durban Chest Clinic.

Tables of statistics relating to new City and Imported cases notified, deaths recorded, the notification and death-rates per thousand of the population and the numbers of notifications and deaths according to age-groups are set out hereunder.

(3) Deaths amongst City cases from all forms of tuberculosis have dropped, during the period of one year, from 692 to 524, representing a decrease of approximately 24% in this one year. Reference to the seven-years table, moreover, shows that the fall in the pulmonary tuberculosis death-rate in Durban has been both rapid and extensive.

During this period, all races have shared in this improvement, though in different proportions. The rate for all races has dropped from 1.79 per thousand in 1947 to 0.91 in 1953, which represents a decrease of approximately 49%.

This improvement stems from a combination of several factors, including recent drug-therapy which almost certainly has accelerated improvement over the last year or two. But other factors have played their part, viz: more extensive search for cases including early cases especially amongst contacts and 'risk' -groups of the population, earlier in-patient and out-patient treatment, the provision of additional hospital beds, the close and regular follow-up of cases after discharge from hospital, the improvement in Native wages and housing conditions, etc.

The considerable expenditure on tuberculosis control services locally during the preceding decade would appear to have been justified by these results.

* * *

TUBERCULOSIS: STATISTICS

	E		C		N		A		Total:	
(a) <u>Notifications</u>										
(i) <u>Pulmonary</u>										
Local Cases	170	(132)	122	(108)	1145	(1188)	371	(385)	1808	(1863)
Imported Cases	117	(79)	37	(33)	1492	(1172)	107	(94)	1753	(1378)
(ii) <u>Non-Pulmonary</u>										
Local Cases	3	(5)	14	(4)	149	(114)	48	(47)	214	(170)
Imported Cases	2	(2)	-	(-)	222	(228)	8	(20)	232	(250)
(b) <u>Deaths</u>										
(i) <u>Pulmonary</u>										
Local Cases	25	(35)	29	(28)	321	(396)	43	(105)	418	(564)
Imported Cases	9	(12)	5	(5)	320	(426)	5	(21)	339	(464)
(ii) <u>Non-Pulmonary</u>										
Local Cases	2	(5)	6	(3)	78	(95)	20	(25)	106	(128)
Imported Cases	-	(1)	-	(-)	70	(79)	7	(8)	77	(88)

OTHER ACTIVITIES IN CONNECTION WITH TUBERCULOSIS CONTROL:

	E		C		N		A		Total	
Admissions to hospital	231	(209)	119	(82)	726	(776)	302	(416)	1378	(1483)

OTHER ACTIVITIES IN CONNECTION WITH TUBERCULOSIS CONTROL: (contd)

	E	G	N	A	Total
Discharges from hospital	176 (156)	39 (40)	324 (295)	234 (208)	773 (699)
Visits to Patients	6369 (5875)	1979 (1488)	4122 (4325)	3655 (4451)	16125 (16139)
Left against advice	25 (30)	13 (30)	246 (296)	59 (87)	343 (443)

HOSPITAL FACILITIES.

The following hospitals, situated in or near Durban, provide the following approximate numbers of beds for tuberculosis cases:-

Hospitals	Authority	E	G	N	A	Total
King George V/ Springfield	Union Health Dept.	141		1,116		1,257
Wentworth	Provincial Govt.	100	-	-	-	100
Point non-European	Provincial Govt.	-	-	151		151
McCord Zulu	Private Board	-	-	-	78	78
St. Aidan's	Mission	-	-	-	21	21
Umlazi	Mission	-	-	150	-	150
FOSA Settlement	Private	-	-	-	75	75
Botha's Hill		-	-	67	-	67
						<u>1,899</u>

A considerable number of City and Imported cases is always to be found in general hospitals, such as Addington, King Edward VIII and the S.A. Railway Hospitals. In King Edward VIII Hospital, the number of tuberculosis cases varies from one to two hundred daily.

In spite of the fact that Durban is comparatively well equipped with hospital beds, there is always a considerable number of Natives and Asiatic cases on the waiting list for admission to hospital, due partly to the admission to Durban hospitals of large numbers of cases from other parts of Natal and even beyond. However, the position is likely to improve somewhat in the near future by the addition of 134 non-European beds to Springfield Hospital.

On the 8th October 1952, at the instigation of the Provincial Hospital authorities, a meeting took place whereat representatives of the Union Health Department, the Provincial Government and the City Health Department attended. The discussion concerned the large number of pulmonary tuberculosis cases (230) then present in King Edward VIII Hospital and the attendant risks of cross-infection to other patients and the staff. Various remedial measures were considered including the provision of additional beds at Springfield Hospital, although it was recognised that a proportion of 'general' patients must always be tuberculous.

The number of City cases admitted to, and discharged from, hospital during the year was as follows:-

	<u>Admissions</u>	<u>Discharges</u>	<u>Left against advice</u>
European	231	176	25
Coloured	119	39	13
Native	726	324	246
Asiatic	302	234	59
	<u>1,378</u>	<u>773</u>	<u>343</u>

Clinical

Tuberculosis Clinics were held during the year at (a) the Durban Chest Clinic, which was acquired by the Union Health Department from the Durban Corporation on the 29th March 1952; and (b) at Springfield Hospital.

The majority of European, Coloured and Indian out-patients were dealt with at the Durban Chest Clinic, whilst a large proportion of the Native cases, particularly ex-hospital cases, attended the Springfield Clinic.

Attendances at Durban Chest Clinic

Figures are not available for the Government year but attendances for the first twelve months, April 1952 to March 1953 inclusive, during which the Government owned the Clinic were as follows:-

	<u>City cases</u>	<u>Ex-City cases</u>	<u>Total</u>
European	12,237	1,706	13,943
Coloured	1,274	63	1,337
Asiatic	798	569	1,367
Native	534	298	832
	<u>14,843</u>	<u>2,636</u>	<u>17,479</u>

The proportion of ex-City cases was 15% and is likely to rise in future.

Attendances at Springfield Hospital Clinic

The following are the attendances, all non-European, for the twelve months' period March 1952 to February 1953:-

<u>City cases</u>	<u>Ex-City cases</u>	<u>Total</u>
10,021	2,546	12,567

The proportion of ex-City cases was 20.25%.

Mobile X-Ray Unit

In addition to the above clinic services, Durban has been fortunate in having available the Union Health Department's Mobile X-Ray Unit for diagnostic work among school children and the staffs of large business undertakings. During the calendar year 1952, 111 general surveys and 43 school surveys were carried out in and near Durban whereby almost 60,000 persons were X-rayed, all except 2,000 being Durban residents, and 366 cases of tuberculosis were discovered.

The following statistics have been kindly supplied by the Medical Superintendent of King George V Hospital:-

Races	General surveys				School surveys			
	Males		Females		Males		Females	
	No. of X-rays	T.B. Cases	No. of X-rays	T.B. Cases	No. of X-rays	T.B. Cases	No. of X-rays	T.B. Cases
European	12,415	19	6,074	3	4,661	3	4,382	2
Coloured	1,098	12	1,788	11	112	5	318	2
Asiatic	4,814	47	2,847	9	718	2	1,476	6
Native	18,428	230	986	6	313	7	186	2
	36,755	308	11,695	29	5,804	17	6,362	12
All races	Total X-rays taken 48,450 Total cases found 337 Approximately 1.0%				Total X-rays taken 12,166 Total cases found 29 Approximately 0.25%			

Control of tuberculosis in shack areas such as Cato Manor, where approximately one-half of Durban's Native population resides, remains a difficult problem because of access. A larger staff of Native Health Assistants has been planned to cope with this area where malnutrition and overcrowding prevail and many City and ex-City cases are able to evade public health control.

In the southern parts of Durban - Clairwood, Merebank, Lamont Village and at Springfield - the major part of following-up of tuberculosis cases and contacts is undertaken by the Government Health Centres, whose work in this regard is much appreciated.

Domiciliary Assistance.

Assistance to needy tuberculous families in Durban is given by:-

- (a) The Government Social Welfare Department which allocates disability and maintenance grants; and
- (b) The Care Committee of Natal Anti-Tuberculosis Association of which Committee, the European Health Visitors and Medical Officer are members.

During the year, the total amount expended by the Association on cases of all races in Natal was £8,139, compared with £6,711 the previous year - an amount which is, however, far below actual requirements.

- (c) The Friends of the Sick Association through its numerous Care Committees in Natal (confined to Indian families), in addition to the considerable direct and indirect financial assistance contributed from other sources such as women's organisations and private individuals, the help given by many industrial and commercial concerns in the way of prolonged sick leave on pay and the special and often very lengthy sick leave granted to employees of all races by the Durban Corporation.

Tuberculosis Conference in Durban: November 1952.

A conference called by the Secretary for Health was held at King George V Hospital, from the 10th to 14th November 1952, and attended by the Minister of Health, the Secretary for Health, Medical Officers of Health, Tuberculosis Officers and Medical Superintendents from various parts of the Union to the number of approximately one hundred persons.

All aspects of tuberculosis were discussed and numerous papers were read. The exhibition of pathological specimens and X-rays was a notable feature.

Two extremely interesting addresses on the subject of BCG vaccination were given by Dr. Carrol Palmer of the World Health Organisation, Copenhagen, and by Dr. Holm of the Division of Tuberculosis of the State Serum Institute, Copenhagen.

The Union Health Department sought information as to which of the larger local authorities would be prepared to co-operate in carrying out a BCG programme and the Durban City Council in December 1952 indicated to the Secretary for Health its willingness to be associated with this campaign.

The Medical Superintendent of King George V Hospital and his staff are to be congratulated on the very excellent organisation and programme of this Conference.

* * *

B.C.G. VACCINATION.

The following information has been kindly furnished by Dr. S. Fine of the staff of King George V Hospital:-

During the period under review a small B.C.G. vaccination 'Pilot' scheme was undertaken by the Union Health Department. The vaccine was made available to -

- (a) Infants with tuberculous contacts;
- (b) Nurses;
- (c) School children.

The project was first started in March 1953 and from then until 30th June 1953, the following figures were recorded:-

	<u>E</u>	<u>C</u>	<u>A</u>	<u>N</u>	<u>Total</u>
No. tuberculin tested.....	667	1,852	3,812	1,759	8,090
Resultant vaccination.....	502	1,035	2,702	615	4,854

Durban Chest Clinic: The following is a brief outline of the functions of the Durban Chest Clinic.

The patients are arranged into groups according to their source of reference.

- (1) Private doctors: Private doctors are at liberty to refer their own cases to the Clinic for diagnosis and consultation. If the doctor and the patient so wishes, the Clinic will undertake the treatment.
- (2) Individual Patients: This group comprises patients who come to the Clinic on their own initiative, and who have not been referred by anyone. Here the Clinic provides a diagnostic and treatment service.
- (3) Ex-hospital Patients: Following discharge from hospital, all patients attend the Clinic at regular intervals for continuance of treatment and follow-up supervisions.
- (4) Mass X-ray Survey recalls: One mass X-ray van is attached to the Clinic and is continuously occupied in mass X-ray surveys of schools, industries, etc. All abnormalities from these surveys are referred to the Clinic for further investigation, diagnosis and treatment when necessary.
- (5) Health Centre and T.B. Settlements: The Clinic provides a diagnostic and consultation service for all Health Centres and Settlements in and round Durban. The treatment of patients is left to these organisations with the help of the Clinic or King George V Hospital personnel.
- (6) Contacts: All contacts of known cases are called to the Clinic for X-ray of chest and tuberculin test. Treatment is provided for any new cases. When the tuberculin test is negative in children and young adults, B.C.G. inoculation is offered.

At present, the Clinic is carrying out approximately 5,000 X-ray examinations each month and covering all racial groups. In addition, the Mobile Unit attached to the Clinic, X-rays a further 6,000 to 8,000 people each month.

Domiciliary Treatment: The domiciliary treatment of patients within the limits of the City of Durban is carried out with the closest co-operation of the City Health Department. Durban is divided into five areas, each area being controlled by a qualified nursing sister. New cases of tuberculosis are notified to the Medical Officer of Health for Durban who informs the Sister in charge of the specific area.

She visits the home and advises on home isolation, disinfection and carries out the treatment of the patient. She also arranges all contacts to attend the contact clinic. The sisters are at attendance at the Clinic on set days, and their own patients at the Clinic on these days. In this way, a very close and valuable patient/sister/doctor relationship is obtained and maintained.

When the patient requires treatment, but is regarded as being fit enough to work, he reports to the Clinic for his treatment and also receives regular X-ray checks on his area-day.

These arrangements hold for European and Coloured

Because of the large numbers involved, Indian and Coloured patients, with a few exceptions, obtain all their treatment at the Clinic.

Industrial Treatment: More and more firms are co-operating with us in allowing employees with early lesions to receive treatment whilst continuing work. The 'reward' for this co-operation is a more contented, stable and efficient labour force.

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4. VENEREAL DISEASES

The incidence of venereal diseases as reflected in the returns available from limited sources has fallen in all racial groups in all but one sex group, i.e. European females, where an increase has occurred.

More intensive penicillin therapy and less use of hospitalisation have eased the demand for hospitalisation, released 33 beds for syphilis cases in King Edward VIII Hospital and reduced the work of the non-European Out-Patient Clinic by almost one-half.

The statistical returns are those available from the Provincial Administration and City Health clinical units. The Municipal Hospital unit does not furnish returns to this Department.

Clinical Services

Europeans: The Addington Hospital clinic is operated as part of the polyclinic service and is available for Europeans. A Medical Officer attends during four sessions of one-hour weekly for males and one session of three-hours weekly for females. Two additional sessions of 1½ hours each for females (treatment only) have been added during the year. These coincide with ante-natal clinics and have been very successful in reducing the number of defaulters among female patients. On Saturday mornings a 1½ hour session caters for urgent cases.

Non-Europeans: At the Addington Hospital clinic, three-hour sessions weekly cater for Coloured males and females. Two additional 'treatment' sessions for females of 1½ hours each coincide with the ante-natal clinics and have been very successful.

Asiatic, Bantu and Coloured males and females attend a three-hour session held by the McCord Zulu Hospital on Saturdays at 11 a.m. and 2 p.m.

The Municipal non-European clinic provides a 9 a.m. to 5 p.m. daily service (totalling 50 hours per week) for all non-Europeans of both sexes. This clinic is closely integrated with the King Edward VIII Non-European Hospital.

Staff

time by the Natal Provincial Administration. The McCord Zulu Hospital has one part-time medical officer on venereal diseases work.

Nursing and Health Assistants: Staff in all venereal disease units under the Natal Provincial Administration have been reduced. Anticipated expansion of activities preclude major reductions of staff at the Municipal non-European Clinic. The number of Health Assistants has been reduced by one, but with the proposed co-ordination of tuberculosis and venereal disease Health Assistants' duties, more efficient contact with City cases should result.

At Wentworth Hospital (Natal Provincial Administration):
1 Head Male Nurse, European, full-time, attached to Special Clinic at Addington; and 1 Sister, European, full-time, attached to Special Clinic at Addington.

At King Edward VIII Hospital (Natal Provincial Administration):
1 Sister, European, full-time, 1 Charge Male Nurse, European, full-time (between tuberculosis and venereal disease); 5 Staff Nurses, Bantu, full-time; and 4 Male Ward Orderlies, Bantu, full-time.

At the Non-European Clinic (Municipal): All full-time Bantu staff comprising 4 Staff Nurses; 1 Senior Clinic Orderly; 2 Junior Clinic Orderlies; 1 Clinic Assistant; 1 Senior Laboratory Assistant; 1 Junior Laboratory Assistant; 4 Clerks; and 1 Cleaner.

At the City Health Department (Municipal): 1 Health Visitor, European, full-time; 3 Health Assistants, Bantu, full-time; and 1 Health Assistant, Asiatic, full-time (four latter posts to be amalgamated with tuberculosis Health Assistants and cover both tuberculosis and venereal disease work).

Contacts and Defaulters

The European Health Visitor follows-up European and Coloured contacts and defaulters. It is proposed to combine all Health Visitors' and Health Assistants' duties, in smaller districts which can be more intensively covered. This will prevent disclosure of the purpose of the Health Visitor's visit.

Propaganda

The Health Education Section gave talks, lectures and film-shows to 'vulnerable' groups. It is intended to produce 'film-strips' of suitable character with recorded commentaries in the various languages which it is hoped will be as successful as those already produced for other purposes.

Members of the non-European clinic staff and Health Assistants in the course of their work disseminate information about venereal diseases and encourage attendance for proper treatment.

Ante-natal Cases

All doubtful and positive reactors to the Wassermann test at the ante-natal clinics are referred for further investigation by the special clinics.

Syphilis

A marked fall in the 'turn-over' of syphilis has occurred. As the total number of new cases of all types remains about the same, it is assumed that this fall in syphilis is not due to any change of behaviour but rather relates to the effectiveness of modern treatment, earlier attendance of cases and the widespread use of penicillin for other conditions which abort or mask 'incubating' syphilis.

Gonorrhoea

In support of the theory that there has been no change in behaviour, more cases of gonorrhoea are being seen. There are also more acute complications of gonorrhoea. In most such cases a history is obtained of prior attendance at herbalists and inyangas (witch doctors) or of insufficient medication by 'black market' vendors of sulphanamides in the locations.

Gonococcal Ophthalmia Neonatorum

Only 77 cases of gonococcal ophthalmia neonatorum were treated at King Edward VIII Hospital, which compares favourably with the 307 cases treated during the previous twelve months.

Non-Gonococcal Urethritis

Fewer cases of this condition have been seen at the non-European clinic. The majority of these were due to bilharzia which is fast becoming a major problem in this area.

Venereal Warts (Conpylomata Acuminato).

Liquid nitrogen treatment of this condition has been very successful and only occasionally has it been necessary to resort to other methods.

Laboratory Investigations

Re-organisation of duties in the non-European clinic have resulted in more bacteriological work being undertaken. Liaison has been maintained with the Government Laboratory and the Pathological Laboratories of the Natal Provincial Administration.

Co-ordination of Venereal Diseases Services.

Representatives from the Union Health Department, the Natal Provincial Medical Services, the Medical Superintendent of McCord's Zulu Hospital and the City Health Department met in Durban in April 1952 to discuss this question. Agreement was reached as to the desirability of a more co-ordinated service and as to its precise organisation but no re-organisation is possible unless and until the scheme is approved by the Union Health Department.

Salary Re-grades.

Non-European salaries throughout the Municipal Services were up-lighted this year but, unfortunately, recommendations in respect of the Venereal Diseases Section personnel were not acceptable to the Union Health Department. Only in some instances were 'modified' increases approved and no increases were granted to those with the longest service. Minimum salaries for 'cleaners' were fixed at a lower rate than that laid down by the Wage Determination Board! One post was declared redundant and it is hoped to transfer the holder to another section of the City Health Department.

Extension of Non-European Venereal Diseases Services

The Union Health Department has not yet sanctioned the minor alterations needed to adapt existing premises at Cato Manor for the purpose of establishing a district clinic in this area.

Staff Health

Following the supply of a hot midday meal to the non-European staff (as reported last year) a great improvement was noted in general health and the lessening of minor illness. Unfortunately, the meals were discontinued before their full effect could be evaluated.

Incidence per 1,000 New Cases of Venereal Disease (City only) : (Figures corrected for sex difference) :

	Europeans		Coloureds		Natives		Asiatics		Total	
	M	F	M	F	M	F	M	F	M	F
1953	4.05	1.12	27.16	19.14	55.00	47.33	5.06	1.44	25.06	13.10
Total	2.54		22.97		52.47		3.28		19.72	

V.D. STATISTICS:

New Cases	269 (314)	79 (59)	231 (156)	11 (5)	222 (245)	143 (144)	26 (23)	5 (6)	5461 (5533)	2206 (2208)	2170 (2084)	971 (1185)	397 (487)	109 (113)	62 (101)	8 (22)	6349 (6579)	2537 (2524)	2489 (2364)	995 (1218)	12370 (12685)
Ward Admissions	12 (25)	11 (31)	15 (11)	6 (2)	26 (49)	56 (113)	6 (5)	3 (4)	910 (1195)	911 (1176)	819 (897)	729 (1167)	18 (44)	9 (49)	2 (9)	4 (2)	966 (1313)	987 (1369)	842 (922)	742 (1175)	3537 (4779)
Out-Patients Attendances	1430 (1630)	959 (1209)	455 (410)	68 (97)	1200 (1534)	3221 (3751)	143 (153)	232 (308)	25429 (30316)	11344 (14091)	8752 (10960)	4196 (6464)	1490 (2132)	530 (741)	203 (314)	23 (55)	29549 (35612)	16054 (19792)	9553 (11837)	4519 (6924)	59675 (74165)
Clinics Held	341	(420)										548	(534)							889 (954)	

FOLLOW UP STATISTICS:

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

	New Cases	Contacts Located	Defaulters Located	Absconders Located	Visits	Clinics Attended
European	10 (6)	30 (7)	112 (89)	3 (2)	790 (623)	71 (83)
Coloured	69 (55)	33 (36)	927 (737)	19 (8)	1675 (1470)	655 (50)
Native	1141 (790)	914 (664)	902 (830)	6 (6)	3310 (2947)	33 (15)
Asiatics	202 (158)	179 (107)	982 (874)	1 (2)	1621 (1536)	54 (65)
Total	1422 (1009)	1156 (814)	2923 (2530)	29 (18)	7396 (6576)	223 (213)

5. PLAGUE AND RODENT REPORT

(See report under Field Hygiene 9 Section 14.)

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6. OTHER COMMUNICABLE AND PREVENTABLE DISEASES

Malaria

During the mid-summer months an epidemic of malaria raged in Northern Zululand presenting the possibility of a southward spread of the disease to Durban. Moreover, the element of danger from infected visitors and residents of the town who might have contracted the disease in Zululand could not be ignored. Weather conditions at the time were most favourable for mosquito development being characterised by short, hot sunny spells alternating with rains. Immunity largely depended on the steps taken to combat the disease in the northern districts and the degree of protection afforded by local control measures.

Durban has been free from malaria for an uninterrupted period of twelve years.

The local history of the disease appears to have been as follows:-

Nearly fifty years ago a malaria epidemic of low virulence was experienced in Durban. The disease appeared in the summer of 1904/05, reached its maximum in the following year, subsided over the next two years and disappeared in 1909.

This epidemic began in the North of Zululand, spread southwards along the coast as far as Port Shepstone and then subsided, leaving a few endemic centres of infection in the large valleys near the coast, particularly in the northern section.

Then followed a period of freedom from indigenous malaria for a quarter of a century, until the late summer of 1929 when the Borough experienced a mild visitation of the disease which coincided with a severe epidemic on the North Coast. On this occasion, the epidemic did not spread to the Borough, although hundreds of active cases were admitted to town hospitals and nursing homes. However, in the Indian suburbs lying to the north and south of the Borough, a fair amount of malaria was known to have occurred during that year.

Early in the summer of 1929/30, anophelines were found to be breeding freely in both town and suburban areas of Eastern Vlei, Race-course and Umgeni Valley. The suburban authorities were warned of the danger threatening the whole Greater Durban area and invited to co-operate with the Borough in a concerted drive against the anopheles. As a result, a Joint Advisory Committee was formed, the whole region carefully surveyed, anopheles breeding foci located and a system of intensified control commenced. These measures curtailed the incidence of fever in the low-lying parts of Greenwood Park and South Coast Junction. So far as the Borough itself was concerned, there was at no time anything approaching epidemic prevalence - the outbreaks being strictly localised to low-lying districts abutting the swampy ground, e.g. Umgeni Road, Greyville and a few localities in the Umbilo district. During that year, anopheles-breeding 'nurseries' were discovered in the most unexpected and trivial situations and small seepages were found to be the most prolific sources of breeding. The disease at this stage was mild in character and of the benign tertian type.

The epidemic phase continued through the year 1930/31 with an increasing mortality. Within the Borough, persistent foci of infection were located along the margins of the Eastern and Western Vleis, the river boundaries of the Umgeni and the Umbilo and the Bayside

Congella area. Intensive oil-spraying and light-draining operations were carried out, but the results showed the essential limitations of these methods of 'temporary' control. In his Annual Report, the City Medical Officer of Health stated that: "In a crowded urban area, flanked by low-lying ground subject to periodic inundation, malaria can only be eradicated by thorough subsoil and surface drainage and reclamation".

The summer months of 1932 showed no improvement, in fact, the outbreak was rather more serious than that of the preceding year, and a further disquieting sign was the fact that the disease had now appeared in many hitherto unaffected districts in the Province. In that year, the City Medical Officer of Health expressed the opinion that "as long as malaria was epidemic or endemic in Natal, cases of the disease would occur in Durban in spite of effective anti-larval measures because malaria-carrying mosquitoes could enter the City via road and rail transport from districts infected with malaria, especially as the town was the receiving-, distributing- and main hospital centre for the Province". As in previous years, anopheles breeding was located at the following points:- Valleys of the Umgeni and Umbilo Rivers; Eastern Vlei; Race-course; Western Vlei and Congella Flats and Albert Park.

The City Medical Officer of Health further reported that: "although the swampy and low-lying areas of Durban have been known for years to attract the *Anopheles costalis* (*gambiae*), on no occasion has this species been found breeding in the residential areas of the town. Anti-larval measures directed against the *Anopheles costalis* can therefore be restricted to the swampy and low-lying areas".

In 1933, malaria again broke out in the Borough as a local manifestation of an epidemic which had now spread throughout the Province. The outbreak reached its height during February but spent itself out by the middle of June. Again, the brunt of the disease was mostly borne by non-Europeans residing in the areas contiguous to the Umgeni and Umbilo Rivers and their tributaries. A disquieting feature was the high percentage of subtertian infections notified.

During 1934, the disease was twice as prevalent as in the previous year and the mortality increased by over one hundred per cent. The number of Borough notifications for all races - nearly a third of which were fresh infections - reached a figure of 1,154, which included 482 from the Old Borough and 390 from the North Coast area. The number of Borough cases for each month during the first half of 1934, were as follows:- January - 8; February - 25; March - 221; April - 312; May - 381; June - 182.

Borough deaths for all races numbered 248.

Anopheles costalis (*gambiae*) bred in the central Borough area from January to June. In other areas, breeding went on throughout the year, the period of maximum intensity being from February to May inclusive. There was excessively heavy rainfall and high average temperatures during the early summer months and conditions were ideal for widespread and heavy breeding of *A. costalis*.

Inhabitants of the shack settlements of the Sea Cow Lake, Springfield and Riverside areas suffered severely. The degree of *A. gambiae* infestation in those districts may be gauged by the fact that they supplied more than half the total anopheline specimens dissected that year. These severe focal outbreaks followed closely upon heavy flooding of the Sea Cow Lake and Springfield areas. Now these were precisely the conditions which prevailed during the summer of 1952/53 when the low-lying areas along the Umgeni River were heavily flooded and it was felt that the malarial precedent of 1932/33 in this connection might be repeated.

Malaria was again prevalent in 1935, the distribution following the pattern of previous years. Slightly over half of the

cases occurred in the Old Borough mostly in the Umgeni district. Greenwood Park area accounted for slightly under one-third, the majority of cases occurring along the banks of the river and at Sea Cow Lake. Sydenham was responsible for one-tenth of the cases, mostly from the Springfield Flats. In the South Coast, Umhlatuzana and Mayville districts, the infection was relatively light. There was a higher incidence of subtertian infections than usual.

However, the back of the epidemic phase had been broken and in the years that followed the incidence of malaria declined steadily until 1939, when it ceased altogether. Since then, the City has been malaria-free.

In the twenty years more or less since malaria was endemic in Durban, the environmental pattern has changed materially. Owing to the progressive activities of the City and Water Engineer's Department, the Eastern Vlei has been drained and reclaimed and the Race-course has been subsoil-drained. The Government have drained and reclaimed the extensive site where the Reunion Airport is now established and much of the Bayhead. At the Western Vlei and Congella Flats, similar improvements have been effected and to-day, these areas are occupied by large industrial and commercial establishments. Long stretches of the Umbilo and Umlaas Rivers have been canalised and concrete-lined. By and large, the environmental picture in the southern areas of the City is now quite unrecognisable for what it was some twenty years ago.

Naturally, all these improvements must have a definite bearing on the regional distribution of malaria-potential anopheline breeding if the disease were again to be introduced into the City.

But over this period, environmental conditions in the Umgeni basin have remained virtually unchanged. Thus while there is little or no prospect of malaria gaining a foothold in the Old Borough area, its re-appearance is a possibility in the valleys of the four rivers - the Umgeni, Umbilo, Umhlatuzana and the Umlaas and their tributaries. Of these, the Umgeni Valley is much the most dangerous.

When therefore malaria threatened to break out in January 1953, precautionary measures were taken in accordance with the above appreciation of the situation. Routine anti-larval measures were intensified throughout vulnerable areas of the City and anti-adult measures were commenced on the 30th January 1953, in the residential areas contiguous to the banks of the Umgeni River. The latter consisted in spraying all dwellings to a depth of 200 yards from the river with a residual insecticide consisting of a mixture of D.D.T. and B.H.C. Some hundreds of dwellings were treated in this manner.

Liaison was established with all Indian social organisations in the area so that chemoprophylaxis could be carried out amongst the residents as soon as cases were notified. Areas were assigned to each organisation and members of these bodies were enrolled as ancillary health personnel. By this arrangement, the regular distribution of anti-malarial drugs to be employed was ensured to all members of the Indian community - mainly living within the Umgeni basin.

The southern districts were surveyed and brought under intensive control. Fortunately, a special unit engaged on yellow fever precautions had been employed for two years in the area contiguous to the Umlaas River and the Reunion Airport including a zone around the Mere where Anopheles gambiae had bred recently.

The close proximity of the extensive Lamont Location and the Umlazi Glebe Lands, where thousands of Natives were housed rendered this area vulnerable to malaria attack.

As it happened, the threatened attack did not materialise. The Union Department of Health quickly smothered the outbreak in Zululand and this favourable outcome in the North eased the position

in the City. Nevertheless, several cases of malaria were notified in Durban but all these, with the exception of one case, were found to have contracted the disease in Zululand or in malaria areas further afield. The exception was a young Railway employee who had resided in Durban for only a short time before he sickened. He was emphatic that he had at no time travelled beyond the City boundaries since his arrival from the Cape. The source of his infection remains unexplained.

The assistance rendered to this Department by the Deputy Chief Health Officer, Natal, and his staff and the Indian social organisations aforesaid is hereby gratefully acknowledged.

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Bilharzia

In 1948, it was reported that: "Local authorities in the Durban region co-operated in carrying out surveys with the object of taking concerted measures for the control of bilharzia which is fairly prevalent in their respective non-European areas.

The incidence of bilharzia-carrying snails disclosed by a recent survey, suggests that snail-hosts of the parasite occur throughout the numerous watersheds in the Coastal region. Local control measures such as the application of copper sulphate to the margins of streams and pools and the prohibition of the use of infected streams and pools are unlikely to succeed unless uniformly carried out over an area extending at least five miles beyond the City boundary. Such a programme will involve heavy expenditure as also would its corollary, i.e. the provision of suburban swimming baths and paddling pools supplied with water from springs, boreholes or other safe sources.

Drainage and reclamation of low-lying and swampy areas in connection with mosquito control and refuse disposal contribute materially to the elimination of bilharzia sources within the City itself."

The above observations still hold good to-day. For financial reasons, no material progress has since been made with the provision of district swimming baths. Bilharzia remains fairly prevalent amongst all racial groups especially in the Bantu in whom its incidence is high as confirmed by rectal biopsies.

Better co-operation between neighbouring local authorities could be effected if control measures were to be organised and administered on a regional basis and present policy is shaping in that direction.

There is an impression amongst local clinicians that *S. mansoni* infestations are more frequent than they were though, at the same time, it is acknowledged that this belief may be founded on grounds which are more apparent than real. Improved laboratory techniques and a keener appreciation of the prevalence of *S. mansoni* may be responsible for the increased number of cases which are now diagnosed by local clinicians.

During the year under review, the Department investigated the risk of contracting bilharzia from domestic aquaria following the occurrence of a case of bilharzia in a European child, aged ten years, who avers that he had not bathed or waded in any stream or river for over three years. He had, however, often immersed his hands in a domestic aquarium where snails were kept.

It was disclosed that snails sold by dealers were being bred under artificial conditions including imported varieties of which the most popular was the so-called 'Red Ramshorn' (*Planorbis Corneus*). This species is probably not a bilharzia vector but occasionally infected snails collected from local streams, rivers and ponds find their way into domestic aquaria. The risk of contracting bilharzia through vector snails in aquaria may be small but it cannot be disregarded. Collection of material for aquaria from local danger spots is far more dangerous.

Despite repeated warnings, many people, mainly children of all races, expose themselves to the risk of contracting bilharzia by drinking, bathing, paddling and washing clothes in local streams. The more important danger spots have, however, been located and arrangements are in hand for erecting 24 warning notice-boards in their vicinity.

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7. WATER SUPPLY (By courtesy of the City and Water Engineer)

(a) Sources of Supply

Durban's water supply is derived from the Umlaas and Umgeni Rivers.

The Umlaas River provides water for the old Umlaas Waterworks and the Shongweni Water Scheme and can be relied upon to provide a total supply of thirteen million gallons daily. Both of these waterworks are situated on Durban Corporation-owned property outside the City boundaries.

The Umgeni River provides water for the Umgeni Water Scheme, which, at present, has a capacity of 20 million gallons daily and is in the process of being augmented. The headworks of this scheme are situated near Table Mountain, in the Inanda Native Reserve, outside the City.

(b) Treatment of Water

Water from the Shongweni Water Scheme is stored in a reservoir at Shongweni, originally of 2,657,000,000 gallons capacity, chemically treated and conditioned in sedimentation basins at its headworks and then sent to Northdene, where it is filtered by a Patterson Rapid Gravity Filter Plant, chlorinated, and after storage in balancing reservoirs, passed through a twenty-four inch steel aqueduct to the City.

Water for the older Umlaas Waterworks is taken from the Umlaas River at the old Umlaas Intake near Mariannhill where it is chemically treated, clarified in open sedimentation basins and thereafter filtered through slow sand filters at Umlaas and Coedmore, chlorinated and sent to the City.

Water from the Umgeni River is conserved in a reservoir of 5,500,000,000 gallons capacity formed by the Nagle Dam at the Table Mountain Headworks of the Umgeni Water Scheme. Being situated in a horseshoe bend in the Umgeni River, these works have been constructed so that it is possible to completely by-pass all normal floods - up to 94,000 cusecs capacity - and keep the reservoir free from silt. After conservation, the water flows through the Umgeni Scheme Aqueduct to the purification works at Durban Heights where it is passed through a Candy Rapid Gravity Filter Plant, Slow Sand Filters, chlorinated and finally passed through a steel aqueduct to the service reservoirs and distribution system of the City.

(c) Distribution

Durban's water never sees the light of day from the time it leaves the various filtration works until it emerges from the consumers' taps. The water is distributed by means of a network of steel, cast iron, spun iron and asbestos cement pressure piping. Reinforced concrete service reservoirs, all totally enclosed and having an aggregate total capacity of 38,390,000 gallons, have been provided.

(d) Adequacy and Purity

Durban's average daily consumption during the financial year ended 31st July 1952, was 26,415,661 gallons and the peak daily consumption was 32,396,000 gallons. At present, the City enjoys waterworks facilities having a total daily capacity of 33 million gallons. Parliamentary authority to augment the Umgeni Water Scheme by duplicating the aqueduct and purification works has been obtained.

Every precaution is taken to ensure that Durban's water supply is maintained at the highest possible state of purity. A staff of chemists and bacteriologists is continuously employed on chemical and bacteriological examination during all phases of the water's treatment and distribution. An average of 1,200 samples taken from various points in the City, are examined bacteriologically each year and the results reveal a high state of purity throughout the entire distribution system. Independent and regular examinations are made by the Government Pathologist.

(e) Development and Progress

During the year under review, considerable progress has been made on the extension of the Purification Works at Durban Heights by an additional five million gallon per day unit. The Shongweni Flood Diversion Scheme flood canal is in process of enlargement and tenders have been invited for the drilling of a new Flood Diversion Tunnel. Work is proceeding on the installation of a pumping scheme to provide the Pinetown Regional Water Supply Corporation and the new Umgeni Power Station with water. A total of 34 miles of water mains was laid during the year under review.

(f) Chemical Analysis

The following is an average of the chemical analysis that has obtained over the year (expressed in parts of 100,00) :-

Colour.....	Good	Nitrites.....	Nil
Sediment.....	Nil	Saline Ammonia.....	0.004
Turbidity.....	Nil	Albumin Ammonia.....	0.004
Reaction.....	0.5	Total hardness.....	3.91
Total Solids.....	10.20	Permanent hardness.....	1.95
Chlorine.....	2.49	Iron.....	Trace
Loss on Ignition.....	2.36	Poisonous Metals.....	Nil
Nitrates.....	0.010		

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8. NIGHTSOIL, SLOP WATER AND REFUSE

Cemeteries : The Municipal cemeteries were properly conducted and maintained. During the course of the year, an additional 9 acres in the European Section at Stellawood Cemetery were bought into use.

Private cemeteries were regularly inspected and were generally found to be well conducted and maintained. No new cemeteries were registered during the year nor were any existing cemeteries abandoned.

Interments : There were 8,305 burials in the Municipal cemeteries and 692 in private cemeteries, totalling 8,997 as against 7,847 and 684 respectively in the previous year.

Cremations : Cremations during the year totalled 676, of these 583 were European and 93 Asiatics, the previous year being 536 and 96 respectively.

Free Burials : During the year, there were 5 European free burials, 8 Coloured, 336 Native, 8 Asiatic and 4 unclassified, totalling 361 as against 280 for the previous year.

Conservancy : The number of pails in use during the year was 15,050 - an increase of 63 over the previous year.

Refuse Removal and Disposal : The quantity of refuse removed during the year continues to increase and a total of 273,699 cubic yards was removed compared with 259,865 for the previous year, an increase of 13,834 cubic yards.

The disposal was carried out as in previous years, a small proportion by incineration at the point Destructor, and the remainder by tipping on low-lying and swampy areas. Randles Road Tip was closed during the year and a new tip opened at Marigold Road in the Springfield Indian Housing Scheme area. This new tip, and with it, Harris Park Tip receive the greater proportion of domestic refuse whilst Lamontville and Springfield Tips are primarily for trade refuse.

A strict watch is kept for any signs of fly and rodent development, and necessary precautions are adopted to eliminate this nuisance.

Street Cleaning : The streets and pavements of the City are swept regularly and approximately 43,662 cubic yards of street sweepings were collected and disposed of compared with 39,390 during the previous year.

Street Washing : Pavements in the central areas are washed nightly. During the course of the year, over 5 million square yards of street and pavements were washed.

Dead Animals : 434 Dead animals were removed and disposed of during the year.

Public Conveniences : There were no new public conveniences built during the year. The total number in the City is 121, of which 59 are European and 62 non-European.

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9. MEAT SUPPLIES

System of Slaughtering : The methods used are governed by the Humane Slaughter of Animals Act No. 26 of 1934. Bovines are stunned by means of humane killers of the captive bolt type. Animals for Kosher and Mahammedan consumption are slaughtered by means of throat-cutting in accordance with the religious scruples of these sections of the Community. In all cases, races and stunning or casting pens of approved types are used.

Pigs are slaughtered by means of electrically operated stunners. Owing to the objections raised by the Asiatic section of the community to stunning, all sheep and goats are slaughtered by the throat cutting methods.

Slaughterhouses : Two slaughterhouses are situated in Durban, viz :-

- a) The Municipal Abattoir, operated by the local authority; and
- b) The Federated South African Meat Industries, Ltd., Maydon Wharf. (This abattoir, for the purpose of slaughtering, has not operated this year, but its cold stores have been extensively used by the Meat Control Board).

Mutton Sales : As sheep have been de-controlled by the Livestock and Meat Industries Control Board, all mutton carcasses are now auctioned on the hook.

Disposal of Waste Products : Condemned meat and offal, and the blood of slaughtered animals, are converted into valuable farm foods of which there is a national shortage, and tallow, which is sold to soap manufacturers. Pigs' bristles are collected and sold by contract and a firm of manufacturing chemists collects glands, spinal cords, pigs' and calves' stomachs, ox gall, etc., for the production of pharmaceutical preparations. An arrangement has been entered into whereby this firm is supplied with the sound tissue of livers affected with Distomiasis.

Whereas, in the past, manure and stomach contents have been issued gratis to farmers, they are now being sold by contract,

Unborn calf skins, another commodity now classified as Abattoir Waste and for which there is a ready market amongst Natives, are now disposed of by auction sales.

Butchers' Shops : The City Health Department exercises supervision of these premises throughout the City. All meat exposed for sale must have been inspected, passed and stamped at the Municipal Abattoir. Actual distribution of the meat to the butchers at the Abattoir is carried out by the Livestock and Meat Industries Control Board.

Condemned Meat : Actual quantities are set out below. An efficient by-product plant is operated in accordance with the provisions of Government Notice No. 2118 of 1924, whereby all condemned meat is satisfactorily disposed of.

Improvements during the year : Due to financial restrictions unfortunately, only one major project, i.e. the provision of extra facilities for Durban By-Product (Pty) Ltd., an offal company operating within the Municipal Abattoir, was carried out. Provision has, however, been made for the erection of a gut-cleaning factory as well as other major extensions.

Uninspected Meat entering Local Authority Area : The Livestock and Meat Industries Control Board is in complete control of the movement of meat into Durban which is classified as a controlled area. Meat brought into this Abattoir from other centres has already been inspected at these points, but is always re-inspected by the Abattoir staff before release.

Occasional cases of illegal slaughter are detected by the City Health Department's Inspectors or the South African Police, and charges laid.

The Livestock and Meat Control Board also has inspectors who detect occasional cases of illegal importation of meat into the controlled area; in these cases, the Board takes action.

<u>Meat Supplies</u>	<u>Bovines</u>	<u>Swine</u>	<u>Sheep and Goats</u>
Slaughtered	76,257 (70,961)	50,871 (55,311)	362,057 (284,836)
Whole carcasses condemned	2,025 (1,538)	1,787 (2,150)	3,387 (2,117)
Portions of carcasses in lb. weight condemned	455,206 (288,919)	46,190 (72,721)	991,599 (685,001)

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10. MILK SUPPLIES

Total number of dairy inspections.....	3,125
Total number of City dairy inspections.....	2,204
Total number of ex-City dairy inspections.....	948
Initial farm/dairy inspections.....	534
Country depot inspections.....	154
Country depot sampling and re-visits.....	260
Written notices and letters to producers/distributors.....	826
Personal notices to remedy minor defects.....	108
Chemical tests.....	258
Bacterial tests (B. coli and Plate-official).....	147
Laboratory Presumption B. coli tests.....	834
Phosphatase tests.....	636
Biological tests (Tuberculosis).....	93
Breed Smear counts.....	7,612
Sediment Disc tests (Visible Dirt).....	6,273
Mastitis tests.....	20,679
Methylene Blue tests.....	755
Contagious Abortion Ring tests.....	4,485
Butter-fat tests.....	243
Acidity and P.H. tests.....	176
Dairy personnel inoculated and vi-tested.....	1,397
Dairy personnel doubtful : vi-tests.....	3
Dairy personnel positive : vi-tests.....	2

General Control Programme

(a) Registration of Milk Producers : To begin with, in 1951, producers were registered under the new Milk (and Milk Products) By-laws without prejudice but, since 1952, registration has been granted only on the verbal assurance of a 'bona fide' farmer that the Department's requirements will eventually be complied with. Furthermore, registration is subject to annual review and its renewal is dependent upon the progress made and the standard attained by the applicant during the preceding term of registration.

Applications for registration were at first slow in coming in due to misconceptions on the farmers' part regarding the methods whereby By-law standards - admittedly high - were to be applied to their premises and working routine.

Rumours gained head until it clearly became imperative to allay suspicions in order to prevent a general switch-over of milk-producers to other avenues of farming which could lead to a milk shortage in the City. This Department's officials conducted a number of lecture tours and addressed numerous farmers' association meetings. This initial 'propaganda' campaign was followed-up by dairies inspectors who visited the farms of applicants for registration

and thus established personal contact with them. Friendly discussion of individual problems soon cleared away doubt and suspicion, evoking a spirit of co-operation which quickly spread throughout the farming community. As a result, the Department's officials were able to approach various organised farming bodies of which the Natal and East Griqualand Fresh Milk Producers' Union proved the most helpful. Following upon a number of meetings, this influential organisation gave its full support to the scheme of farm inspection and registration which led to immediate application for registration by two out of every three farmers producing milk for the City. At the same time, similar support was received from the commercial milk interests, thus completing the initial and difficult phase of registration throughout the Natal milk-shed.

(b) Up-country Depots or Balancing Stations : Milk supplies are collected from registered farms at various up-country balancing stations, where the milk is filtered, cooled and dispatched to Durban. There are seven balancing stations or milk depots throughout Natal and four in East Griqualand on the register. In view of the fact that these depots handle large quantities of milk and, furthermore, are well capitalised, immediate compliance with out By-law requirements was made a pre-requisite for registration. All balancing stations in Natal are now structurally adequate and work is still in progress in East Griqualand depots. These stations are regularly inspected by Municipal inspectors. Bacterial tests of plant and equipment are regularly conducted 'on the spot' and results are immediately discussed with the depot management, thus enabling inadequate machinery and faults in handling and control of milk to be rectified with a minimum of delay. This expeditious method of health supervision has materially helped to maintain the high standard of dairy hygiene requisite at these stations which handle bulk supplies.

(c) Farm Dairy and Country Depot Inspections : From the 1st July, 1952, to 30th July, 1953, inspections have been as follows: Country depot inspections - 154; Initial farm dairy inspections - 534; Re-visits : Farm/dairy inspections - 260; Total - 948.

These 'first' inspections have been concentrated mainly in Natal where the initial survey is now fast nearing completion. A similar programme will be followed in East Griqualand.

It is known and appreciated that the great majority of producers throughout Natal and other areas so far inspected have for a long time produced only milk intended for condenseries, cheese factories and other industrial purposes and, generally, of a standard far below that required for the City's fresh milk market. From these inspections, however, farmers have learned of the need to improve conditions on individual farms such that a clean safe and wholesome milk supply can be ensured.

The following bacterial counts tend to show the success already achieved by these initial inspections :-

Bacterial Count : Using a dividing line of 1,000,000 organisms per cubic centimeter to distinguish between good and bad, 7,612 samples were tested (Breed smear count). The failure percentage of the last three years is as follows :-

<u>Season</u>	<u>1949/50</u>	<u>1950/51</u>	<u>1951/52</u>	<u>1952/53</u>
Summer	54%	49%	45.8%	38%
Winter	23%	44%	18.8%	18.5%
<u>Visible Dirt</u>		<u>1951/52</u>	<u>1952/53</u>	
Total tested		4,352	6,273	
% unsatisfactory		45.3%	24%	

Nature of Supplies : The daily consumption of milk is approximately 28,000 gallons, of which approximately 27,200 gallons are pasteurised. Raw milk is produced by eight local and three country 'A' Class dairymen. Milk-for-pasteurisation is produced by some 900 to 1,000 producers situated throughout Natal and East Griqualand. Of this gallonage, an average of 500 gallons is diverted daily for the manufacture of ice-cream.

Distribution : Milk reaches City depots by road and rail in cans and also by road in stainless steel tankers which are filled at up-country balancing stations. In the City, milk is distributed from seven pasteurising depots and eleven raw milk producer/distributors' premises.

System of Supervision and Control : A Veterinary Officer and three Dairies Inspectors carry out a field inspectional programme at all dairies and milk depots in relation to lay-out of premises, design of structures, refrigeration, sterilising, bottling, hygiene of milking operations, health of personnel, health of dairy herd, Native quarters, sanitation and general conduct of the business.

In addition, statutory surveillance on chemical and bacterial standards of the City's milk supply is maintained. The field programme is supported by an extensive sampling and laboratory testing routine, which gives valuable information respecting the standards of hygienic quality and safety.

Furthermore, technical advice is given to dairymen and milk dealers in regard to plans of proposed new buildings, alterations and repair schemes, types of apparatus and equipment together with all relevant aspects of milk production, handling and distribution.

For the purpose of ensuring compliance with prescribed legal standards, samples of milk are regularly taken from supplies in the course of delivery to consumers. In this connection, chemical analyses are carried out by the Government Chemical Laboratory, Johannesburg, whilst bacterial examinations are performed by the Municipal Pathologist and the biological tuberculosis tests are undertaken by the Union Health Department. All other tests including the very large number emanating from the field inspectional programme are done in the departmental Milk Laboratory which is staffed by two Lady Assistants who work under the direct supervision of the Veterinary Medical Officer.

The results of tests on milk samples purchased in terms of the law are set out below :-

Chemical Analysis (Food, Drugs and Disinfectants Act) :-
258 Samples examined : 4 failed to conform.

Bacterial Count :

<u>No. of Samples</u>	<u>B. coli test</u>		<u>Plate count</u>	
	<u>Passed</u>	<u>Failed</u>	<u>Passed</u>	<u>Failed</u>
147	82	65	62	85

Biological Tuberculosis test : from a total of 93 tests, no positives were found.

Dairy Personnel : Vi-testing and Immunisation : An outbreak of typhoid fever occurring in Pietermaritzburg during 1952/53 was found to have originated from infected milk passing through the local depot. Although surplus milk from this depot had always been sent to Durban its control had been left entirely to the health authorities in Pietermaritzburg, where it is situated.

In view of the very large field programme facing this Department, it was felt that the depot and associated producers could, as an interim measure, remain subject to the control of the local authority such that registration granted by the Pietermaritzburg health authority would automatically be accepted as valid by the Durban authority.

Following upon the outbreak, however, officials from this Department immediately assumed public health control conjointly with the local health officials. Later, this depot was registered by this Department in the ordinary way and is now regarded in the same light as any other balancing station and, as such, required to conform with the requirements of the Durban Milk (and Milk Products) By-Laws.

During the 'incubation' stage of this epidemic, an aggregate quantity of 1,650 gallons had been sent to Durban from this particular depot. This milk was pasteurised in Durban where the Department, as a routine, keeps a laboratory check on the efficiency of this process and, in addition, vi-tests and immunises dairy personnel. No cases of typhoid occurred in the City.

The first line of defence against an outbreak of milk-borne enteric is the Department's programme of vi-testing, immunisation and health education for milk-handlers. The main line of defence is, of course, pasteurisation or sterilisation.

As a pre-requisite to registration for a permit to engage in the distributive milk trade, applicants are required to employ only personnel who have given a negative reaction to the vi-agglutination test and who have been immunised against enteric fever. Furthermore, vi-registers are required to be kept at such establishments and these are regularly inspected in order to keep a thorough check on all new employees.

(d) Milk Laboratory Testing : Local Depots and Consumer Milk :

Local Milk : The Departmental milk laboratory undertook 834 B. coli tests in order to trace unsatisfactory conditions in local depots and, in addition, conducted the following examinations of milk taken from supplies during distribution to the public.

Breed Counts : 690 Samples examined, 24 representing 3% showed a high bacterial count.

Keeping Quality : 690 Samples examined - 169 or 24.5% showed poor keeping quality.

Pasteurising Efficiency : The system of weekly testing has now been increased to a bi-weekly testing programme of 636 tests conducted : 2 samples failed.

Up-country Milk :

<u>Visible Dirt</u>	<u>1951/52</u>	<u>1952/53</u>
Total tested	4,352	6,273
% unsatisfactory	45.3%	24.0%

Cream and Ice-cream : The departmental milk laboratory introduced the testing of these products as a weekly routine in order to aid dairymen in rectifying unsatisfactory conditions. Excellent co-operation has been received and this work is progressing favourably.

(e) Veterinary

Tuberculosis : Out of a total of 93 samples of milk examined biologically for the presence of M. tuberculosis, none were found to be positive. Regular clinical examinations of all cows in 'A' Class dairymen's herds aim at detecting cases of tuberculosis at an early stage. Tuberculin-testing of herds is performed as part of the field programme and farmers continue to make use of this service.

Mastitis : As a result of propaganda in the form of pamphlets circulated, addresses given to farmers, the ravages of this disease have been demonstrated to farmers. As a result, requests for herd tests and advice on treatment have been received in ever-increasing numbers. A total of 20,679 mastitis tests were conducted and, of these, 12,625 tests have been done at the request of up-country producers and local producer/distributors.

Tests were conducted on the herds of up-country producers at their own request as follows :-

	<u>1951/52</u>	<u>1952/53</u>
Tests.....	597	4,998

Of up-country herds tested, 32.5% were found to be infected with this disease.

Brucellosis : All 'A' Class dairymen's herds are tested regularly every two months. One herd was found to have become infected and immediate pasteurisation was enforced and continued until this herd was proved clean.

Testing of up-country herds continues and, in this connection, 1,485 tests were conducted. In all cases where infection has been found, farmers have been advised and pamphlets circulated giving full details of the symptoms, signs and treatment of this disease.

Of 597 producers throughout Natal, 4.3% were found to have herds infected with B. abortus.

Pirate Milk : Three successful prosecutions were instituted during the year. This problem will remain while cow-keeping is allowed within the City other than at registered dairy premises.

Miscellaneous : Farmers' requests to veterinary laboratories for the general examination of blood smears has resulted in the detection of several diseases. Recently, a very heavy incidence of Anaplasmosis has been noted in the rural areas of the coastal belt.

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11. OTHER FOOD SUPPLIES

City Market : Daily inspection of dressed poultry and other foods arriving at the City Market have been carried out throughout the year and all unsound, diseased or otherwise unfit foods were seized, condemned and destroyed.

Indian Market : Many traders at the Indian Market have long enjoyed a concession which enabled them to trade without a licence provided their businesses were confined to trading with non-Europeans.

This concession has now been withdrawn and all traders concerned are obliged to take out appropriate licences. In reporting on applications for licence, objections have been lodged in respect of all restaurant stalls. Structural and other conditions in these stalls are such that they cannot comply with the requirements of the Food By-laws. Other defects obtaining at the Indian Market have been listed on a schedule which was duly submitted to the City Market Master. The matter was duly referred to the Departmental Committee who finally agreed to examine proposals to alter existing premises so as to satisfy the requirements of this Department. With this object in view, the City Market Master, the City and Water Engineer (Architectural Section) and representatives of this Department have since collaborated to devise suitable remedial measures.

Native Institutions : Liaison has been maintained with the Native Administration Department and the Architectural Section of the City and Water Engineer's Department in connection with plans for new premises and alterations to existing buildings. The results so far have been very satisfactory and a number of premises have been completed and a new and improved standard of food-hygiene has been established. Included in these plans are a number of shops under construction in the Cato Manor Emergency Camp.

Cafes-de-Move-on : One unit only of this type of business continues to operate in the City area. Several applications have been received during the course of the year to establish others. These applications included one for non-Europeans on the Snell Parade. All applications were opposed.

Ice-cream : Mention was made in last year's report of three applications to introduce ice-cream into Durban has having been received from a manufacturing firm situated outside the City. The applications were refused but the firm concerned was subsequently found to be bringing ice-cream into the City without the necessary permit. Two successful prosecutions were instituted and a total, to date, of six successful prosecutions have been taken against the firm in question.

During recent months, samples of ice-cream from the three registered manufacturies in Durban were examined for bacterial content and B. coli presumptive tests. Certain samples were, at first, found to be under standard and the matter was represented to the Manufacturers concerned with satisfactory results.

Beach Catering and the like : From time to time, checks were made on the handling of food and drinks retailed on the various beaches and other places of public resort. Several beach caterers were prosecuted for exposing food and, in one case, for using chipped and cracked crockery.

Delivery of Meat : Consultations with the Director of the Municipal Abattoir and Chief Veterinary Officer have effected several improvements in vehicles being used for the conveyance of meat. Several traders were prosecuted for using unsatisfactory vehicles.

Bread Delivery : Two large bakeries in the City have re-designed some of their bread delivery vans by providing a central passageway with shelving on either side. Bread is loaded through a rear door and stacked on the shelving. Thereafter, the rear-door is locked and the passageway kept clear for delivery of bread-baskets through a side door. This method of bread delivery represents a great advance on present practice in regard to protection from contamination. It will also eliminate the practice of packing bread-baskets from the rear, and thus the possibility of bread falling on to the roadways.

Unsound Food : Many food-handling premises were visited and several consignments of unsound foods were discovered, condemned and destroyed. Several prosecutions were involved. In other cases, several firms invited the Department to examine doubtful stocks, of which some were surrendered for destruction.

Food-handling : Food-hygiene : Many successful prosecutions were instituted against traders in food shops, bakeries, hotels, tearooms and restaurants, etc., for various contraventions of the Food By-laws, which included dirty food premises, illegal food-trading, shack type shops, exposure of food to contamination, defective food shops, insanitary methods used for the delivery of bread, fish and meat, sale of unsound foods, lack of refrigeration, rat-gnawed foods, the finding of an elastic plaster bandage in a loaf of bread, lack of or dirty overalls, improperly washed bottles at a mineral water factory, etc., etc. Fines and admissions of guilt in the sum of £5 upwards were paid.

Chemical Samples : This Section has been responsible for two groups and quotas of chemical samples, i.e. 300 to the City Analysts, and 102 to the Government Laboratories, Johannesburg. These quotas cover nearly all the foods and commodities listed in the Food, Drugs and Disinfectants Act and the Regulations framed thereunder and have been used up in full. In cases of minor discrepancies, the sellers have been warned. In other cases where the samples fail to conform to prescribed standards, legal proceedings have been instituted.

In addition to the quota in terms of the Food, Drugs and Disinfectants Act, samples of the City's water supply have been submitted for chemical analysis and bacterial examination. Any unsatisfactory feature is forthwith taken up with the City and Water Engineer.

12. FAMILY HEALTH SERVICE

The birth-rate decreased for all races except the European, which remains the same, viz :-

	<u>1951/52</u>	<u>1952/53</u>
European	20.23	20.33
Coloured	54.25	45.00
Native	29.45	28.08
Asiatic	37.10	34.83

Infant Mortality : Infantile mortality increased in all sections, except amongst the Asiatics which was the lowest on record, viz :-

	<u>1951/52</u>	<u>1952/53</u>
European	21.51	23.20
Coloured	59.38	83.90
Native	301.66	336.05
Asiatic	69.85	61.05

Maternal Mortality : There was a considerable decrease in the maternal mortality rate for all races.

Stillbirths : The stillbirth rate showed a decrease among Europeans, but an increase among non-Europeans.

Family Health Services : There have been no new developments or extensions in the Family Health Services but attendances at most clinics have increased. Total clinic attendances were 170,097 as compared with 138,930 last year - an increase of 31,167. This increase was greatest among Native and Asiatics.

Chesterville Clinic : Clinic sessions were held at Chesterville on Tuesday and Friday mornings, but owing to the increased attendances, these clinics have been extended to 'all day' sessions.

Set out below are the figures for the attendances at this clinic for the past three years :- July 1950/June 1951 - 6,176; July 1951/June 1952 - 6,909; July 1952/June 1953 - 15,507.

Cato Manor Clinic : The attendance rate remains steady at this clinic which is as popular as ever. Mothers now bring their babies at an earlier age and attend more regularly. A special effort is being made to discredit the Native custom of 'cleansing' small babies with rectal injections of herbal and disinfectant solutions which irritate and inflame the lower gut.

The Bantu mother breast-feeds her baby for the first twelve months, but is inclined to wean it too early. Thereafter, the feeding consists chiefly of mealie-meal porridge with little or no milk, so that there is often a marked physical deterioration when they first arrive at the clinic. Malnutrition due to protein - and vitamin-deficiency is common among the babies and toddlers. Mortality directly attributable to malnutrition is distressingly high.

In October, 1952, the Native Affairs Department began to supply 110 lbs. of Powdered Milk monthly for indigent Bantu babies attending the Clinic. This gesture has been appreciated by the mothers whose babies have benefitted by the extra food. Unfortunately, this amount caters for only 30 babies per month - a very small proportion of those in need.

The attendance at all the Bantu clinics was 80,689.

Staff Changes : Dr. L. Chapman, Senior Clinical Medical Officer, resigned in September, 1952. This vacancy has not yet been filled. Dr. E.L. McDonald, Clinical Medical Officer, resigned in November, 1952. The vacancy was filled by Dr. H.E. Rose in June 1953.

SUPERVISION OF MIDWIVES :

<u>MIDWIVES</u>	<u>Eur.</u>	<u>Col.</u>	<u>Nat.</u>	<u>Asiat.</u>	<u>Total</u>
No. of Trained Midwives practising in Durban	52	4	13	1	70
No. of Trained Midwives who have ceased to practise	3	-	-	1	4
No. of untrained Midwives practising in Durban	3	3	-	154	160
No. of untrained Midwives who have ceased to practise	1	-	-	2	3
No. of trained Midwives deceased	-	-	-	-	-
No. of untrained Midwives deceased	-	-	-	6	6
No. of women practising midwifery who have been warned not to do so unless they apply to have their names put on the list	-	-	-	11	11
No. of midwives prosecuted	-	-	-	2	2
No. of difficult midwifery cases attended to and delivered	-	-	-	3	3

	<u>Eur.</u>	<u>Col.</u>	<u>Nat.</u>	<u>Asiat.</u>	<u>Total</u>
No. of Midwives put on the list during the year	1	-	-	10	11
No. of Midwives reinstated during the year	1	-	-	-	1
No. of Midwives' Appliances examined	33	40	-	1408	1481
No. of Midwives' Bags replenished	-	52	-	2569	2621
No. of Midwives' Bags sterilized after septic cases	-	-	-	1	1
No. of visits to Midwives at their homes or at patients houses	12	1	-	273	286
No. of Midwives dressings sterilized	-	61	-	2413	2474

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 are examined every month.

NO. OF REGISTERED AND UNREGISTERED MIDWIVES ON LIST :
(Private practising in Durban).

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
Registered	14	4	-	1	19
Unregistered	3	3	1	154	161

NO. OF CONFINEMENTS ATTENDED BY MIDWIVES :
(Attended by).

	<u>Registered</u>	<u>Unregistered</u>	<u>Total</u>
European	175	57	232
Coloured	58	16	74
Native	-	-	-
Asiatic	8	3035	3043

ANTE-NATAL CLINICS :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
	37	12	-	90	139

The City Council does not provide any accommodation for Maternity cases but the following Provincial Hospitals and Private Nursing Homes have services available as set out hereunder :-

European : Addington Hospital and the Mothers' Hospital include district midwifery service. Maternity cases are accepted at :- Sanatorium, Florida Nursing Home and Parklands Nursing Home.

Coloured : Addington and McCord Hospitals include district midwifery service. St. Aidan's Hospital accepts maternity cases.

Natives : King Edward VIII and McCord Hospitals include district midwifery service, as do the various Health Centres.

Asiatics : King Edward VIII and McCord Hospitals include district midwifery service. St. Aidan's Hospital accepts maternity cases.

INSPECTION OF REGISTERS OF NURSING HOMES AND LYING-IN-HOMES :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
No. of Homes	6	-	1	1	8
No. of times homes visited	32	-	4	4	40

ANTE-NATAL WORK :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
No. of expectant mothers attending Clinic	42	25	-	3298	3365
Total attendances	91	41	-	3573	3705
No. of Ante-Natal sessions	37	12	-	90	139
No. of Ante-Natal visits	180	32	638	1147	1997
No. of Post-Natal visits	35	8	-	656	699

ACCOMMODATION AVAILABLE FOR MATERNITY CASES :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
Hospitals	50	18	142	57	267
Nursing Homes	182	-	-	-	182

LECTURES AND DEMONSTRATIONS :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
To classes at schools	2	-	-	-	2
To expectant mothers	18	2	-	77	97

DENTAL CARIES :

	<u>European</u>	<u>Coloured</u>	<u>Native</u>	<u>Asiatic</u>	<u>Total</u>
No. of children found to be suffering from dental caries	99	-	237	120	456
No. of cases of dental caries which received attention	72	-	17	12	101

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13. GENERAL SANITATION

During the year, the Department has enforced many major improvements in hotels, board-houses and other food establishments whilst a number of unsatisfactory premises were closed down as the following table shows :-

	<u>Closed</u>	<u>Major alterations and re-equipment</u>
Hotels/Boarding houses.....	3	36
Tearooms/Restaurants.....	9	50
	<u>12</u>	<u>86</u>

It is hoped that agreement will soon be reached between the Beach traders and the City Council in the matter of leaseholds permitting solid construction and proper equipment of food premises. This Department will, meantime, object to renewal of licences for premises which do not comply with By-law requirements.

Industrial Hygiene : Many employers of labour now realise the need for a low-cost canteen service to maintain the health and efficiency of their workers. The Department co-operates with these progressive firms in planning the layout, construction and equipment of canteens.

Nuisance : Durban North Beach : A regular scavenging service has been installed in this area, and routine inspections disclose a marked improvement in the condition of the Beach foreshore.

Campers : Numerous instances of campers squatting on vacant sites have been investigated and prompt action by this Department has prevented or abated the public health nuisances commonly associated with this practice. The need for providing proper facilities for campers and caravanners is clearly indicated.

Refuse Removal and Disposal : Regular inspections are carried out and any nuisances or irregularities are immediately referred to the Department concerned for abatement or correction.

Sewer Connections : The owners of 80 premises were required to connect their house drainage to the Municipal sewer which is being extended in the Mayville, Sydenham and Puntan's Hill area.

Cato Manor : A marked improvement is noted in this area whereof a considerable portion has been acquired by the City Council and provided with water-borne sewerage, communal ablution blocks, refuse removal services and trading facilities.

Offensive Trades : Offensive trades' premises are regularly inspected and any necessary improvements are called for prior to the annual issue of the necessary certificate of approval for Council's permission to carry on an offensive trade.

Composting of Stercus : A stercus composting plant is being erected at Springfield under the aegis of the City and Water Engineer. This Department will co-operate to ensure that the composting process will proceed without causing nuisance.

Early Morning and Night Inspections : These inspections are carried out as a routine by the inspectorate and result in numerous prosecutions for contraventions of relevant By-laws.

The following schedule reflects details of the work carried out by the Health Inspectorate during the year:-

<u>Classification</u>	<u>No. of Inspections</u>
Food-handling trades	26,569
Non Food-handling trades	25,474
Non Trading Premises	<u>47,382</u>
	<u>99,425</u>
Complaints received and investigated	2,925
Notices issued - personal	9,253
Notices issued - written	4,776
Reports on trading licences	2,923
Letters written in connection with health matters	3,627

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14. OTHER MATTERS OF HEALTH AND SANITATION

Plague and Rodent Control : The staff allocated to these activities comprises five (5) European General Assistant (1st Grade) and five (5) Indian Field Assistants. The functions of the staff are allocated to this field programme which comprises systematic sampling by means of gassing and trapping of the whole of the

industrial and commercial areas for 'plague-index' purposes; and inspection of premises under construction to ascertain whether rodent-proofing measures are being properly carried out. Stock sketches of rodent-proofing measures have been circulated to architects for their guidance.

Maydon Wharf: All owners or occupiers of premises in this 'key' area have had their attention directed by circular letter to their responsibility in terms of Government Regulations for preventing rodent infestation of their buildings and premises.

Several occupiers have now engaged rat-catching firms who undertake to keep the premises rodent-free. The rodent position in the Maydon Wharf area is very satisfactory at present.

It is gratifying to know that replacement of the existing wooden wharf by solid construction has commenced, although years must elapse before the whole wharf can be rendered completely rodent-proof.

The following summarises the work of the section:-

Premises trapped for plague index	829
Traps set, general	2,976
Traps set, contiguous to Harbour	12,858
Cyanogas used - lbs.	578
Rodents destroyed - general	3,137
Rodents destroyed - contiguous to Harbour	951
Rodents sent to Government Laboratory	225
Poison - phosphorus baits used	112,680
Poison - ante-blood coagulate - lbs.	167

Mosquitoes: Constant surveillance of likely Anophelene breeding places and collection of larvae were carried out by specially trained Native Health Assistants.

Of 4,167 Anophelene larvae examined, only three were *A. gambiae*, the malaria vector. A search was carried out in dwellings adjacent to the breeding places, but no adults were found.

In January, heavy rains flooded the Sea Cow Lake and Newlands area coincident with an outbreak of malaria in Zululand. Special measures were organised to combat the expected increase in mosquito breeding. Some 620 houses affected by the floods were sprayed with 5% D.D.T. and 2½% B.H.C. Spraying operations were repeated every ten days. A sharp look-out was kept for *A. gambiae*, but none were found. Close liaison was maintained with the Union Health Department which supervised or exercised control measures outside the City area.

Numerous complaints of mosquito prevalence were received from residents of Lower Durban North. Extensive breeding was found to be taking place in the mangrove swamps in the Blue Lagoon and suitable spraying operations were organised to abate the nuisance.

The following anophelene species were identified :-

<i>A. gambiae</i>	3	<i>A. maculipalpis</i>	2,316
<i>A. demeilloni</i>	336	<i>A. constani</i>	358
<i>A. pretoriensis</i>	875	<i>A. squamosis</i>	57
<i>A. cinerus</i>	225		

Mangrove swamps extend from the mouth of the Umgeni River to the top end of the Beachwood Golf Course (Blue Lagoon) on Crown Lands where nuisance prevention is the responsibility of the Union Government whose attention has been directed to the matter. This Department however keeps the area under observation and control meantime.

Cockroaches : Effective use of D.D.T. and B.H.C. insecticides has reduced cockroach infestation in stormwater drainage and sewerage systems and in other Municipal properties to a minimum.

Cimex (Bed-bugs) : This Department undertakes anti-cimex measures where necessary in Municipal compounds. Experience gained by the use of D.D.T. and B.H.C. indicates that by regular spraying at intervals of 10-12 weeks premises are kept reasonably bug-free.

Inspections of the registers, equipment, etc., of licensed H.C.N. fumigators were carried out periodically by this Section.

Flies : The fly position in parts of Cato Manor shack area has much improved thanks to installation of water-borne sewerage and efficient spraying, but until refuse is collected and sewerage extended, heavy fly-breeding will recur in the summer months.

Summary of other control measures carried out is as under :-

Mosquitoes

Larvicide used - gallons.....	610
D.D.T. emulsion.....	46,028
Ditches cleared - yards.....	537,651
Land cleared - acres.....	424

Yellow Fever

D.D.T. emulsion - gallons.....	27,342
Larvae examined.....	4,167

Cimex

Premises fumigated by private firms.....	608
Premises treated with D.D.T./B.H.C. solution	939
D.D.T./B.H.C. - gallons used.....	339
Number of rooms treated.....	2,202

Roaches

Sewer manholes sprayed.....	26,651
Stormwater manholes sprayed.....	21,206
Gutterbridges sprayed.....	11,017
Properties sprayed.....	5,978
Water valves, etc. sprayed.....	10,739

Building Plans : Plans submitted to this Department for approval during the year increased by 363 over the previous year, all districts participating in the increase.

Plans finally passed increased by 339, at an estimated overall increased cost of £440,512. Dwellings showed an upward trend, exceeding last year's figure by 170, with increased estimated costs of £189,183, of these 528 were for four- and five-roomed cottages.

Flats were also given considerable attention with 93, costs on estimate being up to one-and-a-half million pounds, an increase of 30 plans and £570,741.

Great activity was also shown in public buildings such as hotels, clubs, schools, etc., for which 33 plans were passed to an estimated value of nine-and-a-half million pounds, additions and alterations, however, reflect a sharp decline.

The above reflects considerable building activity within the City and much time has had to be given for architects to incorporate the requirements of this Department in their plans and to checking up on the progress of construction to ascertain compliance thereto. Greatest activity is shown in the Old Borough with 1,445 plans submitted and 900 from the South Coast Junction area where the Mobeni industrial area is situated, distribution over the remaining districts being fairly even.

PLANS APPROVED DURING THE YEAR:

Description	No.	Approximate Value
Dwellings	681	1.653.969
Flats	93	1.499.699
Additions to	1258	358.177
Stores, Shops etc.	109	1.786.303
Additions to	598	586.935
Schools, Clubs,		
Halls, etc.	36	1.527.194
Additions to	105	126.002
		7.538.279

* * *

LEGISLATION

(i) AMENDMENTS

Crematoria and the Cremation of Human Remains: Regulations were promulgated on 29th January 1953 (P.N. No. 40) under the Cremation Ordinance, 1938. This code has the effect of controlling the establishment of crematoria and the practice of cremation in the Province of Natal.

Food, Drugs and Disinfectants Act: The Regulations were amended in respect of butter-milk and edible gelatine.

Equine Meat: The Abattoir and Public Health By-laws were amended by P.N. No. 48 dated 29th January 1953 so as to permit the slaughter of equines at the Municipal Abattoir and the sale of equine meat within the City.

International Sanitary Regulations Act, 1952: Regulations made under the Act were published by Proclamation No. 219 dated 26th September 1952, to control traffic to and from the Union by land, sea and air with particular reference to exclusion of pests and communicable diseases.

Poultry By-laws: In view of the increasing tendency to keep poultry on a fairly large scale, it was proposed last year to amend the by-laws so as to control the numbers to be kept on small building plots. Council decided not to proceed in this matter but the By-laws were amended in certain other minor respects.

Refund Regulations : G.N. No. 1251 of 19th June 1953 had the effect of amending the Regulations under the Public Health Act, 1919, regarding the procedure to be followed by local authorities in the submission of claims for part-refund of the costs incurred in the provision of hospitalisation for infectious diseases and schemes for providing treatment for persons suffering from venereal disease.

(ii) PROPOSED AMENDMENTS

(a) It was recorded last year that new legislation was to be introduced regarding smoke control, offensive trade regulations and a new housing act. The following is the latest position :-

Smoke Control : It is understood that the City and Water Engineer will report to Council on this matter in the near future.

Offensive Trade Regulations : The Provincial Administration has decided that no useful purpose will be served at the present time in proceeding with a new code applicable throughout the Province.

Housing : The new Housing Bill has not yet been enacted.

(b) Dry-cleaners, Dyers and Laundries : Council approved the adoption of a new code to control these establishments and by-laws have been approved, but not yet promulgated, by the Administrator.

(c) Sanitary Accommodation : The Public Health By-laws (Section 27) required owners of premises, where sewerage was not available, to make such privy provision as shall be requisite for the proper accommodation of persons using such premises. This code, however, had no effect within a sewered area and an amendment has been approved by the Council to extend this By-law to sewered areas.

(d) From time to time the intention of the Minister of Health to amend various regulations is promulgated in the Government Gazette and criticisms by local authorities are invited. The Secretary for Health has been informed of this local authority's opinion on the following amendments :-

- (a) Regulations regarding Closing of and Exclusion from Schools on account of Infectious Diseases;
- (b) Regulations regarding Slaughtering, Meat Inspection, etc., in relation to the salvage of condemned livers;
- (c) The following foods controlled by the Regulations framed under the Food, Drugs and Disinfectants Act:- tuberculosis-tested milk; de-caFFEinated coffee; milled grain; edible oils.

(iii) CODES OF PRACTICE

Codes on the following additional subjects are now available :- boarding and lodging houses; chemists; composting; sampling procedure for mastitis, etc., dead bodies (exhumations, etc.); garages; hawkers and peddlars; meat delivery vehicles; non-European housing; rodent-proofing sketches concerning cavity walls, roof eaves, external doors, floors, gutters, roofs and ventilation apertures.

(iv) APPEALS

Magistrate's Court : No appeals taken to the Supreme Court have been lost during the year. Only two appeals were lodged but were not considered owing to legal technicalities.

Milk (and Milk Products) By-laws : The City Council was not called upon to consider any appeals against my decision in this matter.

(v) PROSECUTIONS

There has again been considerable activity in this connection, of which the relevant details are appended :-

	Total	Guilty	Not Guilty	Withdrawn and Pending	Fines
<u>FOOD, DRUGS AND DISINFECTANTS ACT</u> :	22	22	-	-	142.10. 0
<u>PUBLIC HEALTH BY-LAWS</u> :					
Foodstuffs	122	103	-	19	1193. 0. 0
Nuisances	185	138	-	47	833. 0. 0
<u>SLUMS ACT</u> :					
Zonal Regulations	44	27	-	17	250. 0. 0
					2418.10. 0

- - - - -

PUBLIC HEALTH EDUCATION

One dominant fact emerges from twenty years of pioneering health education amongst the Durban Bantu - Zulu, Pondo, Xosa, Basuto - to wit, that if one appeals to the Bantu's reason and 'fully persuades' him that health teaching is truth for truth's sake, that your approach is reasonable and free from ulterior motive, that one's pronouncements stand whether he capitulates at first or not, then one has gone a long way towards ensuring his acceptance of your ideas. No matter what the subject or his own shibboleths concerning it, when you have captured his reason he will respond even to the changing of his habits and his very way of life. This throws a heavy responsibility on the health educator, but offers commensurate opportunities.

Always one must take the Bantu into One's confidence if worthwhile results are to be expected.

During the year, tactics based on this philosophy were employed on a research project in connection with local amoebiasis incidence.

(1) Amoebiasis

After unsuccessful attempts had been made to persuade the Bantu to yield stools for analysis, Dr. Elsdon-Dew, head of the Amoebiasis Research Unit, approached this Department with what seemed an impossible request, i.e. to obtain 1,000 stool specimens - 500 from dwellers in shacks and 500 from Municipal housing scheme occupants. The Bantu public was scandalised by the suggestion which offended a traditional taboo. But their willing co-operation was secured after explanatory loudspeaker talks. These were followed by home visits, distribution of containers to 'converted' co-operators and re-visits to collect specimens.

The task was complicated in that specimens had to be collected from healthy persons only and had to be transported to the laboratory not later than 2 p.m. daily. Results of the project are reported elsewhere herein.

(ii) Nutrition

The Government Department of Nutrition has encouraged health education among the Bantu by -

- (a) subsidising the cost of employing a Bantu lecturer to be allocated whole-time to instructing the Bantu on subjects connected with nutrition; and
- (b) defraying part of the cost of producing a film-strip on nutrition for the instruction of Bantu groups.

There is no short cut to the teaching of nutrition to the Bantu because he is a natural logician and must have his doubts resolved. Therefore, the idea of proteins and protective foods and their functions must be built up and clearly associated with the allied energy and heat-giving foods. At Cato Manor, the residents, vendors and stall holders were given the history of the Bremer loaf and its enrichment, its content of wheat germ and its high nutritional value as compared with white bread. As a result, every store-keeper ordered Bremer bread almost overnight. Random comments gathered from shack dwellers include the following: "It stays with us as old Grannie's mealie cakes used to" ... "after eating the enriched loaf, the white bread is like eating grass!"

(iii) Film-strip Production

Themes for film-strips are selected in relation to practical needs. Thus, "A Ngi Katali", the typhoid theme, was suggested by an actual outbreak of enteric fever in the shack areas due to the use of polluted water for domestic purposes although a safe water supply was available from stand pipes in the vicinity.

"Granny Gives Advice" a new strip on pre- and post-natal care for Indian women was suggested by various obstinate difficulties experienced by the Supervisor of Midwives in connection with clinical work.

3D Pictures: Bremer Loaf: The first display of 3D pictures to the Bantu portrayed the Health Education's mobile loud-speaker at work in the shack area. Pictures were made of the lecturer telling the story of the Bremer loaf from the wheat-grain to the finished, enriched bread which compared more than favourably with white bread from the nutritional point of view. As the number of viewing glasses was limited - about 40 - projection had to be restricted to small 'key' groups of Bantu educationalists who, in turn, went out to be Bremer 'missionaries'.

(iv) Bantu Fair: King's Park

This has now become an annual event where displays of traditional dancing, arts and crafts draw both Europeans and Bantu. By tempting displays, industry does its best to coax the Bantu to buy this or that brand of locally made goods. This Department welcomes the opportunity to impart some knowledge on matters vital to Bantu welfare. The Department's exhibition comprised:-

- (a) Two large illuminated anatomy charts, depicting lung structure affected by tuberculosis; bowel-tissue affected by typhoid; the dysenteries and worms; the normal heart action and mechanism. Droplet infection was demonstrated by intermittent lighting. This display interested both Europeans and Bantu.

- (b) Also exhibited was a cast of the Bremer enriched loaf with a movable 'top crust' designed by this Department and made by the Arts Section of the Natal Technical College. Five labelled glass tubes within the loaf proclaimed the ingredients of the enrichment, i.e. skim milk powder, butter-milk powder, ground nut meal, fat and calcium carbonate, all supplied by the Department of Nutrition, Pretoria, for the purpose of exhibition.
- (c) Four bottles of preserved specimens (hookworm, tapeworm, whipworm and roundworm) supplied by King Edward VIII Hospital, evoked much interest.
- (d) The Department's leaflets in Zulu and English on numerous health subjects were displayed and distributed.

The 'Natal Mercury' feature writer 'Idler' commented as follows :- "Should you have an evening free this week, it would repay you to take your Native servants along to this fair.....one of the finest stands is the health demonstration which also supplies some excellent folders printed in Zulu....."

The following attended the Fair which lasted a week :-
European adults - 6,246; European children - 863 not including school classes; Bantu adults - 4,225; Bantu children - 987; Asiatic adults - 171.

All entering the exhibition marquee (kindly loaned by the Durban and District Safety Association), whether singly or in groups were given personal demonstrations. Many Europeans returned next day with their Native servants.

(v) Asiatics

The Asiatic and Bantu sections of the community receive similar attention, one senior lecturer and one health assistant (non-European) being provided for each. The approach, however, differs in conformity with their characteristic pattern of life and ideology. The media of instruction employed are identical and the principal venues are schools and hotels.

(vi) Hotels

A new film-strip for Indians entitled "When Eating becomes Dangerous" demonstrates personal hygiene, food hygiene and food utensil sanitation in relation to the prevention of food-borne diseases.

It has now been shown at all large hotels where Indians are engaged as waiters or food-handlers, and at every Indian tea-room and cafe throughout the City. This is the first own-produced strip in which Indians figure as the cast and its success is already assured. Indian prose is woven into the narrative and Indian traditions are used where helpful.

While Asiatic hotel staffs are being instructed, the Bantu personnel, usually washers-up, also receive attention. If numbers warrant a projection, their own strip "From Hand to Mouth" is used with Zulu commentation. In this event, two visits to the one establishment are necessary as busy hotels are unable to spare their non-European employees for two consecutive sessions.

(vii) Schools : Asiatic : Bantu

All schools are visited once yearly and, as many lack electricity, the scholars see no films other than those projected by the departmental unit which provides current from a generating plant housed in the loudspeaker van.

School principals of both racial groups often ask for a second visit during the same year.

The Sister Tutor of Bantu trainees at King George V Tuberculosis Hospital reports that every new batch receives, as a routine, a session of film instruction on tuberculosis from this Department which includes its film-strip "Then and Now". "It is most notable, the Sister Tutor commented, "that the examination papers reflect knowledge obtained from the films - in some cases employing its very language". A like influence is observed in all the schools.

(viii) Bilharzia

Some weeks after a film on bilharzia was shown at an Indian school, the Senior Indian Lecturer came upon a group of school-boys on a river bank. Deciding to test the value of film instruction, he asked them "Why are you not playing in the river on this hot day?". Unaware of his identity, they forthwith gave him their reasons. "Where did you learn all this?", he enquired. "From the Health Department's film called 'Still Waters' which was shown at the school recently." they replied.

(ix) Food Establishments : (European personnel)

Wherever food is prepared, handled and sold over counters as in large tearooms, cooked meat and confectionery counters, milk bars, etc., European personnel have been warned against careless personal hygiene in relation to food-handling through the medium of an imported U.K. film entitled "Another Case of Poisoning". Following the film, the lecturer summarises the common and, often unconscious, offences such as scratching the nose and hair, etc. Illustrated leaflets are distributed and cartoon cards hung in kitchens. Tabloid talks are given to small employee groups where projection of films is not warranted.

Vi-testing for the enteric 'carrier' state and immunisation against typhoid are explained.

(x) Vi-testing and Immunisation of Food-handlers

Dairy milk-handlers, mainly Bantu, used to be averse to vi-testing and immunisation. The difficulty was overcome by allocating a Bantu Lecturer to instruct milk-handlers in the elements of food-handler hygiene.

The cumulative effect of this routine instruction which is given twice weekly at the Department's clinic is now evident. It is found that new employees, raw from the kraal, have been 'pre-conditioned' by their fellow-workers and are ready to co-operate.

Food-handler employees of scholastic and children's boarding establishments, nursery schools and hospitals were visited and persuaded to attend clinic, with excellent results.

(xi) Shacks

At Cato Manor, some 6,000 shack dwellings accommodate some 45,000 Bantu living under family conditions.

What has health education to offer such? It "declares unto them the whole counsel of health" - it demonstrates by film-shows how deadly are the flies that breed in their rubbish dumps and pit lavatories and how they can help to control the gatro-enteritis that smites their little ones by practising sanitary habits; it tells how isishimuyane, the 'drink with the fire in it', is injurious to health.

There are occasional dramatic responses to these shows as, for example, the mother who kept interrupting with "My child spits blood; she sweats at night like the man in the picture". Her shack was visited after the show with the result that within 24 hours the child was admitted to hospital.

The non-European listens to the health education unit with respect and attention.

(xii) Loudspeaker Mobile Van

When Indians were marooned as a result of floods in the Umgeni Valley, they were rallied by loudspeaker news that food was coming by plane.

Bantu were warned about the danger of lead poisoning as the cumulative result of using paint drums as drinking-water containers. The van and its personnel have acquired a prestige as a result of helpful service through the years.

(xiii) Pre-school Child : Diphtheria

Diphtheria is becoming more prevalent among Indian and Bantu pre-school children whose parents have neglected to take advantage of free protective immunisation. The loudspeaker addressed groups at bus ranks, homes, barracks, etc., urging immunisation for infants. The response was immediate.

(xiv) Native Administration Department

Every day a Bantu Lecturer attends and instructs the queue of Native males seeking registration and medical examination. Thousands who would not otherwise be reached thus receive a quota of health instruction every month. Domestic servants receive food-handler tuition and venereal disease instruction. Industrial employees are given a digest of nutrition, tuberculosis and venereal disease. The requirements of each group are being studied and, as far as possible, catered for.

(xv) General

It has been stated that : "Application of health education principles depends upon a full knowledge of the situation existing in a given locality. Workers must know the customs and habits of the people they want to help and how these people are likely to react....." This Department studies the customs, habits and reactions of the multi-racial local groups in order to prepare and present the material of Health Education to the best advantage. This work is essentially of a pioneering nature and much remains to be done.

HEALTH EDUCATION TALKS AND FILMS :

FILMS:

African Mirror.....	15
Bantu grows new food.....	1
Bilharzia.....	9
Cleanliness brings health.....	3
Environment Hygiene.....	25
Feeling of refection.....	1
Food Poisoning.....	10
Hookworm.....	2
Human body.....	8
Insect carriers.....	22
Infant care.....	2
Kill the louse.....	6
Kialami.....	4
Lead Poisoning.....	2
Malaria.....	6
Mother and child.....	5
Morning milk.....	1
Nutrition.....	10
Play ground safety.....	7
Small-Pox.....	3
Tuberculosis.....	10

Transmission of disease.....	4
Two families.....	3
Typhoid carrier.....	14
Typhus.....	2
Venereal Disease.....	6
Water.....	1
What is disease.....	6

* * *

TALKS:

Amoebiasis.....	2133
Bilharzia.....	188
Food Handler	
Hygiene.....	1098
Food Poisoning.....	5
Gastro Enteritis.....	110
Infectious diseases.....	1416
Immunisation.....	1225
Isishimuyana.....	18
Lead Poisoning.....	36
Nutrition.....	693
Personal Hygiene.....	360
Pest Control (D.D.T.).....	87
Pest Control.....	846
Refuse dumping.....	250
Rat Problem.....	2
Scabbies.....	126
Tuberculosis.....	1096
Venereal Diseases.....	598
Vi-testing.....	143
Worms.....	17
Yellow Fever.....	1

* * *

FILM STRIPS:

A Ngi Katali.....	19
Hand to Mouth.....	8
Then and Now.....	15
When eating becomes dangerous.....	65
Yellow Fever.....	5

* * *

NUMBER OF ATTENDANCES AT HEALTH TALKS AND FILMS:

European.....	1366
Coloured.....	152
Native.....	161164
Asiatic.....	113186

* * *

15.

STAFF ESTABLISHMENT

ADMINISTRATION:

City Medical Officer of Health.....	1	Gunn Dr. G.H. (M.D., D.P.H.)
Deputy City Medical Officer of Health..	1	English Dr. G.D. (M.B., Ch.B., D.P.H., D.M.T. & H)
Administration Officer.....	1	Thomson A.H. (M.R. San.1)
Chief Clerk (Legal and Technical).....	1	Poplett D.J. (M.R. San.1)
Chief Clerk (Administration and Finance).....	1	Donkin F.D.
Senior Clerks.....	2	
Clerk Grade 1.....	3	
Clerk Grade 2.....	1	
Clerk Grade 3.....	3	
Clerk Grade 4.....	9	
Lady Assistant.....	1	
Chief Typist.....	1	
Senior Typist.....	1	
Typists.....	9	
Enquiry Clerk.....	1	

Non-European:

Indian Office Assistant.....	1
Messengers/Cleaners.....	6

MEDICAL BUREAU:

Senior Clinical Medical Officer.....	1	Casson Dr. M. (M.D., M.R.C.S. L.R.C.P.)
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EPIDEMIOLOGY AND ENDEMIOLGY:

Assistant Medical Officer of Health...	1	Hooper Dr. D.H. (M.B., Ch. B. D.P.H.)
General Assistant.....	1	
Driver/Assistant.....	1	
Lady Assistant.....	1	

Non-European:

Health Assistants.....	14	(& Indian : 7 Native)
Messenger/Clearner (Native).....	1	

HEALTH INSPECTION:

Assistant Medical Officer of Health...	1	Gilbert Dr. P.S. (M.B., Ch.B. D.P.H.)
Chief Health Inspector.....	1	Groom G.F. (Cert. R.S.I.)
Deputy Chief Health Inspector.....	1	Johnston M.M. (Cert. R.S.I.)
*Health Inspector (1st Grade).....	8	Plans and Industrial Hygiene Food Hygiene Dairies, Slums and Housing, Field Hygiene, Infectious Diseases, District Sanitation Licences, 2
*Health Inspector (2nd Grade).....	13	Districts 1 to 11 and Dairies
*Health Inspector (3rd Grade).....	10	?
*Assistant Health Inspector.....	9	
Health Assistants.....	6	
*Health Assistants (Lady).....	1	

* (Certificate of R.S.I.)

VETERINARY HYGIENE:

Assistant Veterinary Medical Officer..	1	Cavanagh Dr. F.E. (B.V. Sc.)
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FIELD HYGIENE:

Senior Assistant Supervisor.....	1	
Assistant Supervisor (Field).....	1	
General Assistants (1st Grade).....	5	(Rodent Control)
General Assistants (2nd Grade).....	11	Gang overseers 10, House Disinfections 1

Non-European:

Indian Sirdar.....	1
Indian Field Assistants.....	6
Indian Labourers.....	11
Bantu Health Assistants.....	8
Bantu Labourers.....	72

HEALTH VISITING:

Chief Health Visitor.....	1	Eckhoff Sister E.J.
Senior Health Visitor.....	1	Robinson Sister S.E.H.
Health Visitors.....	30	Child Hygiene 18 : Tuberculosis 5 : V.D. 1 : I.D. 1 : Immunisation 4 : Maternity 1
Lady Assistants.....	8	
Driver Assistant.....	1	
Driver/Lady Assistant.....	1	

Non-European:

Indian Clinic Assistants.....	6
Indian Messenger/Cleaner.....	1
Bantu Health Visitors.....	7
Bantu Messenger/Cleaner.....	1
Bantu Interpreter/Cleaners.....	2

FAMILY HEALTH SERVICES:

Senior Clinical Medical Officer.....	1	Chapman Dr. L.E.J. (M.B., Ch.B., B.Sc., D.P.H.)
Clinical Medical Officer.....	1	McDonald Dr. E.K. (M.B., Ch.B.)
Medical Specialist (Part-time).....	1	Rafferty Dr. L. (M.R.C.O.G., M.R.C.S., L.R.C.P.)
Clinical Medical Officer.....	1	Rose Dr. H.E. (M.B., Ch.B.)

Non-European Health Services:

Senior Clinical Medical Officer.....	1	Dewar Dr. R.S. (M.B., Ch.B.)
Clinical Medical Officer (Female).....	1	McAuliffe Dr. M. (M.B., M.R.C.S.)
Bantu Medical Officer.....	1	Dhlamini Dr. C.N. (M.D., L.R.C.P.) - L.R.F.P.S.

Non-European:

Bantu Nurses.....	4
Bantu Senior Clinic Orderly.....	1
Bantu Clinic Orderlies.....	2
Bantu Clinic Assistant.....	1
Bantu Laboratory Assistants.....	2
Bantu Clerks.....	4
Bantu Cleaner.....	1

HEALTH EDUCATIONS:

Health Educator.....	1
Technician.....	1

Non-European:

Indian Lecturer.....	1
Indian Health Assistant.....	1
Bantu Lecturers.....	2
Bantu Health Assistant.....	1

STAFF CHANGES:

Dr. G.H. Gunn resumed the duties of the City Medical Officer of Health
1.5.53

Dr. L.E.J. Chapman resigned on 15.10.52

Dr. E.K. McDonald resigned on 30.1.53

Dr. H.E. Rose assumed part-time duty on 12.12.52 and was appointed
Clinical Medical Officer
on 3.6.53.

REPORT 'B'

HOUSING

Durban is the largest port on the East coast of Africa and because of this strategic location is of vast importance to shipping and Durban handles approximately 60% of the Union's shipping traffic and occupies a strategic position on the East Coast, adjacent to the Union's largest reservoir of unskilled and semi-skilled labour.

Thanks to the expansion of commerce and industry, Durban's population has virtually doubled itself over the last twenty years.

Housing of the new population becomes a major concern with the emphasis on the provision of low-priced dwellings. Due to the halting since illegal shack building was stopped some two years ago, overcrowding has raised the ratio of occupants per shack from approximately 5 to 8. This indicates that a huge back-log is accumulating.

If given a serviced site, the Bantu and Indian by virtue of their natural ability to improvise, would provide for themselves the basic human need of shelter at little cost to the community. The Cato Manor Emergency Native Housing Scheme is a partial and temporary expedient to deal with a critical situation. It should not be permitted to delay the launching of adequate schemes of permanent housing.

In May 1943, the City Medical Officer of Health recommended that 24,500 sub-economic and 6,540 economic houses should be built during the next ten years. In September 1943, the fact was stressed that many Indians and Bantu employed in Durban lived in or near the City in shack-settlements insufficiently supplied with water and sanitary services.

Ten years have passed, over which period a total of 5,272 'sub-economic' and 1,586 'economic' houses have been erected in the City. The short-fall in the recommended figure for 1943 is 18,228 'sub-economic' and 4,954 'economic' houses.

Shack Distribution

<u>Area</u>	<u>June 1952.</u>	<u>June 1953.</u>
South Coast Junction	967	467
Umhlatuzana	268	268
Sydenham	381	379
Mayville	8,018	8,035
Greenwood Park	250	250
Old Borough	224	224
	<u>10,108</u>	<u>9,623</u>

The decrease in the South Coast area is due to the demolition of shacks whereof the inmates were re-housed in Municipal institutions and elsewhere.

Estimated Shack Population (all races).

<u>Area</u>	<u>June 1952</u>	<u>June 1953</u>
South Coast Junction	8,509	4,109
Umhlatuzana	2,358	2,358
Sydenham	3,352	3,352
Mayville	70,558	70,707
Greenwood Park	2,200	2,200
Old Borough	1,971	1,971
	<u>88,948</u>	<u>84,697</u>

Note

These totals are based on the figure of 8.8 persons per shack supplied by the Shack Survey Section of the Native Administration Department.

Slum Areas : Town Zones

Many old and inferior dwellings mostly situate in slum zones have been demolished during the year. There is evidence of structural improvement in the majority of houses in these zones.

Suburban Zones : Slum Zone 8

The dwellings on the north bank of the Umgeni River, mainly of the shack type, cannot be required to conform with Slums Act standards as this area is included in Town Planning Scheme No. 1 (Umgeni - North-West side). At this stage, it is inadvisable to press for improvements which generally would necessitate reconstruction.

Slum Zone 9

Much of the Cato Manor area has been expropriated to form the Emergency Native Housing Scheme. The area generally from the sanitary viewpoint has improved. Many new roads have been made giving greater access. Seven sanitary/ablution blocks on water-borne sewerage are available in use in the new section of the Emergency Housing Scheme.

Slum Zone 10

The Native Administration Department has demolished some 500 shacks in the Bluff Valley area and removed the occupiers to the Native village at Umlazi Glebe Lands.

Slum Zone 11

Pending connection to the Municipal Sewer, improvements have been held up in this South Coast Road area which now falls into a zone for commerce and industry. Most of the 165 applications to demolish or convert buildings involved the replacement of obsolete dwellings by modern buildings.

New Housing

i) European :

a) Loans to individuals

No. of houses completed	915
No. of houses nearing completion	10

b) Flats for ex-Volunteers

Umbilo Road	48
Kenneth Gardens	282
Currie Road	48
Westgate Gardens	84
Kirkwood Gardens	72
	- 534

c) Flats for Women

Rapson Road	55
Sub-economic (elderly women of limited means).	50

- d) Housing for ex-Volunteers (Woodlands)
Housing completed 500

Sherwood and Virginia Estates

Virginia houses completed	85
Virginia houses commenced	-
Sherwood houses completed	-
Sherwood houses under construction	43

ii) Indian Sub-economic :

- a) Springfield completed 720
b) Cato Manor completed 100 (1 destroyed by fire January 1949)

Economic :

- c) Cato Manor 50 (1 destroyed by fire January 1949)

iii) Coloured (Shaik's Estate) :

No. of houses under construction	-
Sub-economic houses completed	49
Economic houses completed	36

iv) Native (Chesterville Scheme) :

No. of houses completed	1,268
<u>Merebank Native Men's Hostel</u>	
Completed	4,128 beds
1 block for visiting wives	48 units
Recreation hall - completed.	

Magazine Barracks

Extensive improvements have been carried out in these barracks according to programme.

Serious some years ago, overcrowding is being steadily reduced. The rate of occupation per room is now 3.5 persons, 4,992 persons being housing in 1,402 rooms. A wood and iron section comprising 542 rooms, condemned many years ago, has not yet been replaced.

Municipal Native Housing

1. Locations for housing families

Lamont houses completed	775
Lamont houses under construction	-
Lamont flats completed	586
Lamont flats under construction	200
Baumannville	120
Jacobs	64
Chesterville	1,265
	- 3,010

b) Location for Native Males

Somtseu Road	4,456
Merebank	4,128
Dalton Road	1,656
Jacobs	625
	- 10,865

c) <u>Hostels for Native Females</u>			
Grey Street	590		
Jacobs	64	-	654
d) <u>Hostels for Native Males</u>			
Bell Street and Plymouth Road	1,154		
Ordnance Road	440	-	1,594
e) <u>Globe Lands:</u>			
Houses completed	278		
Total sites available	522	-	800

2. (a) Water Supply :

Locations:

	Globe Lands	Lamont.	Bauman- ville.	Jacobs.	Chester- ville.
Houses with water laid on	-	1,149	120	-	1,268
Houses with com- munal supply	278	212	-	64	-
No. of communal taps	17 (Provision for 64.)	51	-	4	-

(b) Ablution, Washing and Sanitary Accommodation :

	Globe Lands	Lamont.	Bauman- ville.	Jacobs.	Chester- ville.
Houses with showers	-	1,149	120	-	-
Houses with bathrooms	-	-	-	-	1,265
Showers for males	-	-	-	6	-
Showers for females	-	-	-	6	-
Washing gullies	-	393	120	2	1,265
Latrines (pail)	4	-	-	-	-
Latrines (pit)	178	212	-	-	-
Latrines (water- borne)	-	1,149	120	-	1,265
Latrines : Males	-	-	-	6	-
Latrines : Females	-	-	-	6	-

3. (a) Hostels for Men :

	Ordnance Road	Merebank	Somtseu Road	Dalton Road	Bell Street	Jacobs
Latrines	13	368	235	66	42	72
Urinals	-	100	13	6	7	58
Showers	9	446	216	38	38	48
Washing Areas	3	100	21	11	22	5
Water taps	9	1,082	50	50	36	58
Fire-places	15	64	662	26	15	16
Kitchens	-	2 (large)	10	5	-	2
Kitchen taps	-	238	24	17	-	7
Dining halls	-	4	3	2	-	1

(b) Hostels for Women :

	Grey Street	Jacobs.
Latrines	40	5
Showers and baths	28	3
Washing Areas	10	1
Water taps	43	8
Fire-places	36	4
Kitchens	4	-
Kitchen taps	6	-
Dining Halls	1	-

4. Summary

	<u>Houses</u>	<u>Beds</u>	<u>Persons</u>
Family housing	3,082	-	19,980
Women housed	-	654	654
Men housed	-	14,919	14,919
	<u>3,082</u>	<u>15,573</u>	<u>35,553</u>

Umlazi Glebe Lands

There are now 278 completed houses in this settlement, many being brick dwellings erected under the Loans to Individuals Scheme. Building proceeds actively.

Much improvement in sanitary conditions has resulted from the provision of a refuse removal service.

The inadequacy of latrine facilities has resulted in the fouling of undergrowth in and around the new buildings. The Native Administration Department proposes to erect 200 additional pit latrines pending the installation of water-borne sewerage. Space for re-siting pit privies is limited and is being rapidly exhausted.

Trading facilities will shortly be improved by the erection of a new shop.

No provision has yet been made for urgently needed ablution facilities.

Duranta Road Indian Settlement.

Conditions in this area have greatly improved since the provision, at the instance of this Department, of refuse and ster-
cus removal services.

Palmet (Wansbeck) Bantu Shack Area.

This settlement has remained static for some time. Although the land is Bantu-owned, no attempt is being made to improve the dwellings structurally. This Department arranged for a ster-
cus removal service. Fly incidence dropped following the filling-in of 20 pit privies. The area is inspected at regular intervals and conditions are generally satisfactory.

General

In the areas known as Roomaville and Glen Anil on the City's north-eastern boundary, shack building has been active in virtual defiance of the responsible rural authority. These areas are now to become 'public health areas' under the control of the Local Health Commission.

A P P E N D I X.

As the foregoing Annual Report will be published and read during 1954, namely during Durban's Civic Centenary Year, it may not be inappropriate to include in its subject matter the following article written by Dr. E.W. Holland, who was District Surgeon of this town a hundred years ago. It certainly serves to emphasise the great strides which have been made in the conception and control of infectious diseases during the last century. But it will be observed that even in those early days of the town, adherence to laws of hygiene was insisted upon and demanded by an invaluable line of defence in safeguarding the public health :-

"On the Sanitary Prospects of Durban, Port Natal, by :-
Edward W. Holland, M.R.C.S.

'Daily experience shows us the presence of infectious disease, in a place where the natural laws in respect of cleanliness are neglected, and the spreading of this disease into regions where there is no blame of this kind.'

A quotation sufficiently pregnant with application to the Borough of Durban, containing as it does numerous foci, from whence certain diseases aroused into action by the electro-chemical changes of the atmosphere may radiate, and vitiate more or less the neighbourhood wherein such centres of dissemination do not exist. It requires very little imaginative power to depict the consequences of those diseases which an epidemic state of the atmosphere would generate, or even to show what localities in Durban are in a state fit to become the recipients of disease, or a nidus for the continued generation of infectious disorders, especially when it can be clearly demonstrated that the substratum on which the Borough is founded, consists of a saturated mass of decomposed organic matter, diluted it is true by the periodical rains, and whose offensive evaporation is carried off and dispersed by atmospheric currents. From considerations of this kind which readily enter the mind, we must admit that our continued well being at present depends solely on the oscillations of physical law, which, notwithstanding our glaring supineness, has not as yet, inflicted on us the punishment properly due for a breach of the moral law. It is true indeed, we are, owing to the sparseness of our population, in a healthy state, we have had no epidemic until now, but which, although moderate in its character, is an instance of a marked change in, or addition to the constituents of the atmosphere; - foreshadowing the probability of further and more terrific changes, leading to the propagation of those decimating agents, cholera and fever, diseases of one type, but varied in character and destructiveness.

I need not adduce examples to portray the effects of an epidemic atmosphere, in localities suitable for the incubation of disease, - one instance - the Mauritius, so lately a prey to those fearful afflictions, smallpox and cholera, diseases which prevailed amongst the filthy, the poorly nourished, and the most dense in population, will suffice.

This island, then, in close proximity to us, supplies us with an example of the consequences which arise from the presence of a morbid atmosphere; and atmosphere not to be resisted by quarantine and restrictive measures, but simply by cleanliness, drainage, and removal of those filthy concentrations from which fever of a low type may originate, and rapidly develop the characters of any prevailing epidemic.

In the general history of epidemics we find that the brute creation, as well as men, suffer from the same disease, and although in this colony the human race has been hitherto free from any general affection of a contagious or infectious character, yet we observe an annual accession of disease amongst cattle, arising not from peculiar

food, but from some undiscovered changes in the properties of the atmosphere. Now if this be true of the lower animals in the same climate, we may safely affirm that man will at some future period experience the infliction of a new train of disease.

'Macies et nova febrium
Terris incubent colors,'

a disease of the same class but of a different order, and only different because his habits and mode of life produce and diversify symptoms, peculiar to himself alone.

Having taken a glance at our blind neglect, and its inevitable consequences, I will conclude with a few remarks on the climate of Durban, in connection with its effects on the inhabitants. We all know that man is the only organised being adapted to live in any climate, and capable of undergoing with impunity great changes of temperature. To insure this capability he must be in good health, free from mental and corporeal depression.

I think it may be asserted that the majority of individuals who have emigrated to this colony are not average specimens either of form, vigour, or stature. Their deficiency in this respect renders them incapable of resisting and enduring the variable temperature peculiar to the climate of Natal, and obnoxious to the depressing influence of an atmosphere, impregnated with organic matter. The climate is the approbrium, - it would be difficult to show what disease with any prominent characters, is its own; and from which there is no escape, or what extraordinary disease might not be avoided by adhering to the laws of Hygiene. The neglect of these laws injures the weak, and renders the strong timid. Nature is our only safeguard; her periodical rains dilute and wash away our filthiness, and the accumulated mists which emanate from the hot-beds of our refuse, are by a wise provision dissolved and dispersed by the tempestuous currents of the atmosphere." ('The Natal Mercury' dated 11th October 1854)

In the same issue of the above-quoted paper, the following item appears regarding the ill-health of the people of Bendigo, Australia, and its suggested causes :-

"The health of the people of Bendigo is getting daily more precarious, sickness is very general, and its increase is attributed to several causes. Some of the medical men say there is a quantity of arsenic in the water; other with more reason declare that the putrifying animal matter which is allowed to decay in the very midst of the thickly populated places, is the chief cause of the increase of disease."

* * * *

Good, but from some unexplained change in the programme of the
conference. Now it is the turn of the French people to be
attacked, we are asked to believe that they are the only
ones who are the cause of the present situation.

Yours faithfully,
[Signature]

A statement of a very simple but of a very serious nature, and only
different because the facts are of a very serious and dangerous
nature, leading to a very serious result.

It is a very simple statement of the facts of the situation, and the
situation is very serious. It is a statement of the facts of the
situation of the French people, and the situation is very serious.
We all know that the only way to avoid a very serious result is
to act quickly, and we must act quickly. We must act quickly
to avoid a very serious result. We must act quickly to avoid a
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