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BOROUGH OF DURBAN

ANNUAL REPORT
of the
MEDICAL OFFICER OF
HEALTH

For the Year Ending
30th JUNE, 1932



B O R O U G H O F D U R B A N .

A N N U A L R E P O R T

O F T H E

M E D I C A L O F F I C E R O F H E A L T H .

(Dr. G.H.Gunn, M.D. ChB.D.P.H.)

1931 - 1932.

THE
BUREAU OF
THE

ANNUAL REPORT

OF THE
MEDICAL OFFICE OF THE
(DR. J. B. GORDON, JR., CHIEF)

1901 - 1902

I N D E X.

	<u>Page.</u>		<u>Page.</u>
Ambulance Services	17	Maternity & Child Welfare	68
Births): Recorded	2	Night Soil Service	33
Still	2	Offensive Trades	82
Illegitimate	2	Population	1
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JVM.

PUBLIC HEALTH DEPARTMENT,
OLD COURT HOUSE,
DURBAN.

1st August, 1932.

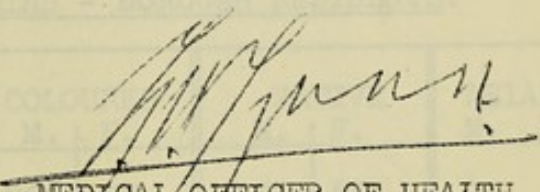
To His Worship the Mayor & Town
Councillors of the Borough of Durban.

Mr. Mayor, Lady & Gentlemen,

I have the honour to present herewith the Thirty-first Annual Report dealing with the health and sanitary conditions of the Borough of Durban, for the year ended 30th June, 1932.

I am,

Your obedient servant,


MEDICAL OFFICER OF HEALTH.

R E P O R T "A".

1. VITAL STATISTICS.

(i) Population.

The following table shows the estimated population for the year 1931-1932, the last census of the Borough being shown in comparison.

	Government Census. Europeans only. 1931.	Municipal Estimate 1932.
Europeans	59,250	59,480
Coloured	4,240	4,290
Natives	43,750	43,750
Asiatics	17,860	18,500
	125,100	126,020

PUBLIC HEALTH DEPARTMENT,
OLD COURT HOUSE,
TAMMARA.

1st August, 1932.

His Worship the Mayor & Town
Council of the Borough of Durham.

Mayor, Lady & Gentlemen,

I have the honour to present herewith the Third
Annual Report dealing with the health and sanitary condition
of the Borough of Durham, for the year ended 30th June, 1932.

I am,

Your obedient servant,

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REPORT
The following table shows the estimated population for
year 1931-1932, the last census of the Borough being shown
for comparison.

Municipal Estimate 1932.		Government Census. Europeans only. 1931.	
Asiatics	18,000	17,800	Asiatics
Native	42,750	43,750	Native
Coloured	4,000	4,250	Coloured
Europeans	50,480	59,250	Europeans
125,230		125,100	

(ii) Births.

The following table shows the recorded births - all races - and birth rates in the case of residents only, the past nine years.

BIRTHS :

	EUROPEAN		COLOURED		NATIVE		ASIATIC	
	Births	Rates	Births	Rates	Births	Rates	Births	Rates.
1924	919	18.09	54	12.02	19	1.17	770	47.67
1925	1025	19.95	84	45.7	40	1.43	665	39.76
1926	-	19.63	92	48.91	37	0.97	909	54.09
1927	1220	22.54	82	31.01	21	0.55	792	46.65
1928	986	17.34	117	34.70	49	1.54	679	39.94
1929	984	17.31	127	31.00	76	1.80	762	44.33
1930	973	16.06	136	32.84	129	2.72	658	37.96
1931	954	15.75	141	33.23	126	2.88	758	42.44
1932	920	15.46	160	37.29	181	4.13	826	44.64

ILLEGITIMATE BIRTHS - BOROUGH RESIDENTS.

	EUROPEAN		COLOURED		NATIVE		ASIATIC.	
	M.	F.	M.	F.	M.	F.	M.	F.
Births	17	9	22	20	61	55	1	-
Percentages	2.8		26.2					

STILL BIRTHS.

	<u>EUROPEAN</u>	<u>COLOURED.</u>
Notified	23	3
Registered	30	8

BIRTHS.

The European Birth Rate, 15.46 is the lowest on record. The continued economic depression has undoubtedly had a lowering effect on the Birth Rate, which has been decreasing steadily since 1927. The Non-European Birth Rate, on the other hand, continues to increase, more especially that of the Native section.

(iii) DEATHS :

-3-

The European Death Rate, 8.45 per thousand of the population, was lower than that of the two previous years. Non-European Death Rates also showed a decrease, except in the case of the Coloured Section, for which the Death Rate was 15.62 as compared with 12.97 in the previous year.

TABLE SHOWING BOROUGH DEATHS & RATES FOR A PERIOD OF NINE YEARS.

YEAR	EUROPEAN Deaths:Rates		COLOURED Deaths:Rates		NATIVES Deaths:Rates		ASIATICS Deaths:Rates		TOTAL Deaths.
1924	473	9.31	23	5.14	234	6.68	300	18.57	1,030
1925	537	10.95	55	29.92	242	8.65	314	20.77	1,148
1926	460	8.81	59	31.36	275	7.23	303	18.03	1,097
1927	507	9.37	62	23.45	287	7.55	319	18.79	1,175
1928	476	8.37	40	11.83	248	6.49	269	15.82	1,033
1929	503	8.42	42	10.25	285	6.75	250	14.54	1,080
1930	508	8.83	5	1.20	319	7.31	266	15.35	1,098
1931	561	9.47	55	12.97	349	7.97	231	12.93	1,196
1932	502	8.45	67	15.62	318	7.27	210	11.35	1,097

INFANTILE MORTALITY:

The following table shows the Infantile Mortality figure over the past 8 years (Borough Europeans only).

	1925	1926	1927	1928	1929	1930	1931	1932
Deaths	82	47	35	44	46	36	36	44
Mortality Rate	83.84	45.81	36.3	44.62	46.64	36.99	37.73	47.82

The European Infantile Mortality shows an increase - 44 as compared with 36 in each of the two previous years.

The European death rate, 8.65 per thousand of the population, was lower than that of the two previous years. Non-European death rates also showed a decrease, except in the case of the Chinese population, for which the death rate was 13.82 as compared with 13.57 in the previous year.

TABLE SHOWING EUROPEAN DEATHS & RATES FOR A PERIOD OF NINE YEARS.

Year	EUROPEAN		CHINESE		NATIVE		ASIAN	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1921	473	9.31	28	6.11	334	6.88	300	18.37
1920	537	10.98	35	7.50	345	8.02	314	20.77
1919	450	8.81	40	8.50	373	7.33	303	18.03
1918	507	9.87	45	9.50	357	7.33	319	18.79
1917	496	8.37	40	8.50	345	6.48	300	18.82
1916	503	8.48	45	9.50	345	6.48	300	18.82
1915	508	8.83	5	1.10	319	7.33	300	18.82
1914	551	9.47	35	7.50	345	7.33	301	18.82
1913	502	8.40	37	7.83	319	7.33	301	18.82

THE MORTALITY

The following table shows the infantile mortality figures over the past 5 years (European only).

Year	1921	1920	1919	1918	1917	1916	1915	1914	1913
Infantile Mortality	82	83	47	35	31	45	40	35	35
Rate	83.64	83.64	48.81	36.3	31.82	46.64	38.99	37.73	37.73

The European infantile mortality shows an increase compared with 1913 in each of the two previous years.

INFANTILE MORTALITY - AGES AND
CAUSES OF DEATH.

	Weeks.			Months.			Total under 1 year.
	0-1	1-2	2-4	1-3	3-6	6-12	
Bronchitis						1	1
Diarrhoea & Enteritis			2		2	2	6
Congenital Debility					1		1
Prematurity	11						11
Broncho-Pneumonia	1				1	2	4
Congenital Heart	2	1		2			5
Intestinal Obstruction					1		1
Whooping Cough						1	1
Syphilis			1				1
Spina-Bifida	1	1		1			3
Convulsions	1						1
Hydrocephalus				1		1	2
Meningococcus Meningitis						1	1
Acute Endocarditis						1	1
Other diseases of Stomach				1			1
Injury at Birth	1						1
Other diseases peculiar to early infancy.	1						1
Cerebral Haemorrhage	1						1
Ill-defined.				1			1
	19	2	3	6	5	9	44

The European Maternal Mortality Rate was slightly in excess of that of the previous year, being 3.28 as compared with 2.09 per thousand births.

Table showing the Maternal Mortality figure for the past five years.

	1928	1929	1930	1931	1932
Deaths	-	-	4	2	3
Mortality Rate	4.05	3.04	4.11	2.09	3.28

CAUSES OF DEATH.
INFANTILE MORTALITY - AGES AND

TO	Wk	Months				Weeks				
		1-3	3-6	6-12	1-12	1-3	3-6	6-12	1-12	
		1	2	3	4	1	2	3	4	Infantile
		2	1	1	1	1	1	1	1	Diarrhoea & Enteritis
		3	1	1	1	1	1	1	1	Genital Gleet
		4	1	1	1	1	1	1	1	Ascarid
		5	1	1	1	1	1	1	1	Whooping Cough
		6	1	1	1	1	1	1	1	Whooping Cough
		7	1	1	1	1	1	1	1	Whooping Cough
		8	1	1	1	1	1	1	1	Whooping Cough
		9	1	1	1	1	1	1	1	Whooping Cough
		10	1	1	1	1	1	1	1	Whooping Cough
		11	1	1	1	1	1	1	1	Whooping Cough
		12	1	1	1	1	1	1	1	Whooping Cough
		13	1	1	1	1	1	1	1	Whooping Cough
		14	1	1	1	1	1	1	1	Whooping Cough
		15	1	1	1	1	1	1	1	Whooping Cough
		16	1	1	1	1	1	1	1	Whooping Cough
		17	1	1	1	1	1	1	1	Whooping Cough
		18	1	1	1	1	1	1	1	Whooping Cough
		19	1	1	1	1	1	1	1	Whooping Cough
		20	1	1	1	1	1	1	1	Whooping Cough
		21	1	1	1	1	1	1	1	Whooping Cough
		22	1	1	1	1	1	1	1	Whooping Cough
		23	1	1	1	1	1	1	1	Whooping Cough
		24	1	1	1	1	1	1	1	Whooping Cough
		25	1	1	1	1	1	1	1	Whooping Cough
		26	1	1	1	1	1	1	1	Whooping Cough
		27	1	1	1	1	1	1	1	Whooping Cough
		28	1	1	1	1	1	1	1	Whooping Cough
		29	1	1	1	1	1	1	1	Whooping Cough
		30	1	1	1	1	1	1	1	Whooping Cough
		31	1	1	1	1	1	1	1	Whooping Cough

The European Maternal Mortality Rate was
 slightly in excess of that of the previous year, being 3.28 as
 compared with 3.09 per thousand births.
 Table showing the Maternal Mortality figure for
 the five years.

Year	Maternal Mortality Rate
1928	3.09
1929	3.09
1930	3.28
1931	3.28
1932	3.28

PERCENTAGES OF DEATHS AT VARIOUS AGE PERIODS (EUROPEANS)

Age Period	No. of Deaths	Percentages of Total Deaths at all ages.
Under 1 year	44	8.9
1 - 2 years	2	0.5
2 - 5 years	6	1.0
1 - 5 years	53	10.4
5 -15 years	5	1.0
15-25 years	14	2.7
25-45 years	66	13.1
45-65 years	185	36.7
65 years & Over	180	37.7
TOTAL:	502	

TABLES SHOWING DEATHS FROM CERTAIN MAIN CAUSES
1930/31 & 1931/32.

Diseases.	No. of Deaths 1929/30:1931/2.		Proportion per 1,000 deaths from all causes. 1929/30: 1931/32.	
Infective Intestinal Diseases (Enteric Fever, Dysentery, Diarrhoea & Enteritis).....	29	19	52	37
Cancer.....	69	71	121	141
Heart & Circulatory Sys...	136	101	242	201
Diseases of Nervous Sys...	20	30	35	59
Diseases of Birth & Early Development.....	14	15	26	30
Pneumonia & Bronchitis....	41	32	73	63
Pulmonary Tuberculosis.... (Incl. Phthisis).....	32	20	57	39
Tuberculosis - Other forms	4	2	7	4
Genito-Urinary.....	32	37	57	73

There were fewer deaths from Infectious Intestinal Diseases, Heart & Circulatory Diseases, Pneumonia & Pulmonary Tuberculosis than in the previous year.

PERCENTAGES OF DEATHS AT VARIOUS AGE PERIODS (EUROPEANS)

Age Period	No. of Deaths	Percentage of Total Deaths
Under 1 year	44	8.9
1 - 5 years	3	0.6
5 - 15 years	8	1.0
15 - 25 years	63	10.4
25 - 35 years	5	1.0
35 - 45 years	14	2.7
45 - 55 years	66	13.1
55 - 65 years	125	25.7
65 years & Over	180	37.7
TOTAL	608	

TABLES SHOWING DEATHS FROM CERTAIN MAIN CAUSES
1930/31 & 1931/32

Diseases	No. of Deaths 1930/31	No. of Deaths 1931/32	Proportion per death from all causes 1930/31
Infective Intestinal Diseases (Enteric Fever)	27	19	52
Bacterial Dysentery & Shigellosis	88	71	181
Heart & Circulatory Diseases	138	101	248
Diseases of Nervous System	20	30	38
Diseases of Birth & Early Development	14	16	26
Pneumonia & Bronchitis	41	32	73
Primary Tuberculosis (incl. miliary)	38	20	57
Tuberculosis - Other forms	4	2	7
Genito-Urinary	32	37	57

There were fewer deaths from infectious diseases, Heart & Circulatory Diseases, Pneumonia & Primary Tuberculosis than in the previous year.

TABLE "B" SHOWING DEATHS FROM CERTAIN MAIN CAUSES - OTHER THAN EUROPEANS.

	NUMBER OF DEATHS.			PROPORTION PER 1,000 DEATHS FROM ALL CAUSES.		
	Coloured. 1930/31; 1931/32	Natives. 1930/31; 1931/32	Asiaties. 1930/31; 1931/32	Coloured 1930/31; 1931/32	Native 1930/31; 1931/32	Asiaties. 1930/31; 1931/32
Infective Intestinal Dis- eases (Enteric Fever, Dysentery, Diarrhoea & Enteritis).....	4	38	35	73	109	110
Cancer.....	1	3	2	18	8	6
Heart & Circulatory Sys...	4	22	15	73	63	47
Nervous System.....	4	10	7	73	25	22
Birth & Early Development.	6	27	25	109	77	78
Pneumonia & Bronchitis....	7	54	55	127	154	172
Tuberculosis Pulmonary.....	10	50	42	182	143	132
Tuberculosis - Non.Pulm...	-	5	3	-	14	9

DEATH RETURNS.

		<u>BOROUGH</u>				<u>IMPORTED.</u>			
<u>EPIDEMIC, ENDEMIC, CONTAGIOUS & INFECTIOUS DIS.</u>		<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>
001/1	Enteric Fever	4	1	7	2	3	2	14	1
001/2	Paratyphoid Fever	-	-	-	-	-	-	1	-
005/1	Malaria	28	4	42	15	20	4	121	6
007/x	Measles	-	-	-	-	1	-	1	-
009/x	Whooping Cough	1	-	-	3	-	-	-	-
010/x	Diphtheria & Croup	-	1	-	-	3	-	-	-
011/1	Influenza - Pulm. Complications	9	-	-	-	-	-	-	-
011/2	Influenza - without Pulm. Comp.....	2	-	3	-	-	-	-	-
016/1	Dysentery - Amoebic	-	-	3	1	3	1	9	-
016/2	Dysentery - Bacillary	2	2	1	-	1	2	11	-
016/3	Dysentery - Other	-	-	12	1	-	-	51	-
021/x	Erysipelas (non-puerperal)	1	-	-	-	1	-	1	-
023/x	Encephalitis - Lethargic ^{ic} a	-	-	-	-	1	-	-	-
024/x	Meningitis - Cerebro-spinal	1	1	1	-	1	-	1	-
029/x	Tetanus	1	-	1	1	-	-	1	-
031/x	Tuberculosis - Pulm.....	18	11	37	13	7	11	84	6
032/x	Tuberculosis - Meningeal.....	-	1	-	1	1	-	1	2
033/x	Tuberculosis - Abdominal	-	-	1	5	-	-	2	1
034/x	Tuberculosis - Vertebral Column	-	-	-	-	-	-	2	-
035/x	Tuberculosis - Joints	-	-	-	-	1	-	-	-
036/3	Tuberculosis - Lymphatic System.....	-	-	-	-	-	-	1	-
036/5	Tuberculosis - Other Organs	-	-	-	-	-	-	3	-
037/1	Tuberculosis - Acute Disseminated.....	1	1	-	-	-	-	-	1
037/2	Tuberculosis - Chronic disseminated...	1	-	2	3	-	1	12	2
038/x	Syphilis	3	-	14	-	-	-	14	1
041/x	Purulent Infection	5	-	1	-	3	2	2	-
042/x	Other Infections	1	-	-	-	-	-	-	-

CARRIED FORWARD :

78 22 125 45 46 23 332 20

<u>VENEREAL DISEASES NOT INCLUDED IN CLASS I.</u>					<u>BOROUGH</u>				<u>IMPORTED.</u>			
					<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>
BROUGHT FORWARD :					78	22	125	45	46	23	332	20
043/x	Cancer - Buccal Cavity	7	-	-	-	-	-	-	-	-	1	-
044/x	Cancer - Stomach, Liver & Oesophagus	21	2	1	2	8	-	4	1	-	-	-
045/x	Cancer - Peritoneum, Intestines Rect.	8	-	-	-	-	-	-	-	-	-	-
046/x	Cancer - Female Genital Organs.....	12	-	-	1	4	1	1	2	-	-	-
047/x	Cancer - Breast	10	-	-	-	3	1	-	-	-	-	-
049/x	Cancer - Other & Unspecified Organs	13	-	1	-	1	-	7	1	-	-	-
050/x	Other Tumours	1	-	-	-	-	-	-	-	-	-	-
051/x	Rheumatic Fever	2	-	-	-	-	-	-	-	-	-	-
052/x	Chronic Rheumatism & Gout	1	-	-	-	1	-	-	-	-	-	-
054/x	Pellagra	-	-	-	-	-	-	1	-	-	-	-
057/x	Diabetes	14	-	-	2	1	-	1	1	-	-	-
058/1	Pernicious Anaemia	4	-	-	-	-	-	-	-	-	-	-
058/2	Other Anaemias & Chlorosis	1	-	-	1	2	-	-	-	-	-	-
060/1	Exophthalmic Goitre	2	-	-	-	2	-	-	-	-	-	-
065/1	Leucaemia	4	-	-	-	-	-	-	-	-	-	-
065/2	Lymphadenoma, Hodgkins Disease	1	-	-	-	-	-	-	-	-	-	-
066/x	Alcoholism	2	-	-	-	-	-	-	-	-	-	-
<u>DISEASE OF NERVOUS SYSTEM & SENSE ORGANS.</u>												
070/x	Encephalitis	1	-	1	-	-	-	1	-	-	-	-
071/x	Simple Meningitis	1	3	1	1	2	-	2	-	-	-	-
073/x	Other Diseases Spinal Cord	2	-	1	-	1	-	1	-	-	-	-
074/1	Cerebral Haemorrhage	11	2	2	2	1	-	2	-	-	-	-
074/2	Cerebral Thrombosis & Embolism.....	7	-	-	-	-	-	1	-	-	-	-
075/1	Hemiplegia	6	-	-	-	1	-	1	-	-	-	-
075/2	Paralysis	-	-	-	1	-	-	-	-	-	-	-
076/x	General Paralysis of Insane	-	-	-	-	-	1	-	-	-	-	-
078/x	Epilepsy	-	-	1	1	1	-	3	-	-	-	-
CARRIED FORWARD :					209	29	133	56	74	26	358	25

DISEASES NOT INCLUDED IN CLASS I.				BOROUGH				IMPORT			
E. C. R. A.				E. C. R. A.				E. C. R. A.			
Carried Forward :				78 22 12 8 43				46 20 22			
Cancer - Buccal Cavity				7	-	-	-	-	-	-	1
Cancer - Stomach, Liver & Oesophagus				21	2	1	2	8	-	-	4
Cancer - Peritoneum, Intestines Rect.				8	-	-	-	-	-	-	-
Cancer - Female Genital Organs				12	-	1	-	4	1	1	1
Cancer - Breast				10	-	-	-	3	1	-	-
Cancer - Other & Unspecified Organs				12	-	1	-	1	-	7	-
Other Tumors				1	-	-	-	-	-	-	-
Rheumatic Fever				2	-	-	-	-	-	-	-
Chronic Rheumatism & Gout				1	-	-	-	1	-	-	-
Polio				-	-	-	-	-	-	-	1
Diabetes				12	-	2	-	1	-	1	-
Pernicious Anemia				4	-	-	-	-	-	-	-
Other Anemias & Chlorosis				1	-	1	-	2	-	-	-
Rheumatic Gout				2	-	-	-	2	-	-	-
Leucemia				4	-	-	-	-	-	-	-
Lymphadenoma, Hodgkin's Disease				1	-	-	-	-	-	-	-
Alcoholism				2	-	-	-	-	-	-	-
E OF NERVOUS SYSTEM & SENSE ORGANS.											
Encephalitis				1	-	1	-	-	-	-	1
Styptic Meningitis				1	2	1	1	2	-	2	-
Other Diseases Spinal Cord				2	-	1	-	1	-	1	-
Cerebral Hemorrhage				12	2	2	2	1	-	2	-
Cerebral Thrombosis & Embolism				7	-	-	-	-	-	1	-
Hemiplegia				2	-	-	-	1	-	1	-
Paralysis				-	-	1	-	-	-	-	-
General Paralysis of Insane				-	-	-	-	1	-	-	-
Epilepsy				-	-	1	1	1	-	2	-
Carried Forward :				202 22 122 22				74 22 222			

	<u>BOROUGH</u>				<u>IMPORTED.</u>			
	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>
<u>DISEASES OF NERVOUS SYS. & SENSE ORGANS.</u>								
BROUGHT FORWARD :	209	29	133	56	74	26	358	25
80/x Convulsions - under 5 years.....	1	-	1	1	-	-	-	-
81/x Chorea	-	-	-	-	-	-	-	1
84/x Other Diseases of Nervous Sys...	1	-	-	1	2	-	-	-
<u>DISEASES OF CIRCULATORY SYSTEM :</u>								
87/x Pericarditis	-	-	-	-	1	-	-	-
88/1 Acute Endocarditis	6	-	1	2	4	-	2	-
88/2 Acute Myocarditis	22	2	3	1	5	-	10	3
89/x Angina Pectoris	3	-	-	1	1	-	1	-
90/1 Valvular Disease of Heart	4	-	1	1	1	-	-	-
90/2 Fatty Degeneration of Heart	-	-	-	1	-	-	-	-
90/3 Other Diseases of the Heart	11	1	2	1	2	1	5	2
91/1 Aneurism	1	-	1	-	-	-	1	-
91/2 Arterial Sclerosis	30	1	1	2	6	-	-	-
91/3 Other Diseases of Arteries.....	5	-	-	-	-	-	-	-
91/4 Aortic Aneurism	1	-	-	-	-	-	-	-
92/x Embolism & Thrombosis	-	-	1	-	1	-	-	-
94/x Disease of Lymphatic System.....	-	1	-	-	-	-	-	-
95/x Haemorrhage	-	-	-	-	1	-	-	-
96/x Other Diseases Circulatory Sys..	18	-	5	1	3	-	4	2
<u>DISEASES OF RESPIRATORY SYSTEM :</u>								
98/x Disease of Larynx	-	-	-	-	1	-	-	-
99/1 Bronchitis - Acute	4	1	2	3	-	-	1	-
99/2 Bronchitis - Chronic	3	2	-	1	1	-	-	1
99/3 Bronchitis - undefined (under 5)	-	-	1	2	1	-	3	-
99/4 Bronchitis - undefined (5 & over)	-	-	1	-	-	-	1	-
100/x Broncho-Pneumonia	16	8	26	32	7	2	44	1
CARRIED FORWARD:	335	45	179	106	111	29	430	35

10 3 47 55 11 2

<u>DISEASES OF RESPIRATORY SYS. CONTD.</u>	<u>BOROUGH</u>				<u>IMPORTED.</u>			
	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>
BRUGHT FORWARD :	335	45	179	106	111	29	430	35
101/1 Pneumonia Lobar	2	11	9	3	2	-	3	2
101/2 Pneumonia - Undefined.....	7	1	16	6	2	-	16	1
102/x Pleurisy	-	1	-	-	1	-	3	-
103/x Pulm. Congestion	1	-	3	-	-	-	1	-
105/x Asthma	2	-	-	3	-	-	-	-
106/x Pulm. Emphysema	1	-	-	-	-	-	1	-
107/2 Diseases of Medeasturum.....	-	-	-	-	-	-	1	-
107/3 Other Dis. Respiratory System.	1	-	1	-	1	-	-	-
107/4 Miners Phthisis - without T.B.	1	-	-	2	1	-	3	-
107/5 Miners Phthisis - with T.B....	2	1	5	3	2	1	42	2
<u>DISEASE OF DIGESTIVE SYSTEM :</u>								
108/x Diseases of Mouth & Annexa ...	-	-	1	-	-	-	-	-
109/x Diseases of Pharynx & Tonsils.	1	-	-	-	-	-	1	-
111/1 Ulcer of Stomach	3	-	-	-	-	-	1	-
111/2 Ulcer - Duodenum	-	-	-	-	2	-	-	-
112/x Other Diseases of Stomach.....	1	-	2	1	2	-	2	-
113/x Diarrhoea & Enteritis - under 1.7	3	11	13	3	-	13	-	-
114/x -do- -do- - 2 yrs & Over.	6	-	4	4	-	-	6	-
117/x Appendicitis & typhlitis.....	6	-	4	-	1	-	1	-
118/1 Hernia	2	-	-	1	3	-	1	-
118/2 Intestinal Obstruction	5	-	-	1	-	-	2	-
119/ Other Diseases of Intestines.	4	-	-	-	-	-	3	-
122/2 Cirrhosis.....	-	1	1	1	3	-	-	-
123/x Biliary Calculi	3	-	-	-	2	-	-	-
124/x Other Diseases of Liver	3	-	-	-	4	-	3	-
125/x Diseases of the Pancreas	1	-	-	-	1	-	-	-
126/x Peritonitis of unstated origin	2	1	1	-	-	-	2	-
CARRIED FORWARD :	396	54	237	144	141	30	535	40

OF RESPIRATORY SYSTEM									
OF DIGESTIVE SYSTEM									
DISEASES OF MOUTH & PHARYNX									
DISEASES OF LARYNX & TRACHEA									
DISEASES OF STOMACH									
DISEASES OF SMALL INTESTINE									
DISEASES OF LARGE INTESTINE									
DISEASES OF LIVER									
DISEASES OF PANCREAS									
DISEASES OF BILIRY CALICUL									
DISEASES OF SPLEEN									
DISEASES OF ADRENAL GLANDS									
DISEASES OF THYROID GLAND									
DISEASES OF TESTES									
DISEASES OF UTERUS & VAGINA									
DISEASES OF BLADDER									
DISEASES OF PROSTATE GLAND									
DISEASES OF PENIS									
DISEASES OF VULVA									
DISEASES OF CLITORIS									
DISEASES OF PERINEUM									
DISEASES OF RECTUM									
DISEASES OF ANUS									
DISEASES OF SKIN									
DISEASES OF EYE									
DISEASES OF EAR									
DISEASES OF NOSE									
DISEASES OF THROAT									
DISEASES OF LUNGS									
DISEASES OF BRONCHI									
DISEASES OF PLEURA									
DISEASES OF HEART									
DISEASES OF BLOOD VESSELS									
DISEASES OF NERVOUS SYSTEM									
DISEASES OF MIND									

	BOROUGH				IMPORTED.			
	E.	C.	N.	A.	E.	C.	N.	A.
<u>DISEASES OF DIGESTIVE SYSTEM CONTD.</u>								
BROUGHT FORWARD :	396	54	237	144	141	30	535	40
127/x Other Diseases Digestive Sys.	-	-	-	1	-	-	-	-
<u>NON V.D. DIS. OF GENITO-URINARY SYS & ANNEXA.</u>								
128/x Nephritis - Acute	6	-	5	3	1	1	2	1
129/x Nephritis - Chronic	16	1	5	1	10	2	-	2
131/x Other Dis. of Kidneys & Annexa	3	2	-	2	-	-	2	-
133/2 Other Diseases of Bladder....	1	-	-	-	1	-	-	-
134/1 Structure of Urethra	2	-	-	-	-	-	-	-
134/2 Other Diseases of Urethra....	-	-	1	1	-	-	-	-
135/x Diseases of Prostate	6	-	-	-	2	-	2	-
137/x Cysts & Other Tumours of Ovary	1	-	-	-	-	-	-	-
138/x Salpingitis & Pelvic Abscess.	1	-	-	-	-	-	-	-
139/x Uterine Tumour	1	-	-	-	-	-	-	-
141/1 Diseases of Uterus	-	-	-	1	1	-	1	-
141/2 Other Dis.of Female Genital Organs....	-	-	1	-	-	-	-	-
<u>THE PUERPERAL STATE :</u>								
143/2 Ectopic Gestation	-	-	1	-	-	-	-	-
143/3 Other Accidents of Pregnancy.	1	-	-	-	1	1	-	-
144/x Puerperal Haemorrhage.....	-	-	-	1	-	-	1	-
145/x Other Accidents of Labour...	-	-	-	-	-	-	1	-
146/x Puerperal Septicaemia	-	-	1	1	-	1	3	1
147/x Puerperal Plegmasia	-	1	-	-	-	-	-	-
148/x Puerperal Albuminuria & Con..	1	-	-	-	-	-	-	-
<u>DISEASES OF SKIN & CELLULAR TISSUE.</u>								
151/1 Gangrene	-	-	-	-	1	-	-	-
152/x Furuncle	1	1	-	-	-	-	-	-
153/x Acute Abscess	-	-	1	1	-	-	1	-
CARRIED FORWARD :	436	59	252	156	158	35	548	44

					<u>BOROUGH</u>				<u>IMPORTED.</u>			
<u>DISEASES OF BONES & ORGANS OF LOCOMOTION.</u>					<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>	<u>E.</u>	<u>C.</u>	<u>N.</u>	<u>A.</u>
BROUGHT FORWARD :					436	59	252	156	158	35	548	44
155/x	Diseases of the Bones	-	-	-	1	1	-	1	-	-	-	-
156/x	Diseases of Joints	-	-	-	-	1	-	-	-	-	-	-
158/x	Other diseases of Organs of Loco.	-	-	-	-	1	-	-	-	-	-	-
<u>MALFORMATIONS :</u>												
159/1	Congenital Heart	5	-	-	2	1	-	-	-	-	-	-
159/2	Hydrocephalus	2	-	-	-	-	-	-	-	-	-	-
159/3	Spina-Bifida	3	-	-	1	1	-	-	-	-	-	-
159/4	Other Forms	-	-	-	-	1	-	-	-	-	-	-
<u>DISEASES OF EARLY INFANCY :</u>												
160/x	Congenital Deb. Icterus & Sclerema	1	2	2	10	6	-	2	-	-	-	-
161/1	Premature Birth	11	2	19	4	4	-	6	-	-	-	-
161/2	Injury of Birth	1	-	-	-	1	-	4	-	-	-	-
162/x	Other Dis. Peculiar to early infancy	1	1	4	3	1	-	5	-	-	-	-
<u>OLD AGE :</u>												
164/x	Senility	11	-	-	5	-	-	4	3	-	-	-
<u>EXTERNAL CAUSES :</u>												
165/x	Suicide by solid or liquid poisons	4	-	-	-	-	-	-	-	-	-	-
167/x	Suicide by Poisonous Gas	1	-	-	-	-	-	-	-	-	-	-
170/x	Suicide by Firearms	3	-	-	-	1	-	-	-	-	-	-
179/x	Burns	1	-	-	1	2	-	-	-	-	-	-
182/x	Accidental Drowning	1	-	-	-	-	-	-	-	-	-	-
183/x	Accidental injury by firearms....	1	-	-	-	-	-	-	-	-	-	-
185/x	Accidental injury by fall	2	-	-	-	1	-	-	-	-	-	-
187/x	Accidental injury by machinery...	-	-	-	-	1	-	-	-	-	-	-
188/1	Accidental injury by railways....	1	-	-	-	-	-	-	-	-	-	-
CARRIED FORWARD :					485	64	277	183	181	35	570	47

BOROUGH

IMPORTED.

EXTERNAL CAUSES :

	E.	C.	N.	A.	E.	C.	N.	A.
BROUGHT FORWARD :	485	64	277	183	181	35	570	47
188/2 Accidental injury by motor vehicle	3	1	-	-	1	-	-	-
188/4 Accidental injury other vehicles..	1	-	-	-	1	-	-	-
188/6 Accidental injury by Motor cycles.	3	-	-	-	2	-	-	-
202/1 Other external violence	-	1	-	-	-	-	-	-
203/x Violent Death - unknown causation.	1	-	-	-	-	-	-	-

ILL-DEFINED DISEASES :

204/x Sudden Death	-	-	-	-	-	-	-	-
205/x Cause of Death unstated or ill-defined.....	9	1	41	27	4	-	55	11

502 67 318 211 188 35 625 58

Scrub typhus.....	1	-	-	-	-	-	-	-
Paratyphoid fever.....	3	-	-	-	-	-	-	-
Typhoid.....	-	-	-	-	-	-	-	-
Shigellosis Bacillary.....	-	-	-	-	-	-	-	-
Shigellosis.....	-	1	-	-	-	-	-	-
Leptospirosis.....	-	-	-	-	-	-	-	-
Cerebro-spinal Meningitis.....	3	-	1	-	-	-	4	2
Dysentery - Gen.....	1	-	-	-	-	-	-	-
Encephalitis - Inf.....	1	-	-	-	-	-	-	-
Malaria.....	137	45	13	2	141	9	23	5
TOTALS:	389	116	37	39	325	221	62	41
							712	137

SCARLET FEVER :

	1925/26	1927/28	1928/29	1929/30	1930/31	1931/32.
						Scro. Imp.
Cases	26	43	59	47	37	22
Deaths	-	-	-	1	-	-

Borough Europeans only :

Case incidence for 1,000 of population = 9.37.

INFORMANTS

RECORDS

2. C. R. A. E. C. R.

483 24 277 183 181 32 270

BRUGHT FORWARD

Accidental injury by motor vehicle 3 1 - - -

Accidental injury by other vehicles 1 - - -

Accidental injury by motor cycles 3 - - -

Other external violence 1 - - -

Violent death - unknown suggestion 1 - - -

DEATHS

Death 1 - - -

Causes of death stated on file - defined 2 1 - 41 25 4 - 22

802 67 218 211 188 32 632

With the exception of Malaria, the incidence of the common infectious diseases was extremely low throughout the year.

2(iv) INFECTIOUS DISEASES.

TABLE SHOWING NOTIFIED INFECTIOUS DISEASES,
ALL RACES.

DISEASE.	Euro.		Coloured.		Native.		Asiatic.		Total.	
	B.	I.	B.	I.	B.	I.	B.	I.	B.	I.
Diphtheria.....	73	27	3	2	1	3	-	1	77	33
Enteric Fever.....	32	19	4	-	15	17	3	5	54	41
Scarlet Fever.....	22	4	-	-	-	-	-	-	22	4
Tuberculosis Pulm...	43	14	12	53	51	152	23	15	129	234
do Non.Pulm...	3	3	2	2	9	30	12	11	26	46
Typhus Fever.....	4	1	-	-	-	-	-	-	4	1
Erysipelas.....	16	2	2	-	1	1	-	-	19	3
Puerperal Fever.....	3	-	-	-	1	1	1	-	5	1
Anthrax.....	-	-	-	-	-	-	-	-	-	-
Ophthalmia Neonatorum	-	-	-	-	1	1	-	-	1	1
Trachoma.....	-	1	-	-	-	-	-	1	-	2
Leprosy.....	-	-	-	-	1	5	-	-	1	5
Cerebro-spinal										
Meningitis.....	3	-	1	-	-	2	-	-	4	2
Ophthalmia - Gon....	1	-	-	-	1	-	-	-	2	-
Encephalitis -Inf....	1	-	-	-	-	-	-	-	1	-
Malaria.....	187	45	13	2	144	9	23	8	367	64
TOTALS:	388	116	37	59	225	221	62	41	712	437

2.(v) SCARLET FEVER :

	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32.	
						Boro.	Imp.
Cases	26	43	59	47	27	22	4
Deaths	-	-	-	1	-	-	-

Borough Europeans only :

Case incidence for 1,000 of population = 0.37.

2(vi) ENTERIC FEVER.

	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32.	
						Boro.	Imp.
Cases	111	143	142	107	94	54	41
Deaths	23	35	26	24	19	14	21

Borough Europeans only :

Case Mortality per cent. 12.5
 Case incidence per 1,000 of population 0.5
 Death Rate per 1,000 of population 0.7

(vii) DIPHTHERIA:

	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32.	
						Boro.	Imp.
Cases	119	153	117	120	163	77	33
Deaths	8	6	6	8	7	1	3

Borough Europeans only :

Case Mortality -
 Case incidents per 1,000 of population 1.2
 Death Rate -

ENTERIC FEVER.

Year	Cases	Deaths
1926/27	111	23
1927/28	143	35
1928/29	145	28
1929/30	107	24
1930/31	94	18
1931/32	84	14

Borough Europeans only:

Case Mortality per 1,000 of population 12.6
 Case Incidence per 1,000 of population 6.5
 Death Rate per 1,000 of population 0.7

OUTPATIENTS:

Year	Cases	Deaths
1926/27	119	8
1927/28	153	8
1928/29	117	8
1929/30	120	8
1930/31	123	9
1931/32	117	8

Borough Europeans only:

Case Mortality per 1,000 of population 1.1
 Case Incidence per 1,000 of population 1.1
 Death Rate

2.(viii)

INFECTIOUS DISEASES HOSPITAL.

DISEASES.	European.	Coloured.	Native.	Asiatic.	Total.
Diphtheria.....	94	5	9	1	109
Scarlet Fever.....	20	-	1	-	21
Measles.....	25	-	18	4	47
Chicken Pox.....	20	1	73	1	95
Mumps.....	1	-	2	-	3
Typhus Fever.....	3	-	-	1	4
Whooping Cough.....	61	2	5	-	68
Malaria.....	-	-	137	-	137
Trachoma.....	1	-	-	1	2
Vaginitis.....	2	-	-	-	2
Cerebro-spinal Meningitis.	2	2	2	-	6
Sandworm.....	4	-	-	-	4
Observation Influenza.....	19	-	-	7	26
do Typhoid.....	-	1	1	-	1
TOTALS:	252	10	248	15	525

Before the end of the year, a start was made with the erection of the Two New ward Blocks and the Disinfecting & Laundry Station at Congella Hospital. No progress, has, however, been made with Provincial Non-European General Hospital on the same site. The delay was occasioned by the inability of the Government to provide the Province with the necessary capital. It is hoped that the condition of the Exchequer will, in the near future, permit of this important scheme being proceeded with.

(ix) DISINFECTING STATION:

During the year the following work was carried out:

	<u>Rooms disinfected.</u>	<u>Articles wash- ed & Disinfected.</u>
Private Premises.....	326	7,755
Congella Hospital.....	-	65,160
Typhus Fever Precautions.....	-	28,846

AMBULANCE REMOVALS:

The following table shows that a total of 595 cases were conveyed in the Infectious Diseases Ambulance :

Hospitals.	European.	Coloured.	Native.	Asiatic.	Total.
Municipal Isolation	214	90	133	5	442
Government Hospital	34	20	19	3	76
Other Hospitals....	70	4	3	-	77
TOTALS:	318	114	155	8	595

CLEANSING STATION :

Verminous Europeans : baths provided 6,959
 Verminous Natives : baths provided 1,492.

INSPECTING STATION

During the year the following work was carried out:

Articles we	Rooms	Disinfectants
7,755	328	
68,160	-	
28,846	-	

DISINFECTANTS

The following table shows that a total of 328 cases are conveyed in the Infectious Diseases Hospital:

Hospitals	European Colonies	Native Colonies	Total
Isolation Hospital	214	20	234
Government Hospital	34	19	53
Other Hospitals	70	3	73
TOTAL	318	42	360

DISINFECTANTS

Various Europeans : baths provided 6,555
 Various Natives : baths provided 1,432

2(x) LAUNDRY:

A total of 21,826 articles, including towels, coats, etc. were washed for the various Corporation Departments.

39,491 Costumes, slips and towels were washed for the Ocean Beach Baths & Bathing Enclosure.

56,082 Costumes, towels, etc. were washed for the Public Baths, West Street.

The new Disinfecting Station and Laundry at Congella Hospital is estimated to cost £6,000, and the station will replace the existing inadequate and unsatisfactory premises at Alice Street. At the new station, it is intended to handle the laundry from the Addington Hospital and the proposed Non-European General Hospital as well as the routine work for Municipal Departments and Congella Hospital. The largely increased turnover, together with the use of modern laundry appliances, should effect a reduction in the costs of laundry work and disinfection.

Incidentally, the cost of supplying hot water to the Isolation Hospital will be greatly reduced by substituting steam heating direct from the Laundry Boiler for the existing expensive automatic thermo-electric heating system.

(Sx) LAUNDRY

A total of 21,000 articles, including towels, coats, etc., were washed for the various Department.

30,401 Coats, shirts and towels were washed for the Ocean Beach Bath & Machine Department.

26,082 Coats, shirts, etc., were washed for the Pacific Beach, West Street.

The new Electric Station and Laundry at Camp Hospital is estimated at cost \$2,000, and the station will replace the existing incinerator and waste-disposal plant at Albee Street. As the new station is intended to handle the laundry from the Camp Hospital and the proposed Non-Europeans Hospital as well as the route work for Municipal Hospital and Congdon Hospital. The new station will be built together with the cost of the laundry appliances, which will effect a reduction in the cost of laundry work and distribution.

Incidentally, the cost of supplying hot water to the Incineration Hospital will be greatly reduced by substituting steam heating instead of the laundry boiler for the existing expensive automatic steam-electric heating system.

2. (X).

RE VACCINATION OF 12 YEAR OLD CHILDREN & OTHERS.

Registration of 12 year old children :	1,316
Successfully Vaccinated:	579
Insusceptible to Vaccination :	45
Vaccination postponed owing to illness :	24
Previously had smallpox :	-
Ratio of Vaccinations & postponements registered to 12 year old registrations during the year.	49.24

CHILDREN.

Exemption Certificates granted.	162
Applications refused.	3

VACCINATION OF INFANTS & CHILDREN :

Births entered in Vaccination Register.	2,038
Successfully Vaccinated.	957
Insusceptible to Vaccination.	32
Vaccination postponed owing to Illness.	302
Previously had Smallpox.	-
Death of Infants under two years registered.	166
Ratio of Vaccinations and postponements registered to Births registered during the year after allowing for Deaths of Infants under two years.	68.96

RE VACCINATION OF 12 YEAR OLD CHILDREN & OTHERS.

Registration of 12 year old children :
Successfully Vaccinated :
Inaccessible to Vaccination :
Vaccination postponed owing to illness :
Previously had smallpox :

Ratio of Vaccinations & postponements registered
to 12 year old registrations during the year.

EXEMPTION

Exemption Certificates granted.
Applications refused.

VACCINATION OF INFANTS & CHILDREN

Births entered in Vaccination Register.
Successfully Vaccinated.
Inaccessible to Vaccination.
Vaccination postponed owing to illness.
Previously had smallpox.

Death of infants under two years registered.
Ratio of Vaccinations and postponements
registered to births registered during
the year after allowing for deaths of
infants under two years.

Ratio of Vaccinations and postponements
registered to births registered during
the year after allowing for deaths of
infants under two years.

3 (i) TUBERCULOSIS :

Pulmonary Tuberculosis (including Pulm. Phthisis).

	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32.	
						Boro.	Imp.
Cases	280	324	338	342	408	129	234
Deaths	161	163	188	167	207	89	155

Borough Europeans only:

Case incidence per 1,000 of population : 0.72
 Case mortality per cent. 46.5
 Death Rate per 1,000 of population : .30

3 (ii) NON-PULMONARY TUBERCULOSIS.

	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32.	
						Boro.	Imp.
Cases	85	61	70	76	42	26	46
Deaths	48	41	58	36	28	16	30

Borough Europeans only :

Case incidence per 1,000 of population 0.05
 Death Rate per 1,000 of population. 0.03

No further addition has been made to the accomodation for cases of Tuberculosis. In this connection, the delay in proceeding with the Non-European General Hospital at Congella, is regretted. The completion of this scheme should considerably relieve the position as regards the isolation of Native and Indian cases in particular. The proposed New Non-European General Hospital must, indeed, form the basis for any comprehensive scheme for dealing with Tuberculosis in this area, as regards discovery, treatment and isolation of cases.

The suggested scheme for a Sanatorium Colony on the Town Council's Camperdown Estate, has been referred to the various Natal Municipalities and the Natal Municipal Association. The replies received so far indicate that, as soon as the economic situation improves, the suggested scheme will be given practical consideration.

(1) TUBERCULOSIS
 Pulmonary Tuberculosis (including Film. Phthisis).

	1925/26	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32
Deaths	151	163	188	242	408	129	234
Rate	1.61	1.63	1.88	2.42	4.08	1.29	2.34

Borough Europeans only:

Case incidence per 1,000 of population: 0.72
 Case mortality per cent: 48.5
 Death rate per 1,000 of population: 1.30

(1) NON-PULMONARY TUBERCULOSIS

	1925/26	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32
Deaths	48	61	76	42	28	25	46
Rate	0.48	0.61	0.76	0.42	0.28	0.25	0.46

Borough Europeans only:

Case incidence per 1,000 of population: 0.08
 Death rate per 1,000 of population: 0.03

No further addition has been made to the accommodation cases of Tuberculosis. In this connection, the delay in providing the Non-European General Hospital at Gungahlin, is noted. The completion of this scheme would considerably improve the position as regards the isolation of Native and Indian in particular. The proposed New Non-European General Hospital, indeed, form the basis for any comprehensive scheme for dealing with Tuberculosis in this area, as regards discovery, treatment and isolation of cases.

The suggested scheme for a Sanatorium Colony on the Council's Campdown Estate, has been referred to the various Municipalities and the Natal Municipal Association. The scheme is received as far indicate that, as soon as the economic conditions improve, the suggested scheme will be given practical attention.

4. VENEREAL DISEASES.

OUT-PATIENTS:

New Cases.

European - Male	271	
Female	33	
Indian - M. & F.	50	
Native - M.&F.	506	
Coloured - M.&F.	40	900.
Non-Venereal		40.

INJECTION OF N.A.B.

European - M. & F.	322	
Indian - M. & F.	135	
Coloured - M. & F.	60	
Native - M. & F.	803	1,320.

IMMIGRATION.

European - M. & F.	4,099	
Native - M. & F.	1,056	
Col.&IndianM.& F.	821	5,976

DILATIONS:

Europeans -	13	
Col. & Indian	-	13
Wasserman Tests	103	
Slides & Smears	257	
Vaccine Injections	141	
Intramine	-	
Medicine & advice only	1305	
Prostate Massage	36	1,842

Total Attendances at Clinic : 9,213

IN-PATIENTS:

European - Male	74	
- Female	18	
Native - Male	515	
Indian - Male	35	
Coloured - Male	27	
Nat.Ind.&Co. Female.	207	876

Babies born in Ward.

INJECTION OF N.A.B.

European - M. & F.	34	
Nat.Ind.&Co. M.&F.	1, 491	1, 525.

IRRIGATION.

European - M. & F.	2,753	
Native, Ind.&Col.	6,418	9,171

4. YEARLY DISEASES.

CUT-PATIENTS:

New Cases.

European - Male	871
European - Female	135
Indian - M. & F.	50
Native - M. & F.	125
Coloured - M. & F.	40
Non-Venereal	900
	40

INJECTION OF U.S.S.

European - M. & F.	302
Indian - M. & F.	125
Coloured - M. & F.	60
Native - M. & F.	303
	1,330

IMMIGRATION.

European - M. & F.	4,080
Native - M. & F.	1,000
Col. & Indian M. & F.	323
	5,373

STATISTICS:

European	12
Col. & Indian	-
Western Testes	152
Slides & Smears	307
Vaccine Injections	141
Intravaginal	-
Medicine & advice only	1,305
Prostate Massage	32
	1,847

Total Attendance at Clinic:

8,213

IN-PATIENTS:

European - Male	75
European - Female	12
Native - Male	615
Indian - Male	35
Coloured - Male	37
Nat. Ind. & Col. Female	207
	876

Babies born in Ward.

INJECTION OF U.S.S.

European - M. & F.	30
Nat. Ind. & Col. M. & F.	1,491
	1,521

IMMIGRATION.

European - M. & F.	3,703
Native, Ind. & Col.	2,412
	6,115

4(1) An important matter in connection with the control of Venereal disease came to light during the year. It became known that the medical examination of Natives applying for registration withⁱⁿ the Borough, was not sufficiently complete to ensure the discovery of all manifestations of Venereal Disease among the applicants. It appears that this was due to a misconception on the part of the Medical Officer employed by the Native Administration Department, as to the scope of his duties under the appropriate Regulations deriving authority from the Urban Areas' Act. The misconception has, however, now been cleared up and examination of Native males applying for registration is now conducted "in the nude". A considerably larger number of cases of acute and chronic gonorrhoea are now coming to light.

When the Borough boundaries are extended, it will become necessary to consider re-organizing and amplifying the existing system of venereal disease control. District Venereal Clinics will require to be established in the Mayville and South Coast Junction areas. These will serve as local out-patient depots and will serve to attract early cases, particularly Non-Europeans, who would not otherwise receive proper attention.

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5. PLAGUE.

RAT DESTRUCTION.

The following figures show the work carried out by the Rodent Prevention Staff :-

Total Visits.....	32,507
Rats destroyed - private.....	8,792
" " - Corpn.Barracks.,....	833
Baits Laid.....	135,818
Traps set.....	3,913
Rat poison prepared by Department (in lbs).....	263

Although the Department carries out a routine programme of rat extermination in Corporation-owned properties, chief stress is laid upon the preventive side of rodent control. Expert advice and assistance is given free to private property-owners whenever sought.

The operation of the new by-laws controlling poultry-keeping has greatly improved the position in residential areas. The wealth of sub-tropical vegetation in gardens and bush-lands however, will always provide attraction and harbourage for rats. Such conditions are difficult to control.

The greatest stress is laid on the (1) rodent-proofing of food and fodder stores (2) anti-rodent requirements as regards design and structure of new buildings and the conversion or alteration of existing buildings and (3) proper storage and regular removal and disposal of organic domestic and trade refuse.

Advantage is taken of modern methods of extermination by Cyanide Gas and gas-impregnated dust wherever applicable.

6. OTHER COMMUNICABLE OR PREVENTABLE DISEASES :

For the fifth summer in succession, Malaria has been prevalent in the Borough. Although at no time excessive, the outbreak was rather more serious than that of the preceding year. The following figures represent the mortality from Malaria during February, March, April and May in each of the last five years :

1927/28 - 2, 1928/29 - 1, 1929/30 - 16, 1930/31 - 7, 1931/32 - 21

Twenty-five years ago, a Malaria epidemic of low virulence was experienced in Durban. The disease appeared in summer of 1904/1905, reached its maximum in the following year, subsided over the next two years and disappeared in 1909.

European deaths from Malaria during that period were as follow : 1904/05 - 16, 1905/06 - 56, 1906/07 - 18, 1907/08 - 9. Subsequent to 1909, Durban was free from Malaria until the summer of 1927/28, when the present epidemic phase began.

The earlier epidemic began in the north of Zululand, spread southward along the coast as far as Port Shepstone and then subsided, leaving a few endemic centres of infection in the large river valleys near the coast, particularly in the northern section.

It appears that the subsidence of the earlier epidemic was due to the operation of some general epidemiological factor or factors, the nature of which has not been determined. At the present juncture, after five years of renewed Malaria activity, the question naturally

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arises: will the present Malaria epidemic subside mysteriously in the manner of its predecessor?

If it does so subside, then a very great menace will have been escaped and valuable time gained for the prosecution of necessary preventive measures throughout the threatened areas.

On the other hand, if the disease reappears next season, on anything like the scale of the preceding year, the fact will have to be recognised that Malaria has definitely become an endemic disease in Natal.

As so much is unknown or uncertainly known, about the epidemiology of Malaria in Natal, it is impossible to predict the nature or extent of next summer's manifestation of malaria.

The outstanding factor in the Malaria problem in Durban is that its occurrence is essentially the local manifestation of an epidemic which has spread throughout the Province of Natal. In this latter respect, the present wave of Malaria resembles that of a quarter of a century ago, but there is the further disquieting phenomenon that, this year, the disease has appeared in many hitherto unaffected districts in the Province. The manner of the spread of Malaria throughout Natal this year leaves but little doubt that/....

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that modern methods of transport - both by road and rail - play an important part in the transmission of the disease. It has been proved repeatedly that *Anopheles Costalis* can be conveyed from one point to another in road and railway vehicles. As the receiving and distributing centre for Natal, Durban, during each Malaria season, is open to the introduction of Malaria-carrying mosquitoes from districts infected with Malaria. Moreover, hundreds of malaria patients are brought into the Borough for treatment at the various hospitals and nursing homes. Thus it follows that Malaria in Durban may be either indigenous or imported. From the evidence accumulated over the last five years, one would probably be justified in assuming that as much as 50% of malaria prevalence in Durban is properly classifiable as imported in the sense that neither the primary source of infection nor the mosquito vector originated within the Borough boundaries. Thus it follows that as long as Malaria is epidemic or endemic in Natal, the disease will occur in Durban in despite of effective Anti-larval measures.

Nevertheless, the experience of 1932 strengthens the opinion that malaria is readily controllable in Durban itself. Had it been otherwise, the summer of 1932 must have witnessed a flaring epidemic, instead of which the Durban community escaped more lightly, comparatively speaking, than any other community throughout the affected areas. Pietermaritzburg, although situated 56 miles inland and at an elevation of 2,000 feet above sea-level, showed a greater Malaria Mortality rate than did Durban.

that modern methods of transport - both by road and rail - play an important part in the transmission of the disease. It has been proved repeatedly that Anopheles Gambiae can be conveyed from one point to another in road and railway vehicles. As the receiving and distributing centre for Natal, Durban, during each malaria season, is open to the introduction of malaria-carrying mosquitoes from districts infected with malaria. Moreover, hundreds of malaria patients are brought into the borough for treatment at the various hospitals and nursing homes. Thus it follows that malaria in Durban may be either indigenous or imported. From the evidence accumulated over the last five years, one would probably be justified in assuming that as much as 50% of malaria prevalence in Durban is properly classifiable as imported in the sense that neither the primary source of infection nor the mosquito vector originated within the borough boundaries. Thus it follows that as long as malaria is epidemic or endemic in Natal, the disease will occur in Durban in despite of effective anti-larval measures.

Nevertheless, the experience of 1922 strengthens the opinion that malaria is readily controllable in Durban itself. Had it been otherwise, the autumn of 1922 must have witnessed a flaring epidemic, instead of which the Durban community escaped with slight, comparatively speaking any other community throughout the affected areas.

Historically, although situated 56 miles inland and at an elevation of 2,000 feet above sea-level, showed a great malaria mortality rate than did Durban.

For the past 27 years, a special unit of the Borough Health Department has been engaged in carrying out routine Anti-Malaria measures. In 1928 this unit consisted of one European and fourteen Indians. Since then it has been augmented, until now this staff consists of six Europeans and twenty-eight Indians. One European is engaged in the work of supervising the oil-spraying and draining gangs, whilst five Europeans and two Indians devote their whole time to surveying work. Since January 1st 1932, 25 nurseries of *Anopheles Costalis* have been located in the Borough at the following points :-

Valleys of the Umgeni & Umbilo Rivers.
Eastern Vlei.
Race Course.
Western Vlei and Congella Flats.

Oil-spraying is carried on throughout the year. During the Malaria season, every likely place is sprayed with oil at weekly intervals. The work of spraying gangs is double-checked by European surveyors, who have to ensure that it is efficiently done. The information accruing from notification and the examination of blood slides at the Government Laboratory, led to the discovery of only one breeding place which was not under control. This breeding-place consisted of a small puddle on an unfrequented side-road between the southern boundary of Albert Park and the foreshore. Attention was directed towards this particular locality following the occurrence of a few cases of malaria in the southern end of the Esplanade.

Although the swampy and low-lying areas of Durban have been known for years to attract the *Anopheles Costalis*, on no occasion has this species been found

breeding/

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Valley of the Bagmati & Umlia Rivers.
Eastern Veld.
Rase Camp.
Western Veld and Gogolia River.

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edge-wood between the southern boundary of Albert Park
and the forebore. Attention was directed towards this
particular locality following the occurrence of a few
cases of malaria in the southern end of the Bagmati.
Although the swampy and low-lying areas of
Durban have been known for years to attract the Anopheles
Costalis, on no occasion has this species been found

breeding in the residential areas of the town. Therefore, it would appear that so far as the Borough proper is concerned, Anti-larval measures, directed against the *Anopheles Costalis*, is a problem restricted to the swampy and low-lying areas. All the evidence goes to show that *Anopheles* breeding has been kept down to the absolute minimum on those low-lying areas for which the Borough is responsible - the absolute minimum, that is to say, having regard to existing conditions. It goes without saying that the conditions in many of the swampy and low-lying areas are not at all satisfactory from the point of view of Malaria prevention. In several instances, swamp drainage and reclamation schemes of a minor engineering nature would effect a permanent eradication of the trouble. The long period of immunity prior to the commencement of the present epidemic phase has, no doubt, been responsible for the development of a somewhat too complacent outlook on the question of swamp drainage and reclamation.

In the ordinary course of events such works would naturally take their place in the settled programme of town planning and development, but the position of Malaria to-day can only be described as extraordinary. It would be unwise in any event to reckon upon the possibility that history will repeat itself to the extent that the present epidemic wave-like the 1905-1908 outbreak - will peter out soon after reaching its peak. Experience in other parts of the world goes to show that once Malaria has taken root in a large expanse of territory it tends to maintain itself in endemic form, punctuated at recurrent intervals with outbreaks of epidemic activity. Such may well be the future history of Malaria in Natal. In any case, so far as Durban is concerned,

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the time has undoubtedly come when every possible and practicable measure must be taken against the spread of the disease.

Among the measures which I beg to RECOMMEND should immediately be taken in hand, are the following :-

1. A progressive programme of Swamp Drainage and Reclamation.

2. Consolidation of Anti-Mosquito Sanitation throughout the Borough Area, including lands and premises appertaining to Union and Provincial Government Departments; the control of such sanitation throughout the geographical area of the Borough to be vested in the Town Council as Local Authority for the Borough.

3. Strengthening of the Anti-Mosquito Sanitation Staff by the addition to the establishment of the following :

- (1) One fully qualified Health Inspector, with special experience in Anti-Mosquito Sanitation.
- (2) Five unqualified European surveyors.
- (3) Thirty Indian sprayers.

These additions to the staff become necessary in connection with the increase of area to be controlled after extension of the Borough Boundaries.

4. Provision of facilities for the systematic instruction of Durban school children in Anti-Mosquito Sanitation, such facilities to include the equipment of a special health section in the Durban Museum, and the appointment of a Health Lecturer to be employed whole-time in the giving of such instruction.

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- (3) Thirty Indian surveyors.

These additions to the staff become necessary in connection with the increase of area to be controlled after extension of the Borough boundaries.

4. Provision of facilities for the systematic instruction of Burmese school children in Anti-Mosquito Sanitation, such facilities to include the appointment of a special health section in the Burmese Museum, and the appointment of a Health Lecturer to be employed whole-time in the giving of such instruction.

7.

WATER SUPPLY.

(By Courtesy of the Borough Water Engineer).

(i) SOURCE : UMLAAS RIVER.

The catchment area draining to the storage reservoir at Camperdown is 172 square miles in extent. An additional catchment of 138 square miles drains to the new storage reservoir at Shongweni. A further area of 33 square miles drains to the Intake, making an aggregate of 345 square miles. The total acreage within the catchment area owned by the Corporation is 10,527.

(ii) POSSIBILITIES OF POLLUTION IN CATCHMENT AREA :

The supply in the river and tributaries from such an extensive catchment area is of course subject to pollution, but almost all the human habitations are situated at such distances from streams as renders them innocuous. The Corporation is empowered by the Durban Waterworks Consolidation Act No. 24 of 1921 to take drastic measures if necessary to prevent serious contamination.

(iii) STORAGE:

The total reservoir capacity is made up as follows:

				<u>Storage Reservoirs.</u>	
				<u>Original Capacity.</u>	<u>Present Capacity</u>
				<u>Million Gallons.</u>	<u>Million Gallons.</u>
Shongweni	...	...	...	2,600	2,600
Camperdown	...	...	...	604	177
Clear Water, Umlaas...	...	...	...	100	100
				3,304	2,877

Service Reservoirs/.....

WATER SUPPLY

(By Courtesy of the Borough Water Engineer).

SOURCE : UMLAAS RIVER.

The catchment area draining to the storage reservoir at Campdown is 178 square miles in extent. An additional catchment of 138 square miles drains to the new storage reservoir at Shonewent. A further area of 33 square miles drains to the intake, making an aggregate of 349 square miles. The total area within the catchment area owned by the Corporation is 10,327.

POSSIBILITIES OF POLLUTION IN CATCHMENT AREA :

The supply in the river and tributaries from such an extensive catchment area is of course subject to pollution, but almost all the human habitations are situated at such distances from streams as renders them innocuous. The Corporation is empowered by the Durham Waterworks Consolidation Act No. 24 of 1981 to take drastic measures if necessary to prevent serious contamination.

STORAGE :

The total reservoir capacity is made up as follows

<u>Storage Reservoirs.</u>			
	Original Capacity.	Present Capacity	
	Million Gallons.	Million Gallons.	
Shonewent	2,600	2,600	...
Campdown	178	178	...
Intake, Umlaas	100	100	...
	2,878	2,878	

Service Reservoirs...

S E R V I C E R E S E R V O I R S .

Congella	1.	3,000,000)						
	2.	3,000,000)	In reserve.					
	3.	650,000)						
	4.	<u>650,000)</u>						
						7,300,000	gallons.	
Botanic Gardens	...	...	...	...	...	3,000,000	"	
South Ridge	...	...	...	...	...	3,000,000	"	
Stella ...	...	...	...	...	...	2,000,000	"	
North Ridge	...	...	...	...	...	2,000,000	"	
Ridge End	...	...	...	...	...	2,000,000	"	
Northdene	1.	500,000	gals.					
	2.	<u>750,000</u>	"			1,250,000	"	
Florida Road	...	...	...	...	...	650,000	"	
St. Thomas Tank	...	...	...	...	...	300,000	"	
Campbell's Tank	...	...	...	...	...	110,000	"	
Botanic Gardens Tank.	...	...	...	...	...	100,000	"	
Murchie's Tank	...	...	...	...	...	30,000	"	
							<u>21,740,000</u>	Gallons.

(iv) PURIFICATION :

When necessary the raw water is treated with Alumina Sulphate for the purpose of sedimentation before Filtration.

Slow sand filters are in operation at both the Umlaas and Coedmore Works, and the Shongweni Works include the rapid gravity type.

In all cases the effluent from the Filters is sterilised by treatment with liquid chlorine on the most modern principles and with completely effective results.

(v) The average daily consumption is in the vicinity of 10,000,000 gallons and the actual capacity of the existing works is approximately 15,000,000 gallons per day.

(vi) BACTERIOLOGICAL EXAMINATIONS:

Regular bacteriological and chemical examinations were made in the laboratory situated at Northdene Filters, and weekly tests are made at the Government Laboratory in Durban, yielding results comparable with those of any other water supply in the world. The Durban standard of negative Bacillus Coli in 100 c.c. is the highest standard sought anywhere.

7. WATER SUPPLY:

Throughout the year, the quality of the water system, as ascertained by weekly chemical and bacteriological analysis, has been consistently good. In quantity the supply has been ample for the requirements of lesser Durban, but it now becomes obvious that early provision should soon be made for an augmented supply in order to anticipate the rapidly expanding needs of the community. The Borough Water Engineer has already submitted a comprehensive report on his investigations for a new source of supply.

The high standards of purity are indicated by the subjoined analyses, taken at random :-

(a) Chemical :

<u>Colour.</u>	Good	<u>Sediment.</u>	Nil.
<u>Turbidity.</u>	Nil.	<u>Re-action.</u>	0.92. Alk.

A N A L Y S I S.

(Result expressed in parts per 100,000)

Total Solids.....	12.14
Loss on Ignition.....	2.99
Chlorine.....	2.84
Nitrates & Nitrites.....	Nil.
Saline Ammonia.....	0.002
Albumoid Ammonia.....	0.009
Total Hardness.....	5.29
Permanent Hardness.....	3.38
Iron.....	Trace.
Poisonous Metals.....	Nil.

(b) Bacteriological :

	<u>B.Coli</u> <u>Present in.</u>	<u>B.Coli</u> <u>Absent in.</u>
Bulwer Park.....	--	100 c.c.
Medwood Gardens.....	100 c.c.	80 c.c.
Mitchell Park.....	--	100 c.c.
Umbilo.....	80 c.c.	100 c.c.

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Throughout the year, the quality of the water system, as ascertained by weekly chemical and bacteriological analysis, has been consistently good. In general the supply has been ample for the requirements of Jasper Durban, but it now becomes obvious that early provision should soon be made for an augmented supply in order to anticipate the rapidly expanding needs of the community. The Borough Water Engineer has already submitted a comprehensive report on his investigations for a new source of supply.

The high standards of purity are indicated by the subjoined analyses, taken at random:-

(a) Chemical:

Colour.	Good
Turbidity.	Nil.
Residue.	Nil.
Alk.	0.92 Alk.

ANALYSIS.

(Result expressed in parts per 100,000)

Total Solids.....	12.14
Loss on Ignition.....	2.32
Chlorine.....	9.84
Nitrites & Nitrates.....	Nil.
Saline Ammonia.....	0.002
Alkaloid Ammonia.....	0.002
Total Hardness.....	8.22
Permanent Hardness.....	3.38
Iron.....	Trace.
Poisonous Metals.....	Nil.

(b) Bacteriological:

B. Coli	B. Coli
Absent in	Present in
100 c.c.	100 c.c.
80 c.c.	100 c.c.
100 c.c.	100 c.c.
100 c.c.	80 c.c.

8. NIGHTSOIL - Refuse :

The number of pails in use at the end of the year was as follows :-

	<u>Pails.</u>	<u>Dwellings.</u>
Private Dwellings	88	80
Business premises	17	2
Govt. Institutions	85	1
Municipal Institutions	19	3

REFUSE - NIGHT SOIL, ETC. - CARTS ETC :

Rubbish Carts.	55
Motor Freighters	6 (1 Spare)
Street Cleaning Carts.	16
Carts for depositing sand on tips.	3
Tank carts for the removal of night soil.	1
Stationary carts and vans.	2

MATERIALS REMOVED :

Rubbish	73,676 Loads.
Street sweepings	21,778 "
Manure	482 "
Sand for covering tips	32,852 "

DISPOSAL OF REFUSE ETC :

<u>Tipping Sites.</u>	<u>Loads of Refuse</u>	<u>Loads of Street Sweepings.</u>
Destructor	7,437	-
Ocean Beach	3	36
Botanic Gardens	18,447	11,600
Gale Street	256	2,963
Willowvale	2,890	-
Near Shires Barracks	1,085	209
Aviation Grounds	4,770	885
Brickhill Road.	34,519	3,841
Stella	1,253	672
Harvey Road.	3,016	1,572
T O T A L S :	63,676	21,778

8. NIGHTSOIL - REMOVAL:

The number of pails in use at the end of the year was as follows:

<u>Private Dwellings</u>	<u>Public Buildings</u>
83	80
17	2
85	1
19	3

REFUSE - NIGHT SOIL, ETC. - CENTS PER:

Stationary carts and vans	2
Tank carts for the removal of night soil	1
Carts for depositing sand on tips	3
Street Cleaning Carts	16
Motor Sweepers	6 (1 spare)
Robb's Cart	83

MATERIALS REMOVED:

Sand for covering tips	32,832
Manure	482
Street sweepings	21,775
Robb's	73,676 loads

DISPOSAL OF REFUSE ETC:

<u>Trucking Sites</u>	<u>Loads of Refuse</u>	<u>Loads of Street Sweepings</u>
Harvey Road	3,016	1,372
Stella	1,323	672
Richmond Road	31,310	3,841
Aviation Grounds	4,770	822
Near Green Barracks	1,022	202
Willemstad	2,300	-
Gale Street	250	2,962
Botanic Gardens	12,447	11,600
Ocean Road	3	30
Destruction	7,437	-
TOTAL:	62,676	21,778

FLY PREVENTION :

24,606 gallons of poison mixture and 1,993 lbs of fly gum were made departmentally and used or laid down as poison bait on the various tips.

DISPOSAL OF MANURE :

482 cart loads of manure were collected by the department, and stored in "Baber" platforms belonging to the Parks and Gardens and Works Department.

In the course of next year, the Botanic Gardens Tipping site will become exhausted, leaving only the Eastern Vlei available for the disposal of town refuse.

By the beginning of 1933, it will be necessary to double the number of motor freighters in commission (6) in replacement of horse-drawn vehicles. Provision has been made for this item on the coming year's estimates.

The Eastern Vlei will serve for many years as a refuse disposal site, containing as it does, large expanses of low-lying vacant land designated largely for recreational purposes. A double purpose is served by utilizing the Eastern Vlei as a tipping site: (1) the elimination of mosquito breeding swamps and (2) the reclamation of waste land.

The type of mechanical transport hitherto in use by the Cleansing Section has proved eminently satisfactory, i.e. independent units of 7 and 8 cubic yards capacity. Ten-yard-capacity vehicles could with advantage, be specified in connection with the proposed addition to the fleet next year.

FLY PREVENTION :

24,500 gallons of insecticide and 1,500 lbs of
fuel were made available and used on field crops as per
bill on the various crops.

DISPOSAL OF MANURE :

488 cart loads of manure were collected by the day
men, and stored in "manure" pits belonging to the
and Gerdana and Wana Department.

In the course of next year, the Botanic Garden
Tipping site will become exhausted, leaving only the Botanic
Viel available for the disposal of farm refuse.

By the beginning of 1953, it will be necessary
to double the number of motor tractors in commission (2) in
replacement of horse-drawn vehicles. Provision has been
made for this item on the coming year's estimates.

The Eastern Viel will serve for many years as a
refuse disposal site, containing as it does, large expanses
of low-lying vacant land designated largely for recreation
purposes. A double purpose is served by utilizing the

Eastern Viel as a tipping site (1) the elimination of two
breeding swamps and (2) the reclamation of waste land.

The type of mechanical transport vehicle in use
the Cleaning Station has proved entirely satisfactory, and
independent units of 7 and 8 cubic yards capacity. Ten-year
capacity vehicles could with advantage, be specified in

connection with the proposed addition to the fleet next year.

ANALYSIS OF WORK DONE BY MOTOR REFUSE REMOVAL FREIGHTERS.

	Vehicle No. 1. Code No. 84.	Vehicle No. 2 Code No. 865.	Vehicle No. 3 Code No. 858	Vehicle No. 4 Code No. 859	Vehicle No. 5 Code No. 868	Vehicle No. 6 Code No. 869
Loads removed. Loads in Cubic yards.	1521 9991	804 6136	692 5559 8 months Nov. to June.	576 4539 8 Mos. Nov. to June.	531 4239 7 Months Dec. to June.	570 4577 7 months Dec. to June.
Cost per cub. yard.	1/9d.	1/9.34d.	1/10.14d. 5 months Feb. to June.	2/1.423d. 5 months Feb. to June.	2/2.614d. 5 months Feb. to June.	1/10.606d. 5 months Feb. to June.
Miles covered.	7440	5076	4938 $\frac{1}{2}$ 8 months, Nov. to June.	4854 8 months Nov. to June.	3783 $\frac{1}{2}$ 7 months Dec. to June.	4306 $\frac{1}{2}$ 7 months Dec. to June.
Miles per gallon	13.143	10.183 8 months July. to Feb.	7.599 8 months Nov. to June.	9.49 8 months Nov. to June.	7.137 7 months Dec. to June.	6.962 7 months Dec. to June.

DISEASED CARCASSES TOTALLY CONDEMNED AS UNFIT FOR HUMAN CONSUMPTION.

DISEASES.	BEEF.	VEAL.	MUTTON.	PORK.
Cyticercus Bovis	897	80	-	-
Cytecercus Cellulosae	-	-	-	1,101
Dropsy & Emaciation	471	155	1,626	47
Tuberculosis	264	10	-	25
Jaundice	14	10	105	-
Injuries	40	3	10	12
Moribund	2	-	34	-
Immature	-	199	-	15
Dead in Pen	2	-	10	4
Dead on arrival	3	-	1	2
Decomposition	-	2	1	1
Uraemia	-	-	-	5
Pigmentation	1	-	-	-
Pyæmia	3	-	130	-
Septicaemia	1	-	-	-
Fevered	1	-	-	-
Pupura Haemorrhagica	2	-	2	24
Pleurisy	1	3	-	4
Septic Pneumonia.	-	-	-	-
	1,701	462	1,919	1,240

10. MILK SUPPLIES:

Applications for registration in respect of fifty-three dairy premises were received during the year, as compared with sixty-seven last year, viz:

Dairies (Fresh Milk) Ex Borough	43
Borough	4
Milk Depots (Pasteurised Milk)	6
	—
TOTAL:	53
	—

The decrease in applications is due to the closing down of a number of dairies formerly registered, owing to the inability of the owners to comply with the requirements of the New Milk Bye-laws.

Three applications were made in respect of dairy premises for which license had previously been refused owing to non-compliance with the Bye-laws.

In one, case, the trade was forthwith discontinued. In the other two, proceedings were instituted and convictions obtained, resulting in the closing down of both dairies.

Two new applications for registration for the sale of fresh milk were received during the year, both of which have been held over until the requirements of the department with regard to structural improvement and equipment have been met.

Many of the dairies have now been brought into line with requirements of the new bye-laws with the exception of a few in which minor structural improvements and additions to plant and equipment are necessary.

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43	Dairies (Fresh Milk) in Borough
4	Borough
6	Milk Depots (Sterilised Milk)
—	—
53	TOTAL
—	—

The decrease in applications is due to the closing down of a number of dairies formerly registered, owing to the inability of the owners to comply with the requirements of the New Milk Bye-laws.

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Many of the dairies have now been brought into line with requirements of the new bye-laws with the exception of a few in which minor structural improvements and additions to plant and equipment are necessary.

Fourteen dairies discontinued the sale of milk within the Borough during the year, having failed to meet the requirements antecedent to the granting of a licence.

During the year, one milk-depot closed down and another opened, leaving the number of milk-depots in the Borough (6) unchanged from last year.

The new milk-depot is excellently planned, constructed and equipped for the handling of pasteurised milk and dairy products.

Several local dairymen were unable to recover from the heavy financial loss involved by the Tuberculosis Eradication Campaign before the effect of the present economic depression made itself felt. The depressed state of the industry has, to some extent, hindered progress towards a higher plane of dairy hygiene and sanitation. Nevertheless, very definite progress has been made, as will appear from the following :

In the case of one dairy situated within the Borough, license was definitely refused on the grounds of unsuitable premises. The dairyman in question has been permitted to carry on business for a limited period to permit of the disposal of his cows, after which the business will be closed down.

The closing of this dairy will reduce the number of dairies situated within the Borough boundaries to three, as compared with eleven some three years ago.

Another local dairyman with a good 'milk record', has had plans approved for new premises. In view of this dairyman's record, a further extension
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of the period within which building should commence, has been granted.

Cowsheds:

Two new cowsheds, in connection with hitherto unregistered dairies, have been erected in the per--Durban areas.

Major improvement schemes have, in addition, been undertaken at thirteen registered dairies, involving the erection of five new cowsheds and the reconstruction of eight others.

In the reconstruction of cowsheds of limited width, it has not always been possible strictly to adhere to the dimensions laid down in the bye-laws particularly in respect of milking passages. In such cases, slight concessions have been made as an alternative to interference with the main walls, provided the buildings were otherwise suitable.

Water Supply:

The majority of the dairies obtain their water supply from the Durban Corporation. During the year, the Corporation water supply was laid on to four more dairies.

Where Corporation water is not available, a good supply is obtained from bore holes or alternatively rain-water storage tanks of adequate capacity.

Inclusive of those dairies where such buildings formed a part of a general reconstruction scheme, eleven new milkrooms have been erected.

Washrooms/.....

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Where Corporation water is not available, a good supply is obtained from bore holes or alternatively rain-water storage tanks of adequate capacity. Inclusive of those dairies where such buildings formed a part of a general reconstruction scheme, eleven new buildings have been erected.

Washrooms:

Fifteen dairies have been provided with approved washrooms for the cleansing of dairy utensils.

Steam Sterilizing Equipment.

During the year, twenty-one dairies have been equipped with steam sterilizing equipment. Two were new installations. The remainder were in substitution of the old type of built-in boiler.

The provision of efficient sterilizers is of primary importance now that all milk is retailed in bottles. Dairymen are beginning to regard sterilizing apparatus as a most essential part of their equipment.

Milk Coolers:

Ordinary water-coolers have been installed at three dairies where formerly no cooling facilities existed.

Two dairies have introduced intensive cooling plants with brine as the cooling medium, while another has supplemented water-cooling by the installation of a refrigerator.

The necessity for effective cooling facilities is gradually being brought home to dairymen and no doubt a return to normal times will see the more general adoption of milk cooling plants.

Servants Houses:

A further ten dairies have been provided with suitable accommodation for the housing of dairy employees, the majority of which are well-constructed of brick, satisfactorily lighted and ventilated.

It is somewhat difficult to overcome the common fallacy that any old hovel is good enough for Native servants. Firm pressure has been necessary to achieve improvements in this direction.

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Milk Coolers:

Ordinary water-coolers have been installed at the dairies where formerly no cooling facilities existed. Two dairies have introduced intensive cooling plan with brine as the cooling medium, while another has introduced water-cooling by the installation of a turbine.

The necessity for effective cooling facilities is gradually being brought home to dairymen and no doubt a return to normal times will see the more general adoption of milk cooling plants.

Servants' Houses:

Further ten dairies have been provided with suitable accommodation for the housing of dairy employees, the majority of which are well-constructed of brick, gas-retardant, lighted and ventilated.

It is somewhat difficult to overcome the common fallacy that any old house is good enough for Native servants. The pressure has been necessary to achieve improvements in the direction.

Bathing & Sanitary Accommodation:

New bathing facilities have been installed at ten and new sanitary conveniences at seven dairies during the year.

Milk Competition:

For the fifth successive year a Clean Milk Competition was held by the Public Health Department in conjunction with the Durban & Coast Society of Agriculture & Industries.

Entries showed a slight falling off. Fourteen as compared with eighteen in the previous year.

This decrease is attributable less to lack of enthusiasm than to lack of means on the part of the dairymen. A number of former competitors, realizing that their dairy premises or equipment were not up to competitive standards decided to withdraw from the competition until such time as these defects or deficiencies are made good.

The silver cup presented by the Durban Town Council, the Diploma of the Agricultural Society and the Special Prize for the best dairy premises, awarded by Tomango Ltd., fell to Mrs. J. England, 'Norfolk Dairy'.

The silver medal, awarded by the Agricultural Society as Second Prize, was won by Mr. Meyerowitz, Crown Dairy, Durban North.

Dairies, Cowsheds, etc.

33 inspections of dairies and milk depots within the Borough and 293 of dairies outwith the Borough boundaries but selling milk within the Borough were made.

No. of Milk Depots in the Borough	6
No. of Dairies within the Borough	4
No. of dairies without the Borough but selling milk within the Borough	43
	—
TOTAL:	53
	—

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Dairies, Cowsheds, etc.

33 inspections of dairies and milk depots within the Borough and 293 of dairies outside the Borough boundaries but selling milk within the Borough were made.

No. of Milk Depots in the Borough 6
No. of Dairies within the Borough 4
No. of dairies without the Borough 43
but selling milk within the Borough 43

TOTAL: 63

MILK DISTRIBUTION :

The operation of Section 34 of the new Milk Bye-laws has effected a much needed transformation in milk distribution. The terms of the Bye-law are being strictly observed - "No person shall sell or deliver milk except in an unventilated sealed container, bottle or carton, and the milk shall not be removed from such container, bottle or carton or the seal broken, before delivery to the purchaser. Each container, bottle or carton shall be so labelled or marked as to show clearly -
(a) the designation of the grade of milk contained therein:
(b) the address of the dairy or milk-depot where the milk has been produced and/or prepared. Every bottle containing the milk shall be closed with a tight-fitting disc."

The Dipper-and-Can and Tapped Can are now no longer seen in the streets of Durban. The new method of milk distribution reduces to a minimum, the opportunities for gross contamination inherent in the obsolete methods of milk distribution hitherto in force.

NEW MILK BYE-LAWS :

The New Milk Bye-laws for the Borough were promulgated on the 29th July 1931, under Government Notices Nos. 229 and 252, 1931.

Those Bye-laws represent that which may be reasonably described as ^a high standard of control as regards milk production and distribution. Authority for the framing of those Bye-laws is contained in Section 114 of the Borough's Ordinance No. 19 of 1924. The fullest possible use has been

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made of the powers under this Ordinance as regards the licensing of premises for the production, preparation and distribution of milk intended for sale within the Borough. The Ordinance fortunately provides for those powers to be extended to all premises from which the Borough Milk supply is derived, whether such premises are situated within or outwith the ordinary sanitary jurisdiction of the Borough Council.

It is considered worth while to print the full text of the New Milk Bye-laws inasmuch as they represent the latest development of the control of milk supplies in this country.

Special interest attaches to the definition of the persons and premises associated with the milk industry. The distinction between a 'dairyman' and a 'milk dealer' is made clear - the former being permitted to trade only in milk produced by his own herd. A 'milk dealer' may operate in a milk depot or a milk shop - in the latter case he is not permitted to do more than retail milk in the same containers in which it is received from the dairy or milk-depot, that is to say, the 'milk dealer' operating in a milk shop is not permitted to "break bulk" or transfer milk from one container to another.

Control is exerted through the dual requirement of registration and licensing. No premises are licensed either as dairies, milk depots or milk-shops unless these premises are, as regards structure, size, character and sanitation, suitable for the particular trading process intended to be carried on therein.

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operate in a milk depot or a milk shop - in the latter
he is not permitted to do more than retail milk in the
containers in which it is received from the dairy or milk
depot, that is to say, he is not permitted to re-sterilize in a
shop is not permitted to "break bulk" or transfer milk
one container to another.

Control is exercised through the dual requirements
of registration and licensing. No premises are licensed
either as dairies, milk depots or milk-shops unless they
premises are of a certain structure, size, character and
sanitation, suitable for the particular trading process
intended to be carried on therein.

In addition to operating in approved premises, a dairyman or milk dealer, prior to being registered as such, must comply with the terms of Schedule "A" Sub-Section 3 with any special requirements or conditions as regards the conduct of his business as are desirable in the interests of hygiene. Sub-section 3 of the aforesaid Schedule A is left blank in order that any such special requirements, coming within the scope of the validating Ordinance, may be included. In this way, the full weight of the bye-laws and the general licensing powers of the Ordinance, may be given effect to in all branches of the milk trade from the point of production to that of distribution.

The standard for cleanliness prescribed for the various authorised grades of milk may, at first sight, appear somewhat exacting in view of the local sub-tropical climatic conditions and the fact that the bulk of operative in the milk trade are raw Zulus. But it is a fact that, although those bye-laws have not yet been in operation a full year, the large majority of dairies are capable of turning out milk well within a prescribed standard of cleanliness.

The following table shows the results obtained from nine dairies this year and last, under conditions affording an accurate comparison and a fair reflection of the progress being made :

Total tested :	1931		1932.	
	B.Coli.	Tot.O.	B.Coli.	Tot.O.
Number up to Certified Milk Standard.	1	2	5	4
Number up to Grade "A" Milk Standard.	3	5	7	8

In addition to operating in approved premises a dairymen or milk dealer, before being registered as such, must comply with the terms of Schedule "A" and Section 3 with any special requirements or conditions as regards the conduct of his business as are desirable in the interests of hygiene. Sub-section 3 of the said Schedule A is left blank in order that any such special requirements, coming within the scope of the validating Ordinance, may be included. In this way the full weight of the Ordinance and the General Hygiene powers of the Ordinance, may be given effect to in all branches of the milk trade from the point of production to that of distribution.

The standard for cleanliness prescribed for the various authorized grades of milk may, at first sight, appear somewhat exacting in view of the local sub-tropical climatic conditions and the fact that the bulk of operators in the milk trade are raw Indians. But it is a fact that, although these bye-laws have not yet been in operation a full year, the large majority of dairies are capable of turning out milk well within a prescribed standard of cleanliness.

The following table shows the results obtained from nine dairies this year and last, under conditions affording an accurate comparison and a fair reflection of the prevailing state:

1932.		1931.		Total tested :	
No. of Cows.		No. of Cows.		No. of Cows.	
1	2	1	2	1	2
2	3	2	3	2	3
3	4	3	4	3	4
4	5	4	5	4	5
5	6	5	6	5	6
6	7	6	7	6	7
7	8	7	8	7	8
8	9	8	9	8	9
9	10	9	10	9	10

Only one supply fell short of the standard for Total Organisms, Grade A Milk and this supply reached the Certified Milk Standard for B. Coli.

On the whole, the year has witnessed a tremendous improvement in the quality of milk production and distribution.

CHEMICAL ANALYSIS OF MILK :

Two hundred and sixty-one samples (261) of milk were submitted for analysis, eighteen (18) of which were certified by the Borough Analyst to be under the standard required by the law, viz :-

Milk Fat	...	...	3.0 per cent.
Solids-not-fat.	...	...	8.5 " "

In the case of ten of these samples the deficiency was slight and as satisfactory explanations were forthcoming, no action was taken beyond warning the dairymen concerned.

Such cases are always followed up and further samples taken after a short interval.

Legal proceedings were instituted in respect of eight (8) samples under standard and in each a conviction was secured.

The average composition of all milk samples was as follows :-

Milk fat	...	...	3.4284 per cent.
Solids-not-fat	...	...	8.6951 " "

VETERINARY SECTION.

During the year, a full time Municipal Veterinary Officer was appointed to the Department, the successful

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Two hundred and sixty-one samples (261) of milk
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certified by the Bureau. Analysis to be under the standards
required by the law, viz :-

Milk Fat	...	3.0 per cent.
Solids-not-fat	...	8.3 "

In the case of ten of these samples the deficit
was slight and no satisfactory explanation was forthcoming
no action was taken beyond warning the dairymen concerned.
Such cases are always followed up and further
samples taken after a short interval.

Legal proceedings were instituted in respect of
eight (8) samples under standard and in each a conviction
was secured.
The average composition of all milk samples was
as follows :-

Milk Fat	...	3.4224 per cent.
Solids-not-fat	...	8.6261 "

VETERINARY SECTION.

During the year, a full time Municipal Veterinary
Officer was appointed to the Department, the successful

candidate being Mr. W.A. Dykins, M.R.C.V.S., who held the position of Senior District Veterinary Officer in the Union Department of Agriculture.

Mr. Dykins assumed duty on the 15th March. Although most progressive Municipalities in Great Britain employ full time Veterinarians on the Public Health Staff, this is the first appointment of its kind in Durban. It is interesting to note that the Municipality of Johannesburg has recently made a similar appointment.

The duties of the Municipal Veterinary Officer include the general supervision of dairy hygiene and sanitation, routine clinical examination of dairy animals and the application of the Tuberculin Test.

There are approximately 1,500 cows in the fifty dairies supplying raw milk to the Borough. Those figures will, of course, be considerably augmented after extension of the Borough Boundaries.

After a thorough survey, dairies have now been classified as follows :-

Group A. Dairies which are structurally sound, and where the sanitation and hygiene are good. Forty per cent of the cowsheds are included in this category.

Group B. Dairies which require varying degrees of structural alterations, and improved management to bring them up to the Group A standard. Fifty per cent of the dairies are included in this category.

Group C. Dairies which should be condemned for one or other of the following reasons :

- (a) Defective structure.
 - (b) Poor sanitation.
 - (c) Bad management, and the conditions are such that it is well nigh impossible to produce a Clean milk.
- Ten per cent of the dairies fall under this heading.

candidate being Mr. W.A. Dykine, M.R.C.V.S., who held the position of Senior District Veterinary Officer in the United Kingdom Department of Agriculture.

Mr. Dykine assumed duty on the 15th March. At the most progressive municipalities in Great Britain employ full-time Veterinarians on the Public Health Staff, this is the first appointment of the kind in Dublin. It is interesting to note that the Municipality of Johannesburg has recently made a similar appointment.

The duties of the Municipal Veterinary Officer include the general supervision of dairy hygiene and control, routine clinical examination of dairy animals and the application of the Tuberculin Test.

There are approximately 1,500 cows in the dairy herds supplying raw milk to the Borough. These figures will, of course, be considerably augmented after extension of the Borough boundaries.

After a thorough survey, dairies have now been classified as follows:-

- Group A. Dairies which are structurally sound, and where the sanitation and hygiene are good. Forty per cent of the cowsheds are included in this category.
- Group B. Dairies which require varying degrees of structural alterations, and improved management to bring them up to the Group A standard. Fifty per cent of the dairies are included in this category.
- Group C. Dairies which should be condemned for one or other of the following reasons:
- (a) Defective structure.
 - (b) Poor sanitation.
 - (c) Bad management, and the conditions are such that it is well nigh impossible to produce a clean milk.
- Ten per cent of the dairies fall under this heading.

The Municipal Veterinary Officer has completed a round of clinical examinations of all cows supplying raw milk. Fifteen cows (1%) picked out as clinical suspects were immediately isolated. Samples of milk for the biological test were taken from 10 cows. The results are not yet to hand.

The routine clinical examination of dairy cows, at two monthly intervals, constitutes a most valuable safeguard of the purity of milk at its point of production, eliminating as it does, gross contamination of the milk supply by tuberculous and septic udder discharges.

ERADICATION OF BOVINE TUBERCULOSIS :

In October 1930, a scheme for the eradication of Bovine Tuberculosis, by means of the application of the tuberculin test was inaugurated by the Veterinary Division of the Union Department of Agriculture. The Municipality co-operated to the extent of allocating a grant of £1,200 towards the cost of compensating the owners of animals destroyed. By the end of August 1931, practically all the dairy herds were subjected to the test, and the results are tabulated hereunder.

Number of animals tested.	Negative.	Positive.	Per-centage of Positives.
2402	1469	933	38.8%

The above figures include cattle belonging to dairies registered by the peri-Durban Health Boards, in addition to those

belonging/

The Laboratory Veterinary Officer has completed a round of clinical examinations of all cows supplying raw milk. Fifteen cows (1%) picked out as clinical suspects were immediately tested. Samples of milk from the clinical test were taken from 10 cows. The results are not yet to hand.

The routine clinical examination of dairy cows, at two monthly intervals, constitutes a most valuable safeguard of the purity of milk at the point of production, eliminating as it does, gross contamination of the milk supply by tuberculous and other other discharges.

INDICATION OF BOVINE TUBERCULOSIS

In October, 1930, a scheme for the eradication of bovine Tuberculosis, by means of the application of the tuberculin test was inaugurated by the Veterinary Division of the Union Department of Agriculture. The Ministry co-operated to the extent of allocating a grant of £1,500 towards the cost of compensating the owners of animals destroyed. By the end of August 1931, approximately 400 dairy herds were subjected to the test, and the results are tabulated hereunder.

Number of animals tested	Negative	Positive	Per-centage of Positive
2402	1440	962	39.82

The above figures include cattle belonging to districts administered by the East-African Health Board, in addition to those belonging to the Government of Kenya.

belonging to dairymen normally registered to sell milk within the Borough. In one dairy a second test was carried out, revealing an unexpectedly high percentage of infection - approximately 15 per cent.

It was then decided to call a halt in order to examine the position, in view of :

- (1) The high infection revealed by the second test.
- (2) The prevailing economic depression and the impending incorporation of the Health Board Areas.

Positive reactors to the test were destroyed at the Municipal Abattoir with results as follows :-

General Tuberculosis	15.7%
Udder Infection	3.3%
Lungs Lesions.	16.3%
Lmph Glands.	56.4%
Other Organs.	4.3%
No lesions found.	4.0%

Experience of the Bovine Tuberculosis Campaign so far, would appear to indicate that :-

- (1) The standard of dairy hygiene and sanitation requisite for the production of reasonably clean milk, does not altogether coincide with that requisite for the maintenance of a tubercle-free dairy herd, but differs from it only in such degree as to justify an insistence upon the latter as the basis of approval for licenses in the case of raw-milk-producing dairies.
- (2) Any scheme for the eradication of Bovine Tuberculosis in raw-milk-producing herds should be preceded by (1) a three-year campaign of intensive improvements in dairy hygiene and sanitation in all its aspects, including routine clinical examination of dairy animals and (2) the organisation of adequate facilities for the replacement of reactors eliminated from herds.
- (3) The scheme should apply to all dairies producing raw milk for sale in the controlled area.

belonging to dairies normally registered to sell milk within the Borough. In one dairy a second test was carried out, revealing an unexpectedly high percentage of infection - approximately 15 per cent.

It was then decided to call a halt in order to examine the position, in view of:

- (1) The high infection revealed by the second test.
- (2) The prevailing economic depression and the impending incorporation of the Health Board Area.

Positive reasons for the test were destroyed at the Municipal Abattoir with results as follows:-

General Tuberculosis	15.75
Udder Infection	2.35
Large Lesions	16.35
Small Lesions	55.45
Other Organs	4.35
No Lesions found	4.05

Experience of the Bovine Tuberculosis Campaign

so far, would appear to indicate that:-

- (1) The standard of dairy hygiene and sanitation required for the production of reasonably clean milk, does not altogether coincide with that required for the maintenance of a tuberculosis-free dairy herd, but differs from it only in such matters as to justify an insistence upon the latter as the basis of approval for licensing in the case of raw-milk-producing dairies.
- (2) Any scheme for the eradication of bovine tuberculosis in raw-milk-producing herds should be preceded by (1) a two-year campaign of intensive improvements in dairy hygiene and sanitation in all the dairies, including routine clinical examination of dairy animals and (2) the eradication of adverse facilities for the replacement of animals eliminated from herds.
- (3) The scheme should apply to all dairies producing raw milk for sale in the controlled area.

During the year, the following improvements were effected at the instance of the Health Department.

COWSHEDS:

Outside the Borough newly erected	2.
Erected or reconstructed to replace Existing buildings.	13.
Repairs to walls, floors etc.	4.
Unsatisfactory grooming of cows, warnings given.	12.

WATER SUPPLY:

Dairies outside the Borough connected to Durban Corporation Water Supply.	4.
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CLEANLINESS:

Premises limewashed or otherwise cleaned after notice.	72.
Servants' Quarters limewashed and cleaned after notice.	9.

MILKROOMS:

(a) Erected.	11.
(b) Fly-screened.	10.
(c) Fly-screening renewed.	4.

WASHROOMS FOR WASHING DAIRY UTENSILS:

Number erected.	15.
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BOILERS FOR WASHING UTENSILS:

(a) Provided.	-
(b) Not regularly used - warnings given.	4.

HIGH PRESSURE STEAM STERILIZING EQUIPMENT:

Installed.	21.
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MILK COOLING EQUIPMENT:

Installed.	6.
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SERVANTS' QUARTERS ERECTED: 10.

BATHROOM PROVIDED: 10.

SANITARY CONVENIENCES ERECTED: 7.

DAIRIES CLOSED DOWN: 14.

DAIRY PREMISES :

Connected to Borough Sewerage	1.
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SAFETY CONVEYORS: 2
 DURING THE YEAR, THE FOLLOWING IMPROVEMENTS WERE
 EFFECTED AT THE PLANT OF THE DAIRY DEPARTMENT:

COWS: 12
 4. Repairs to walls, floors etc.
 12. Extensive building.
 12. Outside the Borough newly erected
 2. Erected or reconstructed to replace

WATER SUPPLY: 4
 4. Water supply.
 4. Connected to Burton Corporation

CLEANING: 7
 7. Cleaned after notice.
 7. Repaired, painted or otherwise
 7. Cleaned after notice.

WATER: 11
 11. (a) erected, (b) fly-scrubbed.
 11. (c) fly-scrubbed.
 11. (d) fly-scrubbed renewed.

WATERBOILER FOR WASHING DAIRY UTENSILS: 12
 12. Number erected.

BOILERS FOR WASHING UTENSILS: 4
 (a) provided.
 (b) Not regularly used - writings
 given.

HIGH PRESSURE STEAM STERILISING EQUIPMENT: 21
 21. Installed.

MILK COOLING EQUIPMENT: 6
 6. Installed.

MILK COOLING EQUIPMENT: 10
 10. Installed.

BATHING: 10
 10. Installed.

SAFETY CONVEYORS: 7
 7. Installed.

DAIRIES CLOSED: 14
 14. Connected to Borough Sewerage

PUBLIC HEALTH BYE-LAWS.

Dealing with the Registration, Licensing
and Inspection of

DAIRIES and MILK
DEPOTS.

DEFINITIONS.

1. For the purpose of these By-laws -
 - "Council" means the Town Council of the Borough of Durban.
 - "Dairyman" means any person who supplies or keeps for sale or sells milk obtained from his own herd.
 - "Milk Dealer" means any person, other than a dairyman, who treats and/or prepares for sale and/or sells milk.
 - "Dairy" means any premises occupied and used by a dairyman for the production and supply or sale of milk.
 - "Milk Depot" means any premises occupied and used by a milk dealer for the collection, storage, handling, treatment and/or preparation of milk intended for sale.
 - "Milk Shop" means any building or premises or part thereof in which milk is sold.
 - "Producer" means any person owning or having control of a herd from which milk is supplied to a milk dealer.
 - "Herd" means the milch cows kept by a dairyman or producer and includes any other bovine animal kept in contact with cows while they are in milk.
 - "Sell" means sell by wholesale or retail, and, in addition to its ordinary meaning, includes offer, advertise, keep, expose, transmit, consign, convey or deliver for sale or authorise, direct or allow a sale or prepare or possess for purposes of sale, and further means barter or exchange or supply for disposal for any consideration direct or indirect.

REGISTRATION :

2. (1) The Medical Officer of Health shall keep a register of all dairymen and milk dealers.
- (2) Every person intending to carry on the trade of a dairyman or milk dealer shall apply for the registration of his name at the office of the Licensing Officer, Durban, on the form prescribed in Schedule "A" hereto at the same time as he lodges at the said office his application for a licence or certificate of approval to the grant of a licence, and no person shall carry on the trade of a dairyman or milk dealer unless and until --
 - (a) He shall have obtained such licence or certificate of approval; and
 - (b) His name shall have been entered in the register aforesaid.
- (3) Such registration shall not be valid after the 31st day of December of the year in which it was effected, and every dairyman and every milk dealer shall apply for the renewal of his registration at the same time as he applies for the renewal of his licence or certificate of approval to such renewal, as the case may be.
- (4) No licence or certificate of approval shall be granted unless the premises in and from which such person intends to carry on the trade of a dairyman or milk dealer shall in all respects comply with the requirements of these By-laws.

Inspections/

PUBLIC HEALTH BY-LAWS.

Dealing with the Registration, Licensing
and Inspection of

DAIRIES and MILK
DEPOTS.

DEFINITIONS.

For the purpose of these By-Laws -
"Council" means the Town Council of the Borough of Durham.
"Dairyman" means any person who supplies or keeps for
sale or sells milk obtained from his own herd.
"Milk Dealer" means any person, other than a dairyman, who
treats and/or prepares for sale and/or sells milk.
"Dairy" means any premises occupied and used by a dairyman
for the production and supply of milk.
"Milk Depot" means any premises occupied and used by a milk
dealer for the collection, storage, handling, treatment
and/or preparation of milk intended for sale.
"Milk Shop" means any building or premises or part thereof
in which milk is sold.
"Producer" means any person owning or having control of a
herd from which milk is supplied to a milk dealer.
"Herd" means the milk cows kept by a dairyman or producer
and includes any other bovine animal kept in contact with
cows while they are in milk.
"Sell" means sell by wholesale or retail, and, in addition
to its ordinary meaning, includes offer, advertise, keep,
expose, transmit, convey or deliver for sale or
exchange, direct or indirect, or prepare or possess
for purposes of sale, and further means barter or exchange
or supply for disposal for any consideration direct or in-
direct.

REGISTRATION.

- (1) The Medical Officer of Health shall keep a register of all
milk dealers.
- (2) Every person intending to carry on the trade of a dairyman
dealer shall apply for the registration of his name at the
of the Licensing Officer, Durham, on the form prescribed in
a "A" hereto of the same time as he lodges at the said office
application for a licence or certificate of approval to the same
tenor, and no person shall carry on the trade of a dairyman or
dealer unless and until -
- (a) He shall have obtained such licence or certificate of
approval; and
- (b) His name shall have been entered in the register afore-
said.
- (3) Such registration shall not be valid after the first day of
of the year in which it was effected, and every dairyman and
milk dealer shall apply for the renewal of his registration at
time as he applies for the renewal of his licence or certificate
val to such renewal, as the case may be.
- (4) No licence or certificate of approval shall be granted un-
less in and from which such person intends to carry on the
trade of a dairyman or milk dealer shall in all respects comply with the
provisions of these By-Laws.

INSPECTION OF DAIRIES, ETC :

3. The undermentioned persons are hereby constituted duly authorised officers for the purpose of these By-laws :-
Borough Medical Officer of Health or his duly authorised Deputy.
The Chief Sanitary Inspector or any Assistant Sanitary Inspector of the Borough.
Any other person specially authorised by resolution of Council to perform any functions under these By-laws.

REGULATIONS FOR DAIRIES, MILK DEPOTS, ETC :

4. Every dairyman or milk dealer shall comply with the following:
- (1) In connection with every dairy or milk depot such person shall provide--
 - (a) A pure, wholesome and conveniently accessible water supply, free from liability to pollution and in sufficient quantity for all purposes connected with the dairy or milk depot, including the cleansing of all utensils and appliances :-
 - (b) Proper and sufficient housing, washing and sanitary accommodation for every person employed on the premises and/or living therein;
 - (c) A room to be known as a milk room and to be used solely for the purpose of cooling, straining, mixing, handling or keeping therein of milk and clean milk vessels; the milk room shall be properly constructed of brick or concrete, with smoothly-plastered internal walls, dust-proof ceiling and impervious floor suitably graded; such room shall be well lighted and ventilated, dust and fly-proofed, and shall be entirely separated from any dwelling house or cowshed, but shall be conveniently situated to the cowshed, if any, and the washroom hereinafter described; the milk room shall not be situated within 50 feet of any privy, urinal, manure receptacle or any other accumulation of offensive matter; such room shall be kept clean and no articles other than milk and clean milk vessels or other dairy utensils shall be stored or kept in such room;
 - (d) A room, to be known as the washroom, for the washing of all milk receptacles and dairy utensils; the floor of such room shall be properly paved and drained;
 - (e) A suitable apparatus for the sterilising by steam or boiling water of all bottles, cans or other receptacles for milk and dairy utensils; such apparatus shall not be used for any other purpose than the boiling of clean water.
 - (2) In the case of a dairy, and that in addition to any obligations imposed upon such person by the preceding subsection, such person shall provide a building or part thereof to be known as the cowshed in which the cows kept by him shall be milked. Such cowshed shall have--
 - (a) Proper and effective lighting and ventilation;
 - (b) Walls constructed of brick or other suitable materials, properly rendered in cement to a height of not less than 5 feet;
 - (c) A central milking passage, not less than 9 feet in width, or a rear milking passage, not less than 5 feet in width;

INSPECTION OF DAIRIES, ETC. :

The undersigned persons are hereby constituted duly
 class officers for the purpose of these By-laws : -
 Borough Medical Officer or Health or his duly authorized
 Deputy.
 The Chief Sanitary Inspector or any Assistant Sanitary
 Inspector of the Borough.
 Any other person specially authorized by resolution of
 Council to perform any functions under these By-laws.

REGULATIONS FOR DAIRIES, MILK DEPOTS, ETC. :

- (a) Every dairyman or milk dealer shall comply with the following
 (1) In connection with every dairy or milk depot such person
 shall provide--
 (a) A pure, wholesome and conveniently accessible water
 supply, free from liability to pollution and in
 sufficient quantity for all purposes connected with
 the dairy or milk depot, including the cleansing of
 all utensils and appliances : -
 (b) Proper and sufficient heating, washing and sanitary
 accommodation for every person employed on the premises
 and for living therein ;
 (c) A room to be known as a milk room and to be used solely
 for the purpose of cooling, straining, skimming, packing
 or keeping therein of milk and clean milk vessels ; the
 milk room shall be properly constructed of brick or
 concrete, with smoothly-plastered internal walls, and
 proof ceiling and impervious floor suitably treated ;
 room shall be well lighted and ventilated, and the
 proof, and shall be suitably separated from any other
 ing house or cowshed, but shall be conveniently situated
 to the cowshed, if any, and the washroom hereafter
 described ; the milk room shall not be situated within
 30 feet of any privy, urinal, manure receptacle or any
 other accumulation of offensive matter ; such room shall
 be kept clean and no articles other than milk and clean
 milk vessels or other dairy utensils shall be stored or
 kept in such room ;
 (d) A room, to be known as the washroom, for the washing of
 all milk receptacles and dairy utensils ; the floor of
 such room shall be properly paved and drained ;
 (e) A suitable apparatus for the sterilizing by steam or
 boiling water of all bottles, cans or other receptacles
 for milk and dairy utensils ; such apparatus shall not be
 used for any other purpose than the boiling of clean
 (2) In the case of a dairy, and that in addition to any
 obligations imposed upon such person by the preceding and
 sections, such person shall provide a building or part of
 of to be known as the cowshed in which the cows kept by
 him shall be milked. Such cowshed shall have--
 (a) Proper and effective lighting and ventilation ;
 (b) Walls constructed of brick or other suitable materials
 properly rendered in cement to a height of not less
 than 6 feet ;
 (c) A central milking passage, not less than 8 feet in width
 or a rear milking passage, not less than 6 feet in width

- (d) An impervious floor of cement, concrete or other material, with joints grouted and flushed level with cement; any such floor to be composed of such materials and so constructed as to ensure soundness and durability throughout;
- (e) Proper drainage for every floor by surface gutters not less than 20 inches wide and 4 inches deep to outside drained gullies properly trapped; where sewer drainage is not available the waste liquids from such gutters shall be led away to a cement-lined catch-pit outside the cowshed; the catch-pit shall be emptied at least daily and the waste liquids disposed of in such a manner as will prevent any nuisance arising therefrom; every such gutter and channel shall be properly graded and maintained so as to prevent any stagnation of the liquid therein or thereon;
- (f) A suitable midden or manure receptacle, which shall be at least 50 feet from the milk room, constructed of or lined with impervious material and provided with a close-fitting fly-proof cover.

LIST OF EMPLOYEES TO BE KEPT :

5. Every dairyman or milk dealer shall keep a list of all persons employed by him in such a manner that each employee can be identified; such list shall show the dates upon which each employee enters and/or leaves his service.

LIST OF SUPPLIERS TO BE KEPT :

6. Every milk dealer shall keep a list of the names and addresses of dairymen or other producers or persons from whom supplies of milk are received by him.

LIST OF BOVINES TO BE KEPT :

7. Every dairyman shall keep a list of all bovines comprising his herd in such a manner that each animal can be properly identified such list shall show the dates of transfers into or out of the herd, including births, deaths, sales and purchases.

USE OF COWSHED :

8. No dairyman shall permit the use of any cowshed for the keeping therein of animals other than bovine animals.

NO STORAGE OF FORAGE, ETC. IN COWSHED :

9. No dairyman shall permit of the stacking or storing of forage or other cattle feed in any cowshed, milkroom or washroom.

- (d) An impervious floor of cement, concrete or other material, with joints grouted and finished level with cement; any such floor to be composed of such materials and so constructed as to ensure soundness and durability throughout;
- (e) Proper drainage for every floor by surface gutters not less than 30 inches wide and 4 inches deep to outside drained gutters properly trapped; where sewer drainage is not available the waste liquids from such gutters shall be led away to a cement-lined catch-pit outside the cowshed; the catch-pit shall be emptied at least daily and the waste liquids disposed of in such a manner as will prevent any nuisance existing therefrom; every such gutter and channel shall be properly graded and maintained so as to prevent any stagnation of the liquid thereon or therefrom;
- (f) A suitable midden or manure receptacle, which shall be at least 50 feet from the milk room, constructed or lined with impervious material and provided with a close-fitting fly-proof cover.

LIST OF DAIRYMEN TO BE KEPT :

5. Every dairyman or milk dealer shall keep a list of all persons employed by him in such a manner that each employee can be identified; such list shall show the dates upon which each employee enters and/or leaves his service.

LIST OF SUPPLIERS TO BE KEPT :

6. Every milk dealer shall keep a list of the names and addresses of dairymen or other producers or persons from whom supplies of milk are received by him.

LIST OF BOVINES TO BE KEPT :

7. Every dairyman shall keep a list of all bovine animals kept in such a manner that each animal can be properly identified; such list shall show the dates of transfers into or out of the milking pits, heaths, sales and purchases.

USE OF COWSHED :

8. No dairyman shall permit the use of any cowshed for the keeping of animals other than bovine animals.

NO STORAGE OF FORAGE, ETC. IN COWSHED :

9. No dairyman shall permit the stacking or storing of any other cattle feed in any cowshed, milking room or washroom.

COWSHED NOT TO BE USED AS LIVING OR SLEEPING ROOM :

10. (1) No dairyman or milk dealer shall allow any cowshed or milkroom to be used as a sleeping apartment for any human being or for any purpose incompatible with the maintenance of thorough cleanliness of the building or of milk vessels or utensils therein; neither shall he allow such cowshed or milkroom to be used in any manner likely to cause contamination of the milk.

(2) No dairyman or milk dealer shall allow any milkroom to be in direct communication with any room used as a living or sleeping apartment.

(3) No dairyman or milk dealer shall allow any milk to be stored or kept in any cowshed, stable or human dwelling. The milk from each cow shall forthwith, on being obtained, be removed to the milkroom. Bottles, cans, vessels or containers intended for use in the distribution or sale of milk shall not be filled elsewhere than in the milkroom provided.

KEEPING OF SWINE AND POULTRY :

11 (1) No dairyman shall keep any swine on the premises covered by his licence within 150 yards of any dairy or milk depot, and when any swine are kept on the premises beyond that limit their styres must be maintained in a thoroughly clean, sanitary condition, and the drainage therefrom must be disposed of in such a manner as shall be approved by the Medical Officer of Health.

(2) If poultry be kept, they shall be so confined as to avoid any danger of contamination of milk, utensils or feed.

PREMISES TO BE KEPT CLEAN :

12. Every dairyman or milk dealer shall at all times maintain or cause to be maintained the whole of the premises in respect of which he holds a licence in a state of thorough cleanliness and ventilation and in the case of a cowshed every dairyman shall—

(a) Cause the floors thereof to be cleaned and thoroughly washed at least half an hour before each occasion of milking; in whatever premises milking takes place such premises shall be kept in a state of thorough cleanliness and all precautions shall be taken to prevent contamination of milk by dust, flies or otherwise; the feedstore room shall have no direct opening to cowshed, milkroom or room where milk utensils are stored;

(b) Cause the manure from any cowshed to be removed at least twice in every twenty-four hours to the outside midden or manure receptacle and cause the contents of such midden or receptacle to be removed as often as may be necessary to avoid creating a nuisance; no liquid manure shall be allowed to overflow or saturate the ground under or around the cowshed.

COWSHED NOT TO BE USED AS LIVING OR SLEEPING ROOM

10. (1) No dairyman or milk dealer shall allow any cowshed or milking room to be used as a sleeping apartment for any human being or any purpose incompatible with the maintenance of thorough cleanliness of the building or of milk vessels or utensils therein; neither shall he allow such cowshed or milking room to be used in any manner likely to cause contamination of the milk.

(2) No dairyman or milk dealer shall allow any milking room in direct communication with any room used as a living or sleeping apartment.

(3) No dairyman or milk dealer shall allow any milk to be stored or kept in any cowshed, stable or human dwelling. The milk on each cow shall, forthwith, on being obtained, be removed to the milking room. Bottles, cans, vessels or containers intended for use in the distribution or sale of milk shall not be filled elsewhere than in the milking room.

KEEPING OF SWINE AND Poultry

11. (1) No dairyman shall keep any swine on the premises covered by this licence within 100 yards of any dairy or milk depot, and any swine kept on the premises beyond that limit shall be kept in a thoroughly clean, sanitary condition, and arrangements shall be made for the disposal of their manure as approved by the Medical Officer of Health.

(2) If poultry be kept, they shall be so confined as to avoid danger of contamination of milk, vessels or feed.

PREMISES TO BE KEPT CLEAN

12. Every dairyman or milk dealer shall at all times maintain the premises covered by this licence in a state of thorough cleanliness and order, and shall hold a licence in a state of thorough cleanliness and order in the case of a cowshed every dairyman shall—

(a) Cause the floors thereof to be cleaned and thoroughly washed at least half an hour before each occasion of milking; and any manure or milk which may be spilled on the floors shall be removed as soon as possible and the floors shall be kept in a state of thorough cleanliness and all precautions shall be taken to prevent contamination of the milk by dirt, filth or otherwise; the feed-room shall be no direct opening to the cowshed, milking room or room where the milk is stored;

(b) Cause the manure from any cowshed to be removed at least twice in every twenty-four hours to the outside manure heap or receptacle and cause the contents of such manure heap or receptacle to be removed as often as may be necessary to avoid creating a nuisance; no liquid manure shall be allowed to overflow or saturate the ground under or near the cowshed.

- (c) Cause the ceiling or inner surface of the roof, exposed roof timbers and the inner surface of every wall of any cowshed (except so much as may be painted or tarred or covered with a material such as to render lime-washing unsuitable and as may be otherwise properly cleansed) to be thoroughly cleaned down and then limewashed at least four times in every year, at intervals of three months, and also at such other times as may be required by written notice from the Medical Officer of Health all ceilings, walls and ledges shall be swept down and kept free from dust, dirt and cobwebs.

CARE OF MILK AND MILK VESSELS AND UTENSILS :

13. Every dairyman or milk dealer shall—

- (a) At all times and at every stage in the production, handling preparation, supply and distribution of milk intended for sale take all proper precautions for preventing the infection or contamination of such milk by dust, dirt, flies, vermin, effluvia or otherwise;
- (b) Cause all milk vessels and dairy utensils used in connection with his business to be kept in good repair, to be thoroughly cleansed and sterilised by means of steam or clean boiling water after each occasion of use and to be stored in such a manner as to remain clean.

CLEANLY MILKING METHODS :

14. Every dairyman shall ensure—

- (a) That the cows kept by him shall be groomed daily and kept clean;
- (b) That the flanks, udders, teats and tails of the cows shall be rubbed down with a clean damp cloth immediately prior to milking and that the first stream from each teat is rejected. The tail shall be fixed in such a manner as will prevent contamination of the milk.

15. No dairyman shall permit of any grooming or sweeping or any dry-feeding to take place in any cowshed where milking is in progress or half an hour prior thereto.

16. Every dairyman or milk dealer shall provide and keep at all times at his dairy, milk depot or milkshop adequate and convenient washing facilities, including a receptacle or basin for clean water, together with soap, nail brush and towels, for the purpose of cleansing the hands of every person employed in milking cows or in handling, preparing, conveying or selling milk.

CLEANSING OF HANDS BEFORE MILKING AND WEARING OF CLEAN OVERALLS.

17. Every dairyman shall ensure that every person who milks a cow on his premises shall wash his hands with soap and shall rinse them with clean water immediately before commencing to milk such cow, and

shall/

(c) Cause the ceiling or inner surface of the roof, exposed roof timbers and the inner surface of every wall of the building (except as noted on any plan or map) to be covered with a material such as to render lime-washing unavailable and as may be otherwise properly cleaned; to be thoroughly cleaned down and then limewashed at least four times in every year, at intervals of three months, and also at such other times as may be required by written notice from the Medical Officer of Health all ceilings, walls and ledges shall be swept down and kept free from dust, dirt and cobwebs.

CARE OF MILK AND MILK VESSELS AND UTENSILS:

Every dairymaid or milk dealer shall—
(a) At all times and at every stage in the production, handling, transportation, supply and distribution of milk take all proper precautions for preventing the infection or contamination of such milk by dust, dirt, flies, vermin, animals or otherwise;

(b) Cause all milk vessels and dairy utensils used in connection with the business to be kept in good repair, to be thoroughly cleaned and sterilized by means of steam or clean boiling water after each occasion of use and to be stored in such a manner as to remain clean.

CLEANLY MILKING METHODS:

Every dairymaid shall ensure—
(a) That the cows kept by him shall be groomed daily and kept clean;
(b) That the flanks, udders, teats and tails of the cows shall be rubbed down with a clean damp cloth immediately prior to milking and that the flanks remain free from dirt and rejected. The tail shall be fixed in such a manner as will prevent contamination of the milk.

No dairymaid shall permit of any grooming or sweeping or any thing to take place in any cowshed where milking is in progress at any time thereto.

Every dairymaid or milk dealer shall provide and keep at all times, milk pails or other receptacles and convenient washing facilities, including a receptacle or basin for clean water, together with brush and towels, for the purpose of cleansing the every person employed in milking cows or in handling, conveying or selling milk.

CLEANING OF HANDS BEFORE MILKING AND WASHING OF MILK VESSELS.

Every dairymaid shall ensure that every person who milks a cow shall wash his hands with soap and shall rinse them in water immediately before commencing to milk each cow, and

shall wear an overall of clean washable material while so employed. An approved lubricant may be used on the hands whilst milking.

CLEANLINESS OF HANDS & CLOTHING, etc :

18. Every dairyman or milk dealer shall ensure that every person employed in or occupied on his premises or on his behalf in handling conveying or selling milk is clean as to his person and clothing whilst so employed.

CLEANLINESS OF DWELLINGS OF NATIVES AND COLOURED PERSONS :

19. No dairyman or milk dealer shall allow any premises used by him for the housing of or the washing or sanitary accommodation for his servants employed in connection with the production, sale or distribution of milk to be in a dirty condition.

MILK RECEPTACLES :

20. No dairyman or milk dealer shall use or cause to be used for the purpose of receiving milk from the cow during the process of milking or for the purpose of selling milk any pail, bucket, can, churn, bottle container or other receptacle which does not in respect of material or pattern comply with the requirements prescribed in Schedule "B" hereto or which is worn out or rusted or in such condition that it cannot be rendered clean and sterile by washing by steam or boiling water.

VEHICLES OR CARRIER: NAME & ADDRESS TO BE INSCRIBED :

21. (1) Every person who, by himself or by his servant, sells or distributes milk from a vehicle or other carrier shall have conspicuously inscribed on such vehicle or other carrier his name and address, and he shall further cause such vehicle or other carrier to be covered in such a manner as to prevent contamination of the milk, and shall cause it at all times to be kept in a thoroughly clean condition, and shall not permit it to be used for any purpose which may lead to the contamination or infection of the milk or cream carried therein.

22. . No person shall transfer or allow to be transferred milk from one container or receptacle to another on the streets or at a railway station or siding or elsewhere, except at an approved dairy or milk depot, nor shall he convey milk in any receptacle slung around or hanging on his body or in any manner likely to render such milk liable to contamination.

SICKNESS IN EMPLOYEES AND IN CATTLE AND PRECAUTIONS AGAINST COMMUNICATION & SPREAD THEREOF.

23. (1) Every dairyman or milk dealer shall keep himself informed of any sickness occurring amongst his employees or in any house in which he or his employees reside, and he shall keep a "sickness register", which shall specify-

- (a) Name of employee;
- (b) Date reporting sick;
- (c) Date when employee ceased work on account of such sickness;

(d)/

shall wear an overall of clean washed material which shall be approved and issued by the health department.

CLEANLINESS OF HANDS & CLOTHING, etc.:

18. Every person employed in the kitchen shall keep his hands and clothing clean and free from grease, dirt, and other foreign matter.

CLEANLINESS OF BUILDINGS, EQUIPMENT AND COOKING UTENSILS

19. The kitchen or other building shall be kept clean and free from grease, dirt, and other foreign matter.

20. The kitchen or other building shall be kept clean and free from grease, dirt, and other foreign matter.

21. The kitchen or other building shall be kept clean and free from grease, dirt, and other foreign matter.

22. The kitchen or other building shall be kept clean and free from grease, dirt, and other foreign matter.

23. The kitchen or other building shall be kept clean and free from grease, dirt, and other foreign matter.

(a) Name of employee
(b) Date of inspection
(c) Date when employee ceased work on account of such sickness

- (d) Date upon which he resumed duty;
- (e) Name of doctor, if any;
- (f) Nature of illness.

(2) Such sickness register shall at all times be available for inspection by the Medical Officer of Health or Health Inspector or any duly authorised person, and may be incorporated with the register required to be kept under Section 6. Immediately upon becoming aware of the occurrence of any communicable disease amongst any persons residing in or employed on the premises covered by his licence or amongst any cattle kept therein every dairyman or milk dealer shall notify the Medical Officer of Health thereof immediately, and shall comply with the said officer's requirements for preventing the spread of the disease.

(3) No dairyman or milk dealer shall knowingly allow any person suffering from any communicable disease or who is living in a house in which there is a case of infectious or contagious disease or who has recently been in contact with a person so suffering to milk cows or in any way to take part in the production or distribution or storage of milk, and no dairyman or milk dealer who is himself so suffering or who has recently been in contact with an infected person or has been living in an infected house as aforesaid shall milk cows or in any way take part in the production or distribution or storage of milk unless and until the procedure laid down in Schedule "C" hereto has been complied with to the satisfaction of the Medical Officer of Health.

(4) No dairyman or milk dealer shall allow any person to milk a cow or to take part in the handling, storage or distribution of milk if by competent bacteriological or other examination such person has been proved to be a "carrier" of any of the following diseases :-

Enteric Fever or Typhoid Fever, including paratyphoid A and paratyphoid B; Scarlet Fever; Septic Sore Throat; Dysentery; Epidemic Diarrhoea or Enteritis; Diphtheria;

and such dairyman or milk dealer shall be guilty of an offence under this section if it be proved that he knew or by the exercise of ordinary care could have ascertained that such person was so suffering or had been in contact with a person so suffering or had been living in an infected house or was a carrier of any of the above specified diseases.

MILK OF DISEASED COW :

24. No dairyman or milk dealer shall sell the milk of any cow suffering from any of the diseases specified below, either by itself or mixed with the milk of any other cow, and he shall be guilty of an offence under this By-law if it be proved that he knew or by the exercise of ordinary care could have ascertained that such cow was diseased :-

Tuberculosis.	Foot and Mouth Disease;
Actinomycosis;	Gastro-Enteritis;
Anthrax;	Mange;
Mastitis;	Contagious Abortion;
Cowpox;	Any Septic or Febrile Condition.

- (d) Date upon which he resumed duty;
- (e) Name of doctor, if any;
- (f) Nature of illness.

(2) Such sickness register shall at all times be available for inspection by the Medical Officer of Health or Health Inspector duly authorized person, and may be incorporated with the records to be kept under Section 6. Immediately upon becoming aware of the occurrence of any communicable disease amongst any person living in or employed on the premises covered by his license, the licensee shall report the same to the Medical Officer of Health immediately, and shall comply with the said officer's requirements for preventing spread of the disease.

(3) No dairymen or milk dealer shall knowingly allow any person suffering from any communicable disease or who is living in a house in which there is a case of infectious or contagious disease to have access to the premises in contact with a person so suffering, or in any way to take part in the production or distribution of milk, and no dairymen or milk dealer who is so suffering or who has recently been in contact with an infected person or has been living in an infected house or who has been in contact with any person who has been in contact with an infected person shall be allowed to take part in the production or distribution of milk unless and until the person has been examined by a medical officer of health and found to be free of the disease.

(4) No dairymen or milk dealer shall allow any person to take part in the production or distribution of milk unless and until the person has been examined by a medical officer of health and found to be free of the disease.

(5) No dairymen or milk dealer shall allow any person to take part in the production or distribution of milk unless and until the person has been examined by a medical officer of health and found to be free of the disease.

(6) No dairymen or milk dealer shall be guilty of an offence under this section if it is proved that he knew or by the exercise of reasonable care could have ascertained that such person was or had been in contact with a person so suffering or had been in an infected house or was a carrier of any of the above diseases.

MILK OF SICKED COW.

No dairymen or milk dealer shall sell the milk of any cow suffering from any of the diseases specified below, either by itself or mixed with the milk of any other cow, and he shall be guilty of an offence under this section if it is proved that he knew or by the exercise of reasonable care could have ascertained that such cow was suffering from any of the diseases specified below.

- | | |
|-------------------|----------------------------------|
| Tuberculosis. | Any Septic or Febrile Condition. |
| Actinomycosis. | Contagious Abortion. |
| Anthrax. | Mastitis. |
| Brucella. | Cowpox. |
| Gastro-Enteritis. | |
| Diarrhoea. | |
| Septicemia. | |

OUTBREAK OF SICKNESS ATTRIBUTABLE TO MILK :

25. Whenever the Medical Officer of Health shall be of opinion that the outbreak or spread of sickness or disease within the Borough is attributable to milk produced or sold by any dairyman or milk dealer or itinerant vendor of milk, such person shall, on request being made to him by the Medical Officer of Health or other duly authorised officer of the Town Council, exhibit for inspection all invoices, accounts, books and other documents relating to the supply of such milk, and shall furnish forthwith to such Medical Officer of Health or to such duly authorised officer—

- (a) A full and complete list of the names and addresses of the customers or persons to whom he supplied such milk;
- (b) A full and complete list of the names and addresses of the farmers, dairymen, milk dealers or other parties from whom, during a period to be specified by such officer, the milk complained of or any part thereof was obtained.

26. Any dairyman or milk dealer or the consignee of any milk or any servant or agent of any such person aforesaid who, when required by the Medical Officer of Health or by any duly authorised officer to give information as to the place or places in which any milk was produced, offered for sale or sold, withholds or refuses such information or knowingly gives false or misleading information, shall be guilty of a contravention of these By-laws.

POWER TO FORBID SALE OR USE OF MILK IN CERTAIN INSTANCES :

27. (1) If it shall appear to the Medical Officer of Health that any person within the Borough is suffering from any sickness or disease attributable to milk supplied to such person from any dairy, milk depot or milkshop or that the milk from any dairy, milk depot or milk shop or other place is likely to cause sickness or disease to any person residing in the Borough, such Medical Officer may visit and examine such dairy, milk depot, milkshop or other place and he and/or an approved Veterinary Surgeon may examine all animals therein.

(2) The Medical Officer of Health shall have power to order that the milk from such dairy, milk depot, milkshop or such other place shall not until further order be sold or supplied to any person whomsoever or be caused to be sold or supplied.

(3) No dairyman or milk dealer shall sell or deliver the milk of any cow about to calve or newly calved, taken within the fourteen days preceding and the six days following calving, or from any cow giving less than four pints per diem. Sick and calving cows shall be separated from healthy cows.

(4) No dairyman shall keep any sick animal in a cowshed where milk is produced for sale nor shall he knowingly permit any cow to calve in such cowshed or to be therein within six days after calving.

CHURNING OF RICKNESS ATTEMPTABLE TO MILK :

Whenever the Medical Officer of Health shall be of opinion that the outbreak of a disease or disease within the town is attributable to milk produced or sold by any dairyman or milk dealer, or to the use of milk, such person shall, on request made to him by the Medical Officer of Health or other duly authorized officer of the town Council, submit for inspection all books, accounts, books and other documents relating to the sale of milk, and shall furnish the same to such Medical Officer within such time as may be required.

- (a) A full and complete list of the names and addresses of the customers or persons to whom he supplied such milk;
- (b) A full and complete list of the names and addresses of the farmers, dairymen, milk dealers or other parties from whom he has received or is to be supplied by such officer, the list compiled of or any part thereof was obtained.

Any dairyman or milk dealer or the consignee of any milk, or agent of any such person, who, when required by the Medical Officer of Health or by any duly authorized officer, fails to furnish the same, or furnishes false or misleading information, or who, after having been so required, fails to furnish the same, shall be liable to a fine of not more than £100.

PROHIBITION ON USE OF MILK IN CERTAIN INSTANCES :

- (1) It shall be an offence for any person to use milk in any food or drink, or to use milk in any other manner, if such person is aware that the milk is not fit for human consumption, or if he knows or has reasonable cause to believe that the milk is not fit for human consumption.
- (2) The Medical Officer of Health shall have power to order that milk shall not be used in any food or drink, or in any other manner, if he is of opinion that the milk is not fit for human consumption, or if he has reasonable cause to believe that the milk is not fit for human consumption.

Any person who contravenes any such order shall be liable to a fine of not more than £100.

- (3) The Medical Officer of Health shall have power to order that milk shall not be used in any food or drink, or in any other manner, if he is of opinion that the milk is not fit for human consumption, or if he has reasonable cause to believe that the milk is not fit for human consumption.
- (4) Any person who contravenes any such order shall be liable to a fine of not more than £100.

Any person who contravenes any such order shall be liable to a fine of not more than £100.

POWER TO PROHIBIT SALE, ETC., OF TUBERCULOSIS MILK :

28. Should the presence of tubercle bacilli be detected or discovered in any sample of milk by a qualified bacteriologist, the Medical Officer of Health may, by notice under his hand, prohibit the sale or distribution of milk from the cowshed from which the sample was taken until such time as he has received a certificate from a qualified veterinary surgeon that such surgeon has inspected the herd and that the source or sources of infection have been removed and stating the method of disposal of the affected animal or animals.

EXTRANEOUS SUBSTANCES NOT TO BE ADDED TO MILK :

29. No dairyman or milk dealer shall add any preservative or water or any dried or condensed milk or any fluid reconstituted therefrom to any milk intended for sale, neither shall he himself by any servant or agent sell any milk to which any such addition has been made.

No dairyman or milk dealer either by himself or any servant or agent shall sell as milk any liquid in the making of which dried milk or condensed milk has been used.

RIGHT OF ENTRY BY MEDICAL OFFICER OF HEALTH & OTHERS :

30. The Medical Officer of Health or an approved veterinary surgeon or other duly authorised officer shall have full access and ingress to any premises in respect of which a licence or certificate of approval has been issued for the purpose of inspecting the premises and the cows, milk, receptacles for milk and the utensils kept therein, and the provisions made for keeping the same in good, clean and sanitary condition and of ascertaining whether the requirements of these By-laws are being observed. Every dairyman shall bring in all the cows of his herd for examination at any reasonable time when thereto required by a duly authorised officer. The Medical Officer of Health or a duly authorised officer being a qualified medical practitioner may examine any person resident on or employed in or about any such premises as aforesaid for the purpose of ascertaining whether such person is suffering from any infectious or contagious disease.

COPY OF REGULATIONS TO BE EXHIBITED :

31. Every dairyman or milk dealer shall keep affixed in premises covered by his licence, in a conspicuous and easily accessible place, a printed copy of these By-laws.

GRADING AND SALE OF MILK :

32. No person shall sell any milk which is not labelled or described or otherwise represented as being one of the following grades - viz : "Certified Milk", "Grade A Milk", "Pasteurised Milk", "Sterilised Milk" - and no person shall sell milk so labelled or described or otherwise represented if such milk does not conform to the standard of cleanliness hereinafter prescribed for such grade.

POWER TO PROHIBIT SALE, ETC., OF TUBERCULOUS MILK :

35. Should the presence of tubercle bacilli be detected or recovered in any sample of milk by a qualified bacteriologist, the Medical Officer of Health may, by notice under his hand, prohibit the sale or distribution of milk from the cowshed from which the milk was taken until such time as he has received a certificate from the person in possession of the cowshed that the milk has been obtained from a cow which has been examined and found to be free from tubercle bacilli.

36. No person shall sell or distribute any milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing, or any milk intended for sale, until he has obtained a certificate from the Medical Officer of Health to that effect.

37. Any person who contravenes the provisions of the foregoing regulations shall be liable to a fine of not more than £100 or to imprisonment for not more than three months, or to both such fine and imprisonment.

38. The Medical Officer of Health or an approved veterinary officer or other duly authorized officer shall have full access to and full control over the premises of any person who is licensed to sell or distribute milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing.

39. The Medical Officer of Health or an approved veterinary officer or other duly authorized officer shall have full access to and full control over the premises of any person who is licensed to sell or distribute milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing, and shall have the right to require any person who is so licensed to produce any certificate or other document which may be required for the purpose of ascertaining whether the milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing has been obtained from a cow which has been examined and found to be free from tubercle bacilli.

COPY OF REGULATIONS TO BE EXHIBITED :

40. Every person who is licensed to sell or distribute milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing shall exhibit in a conspicuous and easily accessible place a copy of these regulations.

41. EXHIBITION :

42. The Medical Officer of Health or an approved veterinary officer or other duly authorized officer shall have full access to and full control over the premises of any person who is licensed to sell or distribute milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing, and shall have the right to require any person who is so licensed to produce any certificate or other document which may be required for the purpose of ascertaining whether the milk or any condensed or evaporated milk or any fluid reconstituted from any of the foregoing has been obtained from a cow which has been examined and found to be free from tubercle bacilli.

STANDARDS OF CLEANLINESS FOR EACH GRADE :

33. The standard of cleanliness shall be such that on a sample being taken at any time before delivery to the consumer the milk shall contain, in the case of -

- (1) "Certified Milk".
 - (a) Not more than 30,000 bacteria per cubic centimetre;
 - (b) No coliform bacillus in one-tenth of a cubic centimetre
- (2) "Grade A Milk".
 - (a) Not more than 200,000 bacteria per cubic centimetre;
 - (b) No coliform bacillus in one-hundredth of a cubic centimetre.
- (3) "Pasteurised Milk":
 - (a) Not more than 200,000 bacteria per cubic centimetre;
 - (b) No coliform bacillus in one-hundredth of a cubic centimetre.
- (4) "Sterilised Milk":
 - (a) No bacteria and no coliform bacillus in one cubic centimetre.

GRADING OF PASTEURISED MILK :

34. Milk to be heat-treated at a milk depot shall not be treated more than once and shall not be eligible for subsequent grading as "Pasteurised Milk" unless upon arrival at such depot it conforms to the following requirements-

- (a) Acidity not greater than 0.18 per cent;
- (b) Temperature not to exceed 75°F.

The type of apparatus and the methods to be employed in the heat-treatment of milk shall be such as conform with the requirements prescribed in Schedule "B" hereto.

DELIVERY OF MILK :

35. No person shall sell or deliver milk except in an unventilated sealed container, bottle or carton, and the milk shall not be removed from such container, bottle or carton or the seal broken before delivery to the purchaser. Each container, bottle or carton shall be so labelled or marked as to show clearly-

- (a) The designation of the grade of milk contained therein;
- (b) The address of the dairy or milk depot where the milk has been produced and/or prepared.

Every bottle containing the milk shall be closed with a tight-fitting disc.

PRODUCTION OF CERTIFIED & GRADE A MILK :

36. Every person intending to sell or supply milk shall, in his application for registration, state the grade of milk he intends to sell and will sell or supply during the period covered by such registration, and he shall not sell or supply any grade of milk other than that in respect of which he is registered. Every dairyman shall further be required to satisfy the Medical Officer of Health that in respect of the production of certified milk :-

STANDARDS OF CLEANLINESS FOR EACH GRADE

33. The standard of cleanliness shall be such that on a sample taken at any time before delivery to the consumer, the milk shall contain, in the case of -

- (1) "Certified Milk"
 - (a) Not more than 30,000 bacteria per cubic centimeter
 - (b) No coliform bacteria in one-tenth of a cubic centimeter
- (2) "Sterilized Milk"
 - (a) Not more than 200,000 bacteria per cubic centimeter
 - (b) No coliform bacteria in one-hundredth of a cubic centimeter
- (3) "Pasteurized Milk"
 - (a) Not more than 300,000 bacteria per cubic centimeter
 - (b) No coliform bacteria in one-hundredth of a cubic centimeter
- (4) "Homogenized Milk"
 - (a) No bacteria and no coliform bacteria in one cubic centimeter

GRADE OF PASTEURIZED MILK

Milk to be pasteurized at a milk depot shall not be treated then once and shall not be eligible for subsequent grading as "Sterilized Milk" unless upon arrival at such depot it conforms to following requirements -

- (a) Acidity not greater than 0.18 per cent
- (b) Temperature not to exceed 73°F

The type of apparatus and the methods to be employed in pasteurization of milk shall be such as conform with the requirements prescribed in Sections 10 and 11.

DELIVERY OF MILK

No person shall sell or deliver milk except in an unbroken container, bottle or carton, and the milk shall not be removed from such container, bottle or carton on the seal broken before delivery to the purchaser. Each container, bottle or carton shall be labelled or marked as to show clearly -

- (a) The designation of the grade of milk contained therein
- (b) The address of the dairy or milk depot where the milk has been produced and/or prepared.

Bottle containing the milk shall be closed with a tight-fitting stopper.

PRODUCTION OF CERTIFIED & GRADE A MILK

Every person intending to sell or supply milk shall, in his application for registration, state the grade of milk he intends to sell or supply during the period covered by such registration. He shall not sell or supply any grade of milk other than that in which he is registered. Every deliveryman shall further be required to certify the Medical Officer of Health that in respect of production of certified milk -

- (1) The herd which is registered to produce certified milk shall be completely isolated from all other cattle.
- (2) Every animal in such herd shall be submitted to a physical examination by an approved veterinary surgeon at intervals of not more than two months, and shall further be submitted to a tuberculin test at such intervals and in such manner as may from time to time be prescribed in regulations issued by the Government of the Union of South Africa for the purpose of eradicating tuberculosis from dairy herds; the veterinary surgeon's certificate and the certificate of the prescribed tuberculin test shall be forwarded to the Medical Officer of Health within fourteen days after the respective dates of those certificates.

The dairyman shall not permit any animal to be injected with tuberculin except on the occasions of the prescribed tuberculin tests.
- (3) No animal shall be added to the herd without having first passed the prescribed tuberculin test within the time to be specified in the aforesaid Government Regulations.
- (4) Where any animal of the herd is certified as reacting to the prescribed tuberculin test it shall forthwith be removed from the herd, and where any animal shows evidence of any disease which is likely to affect the milk injuriously it shall be isolated or removed from the herd as the case may require. The milk from an animal so isolated shall not be sold as milk from the herd. The dairyman shall inform the Medical Officer of Health of the reasons for the isolation or removal of an animal, and, in the case of removal, of the manner in which it has been disposed of.
- (5) The dairyman shall cause every person employed in connection with the milking or the handling, preparation or distribution of milk to be submitted to the Widal Test for enteric fever and to the Wassermann Test for venereal disease, and no person shall continue to be so employed unless such tests shall in his case show negative results as certified in writing by a qualified medical practitioner. No new employee shall be engaged for such work without first being certified as having passed the test aforesaid.

37. The provisions of Sub-sections (1), (2), (3) and (4) of Section 36 aforesaid shall apply in respect of the production of Grade A milk.

PURCHASING SAMPLES OF MILK FOR EXAMINATION :

38. The Medical Officer of Health or any Dairy or Sanitary Inspector or any duly authorised officer may demand, on tender of payment, from any dairyman, milk dealer or itinerant vendor of milk a sample or samples of any milk, milk products or articles purporting to be such which are stored, distributed or exposed for sale or in process of delivery by him or by his servant, and any such person as aforesaid who omits or refuses so to supply such sample shall be guilty of a contravention of these By-laws.

The Medical Officer of Health or any Dairy or Sanitary Inspector or any duly authorised agent of such official may, within or without the Borough demand, on tender of payment, from any consignee or purchaser of any milk produced outside the the Municipal Area and delivered or to be delivered or in the course of delivery within the Municipal area, whether by rail or otherwise, any sample or samples of any milk or articles purporting to be such, and any such consignee or purchaser who shall omit or refuse to supply such sample shall be guilty of a contravention of these By-laws.

- (1) The herd which is registered to produce certified milk shall be completely isolated from all other cattle.
- (2) Every animal in such herd shall be submitted to a physical examination by an approved veterinary surgeon at intervals of not more than two months, and shall further be submitted to a tuberculin test at such intervals and in such manner as may from time to time be prescribed in regulations made by the Government of the Union of South Africa for the purpose of eradicating tuberculosis. The veterinary surgeon's certificate and the results of the prescribed tuberculin test shall be forwarded to the Medical Officer of Health within fourteen days after the receipt of those certificates.
- (3) The dairyman shall not permit any animal to be infected with tuberculosis except on the occasion of the prescribed tuberculin tests.
- (4) No animal shall be added to the herd without having first passed the prescribed tuberculin test within the time specified in the aforesaid Government Regulations.
- (5) Where any animal of the herd is certified as reacting to the prescribed tuberculin test it shall forthwith be removed from the herd, and where any animal shows evidence of any disease which is likely to affect the milk it shall be removed from the herd as the case may require. The milk from an animal so isolated shall not be sold as milk from the herd. The dairyman shall inform the Medical Officer of Health of the reasons for the isolation or removal of an animal, and, in the case of removal, of the manner in which it has been disposed of.
- (6) The dairyman shall ensure every person employed in connection with the milking or the handling, preparation or distribution of milk to be submitted to the Medical Officer of Health and to the Wassermann test for venereal disease, and no person shall continue to be so employed unless such test shall in his case show negative results as certified in writing by a qualified medical practitioner. No new person shall be engaged for such work without first being certified as having passed the test aforesaid.

The provisions of Sub-sections (1), (2), (3) and (4) of Section 36 aforesaid shall apply in respect of the production of milk.

PURCHASING SAMPLES OF MILK FOR EXAMINATION:

The Medical Officer of Health or any Deputy or Assistant or any duly authorized officer may demand, on tender of from any dairyman, milk dealer or itinerant vendor of milk or samples of any milk, milk products or articles purveyed such which are stored, distributed or exposed for sale or for delivery by him or by his servant, and any such person who omits or refuses so to supply such sample shall be liable to a contravention of these By-laws.

The Medical Officer of Health or any Deputy or Assistant or any duly authorized agent of such official may, within or without such demand, on tender of payment, from any consignor or person by milk produced outside the Municipal Area and delivered or in the course of delivery within the Municipal Area by rail or otherwise, any sample or samples of any milk or purveying to be made, and any such consignor or person who omits or refuses to supply such sample shall be liable to a contravention of these By-laws.

CONTRAVENTIONS AND PENALTIES :

39. A person contravening any of these By-laws shall, upon conviction be liable to a fine not exceeding in the case of a first offence the sum of Ten Pounds and in the case of a second or subsequent offence the sum of Twenty Pounds.

40. The following By-laws are repealed, with effect at the date of promulgation of these By-laws, namely :-

- (1) The Public Health By-laws for the Borough of Durban relating to dairies, cowsheds and milkshops, promulgated on 6th June, 1912, being By-laws 78 to 92 inclusive; and
- (2) Milk By-laws of the Borough of Durban, promulgated under Provincial Notice No. 240 of 1928, dated 25th July, 1928.

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CONTRAVENTIONS AND PENALTIES :

39. A person contravening any of these By-laws shall, upon violation be liable to a fine not exceeding in the case of a first offence the sum of ten pounds and in the case of a second or subsequent offence the sum of twenty pounds.

40. The following By-laws are repealed, with effect at the date of promulgation of these By-laws, namely :-

- (1) The Public Health By-laws for the Borough of Surbiton relating to dairies, cowsheds and milking machines, passed on 6th June, 1912, being By-laws 78 to 82 inclusive;
- (2) Milk By-laws of the Borough of Surbiton, promulgated under Provisional Notice No. 240 of 1922, dated 23rd July, 1922.

1922-1923

SCHEDULE "A".

BOROUGH OF DURBAN.

Application No.....
(For office use only)

New

Renewal

APPLICATION FOR REGISTRATION AS DAIRYMAN & MILK DEALER

I
of
a.....by occupation,
hereby apply, in conformity with Section 2 of your Milk By-laws
1931, for registration for the year ending 31st December 19....
as a dairyman and /or milk dealer at the premises situate at...
.....

I intend -

(1) to sell the following prescribed grades of milk :-

Certified Grade "A"

Pasteurised Sterilised

(2) To use the following types of utensils, receptacles
and apparatus :-

Material and Pattern.

Milking Machine

Milking Pails & Buckets

Delivery Cans

Milk Strainers

Milk Bottles

Cooling Apparatus

Pasteurising Apparatus

Pasteurising Method

REGISTRATION CARD

Application No.
(For office use only)

BOEHRER OF ...

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APPLICATION FOR REGISTRATION AS ...

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I hereby agree :-

(1) To admit any official of the Health and Sanitary Departments of the Borough of Durban to my premises at..... for inspection of my cowshed and dairy premises for such time as milk is produced from such premises for sale within the Borough and during the term of any licence of licences for the sale of milk from such premises within the said Borough.

(2) To conduct my business in such a way as to comply in every respect with the Milk By-laws of the Borough of Durban.

(3)

.....

I attach a plan of the premises in respect of which a licence is desired. Person by whom the business will be actually carried on and supervised :-

Name in full

Address

.....

Signature of Applicant
(Name in full)

Address

.....

.....19....

"Dairyman" means any person who supplies or keeps for sale or sells milk obtained from his own herd.

"Milk Dealer" means any person, other than a dairyman, who treats and/or prepares for sale and/or sells milk.

S C H E D U L E "B".

BOROUGH OF DURBAN.

Approved Types of Dairy Utensils, Dairy Apparatus & Milk Receptacles.

MILKING PAILS AND BUCKETS.

To be of hooded pattern, with a one-piece seamless body. Constructed of stout gauge steel plate, heavily coated with tin. The formed hood to be soldered flush to the top outside and the joint inside heavily loaded.

Delivery/

I hereby agree:-

(1) To admit any official of the Health and Sanitary Department of the Borough of London to my premises for such time for inspection of my cowshed and dairy premises for such time as is produced from such premises for sale within the Borough and during the term of my license of license for the sale of milk from such premises within the said Borough.

(2) To comply with the provisions in such a way as to comply in every respect with the Milk By-laws of the Borough of London.

(3)

I attach a plan of the premises in respect of which a license is granted to me by whom the business will be actually carried on and supervised by me.

Name in full

Address

Signature of Applicant

Name in full

Address

Witnessed by a person who supplies or keeps for sale or sells milk obtained from his own herd, other than a deliveryman, who is not a person for sale and/or sells milk.

FOR THE BOROUGH OF LONDON

OFFICE OF THE BOROUGH OF LONDON

Approved by the Health Committee, Dairy Department & Milk Department.

Witnessed by a person who supplies or keeps for sale or sells milk obtained from his own herd, other than a deliveryman, who is not a person for sale and/or sells milk.

To be attached to the plan, with a one-piece easelboard body, composed of metal frame steel plate, heavily coated with tin. The frame body to be attached flush to the top outside and the joint inside heavily insulated.

Witnessed by

Delivery

DELIVERY CANS.

To be pressed out of stout gauge steel plate in one piece, seamless and heavily coated with tin, and provided with suitable cover of similar material capable of being scoured or locked so as to render can spill-proof, dust-proof and rain-proof.

MILK RECEIVING VATS.

To be of stout steel plate, heavily coated with tin, with suitable cover and brass plug draw-off taps, easily removed or dismantled for cleaning.

MILK STRAINERS.

To be made of stout gauge steel, seamless and heavily coated with tin, with strong tinned perforated disc and cotton wool filtering medium.

MILK BOTTLES AND CARTONS.

- (a) Bottles to be of best quality clear white flint glass, with reinforced mouth.
- (b) Cartons to be of non-absorbent material imperviously sealed.

COOLING APPARATUS.

To be of the following types :-

- (a) Round Tube Milk Coolers (flat pattern) :
Made from solid drawn copper tubes, with brass headers. The top and bottom troughs to be made from stout gauge sheet copper, removable for cleaning purposes.
All parts coming in contact with the milk to be heavily coated with tin.
- (b) Cylindrical Coolers :
To be made from hard copper, with deep corrugations to give the maximum area of cooling surface, and provided with large receiving bowl, made from stout gauge sheet copper.
All parts coming in contact with the milk to be heavily coated with tin.

APPARATUS FOR PASTEURISING OR STERILISING.

The body of pasteurising or sterilising apparatus to be of metal, or metal-lined wood, properly insulated; all parts of such apparatus coming in contact with the milk to be heavily coated with tin.

SCHEDULE "C".

The Provisions of Section 22 (3) shall apply as follows :-

Enteric Fever.
Paratyphoid A.
Paratyphoid B.
Bacillary Dysentery.

LIVERY CANS.

To be pressed out of about 24 gauge steel plate in one piece, as
leaves and heavily coated with tin, and provided with suitable
cover of similar material capable of being secured or locked
as to render can airtight, rust-proof and rain-proof.

MILK RECEIVING VATS.

To be of about 24 gauge steel, heavily coated with tin, with anti-
ever and brass plug at each end, easily removed for disassembly
or cleaning.

THE STRAINERS.

To be made of about 24 gauge steel, seamless and heavily coated w
with strong flamed perforated disc and cotton wool filter.

BOTTLES AND CARTONS.

Bottles to be of stout, heavy glass, with
reinforced necks
Cartons to be of heavy material, suitably sealed

MILK APPARATUS.

Of the following types:-

Round Tube Milk Cooler (Type A).
Made from solid drawn copper tubes, with brass headers.
The top and bottom headers to be made from about 24 gauge
copper, removable for cleaning purposes.
All parts coming in contact with the milk to be heavily
coated with tin.

Cylindrical Cooler (Type B).
To be made from half copper, with deep corrugations to give
the maximum area of cooling surface, and provided with large
receiving bowl, made from about 24 gauge copper.
All parts coming in contact with the milk to be heavily
coated with tin.

APPARATUS FOR PASTEURISING OR STERILISING.

Body of pasteurising or sterilising apparatus to be of metal,
unlined wood, properly insulated. All parts of appa-
ratus coming in contact with the milk to be heavily coated
with tin.

SCHEDULE 1.

A Provisions of Section 32 (3) shall apply as follows:-

- Bacterial Dysentery
- Paratyphoid A
- Paratyphoid B
- Enteric Fever

CASES.

Not to resume work involving milking or handling of milk utensils or containers until three specimens of stools and urine taken in consecutive weeks have proved negative to the infecting organism.

CONTACTS.

No exclusion, provided patient is properly isolated.

ENTERITIS.

CASE.

Not to resume work until seven days after cessation of symptoms.

DIPHTHERIA.

CASES.

Not to resume work until three consecutive negative swabs have been obtained from throat and nose.

CONTACTS.

Work may be resumed after one negative swab has been obtained from throat and nose.

SCARLET FEVER.

CASE.

Minimum exclusion six weeks from onset or until any nasal or ear discharge or any crack or sores are dry and healed.

CONTACTS.

Immune contacts may resume work at once after disinfection of clothing. Non-immune contacts ten days after last contact with patient.

The above regulations imply that the patient is isolated to the satisfaction of the Medical Officer of Health, who has power to increase or reduce the periods of exclusion from work.

CASES.

Not to resume work involving mixing or handling of milk or
or containers until three specimens of stool and urine taken
consecutive weeks have proved negative to the tuberculin test.

CONTACTS.

No exclusion, provided patient is properly isolated.

ENTERITIS.

CASES.

Not to resume work until seven days after cessation of
symptoms.

DIPHTHERIA.

CASES.

Not to resume work until three consecutive negative swabs
have been obtained from throat and nose.

CONTACTS.

Work may be resumed after one negative swab has been obtained
from throat and nose.

SCARLET FEVER.

CASES.

Minimum exclusion six weeks from onset or until any nasal or
throat swabs or any other excreta are dry and sealed.

CONTACTS.

These contacts may resume work at once after disinfection of
household, but should be excluded for one day after last contact.

The above regulations apply when the patient is isolated
the satisfaction of the Medical Officer of Health, who has
no to increase or reduce the periods of exclusion from work.

11. OTHER FOOD SUPPLIES:

Unsound Food:

The following table shows the nature and quantity of unsound foodstuffs dealt with under the Public Health Act, No.36, 1919, viz:

<u>Article.</u>	<u>Seized.</u>	<u>Handed over Voluntarily.</u>
Ham	44 lbs.	8 tins.
Salt Herrings	-	1 barrel.
"Fresh" do	288 tins.	-
Bacon	-	450 lbs.
Mutton	255 lbs.	-
	8 legs.	-
Tongues Ox.	11	-
Sweets-Mixed.	-	5 cases.
Cocoa Nut.	-	3 cases.
Canned Fish	-	5 cases.
Jam Pulp.	-	13 cases.
Poultry)	-	133 fowls.
)	-	6 Turkeys.

Foods & Drugs.

During the year, the following samples were submitted by this department for analysis.

Description.	Number.	Genuine.	Below standard or adulterated.
Milk	261	243	18
Ice Cream	16	6	10
Cream	7	4	3
Sausages	2	-	2
Cheese	2	2	-
Butter	2	2	-
Lard	1	1	-
Dripping	1	1	-
	292	259	33

11. Legal proceedings were instituted in respect of eight samples of milk found to be deficient in quality or adulterated, a conviction being recorded in each case.

In the remaining ten cases the deficiency was slight and as satisfactory explanations were forthcoming, proceedings were not considered to be warranted, the dairy keepers concerned being warned to have the quality of their milk improved.

Prosecutions were successfully instituted against ten vendors of ice-cream, the majority of these samples having on analysis shown a very serious deficiency in the Milk Fat content.

Two samples of cream analysed, disclosed the presence of preservative and a third proved to be deficient in quality, but in each case the adulteration or deficiency was so slight that beyond warning the sellers no further action was taken.

With regard to the two samples of sausages, similar warnings were given by this department as the amount of preservative present in each sample was only slightly in excess of that permissible.

In addition to the above, a further 250 samples of milk were submitted for bacteriological examination during the year.

Legal proceedings were instituted in respect of eight samples of milk found to be deficient in quality or adulterated, a conviction being recorded in each case.

In the remaining ten cases the deficiency was slight and as satisfactory explanations were forthcoming, proceedings were not considered to be warranted. The dairy keepers concerned being warned to have the quality of their milk improved.

Prosecutions were successfully instituted against the dairy keepers, the majority of these samples having been found to be deficient in quality. The milk was found to contain a very serious defect, the milk being found to be deficient in quality.

Two samples of cream analysed, showed the cream to be deficient in quality and a third proved to be deficient in quality. In each case the adulteration of the cream was found to be sufficient to render it unfit for consumption.

With regard to the two samples of cream, similar warnings were given by this department. The cream was found to be deficient in quality and a third proved to be deficient in quality. In each case the adulteration of the cream was found to be sufficient to render it unfit for consumption.

Two samples of milk analysed, showed the milk to be deficient in quality. The milk was found to be deficient in quality and a third proved to be deficient in quality. In each case the adulteration of the milk was found to be sufficient to render it unfit for consumption.

12. MATERNITY & CHILD WELFARE :

(Report by Medical Officer in Charge, Maternity & Child Welfare Department.)

The figures in the accompanying Annual Report for the year ending 31st July 1932, show that there has been a considerable increase in the work in all branches of the Department.

The total attendances at the Clinics for the year were 30,551; 24,185 of these attending at the European and Coloured Clinics at the Old Court House; the other 6,366 attending at the Indian Clinic in Brook Street, compared with 25,314, 21,928, 3,386 respectively for last year. This shows an increase in the total for the year of 5,237 attendances, of which 2,257 was the increase in numbers attending at the Old Court House Clinic, and 2,980 the increase at the Indian Clinic.

The number of infants under one year attending the European and Coloured Clinics was 992, compared with 964 last year, although the total number of births was 1,080, as compared with 1,095.

The total attendances of infants under one year was 7,990, compared with 7,445 last year.

The number of expectant mothers attending the Old Court House Clinic was 606 compared with 559 last year; the total number of attendances at the ante-natal Clinic 1,412 compared with 1,346 last year.

The number of cases receiving dried milk free was 123, compared with 97 last year.

HEALTH VISITORS WORK :

The total number of visits made by the Health Visitors is rather less than the number last year, this being due to preparation of the work in the form of small models and other detailed work for Health Week, and to other propaganda work the Health Visitors have had to undertake. The proportion of infants found to be breast fed at the first visit is, however, slightly higher than that of last year - 973 compared with 966 - although many of the mothers are in very poor circumstances.

WORK OF MIDWIVES.

A second Midwife was appointed during the year. She commenced work on the 9th May 1932.

The total number of cases attended by the Midwives was 176, compared with 142 last year. The total number of ante-natal visits paid was 374 compared with 285 last year.

There were again no maternal deaths and no serious maternal complications.

The Maternal Mortality

12. MATERNITY & CHILD WELFARE :

(Report by Medical Officer in Charge, Maternity & Child Welfare Department.)

The figures in the accompanying Annual Report for the year ending July 1932, show that there has been a considerable increase in the work in all branches of the Department.

The total attendances at the Clinics for the year were 30,531; 24,135 of these attending at the European and Coloured Clinics at the Old Court House; the other 6,396 attending at the Indian Clinic in Brook Street, compared with 25,314, 21,928, 3,386 respectively for last year. This shows an increase in the total for the year of 5,217, of which 3,267 was the increase in numbers attending the Old Court House Clinics, and 1,950 the increase at the Indian Clinic.

The number of infants under one year attending the European and Coloured Clinics was 992, compared with 964 last year, although the total number of births was 1,023, as compared with 1,005.

The total attendances of infants under one year was 7,990, compared with 7,445 last year.

The number of expectant mothers attending the Old Court House Clinic was 425 compared with 335 last year; the total number of attendances at the ante-natal Clinic 1,412, compared with 1,346 last year.

The number of cases receiving dried milk was 123, compared with 97 last year.

HEALTH VISITORS' WORK :

The total number of visits made by the Health Visitors is rather less than the number last year, this being due to a proportion of the work in the form of health visits and other detailed work for Health Week, and to other propaganda work. The Health Visitors have had to undertake the proportion of the work to be done by the Health Visitors in the form of health visits and other detailed work for Health Week, and to other propaganda work. The proportion of the work to be done by the Health Visitors in the form of health visits and other detailed work for Health Week, and to other propaganda work. The proportion of the work to be done by the Health Visitors in the form of health visits and other detailed work for Health Week, and to other propaganda work.

WORK OF NURSES :

A second Midwife was appointed during the year, commenced work on the 2nd May 1932.

The total number of cases attended by the Midwives was 150, compared with 142 last year. The total number of cases attended by the Midwives was 150, compared with 142 last year. The total number of cases attended by the Midwives was 150, compared with 142 last year.

The Maternal Mortality is again low, being 3.28 for Europeans and nil for Coloureds.

The Infant Mortality Rate 47.82 is higher than it has been for several years, although the incidence of Infantile Diarrhoea which usually accounts for a larger number of cases when the death rate is high, is exceptionally low. It is probable that the high incidence of Malaria, Influenza and poverty during the year, has affected the health of the mothers and reacted on the infants.

Of the 44 deaths recorded, 24 or more than half, took place in the first month of life; 19 of these in the first week due to prematurity, congenital defects and birth injuries, again pointing to the need of more wide-spread ante-natal care.

Of the other 20 deaths, 5 only were due to Enteritis. and none of these occurred in totally breast-fed babies.

The Indian Child Welfare Clinic has now completed a year, with one whole-time European Health Visitor, and one whole-time Coloured Midwife doing the same work as has previously been done for the European and Coloured mothers and babies, and the numbers show a very gratifying result.

Doctors Minnie Alper and Janet Jackson each hold a Clinic and one day a week at the Indian Centre.

The number of expectant mothers attending the Clinics has been 123.

The number of cases attended by the Coloured Midwife 69.

The ante-natal and maternity part of the work is the most important foundation of the work, so this shows a very good beginning for the first complete year.

SUPERVISION OF MIDWIVES :

As well as the routine work at the European and Asiatic Clinics, I have endeavoured to start the work of Inspection of Midwives. This has been made possible by Dr. Jackson attending two of the European Clinics each week, to allow of my attending to this work. One hundred and fifty five women have registered as practising Midwives; 134 Europeans; 7 Coloured; 13 Asiatic.

Of the Europeans	112	are	qualified	-	22	unqualified.
" " Coloured	2	"	"	-	5	"
" " Asiatics	1	is	"	-	13	"

All these Midwives have been interviewed by me; particulars noted of their qualifications or experience, and a record of their work will be kept on cards for that purpose.

It/

The Maternal Mortality is again low, being 3.24 for Europeans and 4.1 for Natives. The Infant Mortality Rate 47.52 is higher than it has been for several years, although the incidence of Infantile Diarrhoea which usually accounts for a large number of cases when the death rate is high, is expected to be low. It is probable that the high incidence of Malaria, Intestinal and poverty during the year, has affected the health of the mothers and reacted on the infants.

Of the 44 deaths recorded, 24 or more than half, took place in the first month of life. 10 of these in the first week due to prematurity, congenital defects and injuries, again pointing to the need of more widespread ante-natal care.

Of the other 20 deaths, 5 only were due to Infantile Diarrhoea and none of these occurred in the first three months.

The Indian Child Welfare Clinic has now completed a year. During this time the Indian Child Welfare and whole-time Coloured Infants during the same year as was previously been done for the European and Coloured children and babies, and the numbers show a very gratifying result.

Doctors Minnie Alder and Janet Jackson each hold a Clinic and one day a week at the Indian Centre.

The number of expectant mothers attending the Clinics has been 125.

The number of cases attended by the Clinics is 100.

The ante-natal and maternity part of the work is the most important foundation of the work, so this shows a very good beginning for the first complete year.

THE INDIAN CHILD WELFARE CLINIC. A year ago the Indian Child Welfare Clinic was started at the Indian Centre. I have endeavored to keep the work of the Clinic as simple as possible. The aim has been to provide for the Indian children and to allow of my attending to this work. One hundred and five women have attended as patients. The number of cases attended is 100.

Of the 100 cases, 112 are qualified - 22 unqualified.

All these children have been reviewed by me. The results of their examinations or examinations, and a record of their work will be kept on cards for their purpose.

It has not been possible to see them all quarterly as is laid down in the Government Regulations; to carry this out would require the time of a whole-time official.

The unqualified Midwives will require a considerable amount of supervision. Their equipment is poor, but they have been given a little time to remedy this. Most of the unqualified Coloured Midwives do not even know how to read a thermometer, or what the reading means when they can do so.

One unqualified European Midwife who had been practising for many years in Durban, was refused registration on account of refusing to comply with the regulations after she had applied for registration. Two European and one Coloured Midwife, who have been registered, have since been warned for not complying with the regulations and their work is being watched.

It is obvious that something will have to be done to improve the work of the unqualified Midwives. The Coloured and Asiatic Midwives could not be refused registration as there are not sufficient qualified ones to carry on the work.

When the Cinematograph Film, which is in process of preparation - depicting how district work is carried out by the Municipal Midwives; showing the use of all the articles they are required by the regulations to carry in their bags; the different modes of sterilising these articles; the preparation of the room and the treatment of the patients, mother and baby - is completed, it will form a very valuable means for educating these Midwives up to a somewhat better standard of work.

NURSING HOMES.

During the year, I have inspected and reported on the staff, equipment and running of 19 Nursing Homes.

DAY NURSERY.

In previous years I have paid a weekly visit to the Day Nursery in Clarence Road, which is run by the Child Welfare Society, in order to supervise the dieting of the infants and young children in that institution, and have paid other visits to new entrants when sent for by the Matron.

This year, however, there has been a continued epidemic of Influenza in the home; there has also been an epidemic of Whooping Cough and many cases of Malaria, and on this account there has been much more need for medical supervision, and I have averaged two or three visits to the Nursery every week.

It has not been possible to see them all, as it is laid down in the Government Regulations, to carry this out would require the time of a whole-time official.

The unqualified midwives will require a considerable amount of supervision. Their equipment is poor, but they have been given a list of things to remedy this. Most of the unqualified midwives do not even know how to read a thermometer, or what a reading means when the can be set.

One unqualified midwife, Miss M. who has been practising for many years in London, was refused registration on account of refusing to comply with the regulations after she had applied for registration. Two European and one African midwives, who have been registered, have since been warned for not complying with the regulations and their work is being watched.

It is obvious that something will have to be done to improve the work of the unqualified midwives. The Colonial and African midwives could not be refused registration as there are not sufficient qualified ones to carry on the work.

When the Government is in process of preparation - drafting new regulations work is carried out by the Municipal Midwives, keeping the use of all the articles they are required by the regulations to carry in their bags. The African midwives are supplying these articles. The preparation of the new regulations is being done by the midwives, mother and baby, and is being done by a very valuable woman for assisting these midwives up to a somewhat better standard of work.

STURRING HOUSE

During the year, I have inspected and reported on the state, equipment and running of 12 Sturring houses.

DAY NURSERY

In previous years I have paid a weekly visit to the Day Nursery in Clarence Road, which is run by the Child Welfare Society. In order to supervise the dieting of the infants and young children in that institution, and have paid other visits to day nurseries when sent for by the Matron.

This year, however, there has been a considerable epidemic of influenza in the house, there has also been an epidemic of Whooping Cough and many cases of Measles, and on this account there has been much more need for medical supervision, and I have averaged two or three visits to the Nursery every week.

ENTRANTS TO SERVICE.

I have in spare time medically examined 25 entrants to the Municipal Service.

CINEMATOGRAPH FILM

A considerable amount of the time of all the staff of the Department has been spent in the drawing up of a scenario on and in the photographing of a film representing the work done in a Child Welfare Department.

In this film demonstrations are given on all the essential principles of Child Welfare work, viz : infant feeding, natural and artificial; feeding of the toddler and the mother; clothing; suitable arrangement of the different rooms in the home; treatment of minor ailments, etc.

This film should be very useful for propaganda work, and should form a very excellent basis for lectures on the different branches of Child Welfare work.

COMMITTEES.

I have attended a committee of the Day Nursery once a month, and a committee of the District Nursing Association once a month.

I attended the Annual Meeting of the National Council of Child Welfare held in Bleemfontein in October 1931, and June 1932.

At the last meeting of the National Council for Child Welfare a resolution was passed that more should be done for the health of the toddler, the child between the ages of one year and school age, and this matter is being stressed in other countries as well.

The toddler as seen at the Clinic to-day is a very serious problem. It is very little use giving a mother advice on what the child should have to eat when she has not the money to buy it, and it is equally useless to give these children tonics which make them hungry.

A very large number of men with families are at the present time earning from 6/- to 8/- a day, i.e. from 36/- to 48/- a week when they are on full time.

It has been worked out that for families with small incomes, the income if apportioned roughly in the following manner, can be made to go round :-

Food	60%
Rent	16%
Clothing	12%
Fuel & light ...	8%
Other items.....	4%

Taking/

REPORT TO THE COMMITTEE

I have to report the results of the examination of the work of the Department of Child Welfare.

GENERAL FINDINGS

A considerable amount of the work of all the departments of the Department has been spent in the carrying up of a general plan and in the organization of a plan representing the work done in a Child Welfare Department.

In this plan the fundamental principles are based on all the essential principles of Child Welfare work, viz: infant feeding, natural and artificial feeding of the toddler and the mother; clothing; domestic arrangement of the different rooms in the home; treatment of minor ailments, etc.

This plan should be very useful for the work, and should form a very excellent basis for lectures on the different branches of Child Welfare work.

RECOMMENDATIONS

I have suggested the formation of the Day Nursery Association once a month, and a committee of the Day Nursery Association once a month.

I attended the meeting of the National Council of Child Welfare held in Washington in October 1915.

At the last meeting of the National Council of Child Welfare a resolution was passed that more should be done for the health of the mother, the child between the ages of one year and school age, and the mother in any other way that may be well.

The mother as well as the child should be given a very serious problem. It is very important to give mother more on what the child should have, and when she has not money to pay for it, and it is a very serious problem to give these children food which makes them healthy.

A very large number of women with families are at present earning from \$4.00 to \$5.00 a day, i.e. from \$12.00 to \$15.00 a week when they are on full time.

It has been pointed out that for families with incomes, the income is expended mostly in the following manner, can be made as follows:

Food	 60%
Rent	 15%
Clothing	 10%
Fuel & Light	 10%
Other	 5%

Taking a family where the father earns from 36/- to 48/- a week, the amount allowed for rent would be from 5/9 to 6/8 a week.

Where in Durban can anyone find accommodation for a family at 5/9 or even 6/8 a week? on this account the money for the rent has to be taken from the money which should be spent on food, and the family has to go short of food.

Every authority is agreed that a growing child needs at least a pint of milk a day. In the families I am speaking of, if there is a pint of milk a day or its equivalent in condensed milk for everyone, they are lucky.

Where the Societies are dealing with so many people who are unemployed, it would be impossible for them to help the families where the husband is employed, though only earning a small sum. It seems to me that if 6/- and 8/- a day are to be considered a living wage, that it is time that something should be done to bring rents down in proportion, so that a large enough percentage of the income can be spent on food.

Amount of dry food given free..... 2,420 lbs.

DEATHS :

<u>Notified</u>	
European	876
Coloured	129
<u>Registered</u>	
European	930
Coloured	160
Imported (Euro & Col.)	322
<u>Still Buried</u>	
<u>Notified</u>	
European	26
Coloured	3
<u>Registered</u>	
European	30
Coloured	3
<u>Deaths</u>	
European	60
Coloured	17
Rate - European	27.25
Rate - Coloured	100.25
<u>No. of above deaths who attended</u>	
<u>Minis or were visited by Health</u>	
<u>Visitors :-</u>	
European	17
Coloured	2

asking a family where the father earns from 35/- to 40/- a week, the amount allowed for rent would be from 10/- to 15/- a week.

Where in London can anyone find accommodation for a family at 5/- or even 6/- a week? On this account the money for the rent has to be taken from the money which should be spent on food, and the family has to go short of food.

Every authority is agreed that a growing child needs at least a pint of milk a day. In the families I am speaking of, if there is a pint of milk a day or the equivalent in condensed milk for everyone, they are lucky.

Where the Socialists are dealing with so many people who are unemployed, it would be impossible for them to find the families where the husband is employed, though only earning a small sum. It seems to me that if 6/- and 8/- a day were to be considered a living wage, that is the most something should be paid to bring people down to poverty level, so that a large enough percentage of the income can be spent on food.

Child Welfare Department.1931-1932.

Total Medical Sessions	353.
Total Ante-natal Sessions	162.
Total attendances at Clinic	24,185.
New cases out of above number	2,190.
No. of infants under 1 year attending Clinic	992.
Total attendances of infants under 1 year..	7,990.
No. of expectant mothers attending Clinic...	606.
No. of cases receiving dry food at reduced price	81.
No. of cases receiving dry food free	123.
Amount of dry food sold	1,470 lbs.
Amount of dry food given free.....	2,145 lbs.

BIRTHS :Notifications.

European	874
Coloured	129

Registrations.

European	920
Coloured	160
Imported (Euro & Col.)	382

STILL BIRTHS :

<u>Notified</u>	26
European	23
Coloured	3
<u>Registered</u>	38
European	30
Coloured	8

DEATHS :

European	44
Coloured	17
Rate - European	47.82
Rate - Coloured	106.25

No. of above deaths who attended
Clinic or were visited by Health
Visitors :-

European	17)
Coloured	9) 26

CHILD HEALTH SERVICE
1932-1933

Total Medical Expenditures	253
Total Pharmaceutical Expenditures	182
Total Expenditures	435
New cases out of hospital	2,100
No. of patients under 2 years attending Clinic	202
Total attendance under 2 years	7,980
No. of patients attending Clinic	602
No. of cases referred by health officer	51
No. of cases referred by health officer	183
Amount of dry food	1,000,000 lbs.
Amount of dry food	1,000,000 lbs.

BIRTHS

White	874
Colored	129
Total	1,003
White	920
Colored	160
Total	1,080

DEATHS

White	22
Colored	2
Total	24
White	30
Colored	2
Total	32

DEATHS

White	44
Colored	17
Total	61
White	47.82
Colored	106.25
Total	154.07
No. of above deaths who attended Clinic or were referred by health officer	17
Colored	2

Attended only.		Health visited only.		Health visited and Attended.	
Eur.	Col.	Eur.	Col.	Eur.	Col.
1	2	10	1	6	6

ANTE-NATAL WORK.

No. of expectant mothers attending Clinic..... 606.

Total Number of attendances.....1,412.

No. of above cases attended by Municipal
Midwife..... 176.

No. of cases referred Addington
Hospital for Confinement..... 250.

MATERNAL MORTALITY.

No. of Deaths from causes due to childbirth :-

European..... 3.

Coloured..... -.

DEATH RATE.

European..... 3.28.

Coloured..... -

MATERNAL DEATHS : attended by :-

Midwife throughout.	Doctor.	Both.	Nursing Home.	Total for year 1931-1932.
1	-	-	2	3

Causes of Maternal Deaths :-

Eclampsia Puerperal.	Acute inversion of uterus following confinement - shock - haemorrhage.	Perinephritic abscess - general Septicaemia.
1	1	1

Attended only.		Health visited only.		Health visited and attended.	
Col.	Row.	Col.	Row.	Col.	Row.
1	2	10	1	5	5

WTE-NATAL WORK.

No. of expectant mothers attending Clinics..... 605.
 Total number of attendances..... 1,418.
 No. of above cases attended by Municipal Midwife..... 175.
 No. of cases referred to Addington Hospital for Confinement..... 230.

TERMINAL MORTALITY.

No. of deaths from causes due to childbirth :-
 European..... 3.
 Coloured..... 1.

WTE RATE.

European..... 3.25
 Coloured..... 1.00

TERMINAL DEATHS : attended by :-

Midwife throughout.	Doctor.	Birth.	Midwife Home.	Total for year 1901-1902.
1	1	1	2	3

Causes of Maternal Deaths :-

Septicæmia.	Septicæmia - General.	Septicæmia - Local.	Septicæmia - Local.
1	1	1	1

HEALTH VISITORS' WORK.

INFANTS UNDER 1 YEAR.

	<u>First visits.</u>	<u>re-visits.</u>
Breast Fed	973	1,026
Mixed	51	509
Artificial	73	1,043

TOTAL: 1,097 2,578

OLDER CHILDREN. 193 4,445

Still Births.	Deaths.	Expectant Mothers.	Maternal Deaths.	Ophth. Neon.	Inspection of Lavatories.	Reports to Sanitary Office.	Contacts.	TOTAL.
32	61	598	3	29	25	4	9	761

TOTAL VISITS.....9,074.

Total number of infants under 1 year visited..... 1,526.
Total number of expectant mothers visited..... 417.

MUNICIPAL MIDWIVES.

TOTAL NUMBER OF CASES FOR YEAR..... 176.
" " " ANTE-NATAL VISITS..... 374.

Premature births born alive..... 4.

1 at 8 months - alive.
1 " 7 $\frac{1}{2}$ " - lived 7 hours.
1 " 7 $\frac{1}{2}$ " - alive.
1 " 6 " - lived five minutes.

Stillbirths..... 3.

2 of which were premature,
1 at 7 $\frac{1}{2}$ months,
1 at 5 months.

No Maternal Deaths,
No serious Maternal complications.

Emergency Cases..... 15.

INFANTS UNDER 1 YEAR

Breast Fed	Mixed	Artificial
1,048	81	73
1,048		

TOTAL

1,102

OLDER CHILDREN

1,102

Deaths	Export and Imports	Maternal Deaths	Infants of 1 year or less	Reported to Sanitary Officer	Con- firmed Cases
81	508	3	83	4	9

TOTAL VISITS.....1,102

Total number of infants under 1 year visited.....1,102
Total number of expectant mothers visited.....417

MUNICIPAL MIMIVES

TOTAL NUMBER OF CASES FOR YEAR.....170
"ANTE-NATAL VISITS".....374
"Post-natal visits born alive".....4

1 at 2 months - alive
1 " " - lived 3 months
1 " " - alive
1 " " - lived five minutes

1 at 2 months - alive
1 at 3 months - alive
1 at 4 months - alive
1 at 5 months - alive

No Maternal Deaths
No neonatal deaths

Geny Cases.....10

B I R T H S.

Table showing the Monthly Distribution of Births occurring among Borough Residents, giving Race and Sex, 1931 - 1932.

Month	European.		Coloured.		Natives.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<u>1931.</u>										
July	39	33	7	7	9	7	38	32	93	79
August	33	45	9	13	9	7	57	38	108	103
September	40	34	11	4	9	9	38	36	98	83
October	36	42	9	4	4	9	40	42	89	97
November	32	35	8	3	6	3	38	38	84	79
December	40	36	5	7	10	9	29	31	84	83
<u>1932.</u>										
January	39	32	5	6	6	4	33	39	83	81
February	42	34	5	7	5	5	19	13	71	59
March	39	40	8	5	8	5	32	28	87	78
April	46	39	3	5	9	5	29	33	87	82
May	43	34	9	5	11	5	34	27	97	71
June	52	35	7	8	14	13	44	38	117	94
TOTAL :	481	439	86	74	100	81	431	395	1,098	989

Table showing Illegitimate Births occurring among Borough Residents, - 1931 - 1932.

European.		Coloured.		Natives.		Asiatic.		Total.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
17	9	22	20	61	55	1	-	101	84

TABLE 1.

Table showing the Monthly Distribution of Births occurring among foreign residents, living here and away, 1931 - 1932.

	Europeans.		Coloured.		Natives.		Asiatics.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Jan.	30	33	7	9	9	7	38	37	88	108
Feb.	33	45	9	13	3	7	38	67	88	108
Mar.	40	34	11	4	3	3	36	36	88	88
Apr.	36	42	9	4	4	9	40	40	88	88
May	32	32	3	3	8	8	38	38	84	84
Jun.	40	30	8	7	10	9	38	38	84	84
Jul.	30	38	3	6	6	4	36	36	88	88
Aug.	42	34	6	7	3	3	38	38	71	71
Sep.	39	40	6	6	3	3	38	38	87	87
Oct.	46	39	3	3	9	8	38	38	87	87
Nov.	43	34	9	3	11	3	38	38	87	87
Dec.	52	38	7	8	14	13	44	38	117	117
Total.	481	439	88	94	100	81	401	388	1,082	999

Table showing the Monthly Distribution of Births occurring among foreign residents, living here and away, 1931 - 1932.

	Europeans.		Coloured.		Natives.		Asiatics.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Jan.	30	33	7	9	9	7	38	37	88	108
Feb.	33	45	9	13	3	7	38	67	88	108
Mar.	40	34	11	4	3	3	36	36	88	88
Apr.	36	42	9	4	4	9	40	40	88	88
May	32	32	3	3	8	8	38	38	84	84
Jun.	40	30	8	7	10	9	38	38	84	84
Jul.	30	38	3	6	6	4	36	36	88	88
Aug.	42	34	6	7	3	3	38	38	71	71
Sep.	39	40	6	6	3	3	38	38	87	87
Oct.	46	39	3	3	9	8	38	38	87	87
Nov.	43	34	9	3	11	3	38	38	87	87
Dec.	52	38	7	8	14	13	44	38	117	117
Total.	481	439	88	94	100	81	401	388	1,082	999

Monthly distribution of Births among Non-Residents giving
Race :-

1931 - 1932.

1931-1932.	European.	Coloured.	Native.	Asiatic.	Total.
July	32	3	38	3	76
August	28	-	26	3	57
September	21	5	40	1	67
October	34	-	42	-	76
November	27	4	43	1	75
December	23	6	49	-	78
January	21	3	39	3	66
February	34	3	35	-	72
March	31	-	43	3	77
April	30	6	52	2	90
May	34	4	35	-	73
June	29	4	38	2	73
TOTAL :	344	38	480	18	880

INFANT DEATHS FROM ENTERITIS - FEEDING.

Barley Water and Cow's Milk.	Breast and Cow's Milk.	Lactic Acid Milk.	Nestles.	Cow's Milk.
1	1	1	1	1

INFANTILE MORTALITY - AGES & CAUSES OF DEATHS - See page 4.

EUROPEAN INFANTILE MORTALITY - See page 3.

Monthly distribution of births among non-residents living

1921 - 1922

Month	European	Colored	Native	Asiatic	Total
Jan	3	1	2	3	9
Feb	1	1	2	1	5
Mar	1	1	2	1	5
Apr	1	1	2	1	5
May	1	1	2	1	5
Jun	1	1	2	1	5
Jul	1	1	2	1	5
Aug	1	1	2	1	5
Sep	1	1	2	1	5
Oct	1	1	2	1	5
Nov	1	1	2	1	5
Dec	1	1	2	1	5
Total	34	12	20	18	84

INFANT DEATHS FROM ENTERITIS - 1921

Infant	Age	Sex	Color	Religion	Place of Birth	Place of Death	Cause of Death
1	1	M	W	C	W	W	W
2	1	F	W	C	W	W	W
3	1	M	W	C	W	W	W
4	1	F	W	C	W	W	W
5	1	M	W	C	W	W	W
6	1	F	W	C	W	W	W
7	1	M	W	C	W	W	W
8	1	F	W	C	W	W	W
9	1	M	W	C	W	W	W
10	1	F	W	C	W	W	W

INFANTILE MORTALITY - 1921 - See page 4

EUROPEAN INFANTILE MORTALITY - 1921

ANNUAL REPORT.

1931-1932.

INDIAN CLINIC.

Total Ante-natal Sessions.....	99.
Total Medical Sessions.....	99.
Total Attendances at Clinic.....	6,366.
No. of new Cases out of above Number.....	1,166.
Total attendances of infants under 1 year.....	1,180.
No. of expectant Mothers attending Clinic.	123.
No. of Infants under 1 year " "	287.

HEALTH VISITORS' WORK.

No. of infants under 1 year visited.....	333.
No. of expectant mothers visited.....	88.

INFANTS UNDER 1 YEAR.

	<u>First Visits.</u>	<u>Re- visits.</u>
Breast Fed	235	152
Mixed	17	38
Artificial	23	55
	<u>275</u>	<u>245</u>
<u>OLDER CHILDREN.</u>	113	288
<u>TOTAL VISITS.</u>		921

ANTE-NATAL WORK.

No. of expectant mothers attending Clinic.....	88.
Total number of attendances.....	284.

MUNICIPAL MIDWIFE.

Total number of Cases.....	69.
Total No. of ante-natal visits for 6 months.....	92

No Maternal Deaths,
No serious Maternal Complications,
No Still Births.

ANNUAL REPORT

1931-1932

INFANT CLINIC

Total Ante-natal Sessions.....	99
Total Medical Sessions.....	99
Total Attendances at Clinic.....	6,366
No. of new Cases out of above number.....	1,106
Total attendances of infants under 1 year.....	1,106
No. of expectant Mothers attending Clinic.....	183
No. of Infants under 1 year.....	387

HEALTH VISITORS' WORK

No. of Infants under 1 year visited.....	323
No. of expectant Mothers visited.....	88

INFANTS UNDER 1 YEAR

First Visits	Second Visits	Artificial	Mixed	Breast Fed
183	336			
38	17			
38	33			

278

173

387

TOTAL VISITS

ANTE-NATAL WORK

No. of expectant Mothers attending Clinic.....	88
Total number of attendances.....	323

MUNICIPAL VISITS

Total number of Cases.....	68
Total No. of ante-natal visits for 6 months.....	73

No Maternal Deaths
No Serious Maternal Complications
No Still Births

3 LEGAL :

Law or by-laws relating to.	Cases.	Convictions, & Consents to Judgment.	Dismissals.	Fines. £. s. d.
Sale of Milk without license.	8	8	-	14. 0. 0.
Adulteration of Milk.	7	6	1	19. 0. 0.
Manufacture, storage and sale of food.	11	10	1	31.10. 0.
Nuisances - Public Health By-laws.	9	9	-	14. 0. 0.
Nuisances - Public Health Act.	4	4	-	1. 0. 0.
House Drainage.	5	4	1	8.10. 0.
Sale etc. of contaminated unwholesome etc. Food	4	3	1	5. 0. 0.
Adulteration of Food - other than milk.	1	1	-	- - -
Illegal Housing.	1	1	-	- - -
Prevention of Malaria & Eradication of Mosquitoes.	6	6	-	9.10. 0.
Collection & Storage of Refuse - Provision of receptacles.	1	1	-	- - -
Ice Cream under standard	10	10	-	15. 0. 0.
Obstruction of Sanitary Inspector.	1	1	-	1.10. 0.
	68	64	4	£119. 0. 0.

by-law ing to.	Class.	Sanitation, a Complaint in Judgment.	Dis- miss- ed.	Penal- ties.
of milk without license.	2	2	-	12.00
operation of milk.	2	2	1	12.00
factory, storage sale of food.	11	10	1	21.00
unseen - Public Health laws.	2	2	-	12.00
unseen - Public Health	2	2	-	12.00
Drainage:	2	2	1	21.00
etc. of contaminated wholesome etc. food	2	2	1	21.00
operation of food - other than milk	1	1	-	-
all buildings.	1	1	-	-
action of Malaria & infection of mosquito	2	2	-	21.00
action & storage of use - provision of specimens.	1	1	-	-
room under standard	10	10	-	12.00
action of sanitary pector.	1	1	-	11.00
	22	24	4	212.00

14. OTHER MATTERS OF HEALTH AND SANITATION.

Sanitary Supervision.

During the year 1726 complaints were received and investigated - these included 237 complaints regarding the prevalence of rats and 360 intimations from householders troubled by mosquitoes.

3,303 verbal and 2,951 written notices were issued.

Sanitary reports on applications for trading license numbered 4,956.

Inspection in connection with the fumigation of premises by Cyanide totalled 700, and

Advisory reports to other Municipal Departments numbered 1708.

The following tables show the statistical records of work done by the District Health Inspectors.

Inspections of :

Hotels, boarding & lodging houses.	2,174.
Restaurants, eating houses & tea Rooms	3,098
Bakeries	181.
Dairies - within the Borough	33.
outwith the Borough	293.
Laundries	877.
Markets	715.
Offensive Trades	239.
General	21,510.
<u>Night Inspections.</u>	195.

Sanitary Supervision

During the year 1908 complaints were received and investigated - these included 237 complaints regarding the prevalence of rats and their extermination from households provided by municipalities.

2,308 verbal and 2,981 written notices were issued.

Sanitary reports on applications for trading

license numbered 4,935.

Inspection in connection with the licensing of

premises by Cyanide totaled 700, and

Advisory reports to other Municipal Departments

numbered 1708.

The following tables show the statistical results

of work done by the District Health Inspectors.

Inspections of :

Hotels, boarding & lodging houses, 2,174

Restaurants, eating houses & tea rooms, 2,032

Bakeries, 181

Dairies - within the Borough, 35

outside the Borough, 295

Laundries, 877

Markets, 715

Offensive Trades, 233

General, 21,210

Total Inspections, 28,427

The following list indicates the nature of nuisance abated and improvements effected at the instance of the inspectional staff :-

Premises demolished/reconstructed.....	10.
New Brick Native Quarters erected.....	15.
Unauthorised or dilapidated structures : demolished...	94.
General/Sundry repairs and improvements to premises...	99.
European water closets (buildings) provided.....	30.
Native water closets (buildings) provided.....	43.
Screening of Sanitary conveniences (Native).....	34.
New brick bathro ms erected.....	8.
" " Washrooms erected.....	1.
" " Change room erected.....	1.
" " Kitchens erected.....	7.
Provision of proper cooking facilities, in refreshment rooms, etc.....	18.
Yards, etc. paved and/or drained.....	56.
Yard paving - repaired or made good.....	65.
Roofs : renewed or repaired.....	153.
Roof gutters and downpipes: renewed/ repaired.....	297.
Defective walls repaired.....	69.
" floors: renewed or repaired.....	66.
Wood " : replaced by concrete.....	25.
Wash-up sinks provided.....	66.
walls tiled (at rear of sinks etc).....	49.
Water closets - defective fittings.renewed/ repaired provided....	518.
Defective water service :renewed/ repaired/ provided..	150.
Defective drains, fittings, etc: renewed/ repaired/ pro- vided..	492.
Overcrowding : discontinued.....	59.
Lighting and ventilation provided.....	103.
Illegal housing of natives : discontinued.....	65.
Use of unauthorised structures as sleeping places: discontinued..	313.
Measures to protect food preparation, delivery, etc....	123.
Premises -(Internal conditions) cleaned and renovated	552.
Premises - (Yards, water closets, gulleys, etc.) cleansed.....	1137.
Refuse/Manure refuse receptacles : provided or repair- ed.....	819.
Vacant land cleared of overgrowth, etc.....	241.
Measures to safeguard against rodent infestation or harbourage.....	337.
Measures to prevent mosquito development.....	697.
Fly nuisance : abated.....	48.
Bug infestation removed (Premises).....	93.
Keeping of poultry in contravention of Borough Bye- laws...(Discontinued).....	456.
Keeping of animals so as to be a nuisance: Discontin- ued.....	21.
Deposits of refuse in unauthorised places : removed, etc.....	137.
Smoke nuisance - abated.....	10.
Discharge of waste water into street : discontinued..	138.

The following list indicates the nature of nuisance
 dated and improvements effected at the instance of the
 inspection staff :-

10	Remises demolished/reconstructed
11	New Brick Native Quarters erected
12	Unauthorized or dilapidated structures - demolished
13	General/Sundry repairs and improvements to premises
14	European water closets (buildings) provided
15	Native water closets (buildings) provided
16	Improvement of Sanitary conveniences (Native)
17	New brick bathro ms erected
18	" " Washrooms erected
19	" " Change room erected
20	" " Kitchens erected
21	Provision of proper cooking facilities in restaurants
22	Yards, etc. paved and/or drained
23	Land paving - repaired or made good
24	Roofs : renewed or repaired
25	Roof gutters and downpipes : renewed/ repaired
26	Defective walls repaired
27	" " Floors : renewed or repaired
28	" " : replaced by concrete
29	Wash-up sinks provided
30	Walls tiled (at rear of sinks etc.)
31	Water closets - defective fittings renewed/ repaired
32	provided
33	Defective water service : renewed/ repaired/ provided
34	Defective drains, fittings, etc. : renewed/ repaired/ provided
35	Overcrowding : discontinued
36	Lighting and ventilation provided
37	Illegal housing of natives : discontinued
38	Use of unauthorized structures as sleeping places : discontinued
39	Measures to protect food preparation, delivery, etc.
40	Premises - (internal conditions) cleaned and renovated
41	Premises - (Yards, water closets, gutters, etc.) cleaned
42	Refuse/Manure refuse receptacles : provided or repaired
43	Vacant land cleared of overgrowth, etc.
44	Measures to safeguard against rodent infestation or
45	harbours
46	Measures to prevent mosquito development
47	Fly nuisance : abated
48	Bag infestation removed (Premises)
49	Keeping of poultry in contravention of Borough Bye-
50	laws : (Discontinued)
51	Keeping of animals so as to be a nuisance/Discontinued
52	Deposits of refuse in unauthorized places : removed
53	etc.
54	Smoke nuisance - abated
55	Discharge of waste water into street : discontinued

OFFENSIVE TRADES.

The following list shows the number of offensive trades being carried on within the Borough, viz:

Abattoirs	3.
Breweries	2.
Hides, Skins & Wool	26.
Fertiliser Works	5.
Soap Makers	3.
Wattle Bark Grinding	2.
Wool Washeries	2.
Refuse Destruction	1.
Sewerage Outfall	1.

DEAD ANIMALS REMOVED OR DISPOSED OF BY THE DEPARTMENT.

Horses	78.
Donkeys	8.
Mules	16.
Sheep	6.
Cattle	16.
Calves	1.

The number of bodies disposed of at the Crematorium during _____ is -----

BODIES RECEIVED AT THE MORTUARY.

Europeans	112.
Asiatics	54.
Coloureds	12.
Natives	10.

OFFENSIVE TRADES

The following list shows the number of offensive trades being carried on within the Borough, viz:

3.	Abattoirs
2.	Breweries
20.	Hides, Skins & Wool
2.	Perfume Works
2.	Soap Makers
2.	Cattle Bark Strippers
2.	Wool Washeries
1.	Refuse Destruction
1.	Beverage Distilleries

DEAD ANIMALS REMOVED OR DISPOSED OF BY THE DEPARTMENT.

78.	Horses
8.	Donkeys
18.	Mules
6.	Sheep
18.	Cattle
1.	Calves

14. continued.

INTERMENTS AT CEMETERY.

	<u>Stellawood.</u>	<u>General.</u>	<u>Umgeni.</u>
European.....	681	185	15
Asiatic.....	318	107	-
Natives, etc.....	1190	9	-

Total Interments 2,505.

SALE OF GRAVE SITES.

The number of grave sites sold at Stellawood Cemetery was 446.

CREMATIONS.

The number of bodies disposed of at the Crematorium during the year was 39 -- Europeans 38, Asiatics 1.

BODIES RECEIVED AT THE MORTUARY.

Europeans.....	52.
Asiatics.....	25.
Coloureds.....	82.
Natives.....	10.
	—
	169.
	—

INTERMENTS AT CEMETERY

European.....	181
Asiatic.....	107
Natives, etc.....	9
Total Interments	2,305

SALE OF GRAVE SITES

The number of grave sites sold at Starwood Cemetery was 190.

OPERATIONS

The number of bodies disinterred at the Cemetery at the mortuary was 35 — Europeans 35.

BODIES RECEIVED AT THE MORTUARY

Europeans.....	22
Asiatics.....	25
Colombians.....	82
Natives.....	10
	139

84.
15. STAFF :

PUBLIC HEALTH COMMITTEE 1931-32.

Councillor Mrs. E. A. Benson (Chairwoman).

" H.K. LeMarchand.

" H.H. Kemp

" A. L. Clark.

" M. Cornelius.

" O. Lea.

" L. McCafferty.

" P. Osborn.

" J. Rainnie.

" G. Reyburn.

" W.E. Smith.

PUBLIC HEALTH DEPARTMENT STAFF.

Administration and Office.

- 1 Medical Officer of Health.....Dr. G.H. Gunn, M.D., ChB, D.P.H.
- 6 Clerks.
- 2 Juniors.
- 3 Typistes.
- 1 Infectious Diseases Officer.....C.C. deLucey, Cert. R.S.I. &
Victoria University, Manchester.

Inspectional.

- 1 Chief Sanitary Inspector.....R. Walker, Cert R.S.I.
- 1 Dairy Inspector.....A. Michie, Cert R.S.I.
- 8 District Health Inspectors.....R.S.I. Certificate.

Sick Leave Control.

Medical Officer.....Dr. G.D. English, M.B., Ch.B, D.P.H.
D.T.M.

Eradication of T.B. in Cattle.

Veterinary Officer.....W.A. Dykins, M.R.C.V.S.

Maternity & Child Welfare.

- 1 Medical Officer.....Dr. K. McNeill, M.B., Ch.B, D.P.H.
- 2 Midwives.
- 4 Health Visitors.
- 2 Typiste (Clerk)
- 1 Clinic Assistant.

Infectious Diseases Hospital.

- 1 Matron.....Miss M.E. Ewels.
- 3 Sisters.
- 3 Staff Nurses.
- 1 Seamstress.
- 15 Indians (1 Cook, 1 Sirdar, 11 Orderlies, 2 Maids).

Disinfecting Station.

- 1 Superintendent.
- 2 Assistant Disinfectors.
- 12 Indians (2 Dhobies, 1 Sirdar, 9 Assistants).

PUBLIC HEALTH COMMITTEE 1931-32.

Committee: Mr. E. A. Hanson (Chairman).
 H. E. Leland
 R. H. Kemp
 A. L. Clark
 S. Connell
 O. Lee
 J. McCarty
 F. Osborn
 J. H. Haines
 G. Hays
 W. H. Hays

PUBLIC HEALTH DEPARTMENT STAFF.

Administration and Office.

Medical Officer of Health.....Dr. G. H. Gunn, M.D., Ch.B., D.C.
 Clark
 Registrar
 Typist
 Infectious Diseases Officer.....C. C. Gentry, Cert. R.S.I.
 Victoria University, Massey

Sanitation.

Chief Sanitary Inspector.....H. Walker, Cert. R.S.I.
 Daily Inspector.....A. Mickle, Cert. R.S.I.
 District Health Inspectors.....A. E. I. Gentry.

Public Health Control.

Medical Officer.....Dr. G. H. Gunn, M.D., Ch.B., D.C.
 D.T.M.

Education of P.B. in Control.

Sanitary Officer.....W. A. Dine, M.A.C.V.S.

Service & Public Welfare.

Medical Officer.....Dr. K. McNeill, M.B., Ch.B., D.C.
 Midwives
 Health Visitors
 Typist (Clerk)
 Clinic Assistant

Infectious Diseases Hospital.

Nurse.....Miss M. E. Evans
 Sisters
 Staff Nurses
 Sanitary
 Indiana (1 Cook, 1 Sister, 11 Orderlies, 2 Midwives).

Infection Station.

Superintendent
 Assistant District
 Indiana (2 Nurses, 1 Sister, 2 Assistants)

Anti-Mosquito Sanitation.

- 1 Inspector -in charge.....J.M.McGreavey, Cert.R.S.I.
- 1 European Overseer.
- 4 " Patrolmen.
- 16 Indians.

Anti-Plague.

- 1 European Overseer.....F.Drake, M.B.E., Cert.R.S.I.

Conservancy.

- 1 Indian Sirdar.
- 1 " Tinsmith.
- 7 " Labourers.

Cleansing Services.

- 1 Chief Overseer.
- 4 Assistant Overseers.
- 6 Sirdars 160 Rubbish Collection (Indian).
- 5 " 206 Street Cleaners (do).

Public Conveniences.

- 11 European Attendants.
- 9 Indian Attendants.

Barracks Management.

- 1 European Caretaker.
- 15 Indians.

Corporation Cemeteries.

- 2 Europeans (Stellawood and General Cemeteries).
- 16 Indians.

16. REMARKS & RECOMMENDATIONS :

1. Extension of Borough Boundaries.

In anticipation of the extension of the Borough boundaries due on August 1st 1932, every effort has been made to adapt existing staff and office facilities to the task of administering public health functions in the Greater Borough.

The Card Index System of Record keeping has now been applied to every phase of the Department's work. This has necessitated an increase in the clerical staff, but should enable the somewhat tedious task of Record keeping to be dispatched with accuracy and expedition.

Further re-organisation of Sanitary Staff arrangements have been held over pending incorporation of the suburban areas. After incorporation has been effected, it will be found necessary to devote the time of two experienced Sanitary Inspectors to supervisory duties in connection with applications for trading licences and building plans and housing matters in general. The development of an Anti-Mosquito Sanitation Unit will, to a certain extent, relieve the District Sanitary Inspectors of responsibility for following up Mosquito, Rodent and Fly Nuisances. In order to effect those dispositions, it will be necessary to recast the sanitary districts of the present Borough into larger units.

2. Clinical Medical Services.

Provision has been made on the Estimates for the coming year for the appointment of a whole-time Clinical Medical Officer to undertake the duties of Sick Leave Control, Medical Attendance on Police & Fire Brigade Staffs and

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Injured-on-duty Cases, including temporary Relief Workers. These duties have hitherto been carried on by the Assistant Medical Officer of Health, resulting in the benefit to the Council of a direct saving on Sick Leave costs and working efficiency amounting to between two and three thousand pounds per annum. Subsequent to incorporation, it will be necessary to devote the whole time of the Assistant Medical Officer of Health to executive public health duties.

3. Health Propaganda & Education.

The cause of health education and propaganda has been very considerably advanced during the year, mainly by reason of the outstanding success which attended Health Week held in September. In addition to the carrying out of a publicity and propaganda campaign in the press and otherwise, a novel Health Exhibition was held in the Town Hall from the 21st to the 26th September.

The Exhibition in the Town Hall was organised on the basis of harmonizing the spheres of Industry, Public Health and Education. Stalls were taken up and appropriate displays made by a large number of industrial firms and Societies interested in health and allied matters as well as by the Works, Electricity, Water and Health Departments of the Corporation.

The Health Department's exhibits and demonstrations were specially illustrative of practical hygiene as applied to control of foodstuffs, mosquito prevention and Maternity & Child Welfare.

The Durban Schools contributed very effectively to the programme of health displays, demonstrations and to

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to the programme of health displays, demonstrations and to

the entertainment of the public generally. The Exhibition was splendidly attended, the hall being crowded on the last two evenings. The impression was gained, as a result of the Exhibition, that the "sanitary conscience" of the community had been definitely stimulated.

Provision has been made on the current year's Estimates, for the appointment of a special Health Lecturer and the equipment of a health section in the Borough Museum. It is confidently expected that, in the course of the next year, a systematic course of Health Instruction will have been organised for the senior Durban School-pupils. In developing this course of instruction, stress will be laid, to begin with, on the phases of domestic hygiene associated with Mosquito Prevention, Dietetics and Child Welfare.

During the year, a series of Health Films sub-standard size was prepared by the Department. The subjects dealt with are as follows :-

Water Supply,
Milk Supply,
Anti-Mosquito Sanitation,
Health Culture,
Snake Bite Treatment,
Maternity & Child Welfare.

Wherever suitable, those films will be utilized to supplement the courses of instruction in the various subjects of the Health instruction curriculum.

The importance of public instruction in health matters is to be specially emphasized in a town such as Durban, where many actual and potential sources of ill-health, occurring within the domestic sphere, are accentuated by reason of the sub-tropical climate ^{and} other special considerations relating to soil and situation which obtain on the Natal

the entertainment of the public generally. The exhibition was splendidly attended, the hall being crowded on several evenings. The impression was gained, as a result of the exhibition, that the "history of civilization" of the community had been definitely established.

Provision has been made on the part of the State for the appointment of a special health instructor and the equipment of a health section in the health bureau. It is confidently expected that in the course of the next year, a systematic course of health instruction will have been organized for the new year. The new year will be held, developing this course of instruction, which will be held to begin with, on the phase of domestic hygiene associated with domestic prevention, education and child welfare.

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- Water Supply
- Milk Supply
- Food Inspection
- Health Officer
- Public Health
- Sanitary & Child Welfare

Whenever suitable, these films will be utilized to supplement the courses of instruction in the various subjects of the health instruction curriculum.

The importance of public instruction in health matters is to be especially emphasized in a town such as Durban, where many actual and potential sources of ill-health occurring within the domestic sphere, are accentuated by the presence of the unsanitary conditions. Special consideration is being given to the subjects which contain on the water

Coast. That the Council has seen fit to undertake such promising pioneer work in the educational field of public Hygiene, is a matter of great encouragement for the staff, who are in the best position to appreciate the wastage of human efficiency and economy resulting from public ignorance and apathy in regard to the canons of domestic and communal hygiene.

My grateful thanks are due to Councillors for their heartening support of my endeavours to prosecute a strong policy of progressive hygiene and to the staff of the Department for their loyal attachment to the best traditions of public service.

(a) created in contravention of the Building Bye-Laws or (b) created for the purpose of housing families or servants or (c) created for purposes other than that of human habitation - and all of which are now being accepted as dwellings.

Most of the premises are of inferior wood and iron construction, situated in the backyards of ordinary dwelling houses. In the vast majority of cases, light and ventilation are inadequate, while sanitary accommodation and domestic equipment are lacking in one or more essentials.

The average family numbers 3.3 persons, and 80% of the total number of families are lodged in one room. Overcrowding, however, is not so bad as often seems. In the main dwellings on the respective lots, which are

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strong policy of progressive hygiene and to the staff of
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R E P O R T "B".HOUSING :1. European.

Owing to the continued economic depression, the number and value of new constructions, including dwellings, have markedly declined as compared with previous years. During the year 286 new dwellings and flats were erected as compared with 473 in the previous year.

During the year, a special survey was carried out for the purpose of ascertaining the housing conditions of the most depressed classes of all races. The survey was largely limited to the class of housing in which the premises can be described as having been (a) erected in contravention of the Building Bye-laws or (b) erected for the purpose of housing Native servants or (c) erected for purposes other than that of human habitation - and all of which are now being occupied as dwellings.

Most of the premises are of inferior wood and iron construction, situated in the back-yards of ordinary dwelling houses. In the vast majority of cases, light and ventilation are inadequate, while sanitary accommodation and domestic equipment are lacking in one or more essentials.

The average family numbers 3.3 persons, and 80% of the total number of families are housed in one room. Overcrowding, however, is as bad and often worse, in the main dwellings on the respective lots, which are

HOUSING

1. Introduction

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The average family numbers 3.3 persons, and 50% of the total number of families are housed in one room. Overcrowding, however, is as bad and often worse, as the main dwellings on the respective lots, which are

not reckoned in this particular survey.

The analysis of average rentals reveals the economically depressed state of this section of the community. Nineteen European families occupy Native Quarters, and in general, it may be taken that the families concerned, all races, represent the lowest economic grade in the community.

There is no alternative accommodation for these people, nor any prospect of such unless the principle is accepted that the difference between economic rentals and the amount they are able to pay be, in some manner, defrayed by the Local Authority.

Communal housing accommodation, let at sub-economic rentals, owned and supervised by the local authority, appears to offer the only solution for this particular aspect of the housing problem.

The information obtained by the survey is set forth hereunder :

Premises.	207
Rooms - Total occupied	716
Families	505
Persons E. 315, C. 161, N. 239, A. 980	1695
Occupants. Adults 1086. Children 609	1695
Families occupying :	<u>1 Room</u> - <u>2 Room</u> - <u>3 Room</u> - dwellings.
	405 77 20
Average number of)	<u>1 Room</u> - <u>2 Room</u> - <u>3 Room</u> - dwellings.
persons per room in)	3.1 1.7 1.9
European Families occupying Native Quarters.	19
	Back. Side.
Situation of Rooms.	<u>Boundary</u>
	139 173
Construction. Good 50.	Fair 114. Poor 254.
Light and Ventilation	Good 55. Poor 365.

Not provided with - (out of total 716)

<u>Kitchen.</u>	<u>Sink.</u>	<u>Bath.</u>	<u>W.C.</u>	<u>Food Storage.</u>	<u>Yard Paving & Drainage.</u>
122	329	83	27	320	146

Number not complying with Bye-laws 298.

Average Rental 1 Room. - 2 Room - 3 Room - dwellings.
 £1/12/6 £2/10/0 £5/-/-

2. Non-European :

(1) Coloured.

The conditions of housing as regards this class have not improved during the year.

(2) Natives.

It has been decided to locate a proposed new Native village at Clairwood, in the South Coast Junction area. The first part of the scheme provides for the erection of 100 detached dwellings. Full details of cost and conditions of rental are not yet available.

(3) Asiatic.

No further progress has been made in connection with the provision of new housing facilities for Asiatics.

Natives & Indians-Private Barracks or Compounds :

There are 126 Native & Indian privately owned Barracks or Compounds, in the Borough, in which ten or more persons are housed. The population thus housed numbers 4813 Natives and 168 Indians. Those premises are all connected to the Municipal Water Supply, but five are outwith the sewered area.

The structural conditions of those Barracks may be described as follows :-

Good 81.	Fair 35.	Poor 10.	Total 126.
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