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

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MEDICAL OFFICER'S REPORT

Municipal Buildings,
Durban, 1st July, 1923.

TO HIS WORSHIP THE MAYOR
AND TOWN COUNCILLORS OF THE BOROUGH OF DURBAN.

LADIES AND GENTLEMEN,

I have the honour to submit herewith the Twenty-first Annual Report relating to the Health and Sanitary Conditions of the Borough of Durban, for the year ending 30th June, 1923.

KATHARINE McNEILL
Acting Medical Officer of Health.

POPULATION.

The following table shows the estimated population for 1922-23 and the previous census of the Borough for comparison are shown :-

	1918 Govt. Census	1921 Govt. Census	1922 Estimate	1923 Estimate
European	41,865	46,113	48,550	50,100
Coloured)	19,872	18,391	4,400	4,750
Asiatic)			15,150	15,650
Native	17,925	29,011	30,000	33,500
Total	79,662	93,515	98,100	104,000

For Public Health purposes the "Coloured" population is included in the European, and the Birth Rates, Death Rates, etc., shown in this Report are calculated on the combined figures.

BIRTHS.

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

Months	Males			Females			Total		
	E.	N.	A.	E.	N.	A.	E.	N.	A.
1922									
July	59	-	46	52	-	41	111	-	87
August	46	-	50	44	1	41	90	1	91
September	41	-	37	38	-	27	79	-	64
October	29	1	44	35	-	30	64	1	74
November	39	-	31	45	2	35	84	2	66
December	41	-	26	38	-	33	79	-	59
1923									
January	51	-	42	55	-	42	106	-	84
February	42	1	35	39	-	41	81	1	76
March	53	-	43	49	-	28	102	-	71
April	41	1	39	43	1	31	89	2	70
May	41	-	35	51	-	21	92	-	56
June	68	-	42	52	-	54	120	-	96
Totals	551	3	470	546	4	424	1097	7	894

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2. TABLE OF BIRTHS OCCURRING IN MONTHS AMONG NON-RESIDENTS. EUROPEAN.

1922												1923													
July		Aug.		Sept.		Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April		May		June		Total	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
81	8	10	7	22	0	9	9	9	4	7	5	6	5	13	12	7	7	7	7	8	6	8	7	114	90

European Birth Rate (gross)................................	23.72
European Birth Rate corrected for non-residents.........	20.0
Asiatic Birth Rate..	57.1
Native Birth Rate..	20.8
Birth Rate, England and Wales, 1922....................	20.6

3. TABLE SHOWING TOTAL REGISTERED EUROPEAN BIRTHS AND BIRTH RATES FOR THE PAST SEVEN YEARS.

	1917	1918	1919	1920	1921	1922	Gross 1923	Boro only 1923
Births	1,063	1,105	1,128	1,252	1,338	1,350	1,301	1,097
Rates	26.09	25.6	23.8	24.9	26.6	26.8	23.72	20.0

4. TABLE SHOWING LEGITIMATE AND ILLEGITIMATE BIRTHS, (EUROPEAN) EXCLUDING IMPORTED BIRTHS.

	Males	Females	Total
Legitimate Births..................................	526	534	1,060
Illegitimate Births................................	25	12	37
Total	551	546	1,097

Percentage of Illegitimate Births (Borough Residents).......... 3.37

DEATHS.

1. TABLE SHOWING RACE AND SEX DISTRIBUTION OF DEATHS DURING THE PAST YEAR.

Race	Male	Female	Total
European.......................................	238	212	450
Native..	117	16	133
Asiatic...	166	122	288
Total	521	350	871

2. AGE DISTRIBUTION OF DEATHS (EUROPEAN).

	Male	Female	Total
Under 1 year....................................	28	36	64
1 - 5 "	14	14	28
5 -10 "	6	4	10
10 -15 "	4	3	7
15 -20 "	2	5	7
20 -25 "	4	7	11

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3. TABLE SHOWING CHIEF STATISTICS OF DEATHS OF ALL RACES IN THE BOROUGH DURING THE PAST FIVE YEARS.

Race	1918-19	1919-20	1920-21	1921-22	1922-23
European	487	481	449	476	450
Native	224	204	172	198	133
Asiatic	338	355	329	306	288
Totals	1,049	1,040	950	980	871
Death-rate per 1,000 of population					
European	10.3	9.6	8.9	9.4	8.20
Native	8.0	6.7	5.6	6.8	3.97
Asiatic	15.6	15.7	23.1	20.2	13.4

4. TABLE FOR COMPARISON SHOWING RECORDED DEATH RATES PER 1,000 IN ENGLAND AND WALES IN 1922.

England and Wales...............................	12.9
105 Great Towns, including London............	13.0
155 Smaller Towns............................	11.7
London.......................................	13.4

5. TABLE SHOWING MONTHLY DISTRIBUTION OF DEATHS AMONGST RESIDENTS (EUROPEANS), 1922-23.

Months	Males	Females	Total
July..................................	21	23	44
August................................	17	15	32
September.............................	27	17	44
October...............................	17	16	33
November..............................	18	15	33
December..............................	22	17	39
January...............................	9	15	24
February..............................	29	26	55
March.................................	17	13	30
April.................................	20	16	36
May...................................	20	26	46
June..................................	21	13	34
Totals	238	212	450

6. TABLE OF DEATHS IN INSTITUTIONS AND NURSING HOMES.

	European		Native		Asiatic		Total	
	M.	F.	M.	F.	M.	F.	M.	F.
Addington Hospital	69	43	48	4	8	7	125	54
Gaol Hospital	1	-	9	1	-	-	10	1
Sanatorium	20	11	-	-	-	-	20	11
Indian Depot Hospital	-	-	-	-	6	4	6	4
S.A. Railways Hospital	-	-	27	-	12	7	39	7
Corporation Hospital	2	3	-	-	-	-	2	3
Private Hospital	10	18	1	-	-	1	11	19
Totals	102	75	85	5	26	19	213	99

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7. CLASSIFICATION OF DEATHS, 1922-23.

BOROUGH RESIDENTS : EUROPEANS.

Deaths classified according to the International Classification of Causes of Sickness and Death :-

1. Typhoid Fever	13
2. Typhus Fever	-
3. Relapsing Fever	1
4. Malaria	2
5. Small-pox	-
6. Measles	9
7. Scarlet Fever	-
8. Whooping Cough	2
9. Diphtheria and Croup	-
10. Influenza	18
11. Biliary Fever	-
12. Asiatic Cholera	-
13. Cholera Nostras	-
14. Dysentery	4
15. Plague	-
16. Yellow Fever	-
17. Leprosy	-
18. Erysipelas	1
19. Other Epidemic Diseases	-
20. Purulent Infection and Septicaemia	3
21. Glanders	-
22. Anthrax	-
23. Rabies	-
24. Tetanus	3
25. Mycoses	-
26. Pellagra	-
27. Beri-beri	-
28. Tuberculosis of the Lungs	24
29. Acute Miliary Tuberculosis	3
30. Tuberculosis Meningitis	-
31. Abdominal Tuberculosis	1
32. Pott's Disease	-
33. White Swelling	-
34. Tuberculosis of other Organs	1
35. Dessiminated Tuberculosis	-
36. Rickets	-
37. Syphilis	1
38. Gonococcus Infection	-
39. Cancer and other Malignant Tumours of Bucal Cavity	6
40. Cancer and other Malignant Tumours of Stomach, Liver	18
41. Cancer and other Malignant Tumours of Peritoneum, Intestines, Rectum	5
42. Cancer and other Malignant Tumours of Female Genital Organs	8
43. Cancer and other Malignant Tumours of Breasts	3
44. Cancer and other Malignant Tumours of Skin	-
45. Cancer and other Malignant Tumours of other Organs and of Organs not specified	3
46. Other Tumours (Tumours of Female Genital Organs excepted)	-
47. Acute Articular Rheumatism	-
48. Chronic Rheumatism and Gout	3
49. Scurvy	1
50. Diabetes	8
51. Xophthalmic Goitre	-
52. Addison's Disease	-
53. Leucaemia	2
54. Anaemia, Chlorosis	2
55. Other General Diseases	1
56. Alcoholism (Acute or Chronic)	2
57. Chronic Lead Poisoning	-
58. Other Chronic Occupation Poisonings	-

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60. Encephalitis	3
61. Simple Meningitis	11
61a. (Including Cerebrospinal Fever)	-
62. Locomotor Ataxia	1
63. Other Diseases of Spinal Cord	1
64. Cerebral Hawmorrhage, Apoplexy	25
65. Softening of the Brain	-
66. Paralysis without specified cause	4
67. General Paralysis of Insane	1
68. Other Forms Mental Alienation	-
69. Epilepsy	4
70. Convulsions (Non-Puerperal)	-
71. Convulsions of Infants	4
72. Chorea	-
73. Neuralgia and Neuritis	-
74. Other Diseases of Nervous System	1
75. Diseases of Eyes and their Annexa	-
76. Diseases of the Ears	1
77. Pericarditis	-
78. Acute Endocarditis	1
79. Organic Diseases of Heart	50
80. Angina Pectoris	2
81. Diseases of Arteries, Atheroma, Aneurysm, etc.	7
82. Embolism and Thrombosis	1
83. Diseases of Veins (Varices, Haemorrhoids, Phlebitis, etc.)	1
84. Diseases of Lymphatic System (Lymphangitis, etc.)	1
85. Haemorrhage : Other Diseases of Circulatory System	2
86. Diseases of Nasal Fossae	-
87. Diseases of Larynx	-
88. Diseases of Thyroid Body	-
89. Acute Bronchitis	2
90. Chronic Bronchitis	2
91. Broncho-Pneumonia	10
92. Pneumonia	11
93. Pleurisy	-
94. Pulmonary Congestion, Pulmonary Apoplexy	2
95. Gangrene of the Lung	1
96. Asthma	1
97. Pulmonary Emphysema	-
98. Other Diseases of Respiratory System (Tuberculosis excepted)	2
99. Diseases of Mouth and Annexa	-
100. Diseases of Pharynx	-
101. Diseases of Œsophagus	1
102. Ulcer of Stomach	1
103. Other Diseases of Stomach (Cancer excepted)	2
104. Diarrhoea and Enteritis (under 2 years)	12
105. Diarrhoea and Enteritis (over 2 years)	6
106. Ankylostomiasis	-
107. Intestinal Parasites	-
108. Appendicitis and Typhlitis	3
109. Hernias, Intestinal Obstructions	5
110. Diseases of the Intestines	1
111. Acute Yellow Atrophy of the Liver	-
112. Hydatid Tumour of Liver	-
113. Cirrhosis of Liver	2
114. Biliary Calculi	-
115. Other Diseases of Liver	2
116. Diseases of the Spleen	-
117. Simple Peritonitis (Non-Puerperal)	1
118. Other Diseases of Digestive System (Cancer and Tuberculosis excepted)	-
118a. Abscess of Liver	-
119. Acute Nephritis	6
120. Bright's Disease	12
121. Chyluria	-
122. Other Diseases of Kidneys and Annexa	1
123. Calculi of Urinary Passages	2
124. Diseases of Bladder	-
125. Diseases of the Urethra, Urinary, Abscess, etc.	-

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126. Diseases of Prostate..	2
127. Non-Venereal Diseases of Male Genital Organs..............	-
128. Uterine Haemorrhage (Non-Puerperal)........................	-
129. Uterine Tumour (Non-Cancerous).................................	1
130. Other Diseases of Uterus...	-
131. Cysts and other Tumours of Ovary............................	1
132. Salpingitis and other Diseases of Female Genital Organs..	2
133. Non-Puerperal Diseases of Breast (Cancer excepted).......	-
134. Accidents of Pregnancy..	1
135. Puerperal Haemorrhage...	-
136. Other Accidents of Labour..	1
137. Puerperal Septicaemia..	3
138. Puerperal Albuminura and Convulsions......................	-
139. Puerperal Phlegmasia Alba Dolens, Embolis, Sudden Death...	-
140. Following Child-Birth (not otherwise defined).............	-
141. Puerperal Diseases of Breast......................................	-
142. Gangrene..	1
143. Furuncle..	-
144. Acute Abscess..	-
145. Other Diseases of Skin and Annexa.............................	-
146. Diseases of Bones (Tuberculosis excepted)..................	-
147. Diseases of the Joints (Tuberculosis and Rheumatism excepted)...	-
148. Amputations..	-
149. Other Diseases of Organs of Locomotion.....................	-
150. Congenital Malformations (Still-Births not included).....	7
151. Congenital Debility, Icterus and Sclerema..................	18
152. Other Diseases Peculiar to Early Infancy....................	1
153. Lack of Care..	-
154. Senility...	26
155. Suicide by Poison...	3
156. Suicide by Asphyxia...	-
157. Suicide by Hanging or Strangulation..........................	-
158. Suicide by Drowning...	-
159. Suicide by Firearms...	2
160. Suicide by Cutting or Piercing Instruments.................	-
161. Suicide by Jumping from High Places.........................	-
162. Suicide by Crushing..	-
163. Other Suicides...	-
164. Poisoning by Food..	-
165. Other Acute Poisonings...	1
166. Conflagration...	-
167. Burns (Conflagration excepted)..................................	3
168. Absorption of Deleterious Gases (Conflagration excepted).	-
169. Accidental Drowning..	1
170. Traumatism by Firearms...	-
171. Traumatism by Cutting or Piercing Instruments...........	-
172. Traumatism by Fall...	1
173. Traumatism in Mines and Quarries.............................	-
174. Traumatism by Machines..	-
175. Traumatism by other Crushing (Vehicles, Railways, Landslides, etc.)..	3
176. Injuries by Animals..	1
177. Starvation..	-
178. Excessive Cold...	-
179. Effects of Heat...	-
180. Lightning..	-
181. Electricity (Lightning excepted).................................	-
182. Homicide by Firearms..	-
183. Homicide by Cutting or Piercing Instruments..............	1
184. Homicide by other means...	-
185. Fractures (cause not specified)...................................	1
186. Other External Violence..	1
187. Ill-defined Organic Disease..	-
188. Sudden Death...	2
189. Cause of Death not specified or ill-defined.................	9
Total	450

8. EUROPEAN DEATHS - ARRANGED ACCORDING TO MONTHS AND CERTAIN DISEASES, 1922-23.

Diseases	1922						1923						
	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL
1. Plague	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Small-pox	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Dysentery	0	0	1	0	0	1	1	0	0	0	0	2	5
4. Enteric Fever	1	0	1	3	3	2	1	0	1	1	0	0	13
5. Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Measles	0	0	0	3	3	1	0	1	1	0	0	0	9
8. Whooping Cough	0	1	0	0	0	0	0	0	0	0	1	0	2
9. Tetanus	2	0	0	0	0	0	0	0	0	1	0	0	3
10. Malaria	0	0	0	0	0	0	0	0	0	1	0	1	2
11. Venereal Diseases	0	0	0	1	0	0	0	0	0	0	0	0	1
12. Puerperal Fever	0	0	0	0	0	0	0	1	0	0	0	2	3
13. Septic Diseases	0	1	2	1	0	1	1	0	1	0	0	0	7
14. Phthisis	2	2	2	0	3	1	3	4	2	0	2	3	24
15. Other forms of Tuberculosis	0	1	0	0	0	0	1	0	0	2	0	1	5
16. Other Infectious Diseases	0	0	0	0	0	0	0	0	0	0	0	1	1
17. Influenza	3	1	1	0	2	2	0	2	3	2	1	2	19
18. Cancer	3	1	6	0	9	2	6	4	2	3	4	7	47
19. Diseases of Birth and Development	2	4	3	3	1	0	0	3	2	3	2	5	28
20. Old Age	4	5	0	1	2	0	3	4	1	2	4	1	27
21. Diseases of Nervous System	5	5	1	6	5	4	5	4	3	7	7	6	58
22. Diseases of Heart, etc.	4	10	5	3	7	3	8	2	1	12	4	9	68
23. Pneumonia	1	4	3	3	1	1	0	2	2	0	1	0	18
24. Bronchitis	1	1	0	0	1	0	1	0	0	1	0	0	5
25. Other Diseases of Respiratory System	0	0	1	0	1	0	2	0	0	0	1	0	5
26. Diarrhoea and Catarrh	0	2	1	3	6	3	1	1	1	1	1	0	20
27. Other Diseases of Liver, etc.	1	2	1	2	3	0	2	0	3	4	1	3	22
28. Diseases of Urinary System	1	2	3	2	5	2	1	1	4	3	0	0	24
29. Diseases of Childbirth	0	0	0	0	1	0	0	0	0	0	0	1	2
30. Diseases of Reproductive System	0	0	0	0	0	0	0	0	1	0	0	0	1
31. Accidents	1	2	4	0	0	0	2	1	1	0	1	0	11
32. Homicide	0	1	0	0	0	0	0	0	1	1	0	0	3
33. Suicide	1	0	0	0	0	0	1	0	0	0	1	1	4
34. Execution	0	0	0	0	0	0	0	0	0	0	0	0	0
35. All Other Causes	2	1	0	0	2	1	0	3	3	0	0	0	12
Totals	34	46	35	31	55	24	39	33	33	44	31	45	450

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9. NATIVE DEATHS ARRANGED ACCORDING TO MONTHS AND CERTAIN DISEASES.

Diseases	1922						1923						
	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL
1. Plague	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Small-pox	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Dysentery	0	0	0	1	1	0	1	1	0	1	1	0	6
4. Enteric Fever	0	0	0	0	4	1	3	1	1	1	2	1	14
5. Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Measles	0	0	0	0	0	0	0	0	0	0	0	0	0
8. Whooping Cough	0	0	0	0	0	0	0	0	0	0	0	0	0
9. Tetanus	1	0	0	0	0	0	0	0	0	0	0	0	1
10. Malaria	0	0	0	0	0	0	1	0	0	0	0	0	1
11. Venereal Diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Puerperal Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
13. Septic Diseases	0	0	0	0	0	0	0	0	0	0	0	1	1
14. Phthisis	1	3	0	1	0	0	2	1	2	0	0	0	10
15. Other Forms of Tuberculosis	1	0	0	0	0	2	0	0	0	0	0	0	3
16. Other Infectious Diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
17. Influenza	0	0	0	1	1	0	0	0	0	0	0	0	2
18. Cancer	0	0	0	0	0	0	0	0	0	0	0	0	0
19. Diseases of Birth and Development	0	0	2	2	1	1	1	2	1	0	1	1	12
20. Old Age	1	0	0	0	0	0	0	0	0	0	0	0	1
21. Diseases of Nervous System	1	1	0	1	0	0	1	0	0	2	1	0	7
22. Diseases of Heart and Circulatory System	0	1	1	1	1	0	1	0	0	1	0	0	6
23. Pneumonia	0	3	3	1	4	2	5	2	3	3	1	5	32
24. Bronchitis	0	1	0	0	0	1	1	0	0	1	1	0	5
25. Other Diseases of Respiratory System	0	0	0	1	0	0	0	0	0	0	0	0	1
26. Diarrhoea and Catarrh	1	0	0	0	0	0	1	0	1	0	2	0	5
27. Other Diseases of Liver, etc.	1	0	0	0	1	1	0	0	1	0	1	1	6
28. Diseases of Urinary System	0	0	0	0	0	0	0	0	0	0	0	0	0
29. Diseases of Childbirth	0	0	0	0	0	0	0	0	0	0	0	0	0
30. Diseases of Reproductive System	0	0	0	0	0	0	0	0	0	0	0	0	0
31. Accidents	0	0	1	1	0	0	0	2	1	5	0	1	11
32. Homicide	0	0	0	0	0	0	0	0	0	1	0	0	1
33. Suicide	0	0	0	0	0	0	0	0	1	0	0	0	1
34. Execution	0	0	0	0	0	0	0	0	0	0	0	0	0
35. All Other Causes	1	0	1	0	0	1	0	2	0	0	2	0	7
Totals	8	9	8	10	13	9	17	11	11	15	12	10	133

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10. ASIATIC DEATHS - ARRANGED ACCORDING TO MONTHS AND CERTAIN DISEASES, 1922-23.

Diseases	1922						1923						
	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL
1. Plague	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Small-pox	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Dysentery	0	0	1	1	2	0	0	0	1	0	0	0	5
4. Enteric Fever	0	0	0	0	0	0	0	2	0	0	0	1	3
5. Diphtheria	0	0	0	0	0	0	0	0	0	0	0	1	1
6. Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Measles	0	0	0	0	0	0	0	1	0	0	0	0	1
8. Whooping Cough	0	0	0	0	0	0	0	0	0	0	0	0	0
9. Tetanus	0	0	0	0	0	0	0	0	0	2	0	0	2
10. Malaria	0	0	0	0	0	0	0	0	0	1	1	0	2
11. Venereal Diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Puerperal Fever	0	0	0	0	0	0	0	0	0	0	0	0	0
13. Septic Diseases	0	0	0	1	0	0	0	0	0	0	0	0	1
14. Phthisis	1	2	1	5	1	2	3	1	3	0	4	2	25
15. Other forms of Tuberculosis	0	0	0	1	0	0	1	0	0	0	1	1	4
16. Other Infectious Diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
17. Influenza	2	2	2	1	0	0	2	1	1	0	3	0	14
18. Cancer	0	1	0	0	1	0	0	0	1	2	1	1	7
19. Diseases of Birth and Development	8	2	3	1	5	0	4	2	4	2	1	4	36
20. Old Age	1	1	0	3	1	1	0	2	1	2	0	1	13
21. Diseases of Nervous System	1	2	6	1	2	0	0	2	1	0	0	0	15
22. Diseases of Heart and Circulatory System	2	1	2	1	0	2	3	1	1	5	2	2	22
23. Pneumonia	7	7	2	2	1	6	3	2	0	1	1	1	33
24. Bronchitis	5	2	5	1	6	2	1	5	1	1	1	4	34
25. Other Diseases of Respiratory System	1	1	0	2	1	1	0	1	0	2	1	1	11
26. Diarrhoea and Catarrh	4	1	0	0	4	5	1	1	2	1	1	3	23
27. Other Diseases of Liver, etc.	2	1	0	2	0	0	1	0	0	1	0	0	7
28. Diseases of Urinary System	0	0	0	0	0	1	1	0	1	0	0	0	3
29. Deases of Childbirth	0	0	0	0	0	0	0	0	1	0	1	0	2
30. Diseases of Reproductive System	0	0	0	0	0	0	0	0	0	0	0	0	0
31. Accidents	2	1	1	2	1	1	2	0	1	0	0	0	10
32. Homicide	0	0	0	0	0	0	0	0	0	0	0	0	0
33. Suicide	0	0	0	0	0	0	0	0	0	0	0	0	0
34. Execution	0	0	0	0	0	0	0	0	0	0	0	0	0
35. All Other Causes	0	0	1	3	2	1	0	0	0	4	0	3	14
Totals	36	24	24	27	27	22	22	20	19	24	18	25	288

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11. TABLE OF NON-RESIDENT DEATHS IN DURBAN, NOT INCLUDED IN TABLE 5, 1922-23.

	1922						1923						Total
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
European	7	20	13	6	16	8	12	13	11	13	13	9	141
Native	11	12	18	19	18	22	14	19	13	22	18	9	195
Asiatic	6	5	8	4	8	1	6	6	6	2	7	6	65
Totals	24	37	39	29	42	31	32	38	30	37	38	24	401

12. TABLE SHOWING CAUSES OF NON-RESIDENT DEATHS.

	European	Native	Asiatic	Total
Small-pox	-	-	-	-
Dysentery	4	3	-	7
Enteric Fever	4	16	2	22
Diphtheria	1	-	-	1
Scarlet Fever	1	-	-	1
Measles	1	-	-	1
Tetanus	-	1	-	1
Malaria	6	2	1	9
Septic Diseases	4	3	1	8
Phthisis	5	35	8	48
Other forms of Tuberculosis	-	13	4	17
Other Infectious Diseases	1	-	-	1
Influenza	4	2	-	6
Cancer	20	3	1	24
Diseases of Birth and Development	4	3	2	9
Old Age	2	3	6	11
Diseases of Nervous System	15	5	7	27
Diseases of Heart and Circulatory System	14	18	9	41
Pneumonia	4	28	4	36
Bronchitis	-	5	3	8
Other Diseases of Respiratory System	4	9	1	14
Diarrhoea and Catarrh	7	5	3	15
Other Diseases of Liver and Alimentary Track	15	8	1	24
Diseases of Urinary System	12	4	2	18
Diseases of Childbirth	-	3	1	4
Accidents	2	15	6	23
Suicide	5	-	-	5
All Other Causes	6	11	3	20
Totals	141	195	65	401

TABLE OF CASES OF NOTIFIABLE INFECTIOUS DISEASES ARRANGED ACCORDING TO RACES, 1922-23.

Diseases	Europeans		Natives		Asiatics		Totals	
	Bro'.	Imp.	Bro'.	Imp.	Bro'.	Imp.	Bro'.	Imp.
Diphtheria	50	5	1	-	2	-	53	5
Scarlet Fever	27	5	-	-	1	-	28	5
Phthisis	22	14	16	15	34	14	72	43
Enteric Fever	220	51	42	21	14	5	276	77
Erysipelas	4	2	-	-	-	-	4	2
Other forms of Tuberculosis	2	1	2	3	-	1	4	5
Puerperal Fever	3	1	1	-	-	-	4	1
Cerebro Spinal Meningitis	-	2	-	-	-	-	-	2
Encephalitis Lethargica	2	-	-	-	-	-	2	-
Typhus Fever	-	1	-	-	-	1	-	2
Malta Fever	2	1	-	-	-	-	2	1
Ophthalmia Neonatorum	2	2	-	-	-	-	2	2
Totals	334	85	62	39	51	21	447	145
Cases treated in Hospital	143	74	62	39	31	13	236	126
Cases treated at Home or Privately	191	11	-	-	20	8	211	19

The following also are notifiable infectious diseases but there have been no cases during the past year -

Plague, Cholera, Membranous Croup, Leprosy, Small-pox, Relapsing Fever, Glanders, Rabies, Yellow Fever, Sleeping Sickness, Infantile Paralysis.

TABLE SIMILAR TO THE FOREGOING FOR COMPARISON CONTAINING NUMBER OF NOTIFICATIONS OF PREVIOUS YEAR, 1921-22.

Diseases	Europeans		Natives		Asiatics		Total	
	Bro'.	Imp.	Bro'.	Imp.	Bro'.	Imp.	Bro'.	Imp.
Diphtheria	66	5	2	-	1	-	69	5
Scarlet Fever	15	5	-	-	-	-	15	5
Phthisis	15	20	8	6	20	14	43	40
Enteric Fever	72	48	15	-	4	-	91	48
Erysipelas	4	-	-	-	1	-	5	-
Infantile Paralysis	6	1	-	-	-	-	6	1
Small-pox	1	-	-	3	-	-	1	3
Other forms of Tuberculosis	5	3	-	2	1	3	6	8
Puerperal Fever	-	1	-	-	-	-	-	1
Cerebro-Spinal Meningitis	-	1	-	-	-	-	-	1
Leprosy	-	-	-	-	1	-	1	-
Typhus	-	1	-	-	-	-	-	1
Ophthalmia Neonatorum	1	-	-	-	-	-	1	-
Totals	185	85	25		28	17	238	113
Cases treated in Hospital	116	71	22	11	13	7	151	89
Cases treated at Home or Privately	69	14	3	-	15	10	87	24

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ENTERIC FEVER.

The following table shows the total number of cases of Enteric notified and deaths registered during the past six years:-

Year:	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23 Boro'.	 Imp.
Cases.......	232	103	259	110	139	276	77
Deaths......	48	21	36	11	26	30	22

Case Mortality : Borough, 10.86 per cent : Imported, 28.57 per cent
Case Incidence per 1,000 pf population, 2.65

RACE AND SEX DISTRIBUTION.

	Male.	Female.	Total.	Deaths.
European............	116	104	220	13
Native..............	41	1	42	14
Asiatic.............	12	2	14	3
	169	107	276	30

WARD DISTRIBUTION.

Wards ...	1	2	3	4	5	6	7	8	9	Impt.	Total.
Cases ...	65	63	25	23	18	32	20	19	11	77	353

SIZE OF HOUSE

Rooms:	1	2	3	4	5	6	7	Over 7	Institution	Total
Europeans...	23	16	24	53	37	35	13	9	10	220
Native......	9	-	-	-	-	-	-	-	33	42
Asiatic.....	5	-	3	2	1	-	1	-	2	14
Total	37	16	27	55	38	35	14	9	45	276

The houses of 249 cases were provided with water closets, and at 27 the pail system was in use.

MONTHLY DISTRIBUTION OF CASES AND DEATHS.

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	Total
Cases........	3	2	30	121	44	14	29	6	10	8	6	3	276
Deaths.......	1	-	1	3	3	2	1	-	1	1	-	-	13

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AGE DISTRIBUTION - EUROPEANS.

Age.	0-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-60	Total
Male.....	7	25	12	32	13	12	9	5	1	116
Female...	10	16	17	9	9	18	18	6	1	104
Totals	17	41	29	41	22	30	27	11	2	220

SANITARY CONDITIONS - The Sanitary Conditions existing at houses where cases resided were :-

Good	Fair	Poor	Bad	Institution	Total
123	96	10	2	45	276

CLEANLINESS - So far as cleanliness of the dwellings and the surroundings were concerned, they might be classed as :-

Clean	Fair	Dirty	Institution	Total
164	64	3	45	276

ENTERIC FEVER EPIDEMIC.

Enteric Fever which is always endemic in Durban assumed Epidemic form in September, 1922.

This resulted in the largest epidemic of Enteric Fever which has been recorded in Durban.

About the 25th September, there was a wide-spread rumour in the town as to the prevalence of Enteric Fever, but the number of notifications received in the Public Health Office was not such as to cause alarm.

On account of this rumour, I sent a circular to all the doctors asking them to notify any cases they might have in their practices.

By Saturday, 30th September, thirty-three cases had been notified, the majority of these notifications being received on that day. Subsequently, however, it was found from later notifications that over one hundred people were ill with Enteric Fever on that date.

From the notifications received during the week 25th to 30th September, it was found that a large percentage of the patients were receiving their household milk supply from the same dairy.

On the 30th September I reported this matter to the Assistant Health Officer for the Union, and consulted with him as to the steps to be taken in investigating this outbreak both inside and outside the Borough.

Cases were notified in all districts of the town, only a very few were notified from the surrounding districts. It was, therefore, probable that the infection had been started either by a large milk supply delivering milk in all these districts, or by the Durban Water Supply.

Until investigations could be systematically carried out, preliminary precautions were taken, viz: advising in the Daily Newspaper that :

1. All milk should be boiled and stored in vessels scalded with boiling water and protected from flies;
2. All drinking water should be boiled;
3. Food-stuffs, utensils, etc. should be protected from flies;
4. Measures should be taken to kill flies.

Special facilities were provided by the Government Health Department for having widal tests done, and prophylactic vaccine was distributed to all practitioners asking for it.

The Municipality provided prophylactic vaccination free during the Epidemic.

Investigations of the milk and water supplies were carried out systematically, the bacteriological work being undertaken by the Government Health Department.

<u>Milk Supplies</u> - The milk supply from which a very large percentage of the early cases had obtained their milk was first investigated. The supply involved was that of a very large company distributing pasteurised milk which comes to Durban from five different sources. To have stopped this supply altogether would have resulted in a complete dislocation of the town's milk supply, and it was unlikely that any good would come from doing this. The main infection must have been in the town in the early part of September; and as the investigations were not begun until the beginning of October, the same conditions would not then have been present.

All the Natives handling this milk supply in Durban were examined by the widal test. Of 75 employees examined, 50% gave a positive widal reaction. These Natives were forthwith removed from work until further investigations could be carried out to prove whether or not they were "carriers".

This finding put the milk supply being investigated under grave suspicion. At the suggestion of the Manager of the Company, the Natives employed in the next largest Dairy Company were examined by the widal reaction, and it was found that about the same proportion of these employees gave a positive reaction.

No case suffering from Enteric was receiving milk from this dairy at that date.

This finding was so unexpected that a large number of Natives taken at random in Durban were examined. A slightly smaller proportion of these gave a positive reaction, this appearing to vary with the length of time the Natives had been town dwellers.

The investigation was then carried further. Natives from dairies around Durban were examined. A smaller proportion still were found to react to the test. Natives from up-country farms were then examined, very few were found to react at all.

All the natives employed by the first company examined, who gave a positive widal reaction, were tested fully to find if any of them was a carrier, but no carrier was found, and the Natives were allowed to return to work.

Samples of milk from this supply were examined bacteriologically for one week; no Enteric Bacilli were found, and the results of the other examinations for purity were fairly satisfactory.

<u>The Water System</u> was next examined. The Water Supply, as described fully in the Annual Report for last year, is from the Umlaas River, and comes in to Durban by two different systems : (1) The High Level System, (2) The Low Level System. In the High Level Supply the river water, after precipitation with alumina ferric, goes to a storage reservoir, where the

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storage is estimated to be about forty days; from there is passes to the Coedmore Filter Beds. After filtration it is treated with liquid chlorine and is distributed on the High Level Supply. In the Low Level System there is no storage reservoir; the river water after precipitation goes to the Umlaas filter beds, and, after filtration, it is treated with liquid chlorine and distributed on the Low Level Supply.

It has been the custom for many years to examine samples of water taken from town supplies from both high and low level systems, bacteriologically for the presence of Bacillus Coli. This has been done in the Municipal Bacteriological Laboratory once weekly, and the amount of Chlorine put in the water has been varied according to the results of these examinations.

I had conducted these tests since December, 1921. At times there have been large variations in the Coli content of the water, especially on the low level supply; but during the weeks when the Enteric infection must have been present in Durban, bacillus coli was found to be absent in 30 cc. in the weekly tests of both high and low level samples.

The whole water system was examined by the Government Bacteriologist. At the time of examination (which was several weeks after the infection had been present in the town), no typhoid bacilli were found in two litres of river water, and the tests for bacillus coli corresponded with those done in the Municipal Laboratory.

Nothing, therefore, was proved as to the source of infection in this epidemic.

The Assistant Health Officer for the Union examined the whole water system of the Borough, and reported on his findings. He recommended that a bacteriological assistant should be appointed under the supervision of the Public Health Department, who would be stationed at Coedmore, and who could make daily routine examinations of the water for B.Coli, in specimens from the raw river water, from the water after filtration and before chlorination and from the water after chlorination, and any other tests the Water Engineer might require for testing the precipiation, storage, etc. This would give information from day to day which would be of the utmost value.

In the early stages of the Epidemic, the Assistant Health Officer for the Union and I met the Council of the British Medical Association, and stated to them the difficulties which had arisen in the Public Health Department by the delayed notification of cases in the early stages of the epidemic. Since this date no further difficulty has arisen due to this cause.

Arising out of the investigations made in this epidemic, there were certain outstanding facts to be considered in order to prevent a recurrence.

(a) Necessity for new Bye-Laws dealing with pure milk;

(b) Necessity for more constant vacteriological control of the Water Supply;

(c) Necessity to take all measures possible to diminish the number of flies;

(d) Necessity to take precautions against the handling of food-stuffs by Natives, who, by the findings of the widal reaction done on a large number, were shown to be possible carriers on a large scale.

Natives do not suffer largely from clinical Enteric Fever, but as a positive result by the widal reaction means that a person has either suffered from Enteric Fever or been inoculated against enteric fever (and it is unlikely that many of the Natives had been inoculated), the assumption from the results of these tests is that many Natives suffer from Enteric in the ambulant form which is not recognised to be Enteric Fever but which makes the Native a source of infection and a carrier of the disease.

The reforms suggested to the Public Health Committee in this connection have been :-

1. New Milk Bye-Laws - The regulations framed under the powers contained in the Public Health Act and Provincial Ordinances which have been before the Public Health Committee since 1920 were again brought forward and

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discussed at length on several occasions. An alternative suggestion was put forward by me as outlined in the Annual Report for 1921-22, that all milk sold in Durban should be sterilized by some up-to-date process which has been proved to be satisfactory - such as the Jonas Nielson process - and sold in sterilized, sealed bottles, which would prevent any handling by Natives.

If any unsterilized milk is to be sold in Durban at all it should conform to a strict standard such as the Grade "A". (Tuberculin tested) milk of the British Ministry of Health's Regulations.

I am still of opinion that this suggestion would be much more satisfactory than the carrying out of elaborate Milk Bye-Laws which do not do away with the handling of milk by Natives.

No decision has yet been arrived at by the Public Health Committee as to how this matter is to be dealt with.

In the meantime all dairies supplying Durban with milk were asked to have their Native employees tested by the widal reaction, and not to employ any natives who gave this reaction, unless they had been fully tested to prove whether or not they were "carriers". The Government Laboratory agreed to do these examinations at specially reduced terms.

2. <u>Water Supply</u> - After the occurrence of Enteric form, I carried out tests on the Water Supply twice weekly on samples taken soon after chlorination, and on samples taken in town. In both sets of samples I have found large bacteriological variations from time to time. On some occasions B. Coli were found absent in 100 cc. and on others present in 1 cc. this condition being less satisfactory than a uniformaly medium result.

A Bacteriological Assistant has been appointed to the Water Department with the object of carrying out the daily routine tesys, as advised by the Assistant Health Officer for the Union, but as a laboratory has not yet been put up at Coedmore these tests have not been started. When this can be done a much closer supervision can be kept on the purity of the water supply.

<u>Flies</u> - With regard to the question of flies - the Epidemic of Enteric Fever was not such as to suggest that the infection had been spread by means of flies. The cases were spread by means of flies. The cases were spread all over the town, occurring where there were many flies, and where there were few flies - but where there is enteric fever, the presence of flies is a potential danger, and everything should be done to reduce their numbers to a minimum. With this in view advertisements dealing with the destruction of flies were put in the daily papers.

Many complaints were received from house-holders living in the vicinity of the Corporation Rubbish Dumps. These complaints were well founded, as at certain times of the year it is impossible to keep flies under control at these places, or to prevent them surrounding the rubbish carts as they travel slowly to and fro amongst the dwelling houses in the neighbourhood of the dumps.

Suggestions were put forward to the Public Health Committee on the lines that it would be desirable to change the method of disposing of refuse by rubbish dumps, and to institute in their place disposal of rubbish by means of destructors, using the refuse from these to reclaim certain marchy lands.

Up to date no change has been made in the method of disposal of refuse.

To deal with the question of Natives handling food-stuffs, Bye-Laws were drawn up and discussed by the Public Health Committee, dealing with the wrapping of bread, etc., and the conveyance and delivery of meat.

Up to date no change has been made in the Bye-Laws dealing with these subjects.

DIPHTHERIA.

The following table shows the cases notified and deaths from Diphtheria registered during the past six years :-

Year.	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23 Boro'.	1922-23 Impt.
Cases......	130	79	94	69	74	53	5
Deaths.....	8	8	2	5	7	1	1

RACE DISTRIBUTION : Europeans, 50; Native, 1; Asiatics, 2.

Case Mortality : Borough, 1.88 per cent; Imported, 20 per cent.

Case Incidence per 1,000 of population : .509.

WARD DISTRIBUTION.

Wards......	1	2	3	4	5	6	7	8	9	Imp.	Total
Cases......	3	12	3	5	3	10	3	2	12	5	58

NUMBER OF ROOMS IN INFECTED HOUSES.

Rooms.	1	2	3	4	5	6	7	Over 7	Institution	Total
European....	5	4	4	6	13	10	5	-	3	50
Native......	1	-	-	-	-	-	-	-	-	1
Asiatic.....	1	-	-	-	-	-	-	1	-	2
Total	7	4	4	6	13	10	5	1	3	53

MONTHLY DISTRIBUTION OF CASES AND DEATHS.

	1922 July	Aug.	Sept.	Oct.	Nov.	Dec.	1923 Jan.	Feb.	Mar.	April	May	June	Total
Cases.....	11	8	6	4	3	-	1	3	5	2	10	5	58
Deaths....	-	1	-	-	-	-	-	-	-	-	-	1	2

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AGE DISTRIBUTION OF CASES.

	0-5	5-10	10-15	15-20	20-25	25-35	35 and over	Total
European								
Males......	5	13	-	1	-	2	1	21
Females.....	6	8	2	-	4	5	4	29
Native & Asiatic								
Males.......	1	-	1	-	-	-	-	2
Females.....	-	1	-	-	-	-	-	1
Totals	12	21	3	1	4	7	5	53

SANITARY CONDITIONS - The sanitary conditions existing at houses where cases resided were :-

Good	Fair	Poor	Bad	Institution	Total
25	20	1	1	3	53

CLEANLINESS - So far as cleanliness of the dwellings and surroundings were concerned, they may be classed as :-

Clean	Fair	Dirty	Institution	Total
34	13	3	3	53

SCARLET FEVER.

Cases notified and Deaths registered during the past six years :-

Year.	1917-18	1918-19	1919-1920	1920-21	1921-22	1922-23 Boro'.	Imp.
Cases.........	39	34	30	24	20	27	5
Deaths........	-	1	-	-	-	-	1

WARD DISTRIBUTION.

Wards..........	1	2	3	4	5	6	7	8	9	Imp.	Total
Cases..........	1	-	5	1	9	4	3	-	4	5	32

AGE AND SEX DISTRIBUTION-(EUROPEAN).

Age.	Under 5	5-10	10-15	15-20	20-25	25-35	35 and over	Total
Male..........	3	2	4	-	-	-	-	9
Female........	1	3	8	3	-	-	2	17
Totals	4	5	12	3	-	-	2	26

(1 Asiatic Case).

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TABLE 1. - TUBERCULOSIS.

Year	EUROPEANS				NATIVES				ASIATICS			
	All Tuberculosis		Phthisis		All Tuberculosis		Phthisis		All Tuberculosis		Phthisis	
	Deaths	Rate per 1,000 of pop	Deaths	Rate per 1,000 of pop	Deaths	Rate per 1,000 of pop	Deaths	Rate per 1,000 of pop	Deaths	Rate per 1,000 of pop	Deaths	Rate per 1,000 of pop
1916-17	29	.71	22	.54	7	.32	6	.27	27	1.36	20	1.01
1917-18	21	.47	16	.36	12	.46	10	.38	21	1.04	19	.94
1918-19	27	.57	20	.42	10	.36	7	.25	30	1.39	23	1.06
1919-20	20	.39	18	.35	16	.52	7	.23	32	1.42	27	1.2
1920-21	19	.37	17	.33	5	.16	4	.13	25	1.11	21	.97
1921-22	24	.47	19	.37	11	.37	7	.24	25	1.76	23	1.62
1922-23	29	.52	24	.43	13	.38	10	.29	29	.185	25	1.59

TABLE 2. - DEATHS FROM ALL FORMS OF TUBERCULOSIS SINCE 1917.

	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	Total deaths for 7 years	Annual Average Mortality
European	29	21	27	20	19	24	29	169	24
Native	7	12	10	16	5	11	13	74	10
Asiatic	27	21	30	32	25	25	29	189	27
Totals	63	54	67	68	49	60	71	432	61

PHTHISIS - EUROPEANS.

TABLE 3. - DISTRIBUTION OF CASES AND DEATHS IN WARDS.

Wards	1	2	3	4	5	6	7	8	9	Impt.	Total
Cases.......	4	3	-	8	2	3	1	-	1	14	36
Deaths......	6	3	3	3	1	3	1	2	2	5	29

TABLE 4. - AGE AND SEX DISTRIBUTION OF NOTIFIED CASES AND DEATHS.
EUROPEANS.

Year	0-1		1-5		5-10		10-15		15-20		20-25		25-35		35-45		45 and over		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cases.....	-	-	-	-	-	-	-	-	0	1	1	0	5	3	1	0	8	3	15	7
Deaths....	-	-	-	-	-	-	-	-	-	-	0	2	3	2	6	1	7	3	16	8

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TABLE 5. - DISTRIBUTION OF NOTIFIED CASES AND DEATHS IN WARDS. NATIVES.

	1	2	3	4	5	6	7	8	9	Impt.	Total
Cases........	6	2	-	-	-	6	-	2	-	15	31
Deaths........	4	-	-	2	-	3	-	1	-	31	41

TABLE 6. - DISTRIBUTION OF NOTIFIED CASES AND DEATHS IN WARDS. ASIATICS.

	1	2	3	4	5	6	7	8	9	Impt.	Total
Cases..........	5	2	-	5	1	18	-	1	2	14	48
Deaths........	4	-	-	5	2	13	-	1	-	12	37

TABLE 7. - SIZE OF HOUSE.

Rooms.	1	2	3	4	5	6	7	Over 7	Not found	Institution	Total
European......	7	-	1	4	3	2	1	1	1	2	22
Native........	1	-	-	-	-	-	-	-	2	13	16
Asiatic.......	9	1	-	1	1	1	-	-	3	18	34
Total	17	1	1	5	4	3	1	1	6	33	72

NOTIFICATIONS OF TUBERCULOSIS ARRANGED IN MONTHS AND RACES.

	European		Native		Asiatic		Total	
	Boro'.	Impt.	Boro'.	Impt.	Boro'.	Impt.	Boro'.	Impt.
1922								
July	-	2	1	-	3	3	4	5
August	2	-	-	4	2	-	4	4
September	2	1	5	4	6	3	13	8
October	-	1	2	2	4	1	6	4
November	2	1	2	-	4	2	8	3
December	3	2	1	-	1	-	4	2
1923								
January	3	2	1	1	5	1	9	4
February	-	1	2	-	2	-	4	1
March	2	-	1	-	4	2	7	2
April	3	-	1	1	1	-	5	1
May	1	1	1	-	2	2	4	3
June	4	3	-	3	-	-	4	6
Total	22	14	16	15	34	14	72	43

VENEREAL DISEASE.

Negotiations have been carried on with the Union Health Department and with the Provincial Administration during the year regarding a scheme whereby patients suffering from Venereal Disease will receive treatment at Addington Hospital.

The Scheme which has now been approved by the Union Health Department and Provincial Administration provides for both out-patient and in-patient treatment at Addington Hospital.

The Out-patient Department is to be provided by alterations to an existing building. Should circumstances and numbers warrant it, an up-to-date Out-patient Clinic could be built later on.

By alterations to some existing wards, and by building two new wards, In-patient accommodation will be provided as follows :-

1. Six beds for Male Europeans;
2. Six beds for Female Europeans (This will include a small ward off the main ward where maternity patients suffering Venereal Disease will be cared for;
3. Six beds for Male Natives;
4. Six beds for Female Natives (including Maternity beds).

Children would also be treated in wards two and four.

The wards will be under the administrative control of the Medical Superintendent of Addington Hospital. A Part-time Medical Officer will be appointed for the Venereal Diseases Department. He will provide reports to the Borough Medical Officer of Health on the work done in connection with the Borough cases. As well as undertaking treatment he will carry on propaganda work.

ANTI-MALARIA PRECAUTIONS.

The usual small gang of Indians under European supervision has been employed on Anti-Malaria operations.

The spraying of all swampy areas has been carried out as usual during the summer months, when 1,879 gallons of Crude Oil were used. During the winter months the gang was employed in drainage and reclamation works.

About the middle of April anophles mosquitoes were found breeding in swampy areas along the flats practically from end of the Borough to the other. A vigorous campaign of spraying was at once instituted, and careful examination made of all pools and stagnant water. Since the latter part of the month of May, no trace of anophles larvae has been found anywhere within the Borough.

ANTI-PLAGUE PRECAUTIONS.

The usual inspections of private premises have been carried out by the European Overseer employed for this purpose. In February last two rat-catchers were engaged and have been continuously employed in trapping or laying poison at premises believed to be rat infested.

Total inspections made....................................	3,287
Rats destroyed on Corporation premises.................	2,397
Rats destroyed, reported from private premises.........	2,333
Rats caught by Departmental Rat-Catchers..............	1,952
Total	9,969
Notices served on occupiers of rat infested premises..	51
Advice given to occupiers................................	612
Improvements effected at instigation of department....	134

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INFECTIOUS DISEASES HOSPITAL.

During the past year 154 cases of infectious disease have been isolated at the Infectious Diseases Hospital, Congella, viz. :-

Diseases.	European		Native		Total	
	Boro'.	Impt.	Boro'.	Impt.	Boro'.	Impt.
Diphtheria	29	7	1	-	30	7
Scarlet Fever	10	4	-	-	10	4
Measles	26	4	21	-	47	4
Chicken-pox	1	-	26	1	27	1
Mumps	1	-	2	-	3	3
Whooping Cough	3	3	-	-	3	-
Venereal Diseases	-	1	-	-	-	1
Malaria	-	4	-	-	-	4
Ophthalmia Neonatorum	-	1	-	-	-	1
Typhus	-	1	-	-	-	1
Observation	4	1	3	-	7	1
Total	74	26	53	1	127	27

DIPHTHERIA, AGE AND SEX DISTRIBUTION.

Ages	0-5	5-10	10-15	15-20	20-25	25-35	35 and over	Total
Male..........	6	4	1	1	-	1	-	13
Female........	9	8	2	-	2	1	2	24
Totals	15	12	3	1	2	2	2	37

The number of swabs examined in the Municipal Laboratory was 275.

Results :		
	Positive..............................	53
	Negative..............................	222

The average length of stay in hospital for the above 37 cases was 35 days.

DEATHS - There was ONE death from Diphtheria during the year. This child had been travelling by rail for four days before admission to hospital, and was admitted with the heart in a very weak condition. It died of heart failure three days after admission.

SCARLET FEVER - AGE AND SEX DISTRIBUTION.

Age	0-5	5-10	10-15	15-20	20-25	Total
Male..........	1	1	2	-	1	5
Female........	1	2	4	2	-	9
Total	2	3	6	2	1	14

DEATHS - There was ONE death from Scarlet Fever during the year. This was a case of Malignant Scarlet Fever.

The average length of stay in hospital for the above 14 cases was 43 days.

TOTAL DEATHS AT INFECTIOUS DISEASES HOSPITAL.
EUROPEAN IMPORTED.

Diphtheria	1
Scarlet Fever	1
Measles	1
Malaria (Cerebral)	1
Typhus	1
Total	5

BACTERIOLOGICAL LABORATORY.

The following examinations were carried out in the Municipal Laboratory during the past year :-

	Positive	Negative	Total
Diphtheria Bacilli	53	222	275
Gonococci	8	20	28
B. Coli	-	2	2
Bilharzia	-	1	1
Totals	61	245	306

TOTAL EXAMINATIONS FOR EIGHT YEARS.

1915-16	1916-17	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23
1,171	785	1,367	1,134	1,471	545	194	306

WATER EXAMINATIONS.

During the year 259 samples of water from various parts of the system have been examined, and reports submitted thereon.

DISINFECTING STATION.

The following is a summary of the work performed at the Disinfecting Station during the part year :-

JULY, 1922, TO JUNE, 1923.

	Rooms or Houses Disinfected	Articles Washed and Disinfected	Totals.
1922			
July	32	2,296	2,328
August	26	3,861	3,887
September	47	3,896	3,943
October	115	4,430	4,545
November	79	2,913	2,992
December	39	2,781	2,820
1923			
January	33	3,175	3,208
February	40	2,153	2,193
March	32	3,023	3,055
April	43	2,927	2,970
May	31	3,075	3,106
June	33	2,693	2,726
Totals	550	37,223	37,773

OCEAN BEACH BATHING ENCLOSURE AND OPEN AIR SWIMMING BATH.

	Towels	Costumes	Slips	Totals
1922				
July	3,580	3,891	297	7,768
August	2,624	2,589	242	5,455
September	1,869	1,788	185	3,842
October	2,560	2,483	393	5,436
November	2,667	2,462	493	5,622
December	5,884	5,973	1,069	12,926
1923				
January	7,411	7,804	1,289	16,504
February	5,991	6,527	1,173	13,691
March	6,767	6,199	1,326	14,292
April	5,490	5,657	962	12,109
May	2,724	3,210	551	6,485
June	2,290	2,858	296	5,444
Totals	49,957	51,441	8,276	109,674

PUBLIC BATHS, WEST STREET.

	Towels	Costumes	Turkish Towels	Sheets	General Articles	Totals
1922						
July	8,527	160	156	44	62	8,949
August	6,721	123	153	56	84	7,137
September	5,381	43	71	44	57	5,596
October	5,154	58	68	39	43	5,362
November	5,269	36	66	53	69	5,493
December	4,818	17	69	29	45	4,978
1923						
January	3,815	33	63	56	50	4,027
February	4,340	41	54	53	46	4,534
March	4,840	80	88	47	55	5,110
April	3,985	40	55	32	106	4,218
May	4,286	61	72	43	49	4,511
June	5,316	86	102	58	68	5,630
Totals	62,452	778	1,017	554	744	65,545

LAUNDRY WORK DONE FOR OTHER CORPORATION DEPARTMENTS.

Departments	Towels	Coats	Trousers	Blankets	Total
Sanitary Department	10,462	-	-	-	10,462
Abattoir	706	355	101	-	1,162
Electrical	308	-	-	-	308
Foreman of Work	196	-	-	-	196
Fire Department	140	30	-	392	562
Water Department	134	-	-	-	134
Police Department	-	-	-	3,285	3,285
Tramways Department	148	-	-	-	148
Totals	12,094	385	101	3,677	16,257

AMBULANCE REMOVALS.

Hospitals	European	Native	Asiatic	Coloured	Total
Infectious Diseases.......	97	57	5	-	159
Addington................	93	33	1	7	134
Sanatorium...............	40	-	-	-	40
Other Hospitals...........	17	-	1	8	26
Totals	247	90	7	15	359

CLEANSING STATION.

Number of Baths to Verminous Persons......	14,190
" " Scabies Patients.......	326
Total	14,516

INFANTILE MORTALITY.

	Male	Female	Total
Infantile Deaths during 1922-23.........	28	36	64
Registered Births......................	551	546	1,097

This equals 58.34 infantile deaths per 1,000 births, and represents the "Infantile Mortality Figure" for Durban.

The following Table shows the Infantile Mortality Figure for England and Wales during 1922 :-

England and Wales..............................	77
105 Country Boroughs and Great Towns, including London.................................	81
155 Smaller Towns..............................	75
LONDON..	73

INFANTILE DEATHS IN WARDS FOR PAST FIVE YEARS.

	1	2	3	4	5	6	7	8	9	Total
1918-19	8	10	6	4	7	15	6	3	8	67
1919-20	18	10	9	6	3	24	10	3	14	97
1920-21	10	6	6	12	3	13	-	3	7	60
1921-22	18	17	6	9	6	10	4	8	11	89
1922-23	6	9	3	8	5	12	6	4	11	64

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MORTALITY FIGURE FOR PAST SIX YEARS.

	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23
Infant Deaths........	63	67	97	60	89	64
Mortality Figure......	85.5	71.5	90.4	54.2	77.8	58.34

The following table shows the comparative rates (European) from the principal towns of South Africa :-

	Population	Birth Rate	Death Rate	Infantile Mortality	Phthisis Death Rate
Johannesburg......	-	25.13	10.06	88.26	0.40
Pretoria	36,000	24.61	8.55	81.26	-
Bloemfontein......	-	-	-	-	-
Capetown..........	-	22.31	9.80	81.77	0.74
Port Elizabeth....	-	-	-	-	-
East London.......	17,500	26.5	11.4	(107)	0.34
Maritzburg........	18,482	28.2	9.4	51.6	.48
DURBAN............	54,850	20.0	8.20	58.34	.43

DEATHS UNDER FIVE YEARS - AGES AND CASES OF DEATHS.

	Under 1 Year.							1 - 5 Years.					
	Weeks.			Months.			Under 1 Year.	Years.					
	0-1	1-2	2-4	1-3	3-6	6-12	Total	1-2	2-3	3-4	4-5	Grand Total	
Measles	-	-	-	-	-	2	2	5	1	-	-	8)	
Whooping Cough	-	-	-	-	-	-	-	2	-	-	-	2)	Infectious Diseases : 11
Enteric Fever	-	-	-	-	-	1	1	-	-	-	-	1)	
Influenza	-	-	-	2	1	1	4	1	-	-	-	5	
Meningitis	-	-	-	1	-	2	3	3	-	1	-	7	
Convulsions	1	-	-	-	-	1	2	1	-	-	-	3	
Pneumonia	-	-	-	3	1	3	7	5	2	1	1	16	Lung Disease : 16
Diarrhoea and Enteritis	-	-	-	1	4	8	13	1	2	-	-	16)	Gastro-Intestinal : 21
Other Digestive Diseases	-	-	-	-	1	2	3	1	-	1	-	5)	
Atrophy, Debility, Marasmus	1	2	-	1	3	1	8	-	-	-	-	8	
Congenital Malformats	4	2	-	-	1	-	7	-	-	-	-	7)	
Prematurity	5	1	1	2	-	-	9	-	-	-	-	9)	Natal and Pre-Natal : 19
Atelectasis	-	-	-	-	-	-	-	-	-	-	-	-)	
Birth Injury	3	-	-	-	-	-	3	-	-	-	-	3)	
All other cases	-	-	1	-	1	-	2	-	-	-	-	2	
Totals	14	5	2	10	12	21	64	19	5	3	1	92	

MATERNITY AND CHILD WELFARE.

The work of the Child Welfare Department has been carried on as described in the last Annual Report, and it is gratifying to find that the Infantile Mortality Figure for the year is the lowest on record in Durban.

The number of Health Visitors is the same as before, viz. :- TWO, but in February, 1923, a clerk was appointed to the Staff of the Department. She has undertaken all the keeping of records previously done by the Health Visitors, and by thus releasing them from this part of the work has given them considerably more time to devote to the work for which they are specially trained.

During the year the Health Visitors have paid 2,598 visits.

The attendances at the Clinics in the Town Hall numbered 7,836. Of these 752 were new cases.

The number of births notified to the Department was 501, although 1,097 were registered at the Court House.

The work at the Clinics has been focussed on the educational side of the Infant Welfare question, the importance of breast-feeding impressed on all the mothers who attend.

Where artificial feeding has had to be resorted to, the most useful substitute for breast feeding has been the sterilized milk (Sterilized by the Jonas Neilson Process) now supplied by the Merrivale Dairy Co., in sealed bottles. This, suitably modified, according to the weight of the child, makes an excellent artificial feed.

However, it is not possible to use liquid milk in all houses. In some cases where families are living in one or two rooms (which conditions are all too frequently found) there is no place suitable to store milk in hot weather, and for such cases dried milk has been used.

In the last Annual Report I called attention to certain reforms necessary in order to further the ovrk in the Child Welfare Department. Since that date several of these reforms have already been made, or at least a beginning has been made in several directions which will lead to these reforms being effected in a comparatively short time.

1. With regard to the suggestion of the necessity for better training of Midwives: Addington Hospital has undertaken to become a training school for Midwives. Up to the present time the training of midwives in Durban has been carried on in small private nursing homes. In the very best conducted of the nursing homes, it is not possible to obtain sufficient material for the practical training of efficient midwives. The step taken by Addington Hospital is one which will help greatly in the furthering of Child Welfare work.

2. With regard to the suggestion of the establishment of an Infants' Hospital for the treatment of babies suffering from malnutrition and other serious digestive disorders: The larger question of the Children's Hospital has been under discussion on several occasions, in which there would be a ward or wards for Infants run in conjunction with the Child Welfare Department. So far no actual arrangements have yet been made, as several important points have still to be discussed upon, but until a decision can be made on this matter, arrangements have been made with Addington Hospital, by which four beds will be allocated to the use of cases ent in by the Municipal Child Welfare Department. This step will also help greatly in the work now carried on at the Clinics.

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3. The revision of the Milk Bye-Laws, though still important, is no longer such an urgent matter as far as the Child Welfare Department is concerned, since a satisfactory supply of sterilized milk can now be obtained at no greater cost than the untreated milk.

4. With regard to the treatment of Venereal Diseases, a scheme has now been approved and arrangements for starting this scheme are now going on.

In these ways the conditions for the carrying on of Child Welfare Work have been very much improved for the future.

WATER SUPPLY.

(From Report of Water Engineer).

SOURCE : UMLAAS RIVER - The catchment area draining to the storage reservoir at Camperdown is 172 square miles in extent. An additional catchment area of 138 square miles will drain to the new storage reservoir now under construction at Shongweni. A further area of 33 square miles drains to the Intake making an aggregate of 343 square miles. The total acreage within the Catchment area owned by the Corporation is 9,940 acres.

POSSIBILITIES OF POPULATION ON 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 distance from streams as renders them innocuous. The Corporation is empowered by the Durban Waterworks Consolidation Act No. 24 of 1921, to take drastic measures as need be to prevent serious contamination. A comprehensive sanitary survey of the catchment area has been instituted during the past year and it is intended to pursue such investigations regularly and continuously in order to safeguard the supply.

STORAGE - The total reservoir capacity is made up as follows :-

STORAGE RESERVOIRS.

	Original Capacity. Million gallons.	Present Capacity. Million gallons.
Camperdown...........................	500	220
Intake................................	11	11
Clear Water, Umlaas...................	107	100
Total	618	331

SERVICE RESERVOIRS.

	Gallons.
Congella..............................	7,300,000
Stella................................	2,000,000
Cato Road.............................	10,000
Campbell's Tank.......................	110,000
St. Thomas'...........................	300,000
Murchie's Tank........................	30,000
Botanic Gardens.......................	100,000
Florida Road..........................	650,000
Goble Road............................	20,000
North Ridge (Constructed during past year)............................	2,000,000
Total	12,520,000

SUMMARY OF AVAILABLE RESERVOIR CAPACITY.

Storage Reservoirs.........	331	million gallons
Service....................	12.5	" "
Total	343.5	" "

PURIFICATION - When necessary the raw water is treated with alumina ferric for the purpose of sedimentation before entering the lines of supply. Two sets of filter beds are in operation, one at Umlaas and the other at Coedmore; both are of the slow sand type.

The Umlaas filters, feeding the low level supply, deal with an average 2¾ million gallons per day. The Coedmore filters feeding the high level supply, deal with an average 3 million gallons per day. The Coedmore filters have been doubled in capacity during the past year. The effluent from each of the beds is sterilized by treatment with liquid chlorine on the most modern principles and with effectual results.

SYSTEM OF SUPPLY - From the Intake the water is conveyed by means of open conduits, tunnels, and syphons to the filters and from there is conveyed to town by cast-iron and steel pipes.

ADEQUACY - The present supply is inadequate in view of the rapidly increasing population and growing trade demands although recent filter extensions have relieved the immediate position.

NEW SCHEME - An entirely new scheme is now under construction consisting of a storage reservoir to hold 2,600 million gallons, much further down stream than the existing Camperdown Storage reservoir. From this storage reservoir the water will be conveyed to Durban through tunnels (at present under construction) conduits and pipe lines. Purification arrangements will be established at Northdene on the route of the pipe-line.

The length of the aqueduct from the new reservoir to Durban will be 17.25 miles.

BACTERIOLOGICAL EXAMINATIONS - Periodical bacteriological examinations for the presence of bacillus coli have been made in the Municipal Bacteriological Laboratory twice weekly and with few exceptions have yielded results comparable with those of any other water supply in South Africa. It might be stated that the Durban standard of negative B.Coli in 100 c.c. is the highest in the country. A field bacteriological and chemical service has been instituted for routine analysis of the river water and also before and after purification.

NIGHT SOIL, SLOPWATER AND REFUSE.

In connection with the extension of the sewerage system in the Stamford Hill District, mentioned in my last report, the Umgeni School is now connected thereto, together with the other premises which were under notice to instal the necessary house drainage.

The average number of pails in use in the unsewered areas during the year under review was 819, a tri-weekly service being given to :-

331 private dwellings.
25 business premises.
9 Government Institutions; and
12 Municipal Institutions.

During the year a start was made with the extension of the sewer to the Umbilo district. The bulk of the night soil service is in that district, and when it is completely sewered there will only remain the Umgeni district where it will be necessary to carry out a night soil service.

On the advice of the Town Solifictors, the system of charging for the removal of all "trade refuse" was discontinued during the year; these charges are now made only for removal of service from premises where manufactures are carried on.

The practice of using refuse for the reclamation of swampy areas has been continued, and it is estimated that approximately six acres have been filled and brought up to a good level during the year.

HOUSING.

The Inspector of Buildings reports continued and increased activity in the building of dwelling houses. Plans for 454 residences and for 151 additions were approved during the period under review. Included in the number of dwellings are 137 residential flats; although this is not a new departure in Durban, the large proportion of residential flats appears to indicate a tendency towards more intensive use of sites in residential area. The majority of these flats were intended for European occupation, and are of very good class.

In addition to the foregoing, the Town Council has under construction a further instalment of the Municipal Housing Scheme, comprising 193 new houses which it is intended will all be completed and ready for occupation within the next twelve months.

There has undoubtedly been an improvement so far as the class of people who can afford to pay high rents is concerned, but the position of the lower paid workers does not appear to have been affected to any extent. With the present prohibitive rentals, it is impossible for the man with a modest wage to keep a roof over his head except by sharing a house with another family or by keeping lodgers.

Very few cases of unlawful overcrowding were discovered, and these were remedied without the necessity for proceedings being taken.

Apart from the slight improvement mentioned it is considered that the housing question is much in the same position as at the time the two previous reports were made.

THE BEACH HUTS - The conditions of the temporary housing accommodation at the Beach, mentioned in the first report, remain unaltered.

LORDS GROUNDS - This very unsatisfactory makeshift accommodation is still in use by a number of poor families. It is understood, however, that the Railway Department may take possession at any time and the occupants of the buildings will then be dispersed to add to the congestion in the poorest parts of the town and district.

INSANITARY OR SLUM AREAS - The Brickhill Road Extension area is unimproved, but the development of the Beach area will shortly necessitate the demolition and removal of the insanitary dwellings remaining there. The occupiers of an adjacent area used for stables and barracks are under six months' notice to remove their buildings in that connection, and when this has been completed a very considerable improvement will be effected.

Before the dwellings in the Brickhill Road area can be demolished, it will be essential to provide accommodation for the occupants elsewhere. The Town Council has had under consideration proposals for the housing of Indians, but nothing definite has been arranged.

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Of the 41 houses recorded as generally insanitary in the previous report, 27 have been improved, 2 vacated, 1 demolished, and 11 remain unimproved. Including the latter, there are 39 houses which are classed as generally insanitary.

HOUSING OF NATIVES, NATIVE OR ASIATIC LOCATIONS OR BARRACKS, MUNICIPAL NATIVE INSTITUTIONS.

CORPORATION INDIAN BARRACKS - Although a large proportion of these barracks are of wood and iron construction, old, and badly arranged, they are now in a fair state of repair.

The health of the inmates of these barracks has been very good.

INDIAN BARRACKS (PRIVATE) - There are 18 private Indian Barracks, containing a total population of 911. A number of these are under European supervision, the remainder being managed by Indians.

All have the Corporation water supply, but 7 are of the sewerage areas.

They are classified as good 5, fair 13, and poor 1.

The health of the inmates has been good, no outbreaks of infectious disease being reported.

NATIVE BARRACKS (PRIVATE) - There are 119 private Native Barracks or Compounds, in which not less than 10 men are housed, and the total number of residents is 5,513. The majority of these barracks are under direct European control and supervision, the remainder being managed by Natives and Indians.

The structural and sanitary classification is :-

Good	....	69
Fair	....	37
Poor	....	11

NATIVE AFFAIRS.

(From Report of Medical Officer, Native Affairs Department).

During the year ending 31st July, 1923, 51,392 Natives were medically examined : 16,534 Natives were vaccinated; 512 Natives were certified medically unfit.

GENERAL HEALTH OF THE NATIVES.

The year under consideration has been most satisfactory, and the general health of the Natives has been excellent.

There has been nothing in the nature of an epidemic; in the Municipal Native Institutions there has been no death, and in fact no serious case of illness of any kind.

PARTICULAR DISEASES.

INFLUENZA - A few sporadic cases only, and of a mild type. No death.

SMALL-POX - No case.

VENEREAL DISEASE - Sixty-five (65) cases. It is most gratifying to be able to report that temporary arrangements exist to have such cases treated at Addington Hospital.

TUBERCULOSIS - Fifty-eight (58) Natives were rejected as showing evidence of tuberculosis. This figure is substantially lower than that of any previous year.

CHICKEN-POX - Twenty cases. All treated at the Congella Infectious Diseases Hospital.

MEASLES - Nine cases. Treated at Congella.

SCABIES - Two hundred and twenty-two cases. So many cases of this disease were entering Durban last March that the matter was reported to the Assistant Medical Officer of Health for Natal.

Dr. Park Ross kindly circularised the Country Magistrates, asking them to instruct the Natives of their respective Districts that such as were suffering from Scabies would not get employment in Durban.

Since then there has been a very marked decrease in the number of cases of Scabies encountered.

OTHER DISEASES - Now and again one meets with a case of Pneumonia, Undefined Fever, General Debility, Bright's Disease, Ascites, etc. etc. These cases are so few and far between that no special comments is required.

MEAT SUPPLIES.

BUTCHERS' SHOPS - The usual weekly inspection of all Butchers' Shops has been carried out, a total of 2,833 inspections being made.

No diseased or unsound meat was found, but in three cases meat was found which did not bear the stamp of the Municipal Abattoir, and the butchers in default were prosecuted.

(From Report of Abattoir Director)

METHOD OF SLAUGHTERING - Cattle are pole-axed except those intended for Kosher, which are killed in the Jewish manner. Sheep have their throats cut and spinal cord dislocated. Pigs are stunned with a mall and throats cut.

The water supply and sewerage connections are part of the general sewerage and water scheme of the town.

ANIMALS SLAUGHTERED AND BODIES, ETC. CONDEMNED FOR 12 MONTHS ENDING 30TH JUNE, 1923.

	Animals Slaughter'd	Whole Bodies Condemned				
		Dropsy and Emacia-tion	Measles	Tuber-culosis	Mori-bund	Other Diseases
Cattle	23,678	91	192	18	-	4
Calves	1,280	33	31	-	-	10
Sheep and Goats	142,289	605	-	-	132	65
Pigs	12,222	35	808	26	-	12

PORTIONS OF CARCASES AND OFFALS, CONDEMNED AND DESTROYED AS UNFIT FOR HUMAN CONSUMPTION.

Shoulders	284
Briskets	9
Legs	21
Topsides	17
Chucks	28
Rumps	19
Heads	538
Necks	17
Quarters	15
Thicks	52
Ribs	8
Blades	43
Tongues	71
Hearts	106
Tails	74
Lungs	19,672
Livers	50,215
Stomachs	89
Intestines	157,306
Kidneys	33

MILK SUPPLIES - There are 18 dairies within the Municipal area, and 61 in the surrounding districts, from which milk is sold within the Borough. 437 inspections were made, representing an average of 24 to each dairy in the Borough, and 246, which is equal to an average of 4 to each dairy in the outside districts.

The following improvements were effected at the instance of this department :-

COWSHEDS -

New (erected), within Borough	1
New (erected), outside Borough	9
Erected to replace unsatisfactory	1
General repairs executed	17
New dairies licensed	11
New applications refused	7
Repairs to walls, floors, etc. executed	22
Repairs to roofs and channels	10
Overcrowding discontinued	-
Closed down, unsatisfactory	1
Corporation water laid on	-

MILK ROOMS -

Erected.........................	4
Fly-screened.....................	8

BOILERS -

Provided.........................	12
Repaired.........................	2
Renewed..........................	2
Warnings for failure to use.......	27

OTHER FOOD SUPPLIES.

BAKERIES, etc. - The number of bakeries, including premises where only pastry or biscuits are manufactures, is eleven, and a total number of 267 inspections were made of these premises. One old bakery, which was badly arranged, was brought into disuse during the year and replaced by good brick premises.

3,213 inspections were made of refreshment rooms, restaurants and other places where food is prepared or sold.

GENERAL - The quantities of unsound foodstuffs siezed or handed over to the department for destruction, are given in the following tables, together with the samples of food and drugs analysed and proceedings taken in respect of unsound, unwholesome or adulterated foodstuffs.

Of the 203 samples of new milk submitted to the Public Analyst, 21 were certified by him to be below the standard of 3.0 per cent. milk fat, and 8.5 per cent. solids - not fat, fixed by the regulations. In 14 cases, proceedings were taken and 10 of the dairymen were fined, 3 cautioned and discharged, and one case was withdrawn. In the remaining cases the deficiency from the standard was so slight that letters of warning were sent to the dairymen concerned.

For the whole of the milk samples, including those under standard, the average composition was :-

Milk Fat.....................	3.45%
Solids not Fat...............	8.82%
Total Solids.................	12.27%

UNSOUND FOOD.

Article.	Quantity.	Remarks.
Canned Apricots	12 tins	Destroyed on Mayor's Order
Kipper Herrings	150 doz. tins	"
Filletted Haddock	3¾ lb.	"
Finnan Haddock	5¼ lb.	"
Dressed Fowls	18	"
Cooked Hams	2	"
Eggs	53 doz.	"
Salt Beef	80 lb.	"
Cocoa	27 lb.	"
Sardines	1,000 tins	"
Raisins	411 cases (each containing 25 lb.)	"
Fowls	18	Destroyed at Owners' request
Turkeys	6	"
Raisins	50 lb.	"
Salmon	18 tins	"
Sardines	6 tins	"
Herrings	77 tins	"
Invalid Food	11 tins	"

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FOODS AND DRUGS - The following samples were taken and submitted to the Public Analyst :-

Article.	No. of Samples.	Genuine.	Adulteration.
New Milk	203	182	21
Condensed Milk	2	2	-
Butter	2	2	-
Butter Fat	1	1	-
Sugar, White	2	2	-
Sugar, Brown	2	2	-
Sugar, Black	1	1	-
Pepper, White	3	3	-
Vinegar	2	2	-
Borax, Purified	1	1	-
Flour	1	1	-
Cocoa	1	1	-
Lard	2	2	-
Cream of Tartar	2	1	1
	225	203	22

Proceedings were taken in respect of contraventions of :-

	Cases	Convictions	Dismissals	Withdrawals	Fine
Adulteration of Food Act No.45, 1901	14	13	-	1	£28.10. 0
Public Health Act No. 36, 1919	10	10	-	-	26.10. 0
Public Health Bye-Laws fir the Borough of Durban relating to -					
Manufacture of Food	15	15	-	-	17. 5. 0
Examination of Meat and Food	6	6	-	-	14. 0. 0
Amended Abattoir Bye-Laws	4	3	1	-	14.15. 0
	49	47	1	1	£101. 0. 0

CONDENSED MILK - New Regulations under the Adulteration of Food Act No.45 of 1901 (Natal), were gazetted on February 24th, 1922. Sections 17 and 18 of these Regulations deal with the labelling of condensed milk, and the regulations provided that Section 18 should not come into operation until the 1st January, 1923.

When it was proposed to take action under these Regulations it was found that the trading community was in complete ignorance of their existence, and on the advice of this Department the Town Council published advertisements in the local press drawing the attention of traders to the provisions of Section 18 of these Regulations.

Notwithstanding this advice it was found recently that 11 different brands of milk were on sale within the Borough, none of which complied with the requirements of the regulations, and that some of this improperly labelled condensed milk was still being imported and being allowed to pass by the Customs Department. No advice regarding the enforcement of these regulations has been received from the Union Department of Public Health, but the local Collector of Customs has advised me he has been instructed that some elasticity may be allowed and that it is unnecessary to enforce strict compliance with the letter of the regulations, provided the requirements of the regulations are substantially met.

No proceedings in connection with the labelling of Condensed Milk have been taken to date.

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PROSECUTIONS, etc. - In dealing with insanitary or defective conditions or nuisances, 2,610 written intimations and 5,441 personal warnings were given.

The number of nuisances abated or remedied is shown in the following tables, and another table shows the prosecutions other than those in connection with foods, which are shown elsewhere :-

CONDITIONS REMEDIED : BAKEHOUSES, FOOD FACTORIES, DAIRIES, etc. -

Change Rooms provided	2
Lavatory basins provided	4
Overalls provided	15
Fly screening provided	17
Floors repaired or renewed	23
W.C's. Drains removed from building, etc.	-
Walls, etc. limewashed, painted or otherwise cleaned	216
Sleeping in store or workroom discontinued.	10
Unsuitable food receptacles replaced or improved	50
Unclean clothes	95
" cattle	2
" vehicles	51
Boilers erected	12
Boilers not used	27

OFFENSIVE TRADES -

Nuisances from dust abated	5
" " smells	23
" " offensive liquids	9

REPORTS TO OTHER DEPARTMENTS -

Obstructed sewer drains	257
Defective water fittings	191
Other matters (chiefly relating to building defects)	211

INTIMATIONS -

Written	2,610
Personal	5,441

NUISANCES -

From defective or dirty stables, kraals, cowsheds, etc. abated	168
From factories or trade premises, abated	256
From dirty yards, gulleys, W.C's., etc.	2,163
From discharge of foul water to streets continued	219
From unauthorised deposits of refuse	719
From accumulation of offensive matter	333
From overgrown lands, etc. cleared	199
From keeping of animals	57

FLIES, RATS AND MOSQUITOES -

Measures taken to prevent breeding and to destroy	579

GENERAL REPAIRS TO PREMISES -

Chimneys	Repaired or renewed	3
Roofs	"	307
Gutters and downpipes	"	240
Floors	"	149
Lighting	Improved or provided	46
Ventilation	"	44
W.C. Pans, Sinks, Baths and gullies	Repaired or renewed	499
Sinks installed		5
W.C. Cisterns	Repaired or renewed	402
Waste and Flush Pipes	"	301
Waterclosets	"	112
Privies	Provided or repaired	13
Urinals	Repaired	3
Sewerage	Installed	24
"	" (Native Type)	15
Manholes, Traps, Vents, etc.	Repaired or renewed	186
Drains	Connected with sewerage system	16
" (Stormwater)	Disconnected from sewerage system	86
" "	Provided or repaired	103
" "	C.I.Pipes across the footpath	78
"	Yard paving carried out	4
Water Supply	Installed or improved	28
" "	Defective fittings repaired	191
Overcrowding	Discontinued	71
Verminous premises	Vermin eradicated	210
Other premises	Limewashed or colourwashed	723
" "	Cleaned	196
Receptacles	Manure and refuse, provided or renewed	762
Shanties unfit for habitation	Vacated or demolished	90
Housing	Illegal housing of natives discontinued	118
"	Sleeping in unapproved premises discontinued	124

PROSECUTIONS UNDER PUBLIC HEALTH BYE-LAWS RELATING TO -

	Cases	Convictions	Fines
Nuisances	12	12	£17. 0. 0
Slaughter of Animals	2	2	3. 0. 0
House Drainage	6	6	15. 0. 0
Laundries, etc.	3	3	2. 0. 0
Native Location	1	1	2. 0. 0
Dairies and Cowsheds	6	6	11. 0. 0
Collection and removal of refuse	2*	2*	2. 0. 0
	32	31	£52. 0. 0

* One case withdrawn.

OTHER MATTERS OF HEALTH OR SANITATION.

FLY PREVENTION - Particular attention is given to stables and other premises where flies are likely to breed, and the occupiers are required to keep their manure in covered receptacles and have it removed from the premises at least three times a week.

At each of the refuse tips a cask is provided in which a solution of Arsenite of Soda is made, and all refuse deposited is sprayed over daily.

OFFENSIVE TRADES - List of offensive trades on our Register as at 30th June, 1923 :-

Soapmakers................	3	Refuse depositing sites.......	7
Dealers in Hides, Skins and Wood....................	18	Wool Washeries...............	2
Brewery....................	1	Abattoir......................	1
Wattle Bark Grinding.......	3	Manufacture of Fertilisers....	1
		Refuse Destructor............	1

The Abattoir, Refuse Destructor and Refuse depositing sites are Municipal institutions.

There are two Abattoirs in the Maydon Wharf area, which are outside the jurisdiction of the Municipality, but I understand they are licensed by the Union authorities.

CYANIDE FUMIGATIONS - Fumigation by Cyanide was carried out at 457 premises during the year. An Inspector of the Department was present on each occasion to ensure that the Bye-Laws for the control of the trade were complied with. Three letters of warning were sent to licensed Fumigators for failure to take all precautions as laid down in the aforesaid Bye-Laws. There are 5 licensed Fumigators.

HEALTH AND SANITARY STAFF.

HEALTH DEPARTMENT -
Medical Officer of Health (Medical Officer in Charge of Maternity and Child Welfare, Acting Medical Officer at present), K. McNeill.
1 Clerk.
1 Typiste.
2 Indians (1 Office Messenger and 1 Laboratory Attendant).

MATERNITY AND CHILD WELFARE DEPARTMENT -
Medical Officer in Charge, K. McNeill.
2 Health Visitors.
1 Clerk.
1 Female Attendant.

INFECTIOUS DISEASES HOSPITAL, CONGELLA -
1 Matron (Mrs. A. Davies).
2 Nursing Sisters.
4 Probationers.
8 Indians.

DISINFECTING STATION -
1 Superintendent (C.D. Morning).
1 Assistant Disinfector.
11 Indians.

SANITARY DEPARTMENT -
1 Chief Sanitary Inspector (R. Walker).
2 Assistant Sanitary Inspectors.
2 Clerks.
1 Junior.
2 Indians (Interpreter and Messenger).

ANTI-MALARIA (Sub-Department) -
1 European Overseer.
14 Indians.

ANTI-PLAGUE -
1 European Overseer.
2 " Ratcatchers.

BARRACKS MANAGEMENT -
1 European Caretaker.
14 Indians.

CLENASING SERVICES -
4 European Overseers.
4 Sirdars and 99 Rubbish Collectors (Indians).
5 Sirdars and 138 Street Cleaners (Indians).

NIGHT SOIL REMOVAL -
2 Sirdars.
20 Indian Labourers.

PUBLIC CONVENIENCES -
7 European Attendants.
5 Indian "

CORPORATION CEMETERIES -
2 European Caretakers.
15 Indians.

K. McNEILL, M.B., Ch.B., D.P.H.
Acting Medical Officer of Health.