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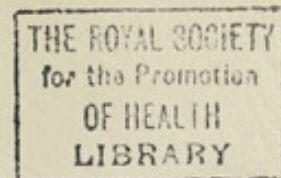
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CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 31st DECEMBER, 1962

DURBAN CORPORATION

RCB/14 (ak)



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ANNUAL REPORT 1962

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ANNUAL REPORT 1962

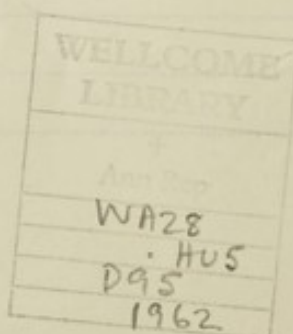
REPORT 'A'

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City Health Department,
640 Smith Street,
DURBAN.

20th April, 1964.

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

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present the 60th Annual Report on the health and sanitary circumstances of the City, together with a review of the activities of the City Health Department, for the year ended the 31st December, 1962.

It is with very deep regret that I record the untimely death after a short illness of Dr. A. Stephen on the 13th February, 1963. Dr. Alexander Stephen was 48. After active service with the S.A. Air Force, during which he was awarded the M.B.E. (Military), Dr. Stephen joined the Pietermaritzburg Health Department and later became Medical Officer of Health to the Port Elizabeth Divisional Council. He was appointed Deputy City Medical Officer of Health of Durban in 1955 and became the City Medical Officer of Health in 1960, on the retirement of Dr. G.D. English.

A man of quiet but none the less invigorating personality Dr. Stephen enjoyed the confidence of City Councillors, departmental heads and his own colleagues in the City. His loss was deeply felt by all members of the Health Department by whom he was not only highly respected but regarded with affection.

The infant mortality rates in all race groups except the European have shown a decrease. The most dramatic fall has occurred in the Bantu, where a fall from 167.10 to 148.20 is recorded. The fall in the Bantu rate is most gratifying and the evidence points towards a continued decrease in this rate. The main contributing factors are undoubtedly better housing, subsidized feeding schemes and increased attendances at Child Health clinics.

After a short but most successful subsidized powdered skimmed milk trial the State converted the scheme into a permanent one in May of this year. The acceptance by the City Council of one third financial and full administrative liability in this scheme has contributed in a demonstrable manner to the health of needy children of all races and this is clearly reflected in the clinic attendances, immunisation rates and infant mortality figures.

The total child health clinic attendances have soared to a phenomenal extent, the increase over the previous year being 197,800. Staff in the non-European clinics where the increase has mainly occurred, have been strained to the utmost to cope with the influx. The results in terms of improved child health have, however, made this aspect of the Department's work most rewarding. Kwashiorkor made notifiable in 1962, is almost never seen amongst City children attending these clinics.

There were no cases of formidable epidemic diseases notified during the year.

Notifiable infectious diseases of major public health importance such as typhoid fever, diphtheria and poliomyelitis showed a substantial reduction over previous years. New regulations long overdue in light of advances on medical practice for the exclusion from school on account of infectious disease were promulgated during the year by the State.

Although the number of notifications of pulmonary tuberculosis showed a slight decrease over the previous year and were in fact the lowest since 1955, this disease remains the greatest single public health problem facing the City. There is no doubt that the clinics for this disease at Cato Manor and kwaMashu have eased the lot of the patients in these areas, have encouraged regular attendances and so reduced the chances of spread of infection.

With the development of the Southern areas of the City preliminary planning is in hand to meet the growing needs of the community in these parts in regard to clinic services.

The importance of B.C.G. vaccination in the prevention of this disease has not been neglected, attention being especially paid to new-born babies amongst the Bantu community who suffer most from this infection.

Health education forms part of the duties of nearly every official in this Department but as in the past, the Health Education Section of the Department performed much valuable work in spearheading specific programmes particularly in regard to immunisation, tuberculosis, nutrition and venereal diseases. An appendix to the Annual Report regarding Bantu beliefs and customs in relation to tuberculosis indicates in no uncertain manner the need for a skilled approach to public health problems in our multi-racial community.

Indian housing made exceptional progress during the year both in the private development sphere and by the City Council. Indian housing has for long been a major problem and has now been tackled by the City Council in a most vigorous manner. The Merebank Housing Scheme is almost complete and the Chatsworth Housing Scheme has been commenced and is proceeding apace.

Bantu housing reflects a most satisfactory state of affairs. The City Council's development of kwaMashu is nearing completion and consideration has been given to extensions on the South West side of the township. The development of the Umlazi Township to the South of Durban by the State is making good progress and will serve to alleviate the problem of Bantu Housing still further.

Steady progress in regard to the elimination of the slum area of Cato Manor is being made and it is anticipated that this area will finally be cleared during 1964. Although the last shack will no doubt be demolished unheralded, with it will go a festering public health sore in the midst of this City.

ACKNOWLEDGEMENTS:

To His Worship the Mayor, to City Councillors and in particular the Chairman and Members of the Public Health Committee, Departmental Heads and Council Officials I wish to express my thanks for the assistance, cordial support and courtesy extended to the Department during 1962.

To the members of the Press and the South African Broadcasting Corporation I must state my keen appreciation of their interest in public health matters and ready co-operation at all times to bring to the notice of citizens the many aspects of public health of interest and importance.

The progress made by the Department during the year is in itself a tribute to the enthusiasm of every member of the City Health Department and I extend to them my sincere thanks for their loyal support, teamspirit and high standard of work throughout the year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

C.R. MACKENZIE

M.B., B.Ch., D.P.H., D.T.M. & H.

CITY MEDICAL OFFICER OF HEALTH

REPORT 'A'

I. NATURAL CONDITIONS

AREA

The inclusion of the north-eastern extremity of the Bluff, which previously fell under the Central Government, further increased the Durban local authority area by an additional 952 acres on 1st August, 1962.

The total area of the City is now 55,874 acres (87.30 square miles).

VALUATION (1961 figures in parenthesis)

	Land Values		Building Values	
	Total	Rateable	Total	Rateable
(a) Old Borough and Areas incorporated in 1932	R177,166,300 (175,511,200)	R145,504,250 (145,807,120)	R293,913,740 (285,140,580)	R256,546,720 (248,584,860)
(b) Chatsworth incorporated in 1961	R2,724,690 (2,954,020)	R2,101,460 (2,216,260)	R1,323,330 (1,229,740)	R1,178,810 (1,075,680)
(c) North eastern extremity of Bluff: incorporated 1962	R3,242,020 (-)	R3,242,020 (-)	R1,211,680 (-)	R1,210,920 (-)

NOTE: No valuations are available for kwaMashu Native Township as the Council does not levy rates on properties in this area.

RATES

- (a) Old Borough and Added Areas - General Rate (includes water rate) - 2.92 cents in the rand for land and 1.46 cents in the rand for buildings. The agricultural rate is 50% of the General Rate.
- (b) Chatsworth - General Rate - 1 1/16th cents in the rand for land and 7/16ths cents in the rand on buildings. Agricultural rate is 60% of the General Rate.
- (c) North-Eastern Extremity of the Bluff - 20% of Durban's General Rate excluding the water rate for which the full rate of .41 cents in the Rand is charged.

GEOGRAPHICAL DATA AND CLIMATE

Situated on the East Coast of Africa at 31° East longitude and 29° 52 minutes 30 seconds South latitude, Durban enjoys a sub-tropical climate and is served by the principal harbour of the Republic. By virtue of its advantages as regards siting, labour resources and port facilities, extensive industrial development in and contiguous to the City has taken place over the past 25 years.

Average Annual Rainfall: 38 inches.

METEOROLOGICAL DATA (By courtesy of the Weather Office: Louis Botha Airport)

1962 Month	24 hour Shade Temperature (°C)			Relative Humidity		Barometer Readings (Inches)			Rainfall No. of Days on which rain fell	Inches m.m.	Highest fall (m.m.)	Sunlight Average hours of Sunshine per day
	Maximum	Minimum	Mean	Minimum	Average	Maximum	Minimum	Mean				
January	26.8	19.6	23.2	52	80	30.22	29.59	29.92	15	88.5	17.1	5.70
February	27.6	20.5	23.8	52	80	30.13	29.63	29.90	14	89.1	24.9	5.46
March	27.5	19.5	23.3	54	82	30.25	29.57	29.96	15	166.3	63.0	6.82
April	25.9	16.7	21.5	36	77	30.32	29.59	30.01	9	40.2	29.0	7.63
May	24.1	11.6	17.8	22	76	30.32	29.72	30.18	7	49.0	18.3	8.17
June	24.2	9.1	16.3	17	71	30.28	29.61	30.01	1	1.0	1.0	7.96
July	24.0	9.1	16.5	21	70	30.54	29.71	30.19	2	1.4	1.3	8.05
August	24.4	11.5	18.0	34	74	30.50	29.54	30.09	6	66.4	39.0	7.62
September	24.4	15.2	19.6	22	75	30.49	29.71	30.07	9	23.2	6.6	6.29
October	24.7	17.3	20.9	40	78	30.39	29.50	30.00	16	61.1	11.3	4.80
November	25.6	18.3	21.9	53	80	30.29	29.61	29.97	20	205.3	30.0	4.85
December	27.3	19.7	23.4	33	79	30.18	29.59	29.95	15	89.1	28.6	6.85
Total Rainfall										880.6	34.67	

II VITAL STATISTICS

Population (Estimated)

	1962		1961	
Europeans	169,212	(27.46%)	166,116	(27.56%)
Coloureds	26,480	(4.30%)	25,640	(4.25%)
Bantu	189,695	(30.78%)	186,863	(31.00%)
Asiatics	230,803	(37.46%)	224,227	(37.19%)
All Races	616,190		602,846	

Births: 1962

Race	LEGITIMATE				ILLEGITIMATE				TOTALS			
	M	F	Total	1961	M	F	Total	1961	M	F	Total	1961
European	1680	1626	3306	3109	38	58	96	117	1718	1684	3402	3226
Coloured	465	470	935	941	137	139	276	232	602	609	1211	1173
Bantu	1658	1724	3382	2197	1847	1694	3541	3782	3505	3418	6923	5979
Asiatic	3712	3925	7637	7202	70	75	145	110	3782	4000	7782	7312
Total	7515	7745	15260	13449	2092	1966	4058	4241	9607	9711	19318	17690

CRUDE BIRTH RATES: (1961 in parenthesis)

European	20.10	(19.42)
Coloured	45.73	(45.75)
Bantu	36.50	(32.00)
Asiatic	33.72	(32.61)
All Races	31.35	(29.34)

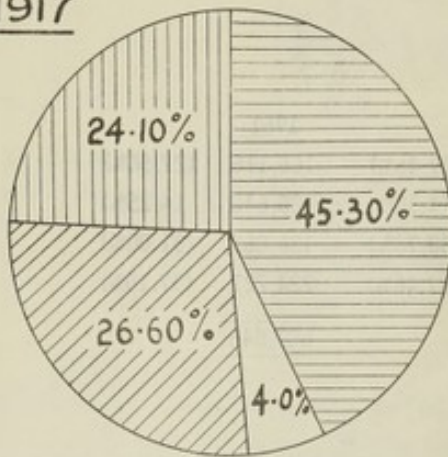
STILLBIRTHS: (1961 in parenthesis)

	Number		Rates	
European	23	(30)	6.76	(9.30)
Coloured	22	(22)	18.17	(18.76)
Bantu	236	(222)	34.09	(37.13)
Asiatic	169	(158)	21.72	(21.61)
All Races	450	(432)	23.29	(24.42)

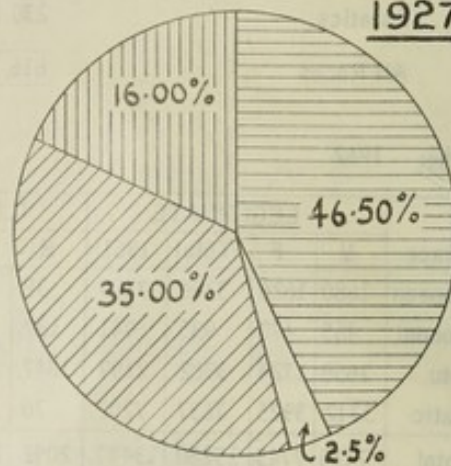
The Asiatic birth rate which showed a steady decline over the past decade from 44.62 in 1950 to 28.57 in 1959, has improved slightly over the following three years to the present figure of 33.72 in the current year. Rates for the other races have remained fairly constant. The decrease in the number of European stillbirths noted last year, has continued.

DURBAN POPULATION RACIAL TREND

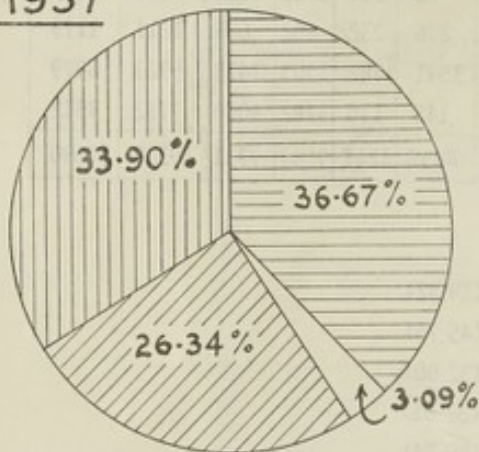
1917



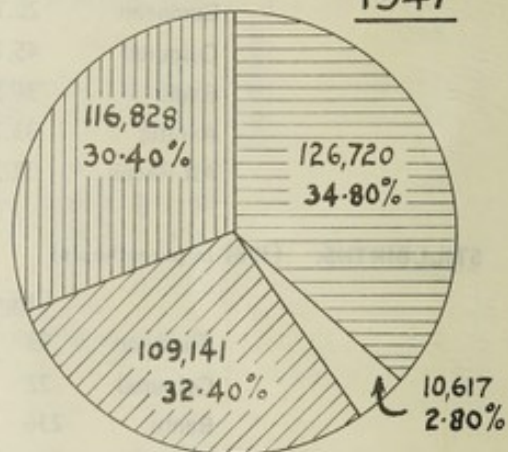
1927



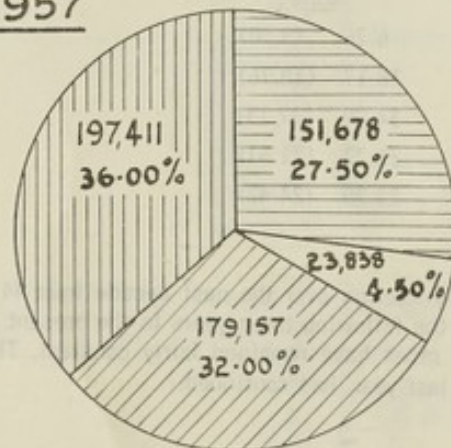
1937



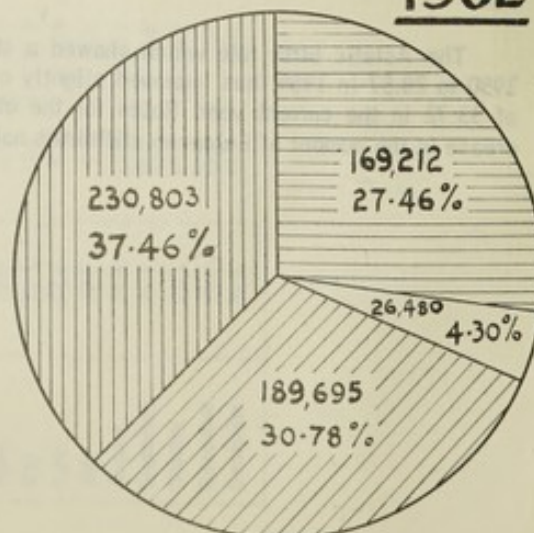
1947



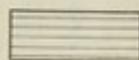
1957



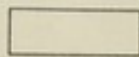
1962



EUROPEAN



COLOURED



BANTU



ASIATIC



DEATHS: 1962

All Deaths

	Total Deaths				Crude Death Rates	
	M	F	Total	(1961)	1962	(1961)
European	937	661	1598	(1635)	9.44	(9.85)
Coloured	111	94	205	(247)	7.74	(9.67)
Bantu	1457	1052	2509	(2369)	13.23	(12.68)
Asiatic	978	832	1810	(1709)	7.84	(7.62)
All Races	3483	2639	6122	(5960)	9.94	(9.89)

Infant Deaths: (Deaths of infants under the age of 1 year)

	Number of Deaths		Infant Mortality Rate	
European	92	(65)	27.23	(20.34)
Coloured	59	(57)	49.62	(49.52)
Bantu	991	(962)	148.20	(167.10)
Asiatic	417	(422)	54.77	(58.99)
All Races	1559	(1506)	82.63	(87.26)

Maternal Deaths (Deaths relating to Childbirth)

	No. of Deaths		Rate	
				(1961)
European	1		0.30	(0.93)
Coloured	1		0.84	—
Bantu	10		1.50	(2.34)
Asiatic	9		1.18	(2.05)
All Races	21		1.11	(1.81)

The very marked decline in the Bantu infant mortality rate has continued. This is commented on later in this Report.

PRINCIPAL CAUSES OF DEATH IN RESPECT OF ALL DEATHS (1961 Figures in Brackets)

Cause of Death	European		Coloured		Bantu		Asiatic		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Tuberculosis (All Forms) (001-019)	17 (15)	1.06 (0.92)	14 (16)	6.83 (6.45)	174 (165)	6.94 (6.97)	53 (56)	2.93 (3.28)	258 (252)	4.21 (4.23)
Neoplasms (140-239)	238 (260)	14.89 (15.89)	11 (20)	5.37 (8.07)	86 (86)	3.43 (3.63)	83 (83)	4.59 (4.86)	418 (449)	6.83 (7.54)
Vascular Lesions of C.N.S. (330-334)	183 (170)	11.45 (10.39)	15 (17)	7.32 (6.85)	69 (66)	2.75 (2.79)	172 (168)	9.50 (9.85)	439 (421)	7.17 (7.07)
Heart and Circulatory System (400-468)	581 (592)	36.36 (36.19)	36 (45)	17.56 (18.16)	164 (148)	6.54 (6.25)	344 (331)	19.07 (19.40)	1125 (1060)	18.38 (17.79)
Pneumonias (490-493)	105 (100)	6.57 (6.11)	19 (24)	9.27 (9.68)	312 (353)	12.43 (14.91)	374 (351)	20.63 (20.57)	810 (828)	13.23 (13.90)
Enteritis and Diarrhoea (571-2)	7 (3)	.44 (.18)	19 (18)	9.27 (7.26)	350 (252)	13.90 (10.65)	133 (96)	7.35 (5.63)	509 (369)	8.31 (6.19)
Road Accidents (810-835)	43 (41)	2.69 (2.51)	8 (9)	3.90 (3.63)	85 (92)	3.39 (3.89)	50 (26)	2.76 (1.52)	186 (168)	3.04 (2.82)
III-defined and Unknown (780 - 793, 795)	58 (127)	3.63 (7.76)	9 (12)	4.39 (4.84)	272 (272)	10.84 (11.49)	61 (92)	3.37 (5.39)	400 (503)	6.53 (8.44)

PRINCIPAL CAUSES OF DEATH IN RESPECT OF INFANTS (UNDER 1 YEAR) (1961 Figures in Brackets)

Cause of Death	European		Coloured		Bantu		Asiatic		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Tetanus (061)	-	-	-	-	13 (25)	1.31 (2.60)	1 (1)	.24 (.24)	14 (26)	.90 (1.73)
Avitaminosis and Nutritional Deficiencies (280-286)	-	-	-	-	31 (26)	3.13 (2.70)	1 (2)	.24 (.48)	33 (29)	2.12 (1.91)
Pneumonias (490-493)	1 (4)	1.09 (6.15)	10 (8)	16.95 (14.04)	158 (188)	15.94 (19.44)	102 (94)	24.46 (22.27)	271 (294)	17.38 (19.52)
Enteritis and Diarrhoea (571-572)	4 -	4.35 -	15 (13)	25.42 (22.81)	261 (178)	26.34 (18.50)	91 (70)	21.82 (16.59)	371 (261)	23.80 (17.33)
Congenital Malformations (750-759)	7 (1)	7.61 (1.54)	1 (1)	1.70 (1.75)	17 (6)	1.72 (.62)	6 (10)	1.44 (2.37)	31 (18)	1.99 (1.20)
Post Natal Asphyxia (762)	17 (14)	18.48 (21.54)	6 (3)	10.17 (5.26)	27 (23)	2.72 (2.39)	17 (15)	4.08 (3.55)	67 (55)	4.30 (3.65)
Infections of Newborn (763-768)	2 -	2.17 -	2 (3)	3.49 (5.26)	57 (50)	5.75 (5.19)	36 (58)	8.63 (13.74)	97 (111)	6.22 (7.37)
III-defined and Prematurity	42 (28)	45.65 (43.08)	8 (21)	13.56 (36.84)	158 (188)	15.94 (19.54)	95 (106)	22.78 (25.12)	303 (343)	19.44 (22.78)

III INFECTIOUS DISEASES

INFECTIOUS DISEASES NOTIFICATIONS

No case of formidable epidemic disease was notified during the year.

Set out below is a table showing the numbers and the racial distribution of the confirmed case of notifiable infectious diseases which occurred in Durban during 1962. The attack rate per 1,000 population is shown in parenthesis.

Disease	European	Coloured	Bantu	Asiatic	Total
Brucellosis	1	—	—	—	1 (.0016)
Cerebro-Spinal-Meningitis	2	—	3	—	5 (.0081)
Diphtheria	10	5	46	9	70 (.1136)
Erysipelas	1	—	—	—	1 (.0016)
Encephalitis	21	—	11	1	33 (.0536)
Gonococcal Ophthalmia	—	—	36	3	39 (.0633)
Leprosy	—	—	7	2	9 (.0146)
Poliomyelitis	—	—	4	—	4 (.0065)
Puerperal Sepsis	—	1	11	5	17 (.0276)
Scarlet Fever	90	1	—	—	91 (.1476)
Trachoma	—	—	3	2	5 (.0081)
Typhoid	5	—	25	11	41 (.0665)

General:

The year has been marked by a substantial reduction in the incidence of the notifiable infectious diseases and in particular in diseases of major public health importance such as typhoid fever, diphtheria and poliomyelitis. Encephalitis notifications showed an increase, the great majority of cases being of unknown virus etiology.

With the exception of typhoid fever all cases of infectious diseases requiring isolation in hospital were admitted to Wentworth Hospital (Europeans) or King Edward VIII Hospital (non-Europeans). Each of these Provincial Hospitals have an isolation section, 150 beds being available at Wentworth and 91 at King Edward VIII. The facilities are available to the Durban Corporation in terms of an agreement which was reached with the State Health Department and the Provincial Hospitals Department when the latter department took over Durban's Isolation Hospital in 1948. Patients are also accepted in these Isolation Hospitals from neighbouring areas. Typhoid cases were admitted to several approved Provincial and private hospitals and are not normally treated in isolation hospitals.

Smallpox

No case of smallpox occurred in Durban during the year. Several suspect cases were reported to this Department and immediately investigated but in no instance was the diagnosis confirmed.

A European family of three returned to Durban after a holiday in Basutoland where they had been in contact with a case of smallpox. The family was immediately revaccinated, quarantined at home and kept under daily surveillance for 16 days. No illness developed.

One suspect case, a Bantu child aged 5 years, was isolated and investigated. All contacts and possible contacts that could be traced were vaccinated, including those that had been present in the out-patient department when the patient was brought to hospital. Specimens sent for laboratory examination proved negative and it was decided that the case was not smallpox.

On 16th October it was learned that a European female passenger had died at sea en route to Italy on 11th October, from smallpox. She had become ill on 6th October. The case had originally come from Johannesburg and had spent one night in Durban prior to embarkation on 27th September. A full investigation was carried out at the hotel at which she had stayed in Durban, and at other points, for a possible source of infection with negative results. Four persons from Durban who had been fellow passengers on the ship as far as Mombasa (4th October) and returned to Durban by sea, were vaccinated and kept under daily medical surveillance until 25th October.

Typhoid Fever

The table overleaf sets out the number of notifications, the notification rate, number of deaths and death rate of typhoid fever in Durban since 1940. This illustrates the improvement over the years in both the incidence and death rates and the year 1962 marks the lowest figures recorded since 1940. The high incidence of typhoid in the Bantu group in the years 1958 and 1959 was mainly due to a culmination of factors, chiefly overcrowding and insanitary conditions in the Cato Manor area which has now to a very great extent been relieved by rehousing of the majority of this population and demolition of the worst shack areas. In 1962 there were only 6 cases notified from the Cato Manor area compared with 14 cases in 1961, 55 in 1960 and 229 in 1959. Six cases of typhoid came from the new Bantu township of kwaMashu compared with 8 cases in 1961.

The cases occurred sporadically throughout the year with the highest incidence in May and the lowest in September and October. All age groups were affected with the highest incidence in young adults. Investigations were carried out in each case and during the year 2 Bantu carriers were discovered amongst the contacts, one of them being a servant in the household of a European case. These two carriers are included in the total of 41 cases for the year. They were both treated successfully in hospital and have remained negative on subsequent examinations.

There were no deaths from typhoid fever during the year.

Diphtheria

City Cases of diphtheria notified during the year numbered 70, made up of 10 Europeans, 5 Coloureds, 46 Bantu and 9 Asiatics. This represents a decrease of 33 compared with the previous year, the decrease affecting the Asiatic and Bantu groups. Three of these notifications were in respect of carriers, discovered in the course of routine investigation of cases. These three carriers had previously all been fully immunised.

Four of the cases notified had a history of some previous immunisation, 2 having had one immunising dose only. One case had received 2 injections of toxoid and 1 case 3 injections. These latter 2 cases were very mild and in both cases the diagnosis was based on clinical grounds only.

As in previous years the majority of the cases were young children. Of all cases notified 76% were under the age of 5 years, and it was in this age group particularly that immunisation programmes were stepped up during the year.

Ten deaths from diphtheria occurred during the year, 1 European, 2 Asiatics and 7 Bantu. One of these was a child aged 6 years and all the others were under 5 years old. None of the cases who died had been immunised.

The table overleaf sets out the number of cases and deaths from diphtheria in Durban together with the notification rate and mortality rate, since 1960. The number of cases notified in 1962 is the lowest recorded since the incorporation of the peri-urban areas in 1932. There has, however, been no such decline in the mortality rate which remains high, despite the efficacy of modern treatment. This serves to emphasize the necessity to increase the level of immunity by immunisation.

Poliomyelitis

Only 4 cases of poliomyelitis were notified during the year compared with 29 in the previous year. The table below sets out the racial distribution of all City cases notified during the last 7 years.

	1956	1957	1958	1959	1960	1961	1962
European	82	113	13	23	9	3	—
Coloured	18	7	1	—	1	3	—
Asiatic	26	16	6	7	8	2	—
Bantu	32	27	7	21	29	21	4
TOTAL	158	163	27	51	47	29	4

Following the immunisation campaigns in May, July and September 1961, no cases of poliomyelitis in the City were reported for a period of 13 months. One case occurred in October and 3 others in December 1962. Three of these cases were young Bantu children aged 14 months and under who had received no immunisation against poliomyelitis and the fourth a Bantu child 2 years old who had received 2 doses of the oral vaccine early in the year. All four were clinically cases of paralytic poliomyelitis but in only one was the poliovirus (type 1) isolated from a stool specimen.

These 4 cases came from 4 different Bantu townships in the City and draw attention to the presence of polio virus in the community. Although a large percentage of the population is probably immune as a result of the immunisation campaigns, the necessity for continuation of regular immunisation especially in children in the lowest age groups is obvious and every endeavour is being made to accomplish this. Details of immunisation programmes carried out are given later in this report.

No deaths from poliomyelitis were recorded during the year.

Trachoma

All 5 cases of trachoma were notified by the ophthalmic out-patient department of a local hospital and the diagnoses were in each case confirmed by laboratory examination. Three of these cases however could not be traced. They were unknown at the addresses given and did not subsequently attend the hospital for treatment. Although recorded as local cases they may well have come from outside the Borough. The other two had lived in Durban for some considerable time. No evidence of infection was found amongst their contacts.

Encephalitis

Thirty-three cases were notified compared with 16 and 51 in the preceding 2 years. Two of these cases were chicken pox encephalitis, 2 measles encephalitis, 2 mumps encephalitis and 1 whooping cough encephalitis. In one of the remaining cases, a European aged 46 years, a Cocksackie group B virus was isolated from a stool specimen and in the remainder the precise etiological factor was not established. Investigations into these cases failed to establish any link between the cases and the prevalence of mosquitoes or other arthropoda.

Two deaths from encephalitis, both Bantu, were recorded.

Brucellosis

One case, a European child, living in Durban was notified. It appeared that this case may have contracted the disease within the City and every endeavour was made to trace the source of infection. One possible source, a supply of unpasteurised cream which had been illegally introduced into the City and which had been consumed by the patient on several occasions, was found but it could not be proved that the cream originated from an infected herd.

Scarlet Fever

Ninety-one cases were notified compared with 108 in the previous year. With one exception, a Coloured child, all were Europeans. Forty-four of the cases were nursed at home, conditions being satisfactory, and the remainder admitted to hospital. Only one case of scarlet fever in an adult was reported - a young man aged 28 years. There were no outbreaks in any institution apart from 5 cases in a local creche.

Gonococcal Ophthalmia

Of the 39 cases notified all were infants under the age of 21 days with the exception of 3 babies just over that age. No cases of ophthalmia neonatorum of other etiology were notified and these cases have therefore all been recorded as gonococcal ophthalmia. With few exceptions the notifications were all received from the Special Clinic.

Non-Notifiable Infectious Diseases

There were no major outbreaks of any of the non-notifiable infectious diseases in the City during the year. There appeared however to be an appreciable increase in the incidence of

measles. The number of hospital admissions for this disease was 743 compared with 480 in the previous year. Eighty-three per cent of these admissions were in respect of Bantu cases. The number of recorded deaths from measles increased from 22 in 1961 to 124 in 1962. In almost all these cases there was an associated broncho pneumonia.

Hospital admissions for chicken-pox numbered 208 compared with 109 in the previous year. One minor outbreak occurred in a Home for Boys where most of the children were affected but it was not necessary for any of the cases to be admitted to hospital.

Admissions to isolation hospitals for cases of other non-notifiable diseases were much the same as in the previous year.

TYPHOID : NOTIFICATIONS AND DEATHS 1940 TO 1962

(NOTIFICATION RATE PER 1,000 POPULATION : MORTALITY RATE PER CENT OF TOTAL NOTIFICATIONS)

Year	EUROPEAN				COLOURED				BANTU				ASIATIC				ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1940	52	.56	5	9.62	4	.49	—	—	42	.60	12	28.57	23	.26	7	30.43	121	.47	24	19.83
1940	52	.56	5	8.33	1	.12	—	—	70	.98	23	32.86	15	.17	6	40.00	110	.48	31	28.18
1941	24	.26	2	8.13	13	1.53	1	7.70	164	2.21	39	23.78	22	.23	10	45.45	322	1.15	60	18.63
1942	123	1.16	10	8.82	10	1.17	2	20.00	156	2.13	34	21.79	71	.75	15	21.12	305	1.09	57	18.69
1943	68	.64	6	16.21	3	.34	—	—	108	1.36	37	34.26	46	.47	11	23.91	194	.69	54	27.83
1944	37	.34	6	11.76	5	.58	1	20.00	62	.86	19	30.65	28	.28	6	21.43	112	.39	28	25.00
1945	17	.15	2	—	7	.68	—	—	113	1.04	38	33.63	39	.34	9	23.08	177	.49	47	26.55
1946	18	.14	—	—	21	1.98	2	9.52	108	.99	29	26.85	67	.57	10	14.93	210	.57	41	19.52
1947	14	.11	—	—	7	.64	—	—	57	.52	9	15.79	24	.20	4	16.67	95	.26	14	14.73
1948	7	.05	1	14.29	5	.44	—	—	21	.19	8	38.10	10	.08	3	30.00	48	.13	11	22.92
1949	12	.09	—	—	2	.16	1	50.00	36	.28	15	41.67	40	.31	2	5.00	94	.24	18	19.15
1950	16	.12	—	—	1	.07	—	—	66	.49	24	36.36	24	.17	6	25.00	98	.23	30	30.61
1951	7	.05	—	—	1	.06	—	—	54	.38	10	18.52	37	.25	2	5.41	101	.23	12	11.88
1952	9	.07	—	—	—	—	—	—	53	.36	11	20.75	16	.10	—	—	73	.16	11	15.07
1953	4	.03	—	—	—	—	—	—	74	.48	9	12.16	9	.06	2	22.22	92	.19	11	11.96
1954	5	.04	—	—	4	.22	—	—	73	.44	4	5.48	16	.10	—	—	100	.20	4	4.00
1955	8	.05	—	—	3	.16	—	—	52	.30	3	5.77	9	.05	—	—	67	.13	3	4.48
1956	5	.03	—	—	1	.05	—	—	110	.61	6	5.45	5	.03	1	20.00	122	.22	8	6.56
1957	6	.04	1	16.66	1	.04	—	—	246	1.32	22	8.13	20	.09	2	5.00	278	.49	24	8.63
1958	7	.04	—	—	5	.19	—	—	280	1.45	21	7.50	16	.07	2	12.49	303	.51	24	7.92
1959	6	.04	—	—	1	.04	1	100.00	71	.39	3	4.22	7	.03	—	—	90	.16	4	4.44
1960	8	.05	1	12.50	4	.16	—	—	39	.21	2	5.13	16	.07	1	6.25	59	.10	3	5.08
1961	2	.01	—	—	2	.08	—	—	25	.13	—	—	11	.05	—	—	41	.07	—	—
1962	5	.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1940 to 1962.
(Notification Rate per 1,000 Population : Mortality Rate per cent. of Total Notifications)

Year	EUROPEAN				COLOURED				BANTU				ASIATIC				ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1940	194	2.10	3	1.55	21	2.60	-	0.00	16	1.23	2	12.50	23	0.26	1	4.35	254	0.98	6	2.36
1	228	2.44	5	2.19	18	2.18	-	0.00	42	0.59	7	16.67	8	0.09	1	12.50	296	1.13	13	4.39
2	262	2.48	2	0.76	26	3.07	1	3.85	63	0.85	4	6.35	14	0.15	-	0.00	365	1.30	7	1.92
3	295	2.76	9	3.05	24	2.80	2	8.33	44	0.60	2	4.55	15	0.16	3	20.00	378	1.34	16	4.23
4	416	3.84	7	1.68	74	8.43	-	0.00	73	1.01	16	21.92	36	0.37	2	5.56	599	2.09	25	4.17
5	255	2.33	6	2.35	36	4.01	1	2.78	116	1.61	9	7.76	37	0.37	-	0.00	444	1.53	16	3.60
6	154	1.23	7	4.55	17	1.66	1	5.88	64	0.59	7	10.94	38	0.33	10	26.32	273	0.76	25	9.15
7	156	1.23	4	2.56	24	2.26	2	8.33	110	1.01	9	8.18	46	0.39	7	15.22	336	0.92	22	6.55
8	73	0.57	1	1.37	8	0.73	-	0.00	93	0.85	12	12.90	18	0.15	5	27.78	192	0.52	18	9.37
9	95	0.73	-	0.00	21	1.85	2	9.52	66	0.60	12	18.18	39	0.32	6	15.38	221	0.59	20	9.05
1950	145	1.10	1	0.69	34	2.65	2	5.88	124	0.97	18	14.52	58	0.45	7	12.07	361	0.90	28	7.75
1	58	0.45	2	3.45	14	0.94	2	14.29	150	1.12	24	16.00	47	0.32	11	28.40	269	0.63	39	14.50
2	50	0.38	4	8.00	7	0.45	-	0.00	103	0.73	19	18.45	51	0.34	11	21.57	211	0.48	34	16.11
3	39	0.28	2	5.13	26	1.51	5	19.23	76	0.51	19	25.00	49	0.32	11	22.45	190	0.41	37	19.47
4	25	0.17	1	4.00	8	1.44	-	0.00	48	0.30	6	12.50	19	0.12	-	0.00	100	0.21	7	7.00
5	75	0.50	1	1.33	34	1.82	2	5.88	102	0.61	16	15.69	69	0.42	15	21.74	280	0.56	34	12.14
6	70	0.46	5	7.14	13	0.67	1	7.69	43	0.24	17	39.53	69	0.42	12	17.39	195	0.37	35	17.95
7	38	0.25	4	10.53	5	0.21	-	0.00	37	0.21	11	29.73	31	0.16	3	9.68	111	0.20	18	16.21
8	38	0.25	3	7.89	6	1.24	-	0.00	57	0.31	13	22.81	70	0.34	15	21.43	171	0.30	31	18.13
9	24	0.15	-	0.00	12	0.46	1	8.33	55	0.29	4	7.27	24	0.11	5	20.83	115	0.19	10	8.69
1960	9	0.06	1	11.11	7	0.28	-	-	56	0.31	6	10.71	22	0.10	4	18.17	94	0.16	11	11.70
1	8	0.05	-	0.00	4	0.16	-	0.00	63	0.34	11	17.46	28	0.12	3	10.71	103	0.17	14	13.59
2	10	0.06	1	10.00	5	0.19	-	0.00	46	0.24	7	15.22	9	0.04	2	22.22	70	0.11	10	14.29

IV OTHER COMMUNICABLE DISEASES

RABIES

In the previous annual report (1961) mention was made of the outbreak of rabies in Natal and the preventive measures which were instituted in Durban. The inoculation campaign carried out by the State Department of Agriculture assisted by personnel from the City Health Department, which commenced on 4th December 1961, was completed on 20th January, 1962. A total of 38,008 dogs were immunised. Following on this campaign arrangements were made by the State Veterinary Officer for a regular monthly immunisation clinic for dogs which had not already been vaccinated and by the end of the year a further 1,200 animals had been immunised.

Although there were a number of cases of rabies in animals in other areas in Natal notified during the year, no further cases occurred in Durban. In 7 suspect cases brains of dogs were sent to Onderstepoort but in each case the biological examination was negative. Five human contacts who had been exposed to these animals received a course of prophylactic treatment using the Semple type vaccine, without ill effects.

MALARIA

During the year 12 notifications of falciparum malaria were received, comprising 4 Europeans, 1 Coloured, 3 Asiatics and 4 Bantu. Five of these notifications were in respect of patients who were brought into Durban for treatment at local hospitals. Four were in respect of Durban residents who became ill shortly after return from Portuguese East Africa on holiday. None of these persons had taken prophylactic treatment and one of them died of cerebral malaria. One Bantu case became ill after his return from a visit to his kraal in Northern Zululand and he died shortly after admission to hospital.

The remaining two cases, one Asiatic and one Bantu, were Durban residents, one of whom lived and worked in a Government Institution. In neither of these two cases was it possible to obtain a history of any recent visit to a malarious area but the possibility of this could not be entirely excluded. Blood specimens taken from house contacts and neighbours were all negative and surveys in the neighbourhood failed to uncover any evidence of further infection. Extensive mosquito surveys were carried out but no vectors were found.

Both these cases gave a history of recent blood transfusions. One had received 5 pints of blood 8 weeks before the onset of illness and the other 4 pints of blood 13 weeks before onset. This aspect was followed up and most of the donors were traced and blood specimens obtained with negative results. In neither case, however, was it possible to contact all the donors, some of whom came from Northern Zululand. The possibility of transmission through blood transfusion could not be entirely excluded.

FOOD POISONING

There were no outbreaks of food poisoning in hotels or restaurants during the year except for one incident in June when 23 guests attending a banquet at a local hotel contracted a form of food poisoning. The onset was sudden and in each case one particular item on the menu appeared to be implicated. Thorough inspection and investigation did not bring to light any unsatisfactory public health features that could be linked with the outbreak. The rapid onset suggested a chemical poison rather than one of pathological organisms. Samples of remnants of the suspected foodstuff, cooked and raw, were submitted for chemical analysis and the results indicated the presence of zinc chloride in considerable quantities. Zinc contamination from kitchen utensils could not be substantiated. On this Department's advice the manager referred the matter to the South African Police.

An alleged case of food poisoning as a result of eating a chicken purchased from a local restaurant was reported and investigated; however, no remnants of the chicken were available for examination and the hygiene and refrigeration facilities at the particular restaurant were found to be entirely satisfactory. A follow up revealed that the patient had recovered and suffered no after effects.

Two additional cases of food poisoning were notified, the persons concerned being entirely unrelated. One case required hospitalization, but both made uneventful recoveries. Investigations indicated a common source, viz. confectionery, and the origin of the contamination thereof was traced and eliminated.

AMOEBIASIS

The problem of amoebiasis has for a long time been the subject of intensive research. Durban is fortunate to have the Amoebiasis Research Unit in the City. I am much indebted to Dr. Elsdon-Dew, Director of the Amoebiasis Research Unit for the following report on the present status of Amoebiasis in Durban :-

"A world-wide better appreciation of the relationship between man and amoeba has been gained as a result of the experience gained in Durban, and whilst the view now held is by no means new, it has only in recent years received recognition

It has now been established that Entamoeba histolytica is widely spread all over the world, but that in the great majority of people it lives as a commensal, doing no harm to its human host. Under some, as yet unknown, conditions, it may invade the host tissues, causing ulceration of the bowel with consequent dysentery and perhaps going further to cause abscess formation in the liver.

Whether the change in habit of the amoeba is due to a change in the host or in the parasite has not as yet been established. At one time it was thought that the amoebae of the tropics were a different species to those found in the temperate zones, but though the Durban Unit proved that there are two species of amoebae of practically indistinguishable appearance, one called E. hartmanni which is never pathogenic and the other E. histolytica which, though usually living quietly in the bowel, may invade the tissues. However, both species have been found in many places where the disease does not occur such as in England. Unfortunately, it is not always easy to distinguish these two species, one from the other, and before the fact that there was a confusing species was appreciated, there was undoubtedly some misdiagnosis.

The difference in the incidence and manifestations of the parasite E. histolytica in the different racial groups in Durban has suggested that there are other factors involved, and that these are in part environmental. The peri-urban Bantu, in whom the disease takes the classical severe form, are subjected to so many adverse factors that it is difficult to assess which of these plays the significant part, and whether this operates on the host or the amoeba. Bad hygiene and deficient nutrition go together, and the effects cannot be separated. There is however a suggestion of the importance of hygiene in the fall in the number of cases which has followed the exodus from Cato Manor to kwaMashu. Though this is post hoc it may not be propter hoc. A counter observation has been a phenomenal increase in the incidence of Amoebic Liver Abscess.

Whether the change in the incidence of amoebic dysentery is due to less transmission of the amoebae or to less transmission of what might be called the 'trigger agent' is not known. The Bantu bowel is unfortunately inhabited by a variety of worms and other agents any of which may play some part in determining whether any amoebae present remain harmless, or embark on invasion of the host tissues.

That the bacteria of the bowel play some part is amply evidenced by the remarkable effect of antibacterial therapy not only on the disease but also on the amoebae. Changing the bacterial population of the bowel by agents which do not directly affect the amoeba often results in eradication of that parasite. This is paralleled in the test tube, for it is practically impossible to grow amoebae in the absence of other living organisms.

Unfortunately in the past it was falsely taught that the presence of *Entamoeba histolytica* in the bowel implied disease, and this led the medical profession in many parts of the world to associate a variety of such clinical conditions as 'Natal Fever' with chance found *Entamoeba histolytica*. This was of course worst in 'amoeba-conscious communities'. It is now better appreciated that an amoeba found may not have anything to do with the patient's symptoms. The invasive amoeba is usually fairly frank in its manifestations, and its association with lethargy, headache and the like has now been shown to be based on a false premise.

Appreciation of the two states of the amoeba has led to better understanding of the blood tests. Whilst this work is still very much in the experimental stage it would seem that invasion by the amoeba gives rise to antibody production, where the non-invasive state does not. Studies are in hand to assess not only the best method of detecting these antibodies, but also the significance of the several different systems involved. This was the subject of a paper given to the 7th International Congress of Tropical Medicine and Malaria at Rio de Janeiro. This paper gave rise to considerable discussion and initiated international action.

Studies on the treatment of the disease continue. Where the anti-bacterial approach is effective on the amoebae in the bowel wall, it has no effect on any amoebae which may have penetrated beyond - such as in the liver. Similarly too, such treatment is not efficient in removing the amoebae from the bowel contents. At the moment multiple therapy is still necessary. However, the horrible mortality and relapse rates of fifteen years ago have been markedly reduced.

The Amoebiasis Research Unit could not continue its work were it not for the financial support of the United States Public Health Service, and of the South African Council for Scientific and Industrial Research. Facilities are provided by the Natal Provincial Administration and the University of Natal and the co-operation of such bodies as the City Health Department is gratefully acknowledged."

MEDICAL EXAMINATION OF BANTU SEEKING REGISTRATION

Bantu seeking registration are medically examined at the Municipal Department of Bantu Administration and during the year 81,143 such examinations were carried out. Of this number 74,591 were adults and 6,552 juveniles. The figures for 1961 were 76,249 and 8,201 respectively.

The number of Bantu referred to hospital for further investigation and treatment was 1,545. Venereal conditions accounted for 1,406 of this number, bilharzia for 57 and tuberculosis for 42. Persons in whom pulmonary tuberculosis is suspected by the medical officer are referred to the Durban Chest Clinic for X-ray examination but undoubtedly many cases are missed at these clinic sessions and it is hoped that facilities for the X-ray examination of the chests of all Bantu passing through the medical section will be provided in the new Departmental premises when completed.

Deaths 1962	14	12	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123</
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V TUBERCULOSIS

INTRODUCTION

The number of known cases of pulmonary tuberculosis in Durban at the end of 1962 is set out in the table below, the figures for the previous year being given in parenthesis.

European	936	(827)
Coloured	761	(638)
Bantu	7,087	(6,891)
Asiatic	2,908	(2,731)
Total	11,692	(11,087)

The numbers quoted above include imported cases living in Durban and imported cases who work in Durban but live outside the Borough. Corrections have been made for inward and outward transfers insofar as this is possible but with frequent moves particularly amongst the Bantu section, the record cannot be regarded as accurate. The files are periodically reviewed and the records of patients who have not been traced over several years are removed from the current files. It will be noticed that there has been a very small increase in the number of known Bantu cases although over 1,800 were added to the register during the year.

STATISTICS OF CITY CASES:

(a) Pulmonary Tuberculosis:

The number of notifications of pulmonary tuberculosis received during the year 1962 is set out below together with the corresponding figures for 1961. The racial group and the attack rate (per 1,000 population) are also indicated.

	E	C	B	A	Total
City Cases 1962	129	85	1,524	332	2,070
Imported Cases 1962	5	11	283	13	312
City Cases 1961	117	96	1,648	416	2,277
Imported Cases 1961	4	4	292	18	318
Attack Rate 1962	0.76	3.21	8.03	1.44	3.35
Attack Rate 1961	0.70	3.74	8.82	1.86	3.78

The age groups of the City Cases notified during 1962 were as follows:

	E	C	B	A	Total
Under 5 years	1	23	283	41	348
5 - 14 years	1	13	109	31	154
14 - 24 years	5	10	201	90	306
24 - 44 years	43	29	662	103	837
44 - 64 years	63	7	237	57	364
Over 64 years	16	3	32	10	61
Totals	129	85	1,524	332	2,070

Deaths amongst City cases together with the death rate (per 1,000 population) and the previous year's figures are given in the table below:

	E	C	B	A	Total
Deaths 1962	14	15	133	37	199
Deaths 1961	14	13	129	42	198
Death Rate 1962	.08	.57	.70	.16	.32
Death Rate 1961	.08	.51	.69	.19	.33

These figures reflect a decrease in the attack rate for all the non-European groups and particularly amongst the Bantu, while the European rate remained much the same, compared with the previous year. This has occurred moreover during a period when the case finding facilities have materially improved. This decrease, however, has occurred mainly in the under 5 years age group and also to some extent in the 5-14 years age group but in all other age groups the rate remained much the same, except for Bantu adults in the 22-44 years age group where the rate was actually slightly higher than in the previous year.

It would be premature to conclude that the improvement in the rate in young children was due to the effects of B.C.G. vaccination in new-born babies, which only commenced on a large scale in 1959, and amongst other young children, which has not yet been carried out on a significant scale. There are other factors such as the human element in the diagnosis and reporting of primary lesions and the criteria on which this is based. It is, however, a matter of some satisfaction that the number of cases reported during the year was less than in any year since 1955.

The number of notifications of City cases from the Cato Manor Emergency Camp decreased from 417 in 1961 to 234 in 1962. This was in conformity with the reduction in population and does not reflect a lower attack rate. Over the same periods the number of City cases in the new Bantu township of kwaMashu increased from 388 to 546, which was mainly due to the increase in population but also there was a slight rise in the attack rate from 7.00 to 8.02 per 1,000. This latter figure is equivalent to the attack rate for the whole of Durban, in this race group.

Of all the notifications received about half came from the Durban Chest Clinic. The remainder were from the Durban Corporation Clinics and from hospitals. Very few cases were notified by private practitioners.

(b) Non-Pulmonary Tuberculosis

The number of notifications of non-pulmonary tuberculosis is set out below, together with the corresponding figures for 1961 :

	E	C	B	A	Total
1962	14	5	56	33	108
1961	1	4	102	44	151

The age groups of the cases notified in 1962 were as follows:

Under 5 years	—	—	5	2	7
5 — 14 years	1	—	7	3	11
14 — 24 years	—	—	12	7	19
24 — 44 years	1	5	18	14	38
44 — 64 years	9	—	10	7	26
Over 64 years	3	—	4	—	7

The number of deaths from non-pulmonary tuberculosis and the death rate per 1,000 population are recorded below.

Deaths 1962	—	3	36	11	50
Deaths 1961	1	2	32	14	49
Death Rate 1962	—	.113	.190	.048	.081
Death Rate 1961	.006	.078	.171	.062	.081

There has been a material increase in the number of European cases of non-pulmonary tuberculosis notified during the year, although the total number of cases is lower than recorded in the previous year. The figures generally, however, should be accepted with some reservation as it is probable that many cases are not notified. The death rate in all racial groups remained much the same.

HOSPITAL FACILITIES

A list of hospitals and settlements admitting cases of pulmonary tuberculosis from Durban was given last year and is not reprinted here. There were no further additions to that list so that the total number of available beds for pulmonary tuberculosis remained at 3,150.

By far the greatest majority of patients are hospitalised in King George V Hospital, Durban. The following analysis of admissions and discharges for the year 1962 has kindly been furnished by the Medical Superintendent.

Number of Admissions	344	132	2,640	310	3,427
Number of Discharges	332	131	2,625	311	3,399

Other figures for readmissions, irregular discharges and average stay in hospital were not available for 1962 but the following table reflects the trend over the past few years (all racial groups included);

	1958	1959	1960	1961
Mean hospitalization period in months	5.9	5.4	5.4	6.2
Irregular discharges as a percentage of all discharges	18.5%	19.1%	17.0%	18.5%
P.T.B. relapse rate - ratio of re-admissions to total admissions	15.9%	15.6%	15.1%	15.5%

In regard to the establishment of a S.A.N.T.A. Centre of 250 beds for Durban, the Natal Anti-Tuberculosis Association have reported that progress has been slow, due partly to the change of site, owing to the requirements of the Bantu village being erected in the vicinity, and partly to arrangements in regard to water supply. Both matters have now been settled but it seems unlikely that the Centre will be available for occupation until early 1964.

Admissions of City Cases to the various hospitals during 1962 totalled 1,555 comprising 153 Europeans, 70 Coloureds, 1,041 Bantu and 291 Asiatics. This represents a slight increase over the number of admissions recorded in the preceding year.

Discharges of City cases were made up of 141 Europeans, 83 Coloureds, 869 Bantu and 257 Asiatics, a total of 1,350. In addition 60 patients absconded or left hospital against medical advice. This latter figure, although still regarded as unnecessarily high, is the lowest recorded for a number of years.

As at 31st December, 1962, 707 City cases remained in hospital. These cases were distributed over 21 different hospitals but more than half of the total were accommodated in King George V Hospital.

FIELD WORK AND CONTROL PROGRAMMES

Departmental staff engaged on control programmes consists of 5 European Health Visitors, 1 European Health Inspector, 15 Bantu and 5 Indian Health Assistants together with a clerical staff of 4 European and 1 Bantu, all under the direction of the Assistant Medical Officer of Health.

All new cases are visited and their domiciliary conditions investigated. Close contacts are referred to the nearest clinic for examination. Regular visits are made to cases under out-patient treatment and all cases discharged from hospital are followed up, particular attention being paid to those who had absconded or left hospital against medical advice. Where necessary, arrangements are made for admission to hospitals or preventoria. Assistance is given to patients to obtain financial relief when this is considered necessary.

During the year a total of 42,990 such visits were made, comprising 4,548 visits to Europeans, 2,765 to Coloureds, 25,315 to Bantu and 10,363 to Asiatics - an increase over the previous year of nearly 4,000 visits. Records reflect that 76% of the contacts referred to the clinics actually attended but since many of these persons lose their referral slips the percentage is probably appreciably higher.

The main problem in field control remains the difficulty in ensuring regular attendance of cases at clinics and treatment centres and the number of defaulters particularly in the Bantu group is so high, coupled with the difficulty of tracing defaulters who have changed their addresses, that the staff resources are unable to cope adequately with this aspect of control throughout the City.

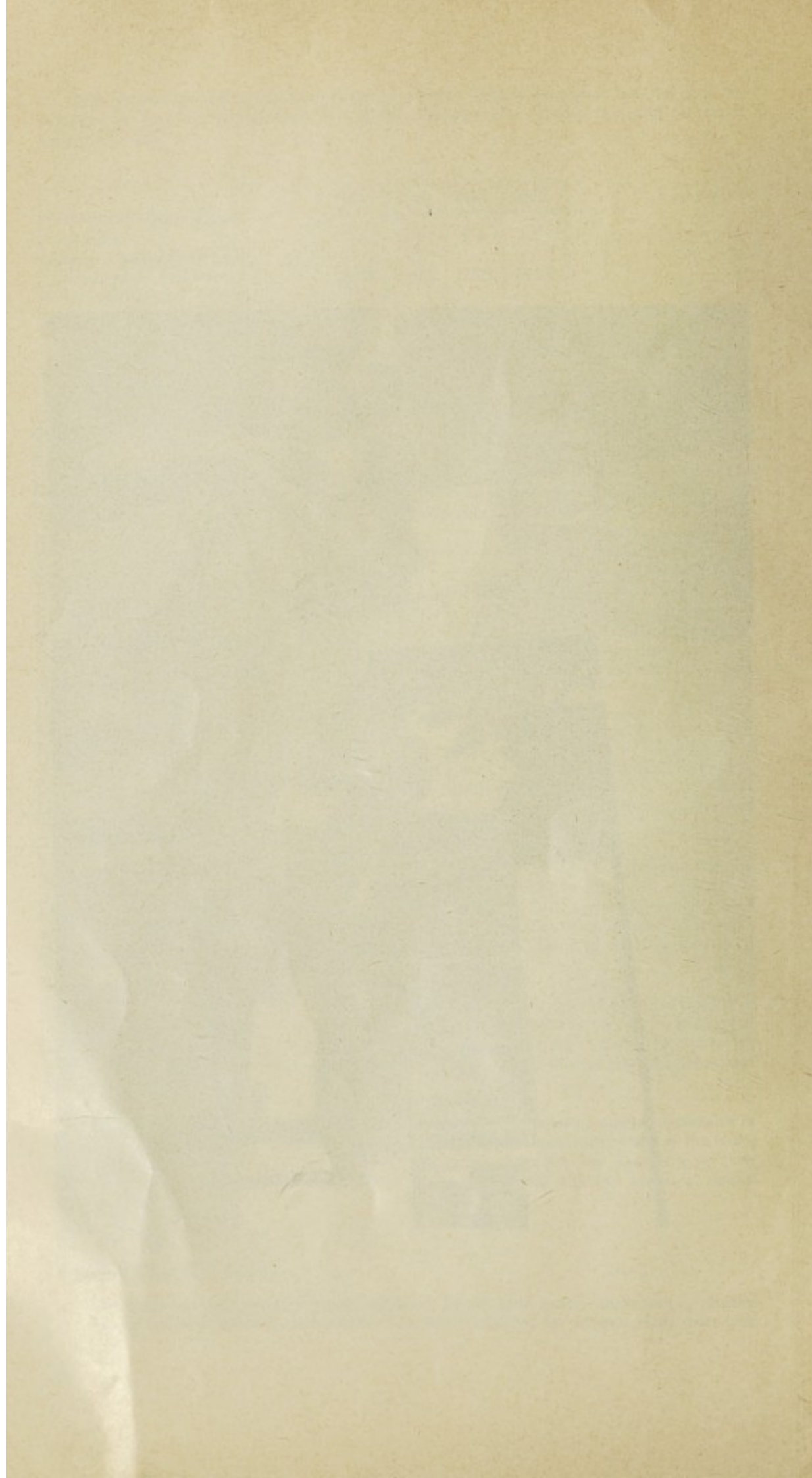
OUT-PATIENT SERVICES

(i) DURBAN CHEST CLINIC

This large and well equipped clinic maintained by the State Health Department is situated in a central position in Durban and provides out-patient facilities for patients of all races both



BANTU LECTURER FROM THE HEALTH EDUCATION SECTION GIVING A TALK ON TUBERCULOSIS.



from the City and from neighbouring areas. The clinic functions to its fullest capacity and there has been no evidence of any diminution in attendances following on the recent establishment of Durban Corporation clinics in the Bantu townships. The following information has been extracted from the annual report which the Medical Superintendent has kindly made available.

Attendance figures have increased but unlike last year this increase applies to City cases as well as out-of-borough cases. Despite the overall attendance increase, there has been a drop in the number of notifications and in the number of tuberculin tests and B.C.G. vaccinations performed. The latter is mainly due to the closure of the baby clinic. The latter is mainly due to the closure of the baby clinic. It was felt that the baby clinic had become unmanageable and more of a polyclinic than anything else. The policy now is to see babies and children as family units and this appears much more satisfactory.

Hospital beds have been as difficult to obtain as ever.

Towards the end of 1962 a tuberculosis education programme for Bantu was instituted at this clinic and made available by the City Medical Officer of Health and his Health Education Section. The Superintendent of the Durban Chest Clinic states that gratifying results have been observed.

Diagnostic and Treatment Services

(i) X-Rays

	E	C	A	B	Total
Borough: Clinical interviews					
100 m.m. and large plates	3,266	2,211	12,283	22,834	
Initial 70 m.m. X-Rays	8,477	1,558	10,302	11,695	
Total:	11,743	3,769	22,585	34,529	72,626
Ex-Borough: Clinical interviews					
100 m.m. and large plates	431	76	1,359	13,090	
Initial 70 m.m. X-Rays	1,170	28	1,419	6,087	
Total:	1,601	104	2,778	19,177	23,660
Total Attendances:	13,344	3,873	25,363	53,706	96,286

(ii) Notified Cases

Borough	70	11	159	529	
Ex-Borough	2	2	7	46	
Total:	72	13	166	575	826

(iii) Tuberculin Tests

Borough	1,407	388	2,217	2,027	
Ex-Borough	59	15	294	1,890	
Total:	1,466	403	2,511	3,917	7,297

(iv) Streptomycin Injections

2,532 2,669 14,239 35,493 54,933

(v) Other Injections

400 98 1,061 2,281 3,840

(vi) B.C.G. Inoculations

33 104 768 751 1,656

Industrial Mass X-Rays

Europeans X-Rayed	8,608
Non-Europeans X-Rayed	41,302
Recalls for further investigation	1,942

There are 182 firms participating in the survey now and this has led to almost 10,000 more screenings than last year.

B.C.G. Vaccination

Mass inoculation continued at various schools and institutions although on a smaller scale than during 1961. It is recorded that B.C.G. vaccination without prior tuberculin testing is a safe procedure.

Further studies among 235 children showed that those inoculated with B.C.G. alone had a tuberculin conversion rate of approximately 83%, whereas those given prophylactic INH for 6 months in addition to B.C.G. vaccination only had a conversion rate of 57%.

(ii) CATO MANOR AND KWAMASHU CLINICS

Introduction

The volume of work at these two clinics has increased considerably during the year. At Cato Manor the peak was reached during the months February, March and April but now with the continued clearing of the Emergency camp and the removal of the shack dwellers to Umlazi and kwaMashu the attendance figures have declined.

At kwaMashu on the other hand the volume of work continues to increase as the population increases. Clinic days were readjusted early in the year so that Cato Manor is served on Mondays and Thursdays and kwaMashu on Tuesdays, Wednesdays and Fridays.

Supplementary feeding rations which are given to needy tuberculosis patients are now given from the Cato Manor and kwaMashu Clinics to those patients attending the above clinics. This relieves them of the journey to town.

On the whole the clinics have functioned well, with kwaMashu being an extremely busy clinic. In the future it will become necessary to function there throughout the week, Monday to Friday.

An important aspect of these clinics is the numerous number of country people (i.e. resident outside Durban, mostly from the reserves) who find their way to these clinics as suspects. This is rather unsatisfactory for two reasons:-

1. It increases the burden of an already busy clinic especially at kwaMashu.
2. Many pulmonary tuberculosis cases are discovered but the treatment of these cases is often very unsatisfactory as the patients then disappear - some of them at least, back to the kraals. Follow up of such patients is impossible.

A meeting between this Department and the Bantu Administration Department was held during June this year to discuss this problem but there does not appear to be any easy remedial solution.

Clinic Attendances

The following figures reflect on the work performed at both clinics during 1962 :-

	Cato Manor	kwaMashu	Total
Total Attendances	12,549	26,090	38,639
Streptomycin Injections	5,385	11,607	16,992
Contacts Seen	814	1,475	2,289
Suspects Seen	831	2,663	3,494
Tuberculin Tests Done	825	2,106	2,931
B.C.G. Vaccinations	299	1,204	1,503
X-Rays Taken	1,861	3,697	5,558

At Cato Manor 203 and at kwaMashu 496 cases of pulmonary tuberculosis were admitted to the clinics. It is to be noted that more cases of pulmonary tuberculosis were discovered among suspects than among contacts in contrast to last year. The 2,289 contacts yielded 97 (4.2%) cases of pulmonary tuberculosis and 3,494 suspects yielded 172 (4.9%) cases. The figures for last year were 5.1% and 3.6% respectively.

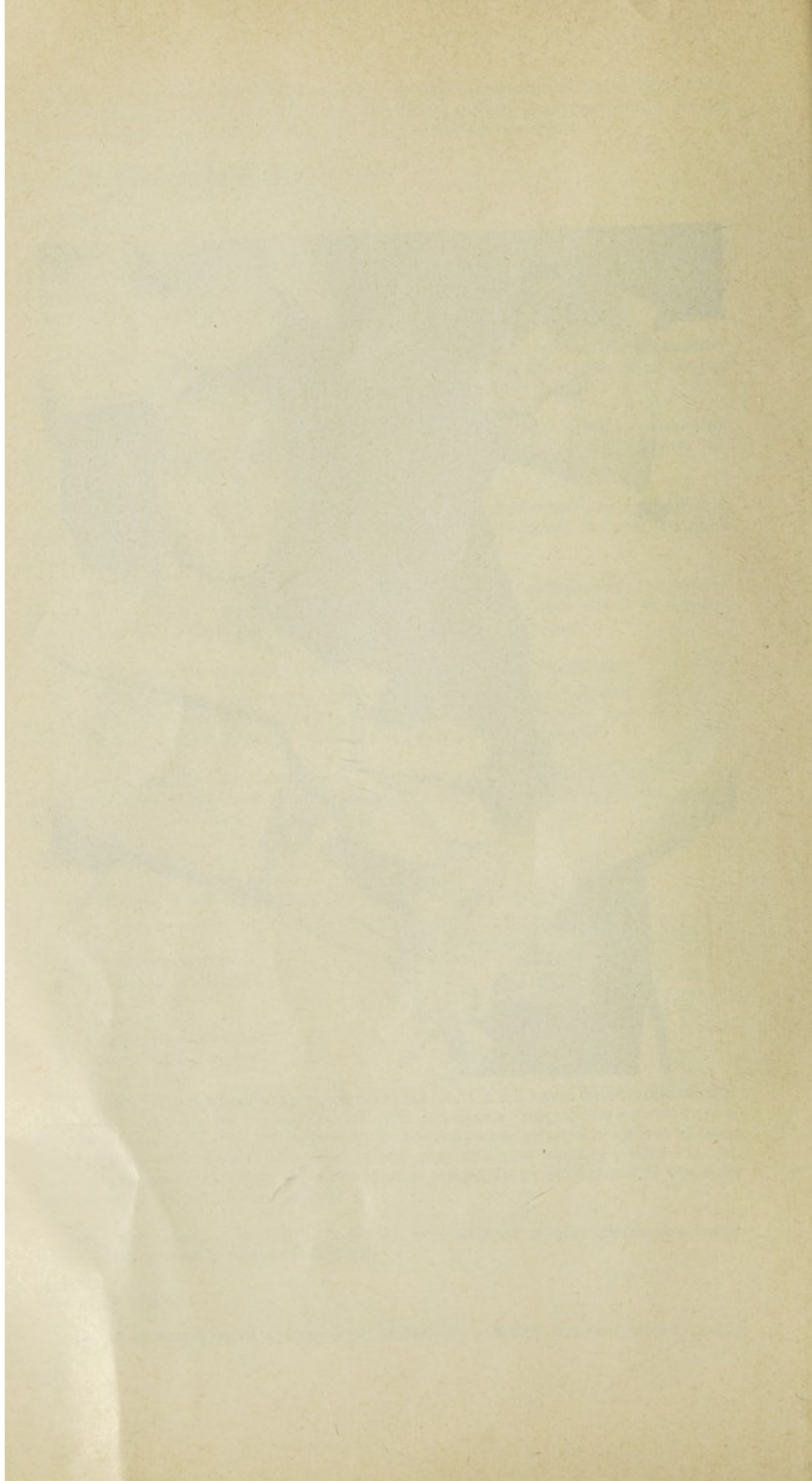
Many more persons attended the clinic but were disposed of after clinical examination without being admitted for further investigation.

Tuberculin testing

This is performed on all children up to 15 years as a routine, and the Heaf test is used.



INDIAN CHILD BEING GIVEN B.C.G. (T.B.) VACCINATION AT CATO MANOR CHILD CLINIC.



The following table analyses the tuberculin tests performed during 1962.

Tuberculin Tests	Cato Manor	kwaMashu
Tests Done	825	2,106
Tests Read	738 (89.5%)	1,874 (89%)
Positive	457	1,061
Negative	281	813

Thus, at Cato Manor 62% of tests read were positive, and at kwaMashu 56% of tests read were positive.

B.C.G. Vaccination

This was performed by the intradermal method over the right deltoid. It is to be hoped that percutaneous vaccine will be available during 1963 as this simplifies the procedure considerably.

Hospitalization of Cases

Much difficulty was experienced during the year in obtaining hospital beds for cases needing admission. It must be realised that pulmonary tuberculosis, being such a chronic disease, requires long periods of hospitalization so that the turnover of patients is slow.

During the year a total of 147 cases were admitted to hospitals through these clinics - 46 from Cato Manor, and 101 from kwaMashu.

(iii) CHATSWORTH (UMHLATUZANA) CLINIC

As recorded in the previous annual report, cases of pulmonary tuberculosis from that position of the newly incorporated area of Chatsworth which is close to the Local Health Commission Umhlatusana Clinic are treated at that clinic. Attendances of City cases at this clinic have decreased, however, and a total of 1,698 were recorded for the year. Many cases who live near a bus route find it more convenient to travel direct to the Durban Chest Clinic for their treatment. It is hoped in the near future to establish the first Corporation tuberculosis clinic in this rapidly expanding new Indian township.

(iv) PROPOSED CLINICS

The improvement in services provided by the recently established clinics at kwaMashu and Cato Manor and the initiation of a new large housing scheme for Indians, at Chatsworth, have emphasised the necessity of extending these services to the non-European townships in the southern areas of Durban. Preliminary plans for four new peripheral clinics have been drawn up and submitted to the State Health Department for their approval in principle. It is hoped that arrangements will be finalised in the forthcoming year to enable these clinics to open early in 1964.

B.C.G. Vaccination

B.C.G. Vaccination has been carried out routinely at all clinics on Heaf negative reactors. In addition all new-born babies at King Edward VIII Hospital and McCord Zulu Hospital were vaccinated with B.C.G. Other babies who attended the Corporation child health clinics but not born in these hospitals were referred to the Corporation tuberculosis clinics for B.C.G. vaccination. As previously recorded, B.C.G. vaccination was also carried out in various schools and institutions by the Durban Chest Clinic. Altogether over 15,000 vaccinations in Durban were recorded.

SUPPLEMENTARY FEEDING OF INDIGENT TUBERCULOSIS CASES

As previously recorded, the Department was desirous of developing this scheme beyond the pilot stage and sought the necessary financial authority. During the year the State Health Department and the City Council voted additional funds which permitted an increase in the annual amount available from R4,000 to R9,000. At the latter figure it is possible to supply approximately 175 out-patients with a weekly issue of rations.

Rations were actually supplied to indigent tuberculosis cases as follows -

Age Groups	European		Coloured		Asiatic		Bantu	
	Patients	Rations	Patients	Rations	Patients	Rations	Patients	Rations
0 - 4 years	—	—	3	102	2	91	12	320
5 - 8 years	—	—	7	160	3	107	6	147
9 - 12 years	—	—	—	—	8	124	4	107
13 years +	2	43	50	863	52	1418	213	3423
Total	2	43	60	1125	65	1740	235	3997

SUMMARY

Race	Patients	Rations
European	2	43
Coloured	60	1,125
Asiatic	65	1,740
Bantu	235	3,997
Total	362	6,905

During the year the system of distributing rations was modified in that patients attending the peripheral clinics, Cato Manor, kwaMashu and Chatsworth, were enabled to draw the commodities pre-packed at the central depot in paper bags, at these clinics. Generally the scheme has functioned very well and is considered to be most valuable in supplying a dietetic supplement to drug therapy in needy cases.

DOMICILIARY ASSISTANCE

In addition to assisting patients in obtaining Government disability and maintenance grants when these are applicable, financial aid is given to patients of all races and their families by the Natal Anti-Tuberculosis Association and in the case of Indians by the Friends of the Sick Association. This Department's Health Visitors serve on the Care Committee of the Natal Anti-Tuberculosis Association and investigate the financial circumstances of cases requiring assistance.

Set out below is an extract from the Annual Report of the Natal Anti-Tuberculosis Association Care Committee, kindly furnished by the Secretary.

"Basic work of the Association is centred largely on care work for those affected by tuberculosis. The Care Committee under the Chairman, Mr. Frank Power, meets every month to allocate the funds available so that as many as possible can be provided for with the money available. The number of recipients each month varies between 450 and 500, but this figure does not take into account the number of dependants in each family. With only R1,200 available for distribution, it will be realised that the assistance which can be given can touch only the fringe of the actual requirements. One of the objects of the S.A.N.T.A. national appeal now in progress is to provide money for care work, and it is hoped that an allocation from this source may put the Care Committee in a position to make better provision for some families. Generally speaking, assistance is given to:

- Families of all racial groups where the breadwinner is incapacitated through tuberculosis;
- Financial aid and food for those receiving domiciliary treatment;
- Help after treatment and until work is found;
- Milk, butter and eggs for children suffering from primary tuberculosis.

The amounts expended in recent years on Care Work are as under:

	Amount	Assisted
1958	R17,700	1,007
1960	R14,426	801
1961	R14,827	816
1962	R15,007	930

The year commenced with 437 cases receiving assistance.

Disability and maintenance grants are a considerable factor in providing help, and the Association sees that everything obtainable in this way is applied for. Unemployment Insurance Fund illness pay also applies to persons suffering from tuberculosis. In most cases, however, the first payments from these funds are not available for some weeks after the patient has been put off work, and it is in this period that grants from the Association come in useful in bringing help over the interim period. The disability grant applicable to Bantu, R3.25 maximum per month, for convenience paid every second month, is quite inadequate to provide for one suffering from tuberculosis, but representations by SANTA from time to time for an increase have not been fruitful.

Previous reports mentioned the fact that in order to ensure that tuberculosis sufferers purchasing houses at kwaMashu and other townships could be helped over the period of incapacitation, it had been necessary for the Association to pay interest on the capital of the houses involved and that this was costing the Association approximately R80 per month. It is pleasing to state that other arrangements have been made and no payments are now being made by the Association on this account."

CONCLUSION

Despite the not inconsiderable facilities made available, the control of pulmonary tuberculosis in the City, as elsewhere, remains a major problem, although it is pleasing to record a slight decrease (9%) in the number of notifications compared with the previous year. Factors such as the apparent indifference of the Bantu cases towards heeding advice in regard to the necessity for prolonged continuation of treatment, their already poor economic status often being completely disrupted by inability to earn a living as a result of this debilitating disease and the chronic shortage of hospital beds depriving many of improved chances of recovery, militate against efforts in therapy and field control. The answer may lie to some extent in an extension of B.C.G. vaccination programmes to cover a large section of the more susceptible population groups but this is a long term project unlikely to show material results for many years.

Race	New cases		Total attendances	
	M	F	M	F
Coloured	283	325	5,098	5,385
White	10	15	100	150
Indian	10	15	100	150
Chinese	10	15	100	150
Other	10	15	100	150
Total	313	365	5,398	5,835

Race	New Cases		Total attendances	
	M	F	M	F
Coloured	283	325	5,098	5,385
White	10	15	100	150
Indian	10	15	100	150
Chinese	10	15	100	150
Other	10	15	100	150
Total	313	365	5,398	5,835

VI VENEREAL DISEASES

Introduction

Venereal diseases in Durban are still on the increase. Failure to control gonorrhoea throughout the world has been admitted by a World Health Organisation Expert Committee. The only hope for the future, they believe, is the discovery of some vaccine to immunise people against the disease.

New Cases

The number of new cases shows an increase of 2,111 (13.3%) over the previous year. (17,225 compared with 15,114 in 1961).

Total Attendances

Here also there was an increase of 2,377 cases (4.5%) over the previous year. (1961 - 53,580; 1962 - 55,957).

New Cases of Syphilis

There were 378 more cases of syphilis than the previous year, seen mainly in group (3) Secondary Syphilis and in group (1) Sero-negative Primary Syphilis.

Clinic Services

Addington

One clinic session is held each day for European and Coloured cases in premises apart from the normal out-patient department. The clinic is administered and staffed by the Provincial Hospital, which is re-imbursed on a "per capita" basis by the Durban Corporation in respect of City cases.

Race	New cases	Total attendances
European	927	2,784
Coloured	583	2,098

Congella

This clinic is situated in the grounds of the King Edward VIII Hospital, utilising the hospital building, but is administered and staffed by the City Health Department. The clinic is open throughout normal working hours with a late session once per week, and together with the Cato Manor and kwaMashu clinics, serves the Bantu and Asiatic communities.

Cato Manor

In August 1962, it was decided that one morning session per week, was adequate to cope with the number of patients attending this clinic. The staff for this clinic is drawn from the Congella clinic.

kwaMashu

One morning session of 3 hours per week, is sufficient for the number of patients attending this clinic. The Congella clinic also provided the staff for this clinic.

Clinic Attendances

Clinic	New Cases		Total attendances	
	M	F	M	F
Congella	9,351	4,050	33,430	12,327
Cato Manor	153	531	362	1,450
kwaMashu	296	1,334	560	2,946

Ward Admissions

There are two venereal diseases wards at Clairwood Hospital, consisting of 20 female and 19 male beds. During the year 1,169 patients were admitted for hospital treatment, being 220 more than the previous year.

Contacts

The tracing of contacts has improved and 25% of the contacts are attending the clinic for investigation and treatment.

Sideroom

In order to establish an early diagnosis, microscopic examination of all discharges is carried out in the sideroom at every clinic session. The following examinations were carried out in the sideroom at Congella clinic:-

Smears	:	14,242
Urine Examinations	:	2,937

Laboratory

The following number of serological examinations for syphilis were carried out at the Government laboratories, Currie Road :-

23,974 Wasserman Reaction Tests.

Ante-Natal

1,790 ante-natal cases were referred to the Special Clinic for serological examination and treatment where necessary.

Penicillin Reaction

Six cases reacted to penicillin in the clinic during 1962. Five cases had mild reactions and complained of weakness and giddiness. They were treated and kept under observation for half an hour and were then fit to go home.

The sixth case complained of feeling ill immediately after the injection of penicillin. Despite emergency treatment carried out to counteract the reaction, he died within 20 minutes of onset.

Statistics

Venereal Diseases among non-Europeans - 1962

	New Cases		Total Attendances	
	Male	Female	Male	Female
1. Sero-negative Primary Sy.	153	7	897	29
2. Sero-Positive Primary Sy.	287	87	1,521	231
3. Secondary Sy.	159	565	365	1,323
4. Tertiary Sy. (Recognised clinically)	4	—	16	—
5. Latent (Diagnosed on result of serological test done)	235	344	5,054	4,069
6. Neuro-Syphilis	—	—	1	—
7. Congenital Sy. (under 1 yr.)	30	32	91	63
8. Congenital Sy. (Over 1 yr.)	12	20	41	71
Total Syphilis	880	1,055	7,986	5,786
9. Gonorrhoea	4,455	1,599	10,697	3,259
10. G.C. Vulvo-vaginitis	—	21	—	39
11. G.C. Ophthalmia	20	22	36	49
Total G.C. Infections	4,475	1,642	10,733	3,347
12. Ulcus Molle	1,501	89	3,484	147
13. Lymphogranuloma Venereum	390	13	1,156	28
14. Granuloma Inguinale	3	1	6	1
15. Venereal Warts	332	81	1,645	180
16. Non-Specific Urethritis	870	2,589	3,017	5,681
17. Non Venereal	2,184	1,290	7,736	3,894
Total	5,280	4,063	17,044	9,931
GRAND TOTAL:	10,635	6,760	35,673	19,064

VI - (iii)

Statistical Summary (All Races) Treated in 1962

	European						Coloured						Asiatic						Bantu						Total
	City			Ex-City			City			Ex-City			City			Ex-City			City			Ex-City			
	M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		
New Cases	429	81		406	11		404	136		33	10		531	204		93	37		7,269	4,308		1,852	1,421		17,225
Out-patient attendances	1,641	256		863	24		1,474	468		131	25		1,647	600		224	92		26,636	12,202		6,058	3,616		55,957
Ward Admissions													6	10		1	-		211	565		109	267		1,169

VII IMMUNISATION

Immunisation programmes were steadily maintained throughout the year in order to raise the state of immunity against the relevant infectious diseases to the highest possible level.

The Department's programmes have been organised along three main lines -

- (a) Immunisation at Child Health Clinics
- (b) Campaigns in thickly populated areas
- (c) Immunisation at schools.

In 1962 it became necessary to review the routine procedure for active immunisation against diphtheria, whooping cough, tetanus and poliomyelitis. The code of practice is now as follows:

Infants up to School Age

At birth	B.C.G. (Non-Europeans only)
2 months	1st DWT
3 months	Smallpox vaccination
	1st Polio
3½ months	2nd DWT
4 months	2nd Polio
5 months	3rd Polio
6 months	3rd DWT
7 months	re-vaccination Smallpox, if necessary
3 years	Booster DT
6 years (entrance to school)	Booster DT
9 years	Booster Tetanus

Smallpox Control

The immunisation programme for vaccination against smallpox was intensified following the occurrence of a number of cases in various parts of the Transvaal early in the year. It was not necessary to institute a mass campaign, but the Mobile Clinic was placed on a planned basis in constant action from one end of the City to the other, especially in the congested areas.

The numbers vaccinated are set out below:-

Europeans	10,515
Coloureds	5,011
Bantu	18,888
Asiatics	39,816
Total	74,230

Diphtheria, Whooping Cough and Tetanus

Immunisation against diphtheria, whooping cough and tetanus was carried out at Child Health Clinics and a number of Creches and Nursery Schools throughout the year.

Besides this, organised campaigns were held in various congested non-European areas. The parents were anxious to have their children immunised against the disease

but great difficulty was experienced in making the mothers of the pre-school children realise the importance of bringing their children for the subsequent injections. Set out are details of injections given:

Diphtheria, Whooping Cough and Tetanus (Combined)

	E	C	B	A	Total
1st injection	2,642	1,194	10,880	10,257	24,973
2nd Injection	2,205	962	5,698	5,896	14,761
3rd injection	2,097	867	3,670	3,727	10,361
Booster	52	5	8	12	77
Total	6,996	3,028	20,256	19,892	50,172

Diphtheria Tetanus

The immunisation units visit all Government, Government-aided and private schools which cater for children under 10 years of age, and immunises all those children whose parents desire to have them protected.

Immunisation against the above diseases was also carried out in the Mobile Immunisation Van.

The following tables set out the details of injections given:-

Diphtheria Tetanus (Combined)

1st injection	4,301	1,476	5,848	12,863	24,888
2nd injection	3,670	1,486	5,146	10,541	20,843
3rd injection	297	103	3,080	2,610	6,090
Booster	1,505	174	27	738	2,444
Total	9,773	3,239	14,101	26,752	53,865

Poliomyelitis

Oral immunisation against poliomyelitis has been held on the first Wednesday of the month throughout the year, administration being at sixteen centres throughout the City. The following details reflect the number of persons who presented themselves for protection:

1st Dose	4,581	1,402	7,559	8,382	21,927
2nd Dose	3,549	1,453	4,083	8,131	17,216
3rd Dose	4,012	1,299	3,194	7,469	15,974
Total	12,142	4,154	14,836	23,982	55,114

Typhoid Control

Clinics have been held twice a week when selected groups of food-handlers were Vi-tested and immunised against typhoid.

Those Vi-tested comprised 10 Europeans, 12 Coloureds, 656 Bantu and 104 Asiatics.

The following anti-typhoid injections were given:

1st injection	32	6	679	95	812
2nd injection	22	15	569	60	666
Boosters	2	1	392	44	439
Total	56	22	1,640	199	1,917

SUMMARY OF IMMUNISATION

Diphtheria Injections

	Infants				Pre-school				School Age				Adults				Total
	E	C	B	A	E	C	B	A	E	C	B	A	E	C	B	A	
1st				1	2	9	5	6	40	17	1	50					131
2nd			24		3				15	5		38					85
Total			24	1	5	9	5	6	55	22	1	88					216
Boosters					1				10	2		3					16

Combined Diphtheria, Whooping Cough and Tetanus

1st	2233	765	5070	3816	393	413	5770	6413	16	16	40	28					24973
2nd	1892	631	2746	2357	308	326	2930	3526	5	5	22	13					14761
3rd	1703	514	1787	1733	390	352	1868	1979	4	1	15	15					10361
Total	5828	1910	9603	7906	1091	1091	10568	11918	25	22	77	56					50095
Boosters					49	2	3	12	3	3	5						77

Typhoid Injections General

Total													56	22	1640	199	1917
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Diphtheria and Tetanus

1st	19	6	20	20	622	224	803	2074	3660	1246	5025	10769					24488
2nd	14	9	25	9	484	111	868	1623	3172	1366	4253	8909					20843
3rd	3	3	9	3	57	10	957	445	237	90	2114	2162					6090
Total	36	18	54	32	1163	345	2628	4142	7069	2702	11392	21840					51421

Booster

1st					432	67	1	56	1068	105	26	682					2437
2nd					5	2											7

Tetanus

1st					10	1			3				1				15
2nd					3				4								7
Total					13	1			7				1				22
Booster																	—

Oral Poliomyelitis

1st	3049	685	2629	3748	684	464	2808	2523	106	96	665	863	742	157	1457	1248	21924
2nd	2266	391	1192	1897	694	717	1934	3390	77	131	340	1204	512	214	617	1640	17216
3rd	1934	249	675	1091	1194	665	1679	3426	151	217	435	1402	733	168	405	1550	15974
Total	7249	1325	4496	6736	2572	1846	6421	9339	334	444	1440	3469	1987	539	2479	4438	55114

Total Oral Poliomyelitis

E	C	B	A	Total
12,142	4,154	14,836	23,982	55,114

Vaccinations against Smallpox

6030	1629	8015	8179	1940	2646	9031	23749	1125	276	98	1547	1420	460	1744	6341	74230
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Total Vaccinations

E	C	B	A	Total
10,515	5,011	18,888	39,816	74,230

VIII MATERNAL AND CHILD HEALTH

MATERNAL HEALTH

In 1937 when the Provincial Administration extended its activities to embrace a district midwifery service, the City Health Department discontinued this function.

District midwifery services are provided by the following institutions –

European: Addington Hospital (Provincial); Mothers Hospital.
Coloured: Addington Hospital (Provincial); McCord Zulu Hospital.
Asiatic: McCord Zulu Hospital; King Edward VIII Hospital (Provincial)
Bantu: McCord Zulu Hospital; King Edward VIII Hospital (Provincial);
Polyclinic, kwaMashu (Provincial)

Ante-Natal Clinics

Ante-natal clinics are provided by this Department for European, Coloured and Asiatic mothers who do not intend to go to hospital or call a medical practitioner for their confinement. There are very few European mothers who fall in this group.

The following sets out the work performed:

	<u>E</u>	<u>C</u>	<u>B</u>	<u>A</u>	<u>Total</u>
No. of Ante-natal clinics	12	12	46	95	165
Total attendances of expectant mothers	76	21	204	3506	3807
No. of Ante-natal Visits	133	14	516	869	1532
No. of Post-natal Visits	3	23	9	1358	1393

The following is a brief note by the part-time medical specialist for ante-natal clinics (Dr. L. Raftery, F.R.C.O.G., M.M.S.A., M.R.C.S., L.R.C.P.)

"The past year has been a satisfactory one in the work of the ante-natal clinics. The attendances have remained good, and the mothers are becoming more conscious of the good services offered to them. We have been able to diagnose the anaemic women (thanks to the apparatus provided for us) and the women have expressed freely how much better they feel after treatment (which we have been able to prescribe with the iron pills now allowed to us).

We have had greater success in persuading those who need it to accept our advice to go to hospital for transfusions or for delivery. The local midwives have made good use of our clinics (for all racial groups) and the relationship has been of the best.

Once again I want to pay tribute to the City Health staff it is my pleasure to work with. One and all maintain the highest standard of efficiency and skill coupled with a pleasantness and humanity which raises their work above the ordinary.

Although the "Bag-nurse system" leaves much to be desired, it is absolutely indispensable for our large Indian community, until fully skilled maternity services are available to all groups at all income levels, and thanks to the conscientious work of the City Health staff, the "home-delivery" system works extremely well."

Supervision of Midwives

A Health Visitor supervises the work of the midwives in private practice and investigates any cases of stillbirth, puerperal sepsis and ophthalmia neonatorum which might occur in their practice.

In the past selected Indian women were given a limited training by the Department and were permitted to practice under strict supervision. With the various hospitals extending their district midwifery services, this training has been discontinued. Today there are only 97 un-certified Indian midwives as compared with 151 in 1952.

Before the Provincial Polyclinic at kwaMashu commenced district nursing services, 4 Bantu trained nurses were practising in the area, but as they have found that the mothers preferred to go to the clinic, they have ceased to practise.

Set out below are details of the number of births attended by midwives only, together with particulars regarding midwives (practising privately in Durban) on the list kept by this local authority.

Number of Confinements attended by Midwives

Race	Registered Midwives	Unregistered Midwives	Total
European	249	2	251
Coloured	318	20	338
Bantu	686	118	804
Asiatic	1,310	1,723	3,033
Total	2,563	1,863	4,426

Details of Listed Midwives

	E	C	B	A	Total
No. of Registered Midwives	6	3	—	—	9
No. of Unregistered Midwives	1	3	1	97	102
No. of Midwives who have ceased to practise	3	—	1	—	4
No. of untrained Midwives who have ceased to practise	—	—	—	8	8
No. of trained Midwives deceased	—	—	—	—	—
No. of untrained Midwives deceased	—	—	—	2	2
No. of women practising midwifery who have been warned not to do so unless they apply to have their names on the list	—	—	—	8	8
No. of Midwives prosecuted	—	—	—	—	—
No. of difficult cases attended to and delivered	—	—	—	—	—
No. of Midwives put on list during the year	3	—	—	—	3
No. of Midwives reinstated during the year	—	—	—	1	1
No. of Midwives' appliances examined	13	25	10	886	934
No. of Midwives' bags replenished	—	62	3	2184	2251
No. of Midwives' dressings sterilised	—	55	—	2040	2095
No. of Midwives' dressings sterilised after septic cases	—	—	—	—	—
No. of Visits to Midwives at their homes or at patients' homes	—	23	—	297	320
No. of Midwives who were warned for failing to comply with regulations	—	—	—	7	7

Certificated and uncertificated European and Coloured midwives' appliances and registers are examined every three months. Uncertificated practising Indian midwives' appliances are examined every month.

Child Health

Clinic sessions are held at 33 different centres in the City. Where there are no Municipal clinics, halls are hired for the purpose.

At some centres daily clinics are conducted whilst weekly sessions suffice in others.

The attendances at all clinics have increased phenomenally during the year. The total attendances being 197,799 higher than in 1961. The increase is probably due to four factors -

- (i) The establishment of clinics in the newly developed housing schemes;
- (ii) The introduction of the State subsidized dried skimmed milk scheme;
- (iii) Increased home visiting;
- (iv) A greatly increased "clinic" consciousness amongst the Asiatic community.

Set out below are details showing the increased attendances of nursing mothers, infants and toddlers at clinics during the past five years.

Race	1958	1959	1960	1961	1962
European	48,525	53,758	56,376	48,344	56,946
Coloured	11,195	14,252	15,608	17,288	34,776
Bantu	89,037	121,475	141,298	146,498	227,106
Asiatic	48,267	63,653	63,951	83,769	174,826
Total	197,024	253,138	283,233	295,855	493,654

Clare Estate Clinic

At the request of the mothers in the Clare Estate district for a child health clinic, the Committee of the Divine Life Society made representation to this Department offering suitable premises in the area free of charge.

The clinic was commenced on Wednesday, 4th April 1962, on a weekly basis. The mothers appreciated the establishment of this clinic, as it saved them the long trip to the clinic in the City.

Bacus Road Clinic

Attendances at this clinic rose sharply during the early part of 1962 and it became impossible with the staff and facilities to cope adequately with such large numbers and so the services were expanded by holding the clinic on an additional day weekly.

Merebank Clinic

The new clinic at the Indian Housing Scheme was completed in November. Great interest was taken by all, as it is the first purpose-designed child health clinic in the City.

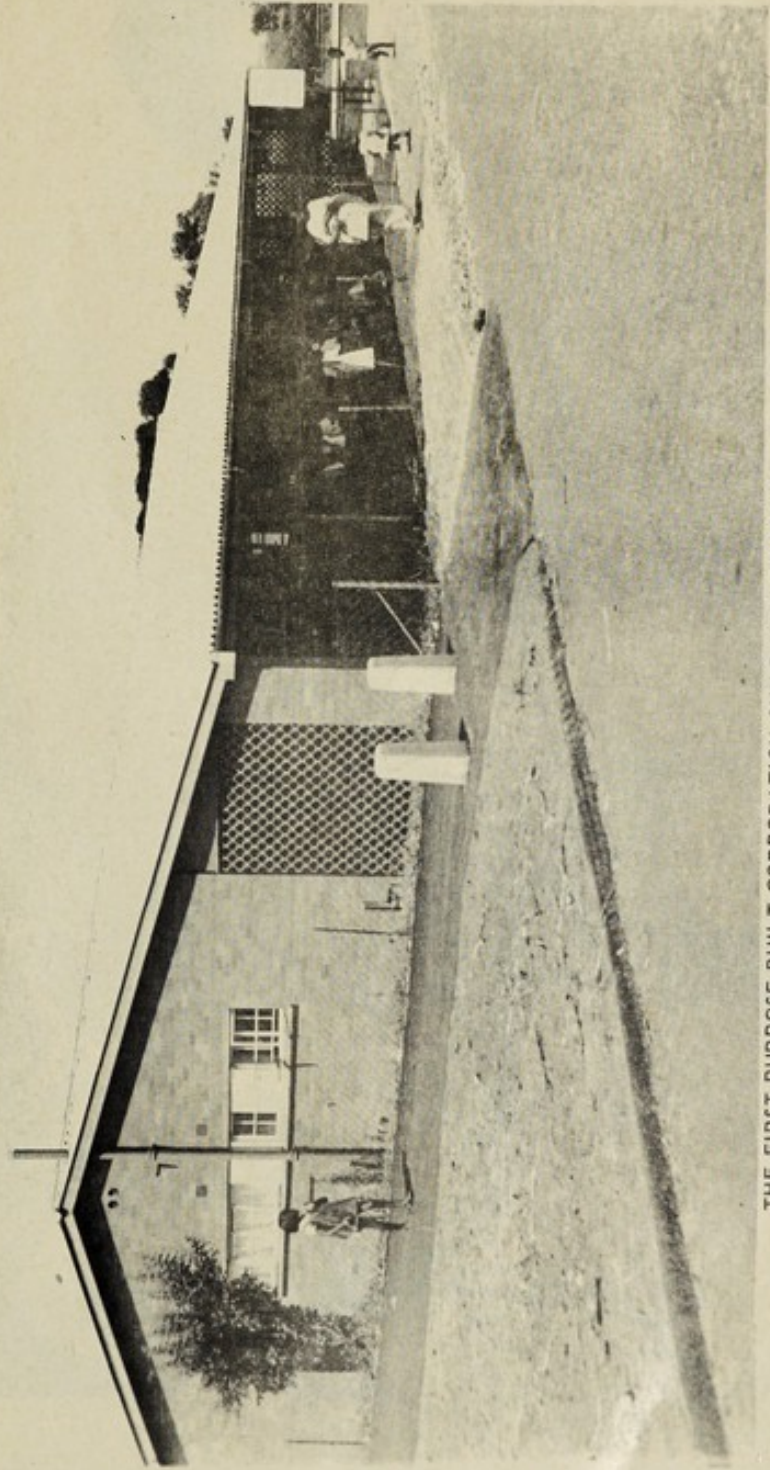
The clinic has been popular, and an average of 417 nursing mothers and babies attend per session.

Two other new clinics were opened during the year; one for European mothers living in the Virginia area, who found the distance to the Durban North clinic too great for reasonable convenience. This clinic is held on Tuesday mornings and is well attended; the other clinic is for the Coloured families in the newly developed Wentworth Government Village area.

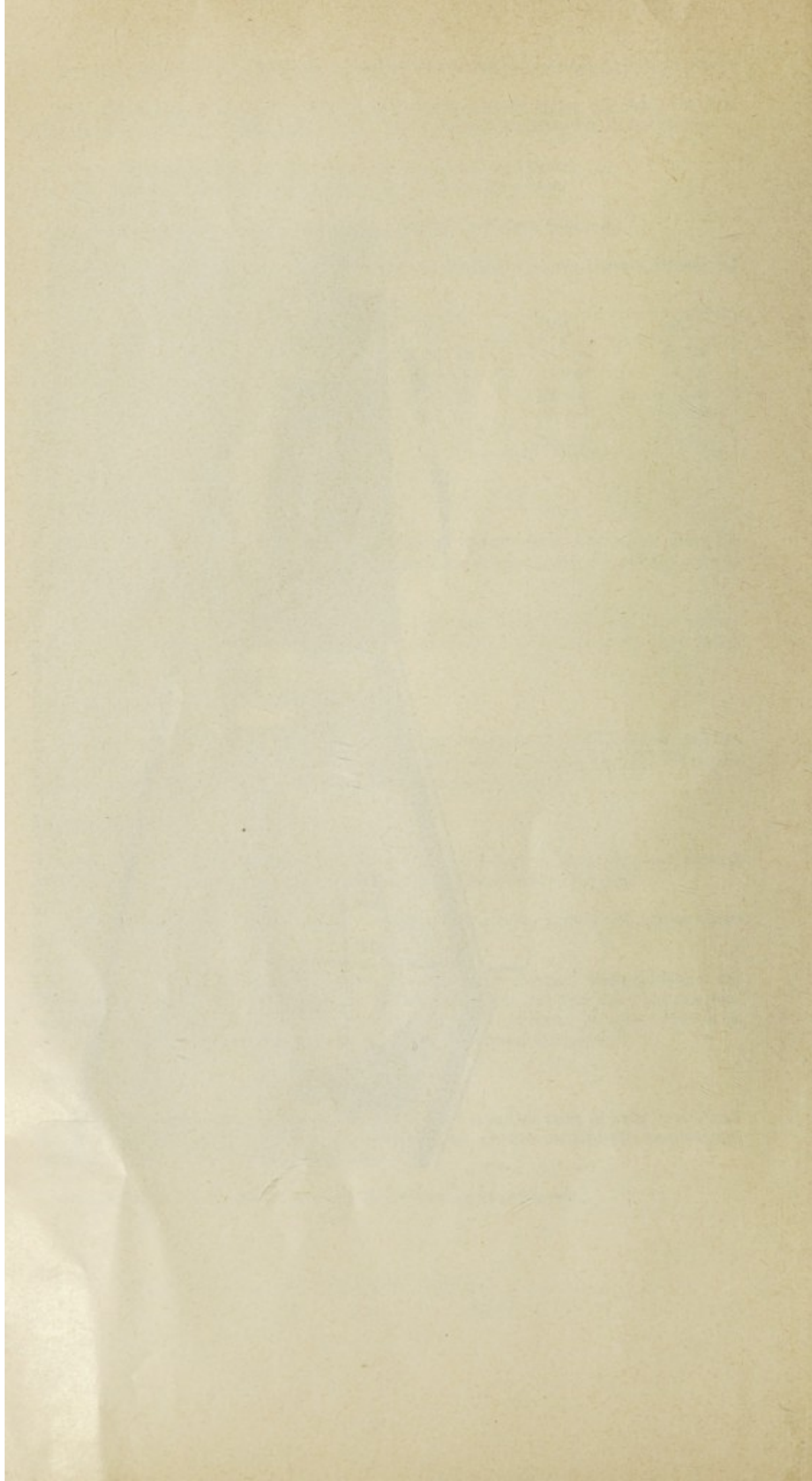
Home Visiting

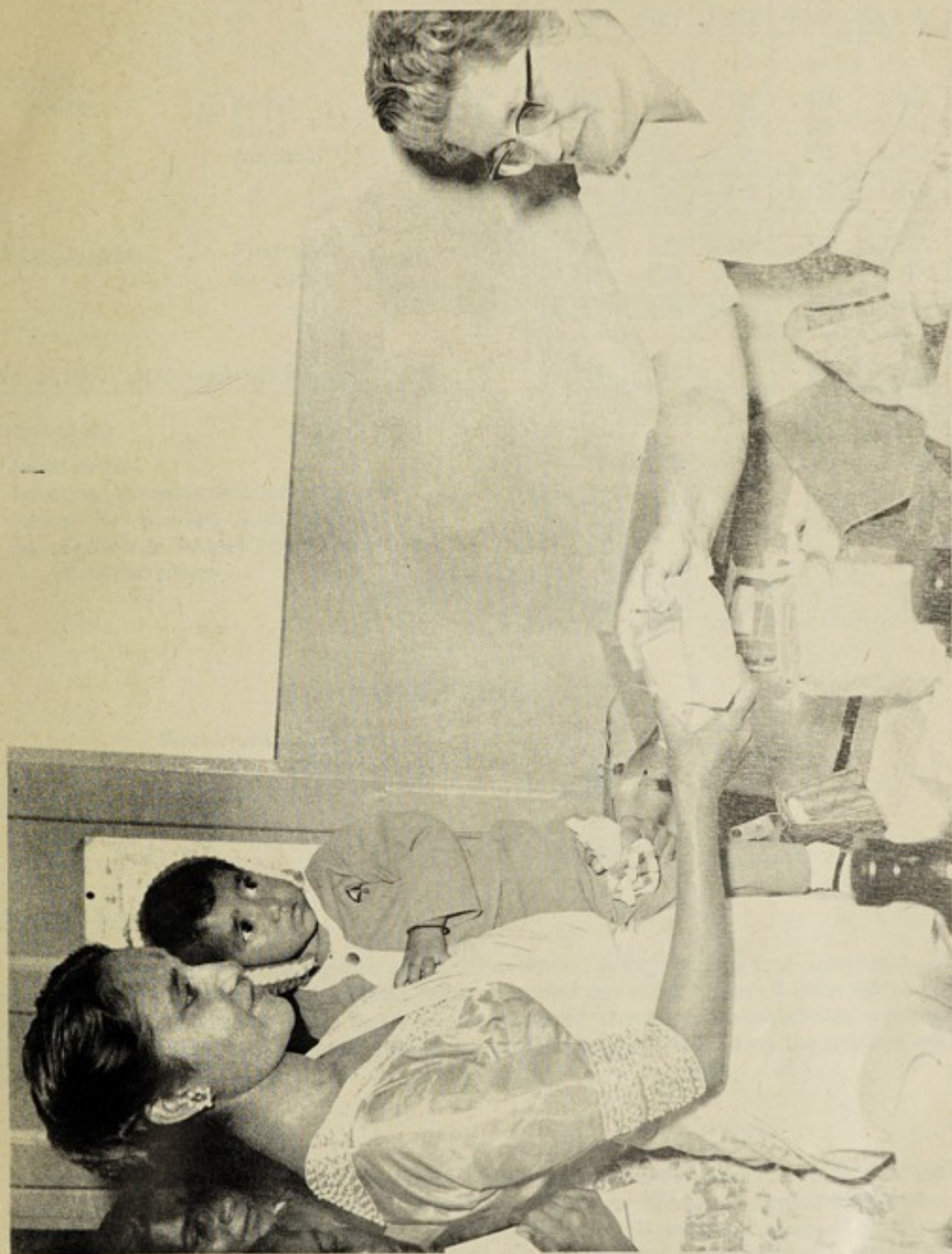
It was possible to give more attention to this most important facet of child health work throughout the year, since work was not interrupted by massive poliomyelitis immunisation campaigns as was the case in the previous year.

The following reflects some of the work done in the course of the year :-

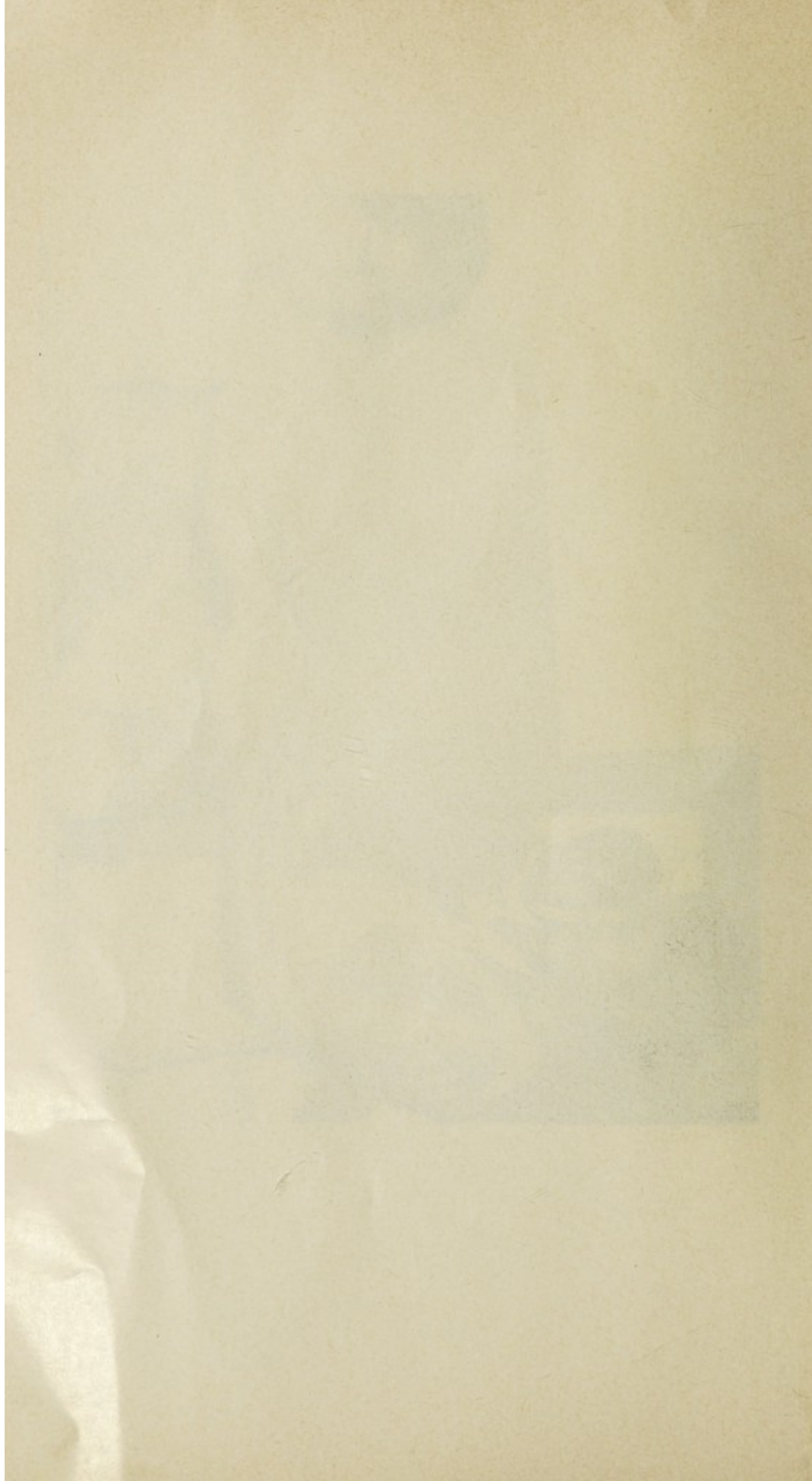


THE FIRST PURPOSE BUILT CORPORATION CHILD HEALTH CLINIC, AT MEREBANK.





STATE AIDED SKIMMED MILK FEEDING SCHEME - A MOTHER RECEIVING A WEEKS SUPPLY OF MILK FOR HER CHILD



		E	C	B	A	Total
First Visits						
Feeding	Breast	1,011	858	1,797	4,693	8,359
	Mixed	108	43	649	608	1,408
	Artificial	531	28	175	1,047	1,781
		1,650	929	2,621	6,348	11,548
Re-Visits						
Feeding	Breast	461	10	117	498	1,086
	Mixed	562	32	87	320	1,001
	Artificial	1,826	15	49	333	2,223
		2,849	57	253	1,151	4,310
Older Children	First Visit	683	523	4,687	6,610	12,503
	Re-Visit	4,178	585	562	1,079	6,404
		4,861	1,108	5,249	7,689	18,907
No. of above visits made to Protected Infants		374	20	—	—	394
Other Visits						
Infant deaths		7	9	13	77	106
Infectious Diseases and Contacts		—	—	6	3	9
Reports on Insanitary Conditions		9	1	7	3	20
No. of Visits to Nursery Schools and Homes for Protected Infants		5	3	5	27	40
		21	13	31	110	175

Summary of Visits

First Visits – Infants	11,548
Re-Visits – Infants	4,310
Older Children	18,907
Other Visits	175
	<u>34,940</u>

Feed the Babies Fund

The above fund has continued to supply "Pro-Nutro", a high protein food supplement, for distribution to needy pre-school children. Where a mother can afford to pay, 4 cents per pound was charged. In November 1962, owing to the increased attendance at the clinics a further 2,400 lbs per annum were received. Marked benefit has been noticed among the toddlers who have taken it regularly.

State Subsidized Milk Scheme

As mentioned in the last Annual Report a pilot feeding scheme was initiated at two Bantu Child Health Clinics at kwaMashu in November 1961, in an attempt to combat kwashiorkor. Skimmed powdered milk was supplied at a subsidised price of 14 cents per pound of which the State refunded 9 cents up to a maximum of R1,800 for the trial period. The milk powder was supplied to children in need of a dietetic supplementation and 5 cents per pound was recovered from those who could afford to pay. Only children under 6 years of age were eligible for this milk.

By May 1962 the successful effects of the pilot scheme resulted in the State accepting it on a permanent basis and the Durban City Council agreed to participate. In terms of this arrangement the powdered milk was purchased at a price of 15 cents per pound of which the State paid 5 cents per pound up to a maximum of R2,000 per year, and 5 cents per pound was recovered from those

who could pay for the milk received. In October 1962 the State Department offered to increase the subsidy to R4,000 (sufficient for 80,000 lbs of milk powder) and this was accepted by the City Council. Railage and distribution costs were not subsidised, being a charge against the City Council.

During this period the Malnutrition Relief Committee authorised increasing expenditure on both skimmed and full cream milk up to June 1962 when 9,200 lbs of milk were distributed, but due to lack of funds, this source of supply had to be drastically curtailed in October 1962. Fortunately, at that time authority was received to increase the State subsidised milk scheme so no further funds from the Malnutrition Relief Committee were utilised for the purchase of skimmed milk powder, but the supply of full cream milk in reduced quantities was continued.

During the year the distribution of the State subsidised powdered milk was extended to all child health clinics and all race groups. Milk was issued only to children attending these clinics, mainly in the under 2 years age group, but where necessary up to the age of 5 years. The need for subsidised milk and the type, full cream or skimmed, was assessed by the Clinical Medical Officer and Health Visitor attending the case and the correct use of the milk taught and demonstrated to mothers at the clinic. Cases judged able to pay the full retail price were required to make their purchases elsewhere. The amount issued was limited to one week's supply for the child concerned. The weights of the children were checked regularly. Every effort was made to control any possible abuse in the use of this milk powder and it is pleasing to record that fears in this direction never materialised. The scheme was extended progressively as facilities were improved and the demand grew. A total of 38,325 pounds of State subsidised milk was issued over the year of which only 8% was distributed free.

Effects

- (1) The effects on the children were generally those of marked improvement in health and the mothers became more and more clinic minded, having seen for themselves how much healthier their children became in every way. Many children who were lethargic and slow in progress and development, became active, bright-eyed, and skin conditions improved. In most cases there was a progressive weight gain. The average gain for Bantu children in the 1-3 years groups was 6-7 lbs over the year and in the 3-5 years group 5-6 lbs. The reasons for any loss of weight were mainly gastro-enteritis, (although this has shown an appreciable decrease since the introduction of the scheme), seasonal coughs and colds and worms. These children soon regained their weight after treatment.

Due to regular attendances many cases of early malnutrition were assisted and Health Visitors report they now very seldom find a severe malnutrition case when home visiting. Kwashiorkor is almost never seen at the clinics.

- (2) The most marked effect of the milk scheme has been the enormous increase in clinic attendances as may be seen in the figures of clinic attendances quoted fully elsewhere in the Report. The total clinic attendances increased by 197,800 compared with the previous year. This represents a 66% increase compared with an increase of 17% over the previous 3 years (average). The increased attendances were mainly in the non-European groups. Such attendances have resulted in a major increase in preventive measures, particularly in regard to immunisation against smallpox, diphtheria, whooping cough and tetanus and also, of course, poliomyelitis.
- (3) It is extremely difficult to assess with any degree of accuracy the true incidence of kwashiorkor and malnutrition. Kwashiorkor was only made notifiable late in 1962 and no conclusions can as yet be drawn.

The total number of deaths from kwashiorkor and malnutrition in the under 5 years age group since 1958 when milk distribution schemes were first started as a positive measure in Durban, is set out in the table below :

Deaths from Kwashiorkor and Malnutrition
(Under 5 years)

	European	Coloured	Bantu	Asiatic	Total
1958	1	—	305	30	336
1959	—	1	145	6	152
1960	—	1	121	2	124
1961	—	2	109	17	128
1962	—	2	102	8	112

These figures cannot be regarded as a true index of deaths occurring in Durban Children since investigations have established that a very large percentage of cases of kwashiorkor came to Durban for treatment and were not normally domiciled here. Nevertheless it does indicate a progressive decrease over the years. Concurrently the infant mortality rate in the Bantu fell from 275 in 1958 through 264 in 1960 to 148 in 1962. Also the number of deaths from gastro-enteritis noticeably declined (350 in the year from 450 in 1958 through 382 in 1960). This is regarded as significant although other factors such as increased Bantu wages, improvement in housing and slum elimination no doubt also played their part.

Kwashiorkor

Kwashiorkor was declared a notifiable disease in terms of the Public Health Act on 14th September 1962. Although it was known that many cases of kwashiorkor were treated in local hospitals, it was considered that only a relatively small proportion of these cases were, in fact, Durban residents and that the remainder were children from rural areas who had been brought to Durban for treatment. Accordingly representations were made to the State Health Department, asking that the question of permanent domicile should be taken into account when cases were notified. The State Health Department agreed that in order to reflect a true epidemiological pattern of the incidence of the disease, "domicile" should be regarded as the place where the child suffering from the disease had resided for a period of one month or longer prior to the date of diagnosis. The criteria on which a diagnosis of kwashiorkor should be based, were also defined. This information was conveyed to all institutions which were likely to deal with cases of kwashiorkor.

Until the beginning of December very few notifications were received but by the end of the year a total of 124 cases had been notified to this Department as City cases. A larger number of cases had also been notified by Durban institutions to Magistrates in rural areas and to other local authorities. In view, however, of the number of notifications received, domiciliary investigations were made in respect of each of these 124 cases and it was found that only 60 of these children had in fact resided in Durban for a period of one month or longer. The remaining cases, comprising more than 50% of the total, had either lived in Durban for a period of less than one month or had given an address at which they were not known. Every endeavour was made to improve the accuracy of these notifications but this is a problem beset with difficulties despite the co-operation of all persons notifying the condition.

Clinical Medical Officer's Report

The Senior Clinical Medical Officer, Dr. H.A.B. Pletts, comments as follows:

"This has been a busy and expanding year with several innovations. The accent has been on nutrition to combat the unnecessary ill-health of inadequate, unbalanced feeding; immunisation to prevent the spread of disease and the attendant inroads on health and development; and education in all fields of health, without which adequate use cannot be made of either of the former.

In the first quarter the attendances at the Merebank mother and baby clinic warranted an additional day each week, which it was hoped would reduce the congestion at the existent once-a-week clinic. Both days, however, continued to be very busy and overcrowded, and it was with relief that the move was made into our own purpose-designed clinic in the area in early December.

In the middle of the year the Clairwood Clinic at Bacus Road was spread out to cover two days each week, and here too, it would seem that the 'new day' produced its own fresh group of mothers and babies, as numbers grew out of all proportion to the reduction on the existing clinic day. Renovations were begun on the clinic at Lancers Road, destined to replace the existing dilapidated Brook Street Clinic in the near future.

Chatsworth expanded from a mobile van - to which babies were brought for clinic advice and services - to the most suitable premises available in the interim period awaiting our own purpose-designed building; the need for which grows each month as the numbers of residents in the area increase.

Gastro-enteritis occurred as a minor outbreak in kwaMashu in January, but was brought under control and was abating by the following month. It seemed at this outbreak, and in the sporadic cases occurring throughout the rest of the year, that it was largely the recent arrivals from the Cato Manor Slums who had been affected. In April and May, measles - in many instances with complications - became severe in the African particularly. The disease is more than usually troublesome in ill-nourished children and it was noted that several children under the age of one year had contracted the illness.

It had been felt for some few months past that a need existed for review of our immunisation schedule, and a new scheme was drawn up in the first half of the year after advice and opinion had been sought of experts in this subject both in our own country and overseas. The general trend was to advance the age at which several of the procedures were started, and to combine where practicable various forms of immunisation, thus reducing the number of visits necessary fully to immunise a child. It was hoped to complete immunisation earlier in a child's life, thus minimising the possibility of the infections attacking a susceptible child. It was also possible thereby to streamline the work entailed in dealing with an unnecessarily large number of visits; and to complete the immunisation programme in many African children who would otherwise be very difficult to find well at a sufficient number of visits under the old scheme.

An attempt was made at kwaMashu Clinics to test as many clinic babies and children for tuberculosis as possible, and where they were found free of the disease to immunise them with B.C.G. vaccine as early as possible. In this attempt several primary cases were detected and put on to early treatment. This type of work at kwaMashu, together with all other preventive concepts of clinic practice, were able to be put into better use with the opening in July of the Polyclinic with its therapeutic function - to whom all ill cases could be immediately referred. Within a month fewer ill cases presented at out clinics as this much-needed out-patient department was welcomed by the population of the area; the separate functions of the polyclinic and our own 'positive health' clinics becoming more widely appreciated.

During the year the attempt at immunising the susceptible age groups of the population against poliomyelitis was kept well to the fore by a one-day-a-month drive. The first Wednesday of each month was publicised as an all-out anti-polio day, and while the mother-baby clinics proceeded concurrently, as did other types of immunisation, the major effort of the day was directed towards maintaining and even improving the present immunity state of the population. Particular effort was made to immunise babies born since the National Campaign and also immigrants to this country from areas where oral vaccination against this disease is not available. The response has been gratifying. In May a new type of vaccine became available, which enabled any of the clinics at any time to administer the vaccine. This was now polyvalent, more stable to changing temperatures than the earlier type, thus greatly simplifying the work of mixing, and the care necessary in handling and also the equipment used. The medical implications with this vaccine are unchanged, so that the vaccination is identical with that used previously during the National Campaign, with a simplified technique. The "First-Wednesday-of-the-Month" drive was maintained, and in addition, gradually all clinics were able to give out the vaccine at any session as well.

The Government subsidized skimmed milk feeding scheme in the pilot stage was assessed and reviewed by their nutrition representative, Dr. Latsky, during his visit to Natal in March. He was very encouraging in his praise of our City's manner of handling the use and distribution of dried skimmed milk, and his visit was welcomed here as a bridge of understanding and co-operation between Government and field workers, whether in preventive or therapeutic fields. While here, Dr. Latsky, visited our clinic and saw the practical workings of the scheme. He spoke of hopes of expansion in the future. At a meeting convened by the Paediatric Department of the Natal Medical School, Dr. Latsky revealed that our City was the first in the Republic to take up its allocation of dried skimmed milk. A medical school spokesman reviewed some of the salient features of kwashiorkor at that time - saying that 85-90% of cases were imported from rural areas, that their average stay in hospital was 30 days, that the

disease still carried a 40% mortality, and that the cost per day per case was R6. Only with these facts in mind can it be fully appreciated the immense help to the community given by the feeding scheme. Kwashiorkor became a notifiable disease in September, but by this time the beneficial effects of the feeding of protein additives had already become felt, and the numbers seen in clinics had fallen dramatically.

Now that the scheme is in its swing, the salient problems in its administration are Health Education, and distribution; determined efforts to tackle these are being made.

The work of the health visitors has been appreciated as usual, and many instances of selfless devotion to clinic families - be it in their homes or at the clinic - will be remembered by all clinical medical staff and not least one hopes by the families who benefit from it."

Nursery Schools, Creches, Play Centres

Inquiries were received from six persons who were contemplating opening creches. Three decided not to proceed and the others have commenced in various centres. All these have been registered with the Department of Social Welfare.

Mothercraft Bursary

To mark the Centenary of Addington Hospital in 1961 the City Council instituted a Bursary of R100 which is awarded annually to a nurse trained at Addington Hospital to assist her to undertake Mothercraft Training at an institution approved by the Mayor.

The grant is known as the "Addington Hospital Bursary" and the first two candidates nominated by the Mayor after consultation with the City Medical Officer of Health and the Matron of the Hospital were:

1. Miss E.M. Young.
2. Mrs. C.M. Godfrey.

Mothercraft Training

In an endeavour to have more mothercraft trained Health Visitors on the staff the City Council passed the following resolution on 2nd July 1962 : "That subject to the exigencies of the service special leave on full pay be granted to Health Visitors and Clinic Sisters in the City Health Department who have completed not less than two years service, to enable them to undertake a course in Mothercraft at a suitable training centre in the Republic of South Africa."

Two Health Visitors were granted leave to undertake the mothercraft training which commenced on 1st October.

Medal Awards to Student Nurses

The following nurses were selected to receive the City Council's awards for the most outstanding nurses in training at the various training hospitals in the City.

Addington Hospital	
Gold Medal	Miss Elsie van Rooyen
Silver Medal	Miss Karen Skinner
St. Augustine's Hospital	
Stainless Steel Fob Watch	Sister de Montford
Entabeni Hospital	
Rolled Gold Fob Watch	Miss Jennifer Wallace Bradley
Stainless Steel Fob Watch	Miss Barbara Grace Lee
St. Aidan's Hospital	
Stainless Steel Fob Watch	Nurse Manakee Nadasen

King Edward VIII Hospital
Rolled Gold Fob Watch
Stainless Steel Fob Watch

Nurse Tshangela Sisana
Nurse Maria Koyama

McCord Zulu Hospital
Stainless Steel Fob Watch

Nurse Meltah Nhlapo

Summary of Child Health Clinic Attendances

	E	C	B	A	Total	Total 1961.
Total Number of sessions	968	269	1,627	762	3,626	3,111
Total sessions for children	956	257	1,581	667	3,461	2,944
Total Ante-natal sessions	12	12	46	95	165	167
Total attendance at clinics	56,946	34,776	227,106	174,826	493,654	295,899
New cases out of above number	4,032	2,370	26,137	16,945	49,484	38,225
Total attendance of infants	28,763	11,499	76,968	60,756	177,986	114,955
Total attendance of toddlers and Pre-school children	15,809	15,472	83,121	62,087	176,489	92,770
Total attendance of nursing mothers	12,298	7,784	66,813	48,477	135,372	84,184
Total attendance of expectant mothers	76	21	204	3,506	3,807	3,990
Number of Test Feeds	83	1	7	31	122	71
Number of mothers instructed in treatment of minor ailments	1,975	2,091	47,278	23,758	75,102	60,512
Number of health talks and demonstrations given	3,132	1,559	18,395	8,953	32,039	24,286
Number of cases seen by doctor	4,026	2,409	5,810	4,987	17,232	5,006

IX HEALTH EDUCATION

Health education forms part of the duties of practically every official in this Department. Health Inspectors are impressed with the need to educate the public with whom they come in contact, while Health Visitors constantly impress on mothers the principles of promotive and preventive health for the benefit of their children. Medical Officers of Health play their part through the medium of press and radio as well as talks to voluntary associations and other bodies.

The Department's Health Education Section is charged with the full-time task of educating the public of all race groups in health matters. This is accomplished mainly by lectures, group discussions and talks with the assistance of films, loud hailer and a variety of impressive visual aids. The following is a brief report of the activities of this section during the year, prepared by the Health Educator.

TUBERCULOSIS

During the year health education was carried out at King George V Tuberculosis Hospital and the influence of tribal beliefs and customs on behaviour of Bantu patients was particularly noted. An account of this is presented in Appendix C.

Towards the end of the year a new and valuable health education programme was inaugurated at the Durban Chest Clinic, from 7.45 to 8.30 a.m. every morning. A group of Bantu from all sections of the community having been X-rayed and awaiting results received instruction and advice from Bantu lecturers with the aid of a new tuberculosis model. They were told -

- (a) how to get the greatest benefit from treatment;
- (b) the main contributory causes of retarded progress or relapse;
- (c) that certain Bantu practices must be avoided as being deleterious to their condition;
- (d) the importance of nutrition;
- (e) the danger of heavy drinking;
- (f) how to prevent tuberculosis if X-ray shows they are free from infection.

These groups all proved to be very receptive and the discussions fruitful.

The extent of the tuberculosis instruction, covering mainly the latter part of the year, is reflected below:

Bantu Community

Footmen with visual aid and loud hailer	1,244 talks
Loudspeaker van with visual aid	170 sessions
Group work with loud hailer - no visual aid	753 talks
Film demonstrations	11
"Model" demonstrations at the Durban Chest Clinic	60 (one session per morning)
	<u>2,238</u>

Indian Community

Footmen with visual aid	75 sessions
Loudspeaker van with visual aid	94 "
Indian schools	14 film sessions
	<u>183</u>

Coloured Community

Footman with visual aid	139 sessions
Loudspeaker van talks with visual aid	15 "
Factories	3 "
Schools	9 films
	<u>166</u>

All talks and sessions whether in open air, or indoors, are followed with an invitation to ask questions which lead to controlled discussion.

NUTRITION

This subject which normally succeeds the nutrition instruction given in the tuberculosis sessions was elbowed out of its place in the line of precedence by considerable instruction on poliomyelitis, carried out month by month throughout all non-European areas. There was however, an innovation in the form of a seminar under the aegis of the National Development and Management Foundation of South Africa (Natal Region).

The seminar was organised with a view to instructing Bantu who supervise other Bantu in factories: delegates were therefore men who were leaders, natural or official in their factory group and would influence, lead and/or instruct fellow workers.

Under the title "Proposed Events for Bantu who Supervise other Bantu" there appeared such subject headings as "Discipline", "Waste", "Induction" and "Nutrition", the last being presented by two of this Department's Bantu lecturers. One gave the lecture, the other the live commentation on the Department's Bantu nutrition film, and both shared the honours of leading and channelling discussion and answering questions.

An English script, with strong Bantu idiomatic slant, was prepared with Zulu translation. It was lavishly illustrated by narratives from recent field work in factories, townships, beer halls and compounds.

Because factory fathers are important contacts in relation to child nutrition, kwashiorkor and infant malnutrition were included.

Nutrition Instruction for the Year

Bantu Community

Footmen with loudhailers	1,240 talks	
Loudspeaker van talks	39	= 1,279

Seminar

6 Lectures)	
6 Films with live commentation)	Discussions

Indian Community

Footmen with loud hailers	10 sessions
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Coloured Community

Group talks	145
Loudspeaker talks	9
Factories	3 sessions

VENEREAL DISEASES

A considerable amount of work was devoted to venereal diseases and particular attention was paid to the reasons for defaulting, failure to bring or to send contact partners and an

apparent rise in the number of cases of secondary syphilis amongst the Bantu. The information garnered was of invaluable use in health education field programmes.

Venereal Diseases Instruction

Bantu Community

Footmen, group talks	1,373
Loudspeaker talks from van	133
	1,506
Film sessions - schools	14

Coloured Community

Footman, group talks	235
Factory sessions, lunch hour	35
Films - sessions	10

Indian Community

Footmen - groups	53
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Bantu Administration Department

Daily throughout the year a lecturer was on duty among crowds registering and seeking work. Stress was laid on venereal diseases, tuberculosis, food-handler hygiene and especially for factory workers, nutrition. This work is especially valuable as many of these workers would not again come under personal and direct influence of health education.

Total sessions - 2,530. Attendances - 28,516.

IMMUNISATION PROGRAMME

One of the major functions of health education programmes among non-Europeans is to feed clinics and create a clinic awareness in mothers on behalf of their children. The clinic is the dominant note in teaching the preventive story of infectious diseases but it rises to a full crescendo every month when poliomyelitis day is observed at established clinics and at temporary mobile clinics which serve the surging crowds gathered at the behest of the voice of health education through the media of loudspeakers from vans and loud hailer operated by footmen.

Poliomyelitis (oral) Immunisation

(a) To say that the Bantu community received 1,276 sessions on poliomyelitis by footmen with loud hailer and 585 sessions from loudspeakers on vans, and that Indians received 1,929 sessions from loudspeakers on vans and 1,253 sessions from footmen with loud hailer is to give a 'flat' picture.

Against these statistics is the backdrop of hills and vales over which footmen trudge many weary miles often under burning sun and in contrary winds wilfully competing with and drowning the voice. There is the fatigue of open-air speaking in a throat-relaxing climate. Another impediment is the 'unbelieving' listener. After all, they think to themselves, we have not seen much of this 'new' disease with its tragic handicap, and anyhow there is tomorrow and tomorrow. Notorious is the Bantu mother of the illegitimate child who is not willing to be too deeply involved with the welfare of the child of an abandoned father, and there are those inured to the teaching of an oft told tale.

(b) Activities amongst the Coloured community living in townships, shacks and small groups scattered throughout the City are reflected in the following:

Group talks	445
Loudhailer	236
Loudspeaker van	235
	916

Diphtheria inoculation

Bantu Community

Illustrated by large model on van and by portable hand illustrations

620 sessions

Indian Community

Illustrated by large model on van and by portable hand illustrations

1,023 "

Coloured Community

Illustrated by large model on van and by portable hand illustrations

603 "

Smallpox Vaccination

Bantu Illustrated by visual aids

521 "

Indian " " "

174 "

Coloured " " "

343 "

Combined lectures on gastro-enteritis and bottle-washing demonstrations to Bantu community only accounted for 334 sessions.

In addition to the subjects majored above, bilharzia, kwashiorkor, food-handling hygiene and pest control were occasionally handled.

Through the years the Department's lecturers have slipped into the position of the people's friends and advisers and frequently return to office encumbered with problems they hasten to further off-load. They become identified with their own people in their dilemmas so that it is often necessary to restore their own perspective and balance by sympathetic analysis of the circumstances. It is a tribute to them that continually people come from their townships, factories and from hospitals to confide their problems and get their advice - more than one tuberculosis hospital patient has thus been persuaded not to abscond.

European

The European community, for various reasons including shortage of staff, is chiefly dependent on radio and press for its instructional guidance. Unlike the non-Europeans, it does not receive health education by means of loudspeaker vans, loud hailer talks and the like. Films are the main media as hereunder -

14 Film sessions to farmers on Milk Production,) Royal Agricultural Show,
Artificial Insemination and East Coast Fever.) Pietermaritzburg.

"The Invisible Guardian" - a pictorial story) 6 Sessions

portraying the unceasing vigil which the)
Department keeps over its citizens to ensure)
their protection from disease at all danger)
points as well as its promotive health)
engagements)

"Examine the Will to Work" - a film on the) 7 Sessions
subject of human relationships in working)
conditions shown to key factory personnel.)

"Witseerkeel" - the Department's production)
in Afrikaans on diphtheria, completed at the)
end of the year, was shown to the Natalse)
Christelike Vroue Vereniging.)

Training Non-European Staff

Frequently we are questioned about training non-European lecturers. One of the seniors recently volunteered, "The first important stage in our training is 'being demolished'." Questioned as to his meaning his cheery reply was, "We come here thinking we know "all the how" of what health education means; we have been teachers, preachers, leaders, etc. Then comes the process of demolition and it is only when we have been built up again do we realise how necessary that demolition was." He was reminded that The Book says -

"There is a time to break down and a time to build up, and a time to plant as well as pluck up. There is a time to keep silence and a time to speak".

X HEALTH INSPECTION

At full strength the inspectional staff is made up of a Chief Health Inspector, Deputy Chief Health Inspector, 10 Senior Health Inspectors and 42 Health Inspectors.

In addition, a number of Health Assistants (trainee Health Inspectors) and General Assistants are on strength. Health Assistants aid the inspectional staff in various ways, including carrying out of surveys in connection with the investigation of complaints of insect pests, poultry keeping, dirty yards and the like. The General Assistants confine their activities to rodent control measures and also to supervising labour gangs engaged on all phases of field work carried out by the Field Hygiene Section, and to other duties allotted to them from time to time.

At the end of the year there remained a shortage of Health Inspectors but early in the coming year it is anticipated that certain of the trainees will qualify and fill the vacant positions.

Durban is split into 34 health districts, these districts being made up to comprise 5 divisions. In charge of each of these five divisions is a Senior Health Inspector with a full complement (where possible) of one Health Inspector to each district. The Divisional Senior Health Inspectors with their respective Health Inspectors undertake all phases of routine inspection, investigation of nuisances, licensing applications, court procedure, and the like. Duties outside their scope are allotted to specialist sections as described under -

Dairies	:	1 Senior and 3 Health Inspectors. A separate report by this section is included.
Infectious Diseases	:	1 Senior Health Inspector
Tuberculosis:	:	1 Health Inspector
Housing and Plans	:	1 Senior and 1 Health Inspector; a separate report is submitted by this section.
Field Hygiene	:	1 Senior Health Inspector is in control of this unit and a separate report on this aspect of the work is returned.
kwaMashu Bantu Township	:	1 Senior and 1 Health Inspector. The activities of this section, however, are included in the general inspection report.

Inspections

Inspections of a routine nature totalled 140,491. This figure excludes inspections relating to infectious diseases, dairy farms, milk depots, housing and plans. A breakdown of this figure reflects the following -

Bakeries	251)	
Boarding houses, private hotels	1,583)	
Butcheries	3,892)	
Dairies, Milk Depots (in the City)	2,528)	
Food Manufactories	1,485)	
General Dealers and Fresh Produce	16,140)	Food-handling trades
Hotels (Liquor Licences)	1,681)	
Milk Bars	85)	
Offensive Trades	280)	
Restaurants, Eating Houses	5,660)	
Tea Rooms	1,819)	
Sundry	2,001)	
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General Dealers	6,461)	
Hairdressers	810)	
Laundries, Dry-cleaning Depots, etc.	967)	
Lodging Houses	9,423)	Non-Food-Handling trades
Offensive Trades	835)	
Sundry	9,874)	

Barracks, Compounds, etc.	699)
Dwellings	45,072) Non-trading premises
Sundry	28,945)

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In connection with the above, 8,268 personal notices were given, 3,113 written notices were served and 1,247 letters written.

Licence Applications

Reports on 2,848 applications for trading licences were submitted to the City Licensing Officer.

In addition 327 reports for permits to house Bantu were addressed to the Director, Bantu Administration.

Registration of Mattress Makers and Upholsterers

In terms of the Regulations regarding Mattress Makers and Upholsterers all operators are required to make application for registration each year. During 1962, 21 permits were issued and in one case registration was refused.

Animal Keepers:

In connection with necessary annual registration of animal keepers 39 permits were issued. These covered :-

Horses	996
Bovines	107
Donkeys	2
Dogs	255
Goats	13

No applications were refused during the year. In the course of the year 9 permit holders removed their animals (94 horses, 2 bovines and 2 donkeys) although most of the horses were re-registered at other premises.

With reference to dogs it is explained that only in cases where dogs, the property of some other persons, are accommodated for reward, is the possession of a permit necessary.

Complaints

In all, 3,417 complaints were received and attended to. These comprised the following:-

Animal keeping	3
Bugs	122
Cockroaches	28
Drainage Appurtenances	29
Defective Drainage (Storm and waste water)	343
Fleas	17
Flies	362
Food Hygiene	16
Food (Unsound)	15
Housing (Illegal)	21
Housing (overcrowding)	26
Lack of Sanitary Accommodation	31
Miscellaneous (unclassified)	56
Mosquitoes	594
Offensive smells	164
Poultry	79
Refuse dumping	128
Refuse removal services	10
Rodents	251

Shacks	1
Smoke/Air Pollution	14
Structural Defects	129
Unclean Conditions	291
Vacant Land (Overgrown, etc.)	685
Ventilation and/Or Lighting	2
	<u>3,417</u>

All complaints were dealt with expeditiously and in most cases remedied forthwith. On the other hand recourse to the Courts was sometimes necessary.

Foodstuffs and Food-handling

(a) City Markets

Every day when the market operated inspections of all incoming perishable foodstuffs were carried out. It was found necessary to condemn and destroy the following items -

<u>Commodity</u>	<u>Quantity</u>
Apricots	3 Boxes
"	4 Trays
Beetroots	10 Pockets
Broad Beans	3 Pockets
Cabbages	10 Bags
"	5 Sugar Pockets
Carrots	72 Pockets
"	5 Sugar Pockets
Cauliflowers	20 Pockets
Celery	1 Pocket
Cucumbers	11 Trays
"	157 Pockets
"	36 Sugar Pockets
Dressed Ducks	61
" Fowls	211
" Geese	10
" Turkeys	1
Feet (Poultry)	1 Lot
Giblets	21 Pockets
Guinea Fowl	1
Green Beans	706 Pockets
" "	36 Sugar Pockets
" "	17 Lots
" "	408 Trays
Lemons	24 Pockets
Lettuce	3 Crates
Mangoes	14 Trays
"	100 Pockets
Mixed Giblets, Heads and Feet	2 Plastic Packets
Oranges	11½ Pockets
Peaches	9 Cartons
"	3 Boxes
Pears	134 Cases
Pineapples	21 Lots (of 3)
Potatoes	1 Pocket
"	327 Sugar Pockets
Quinces	17 Trays
Sugar Loaf Cabbages	17 Hessian Bags
Strawberries	50 Pkts.
Tomatoes	687 Trays

(b) Food, Drugs and Disinfectants Act

The quota of foodstuffs to the State Health Laboratories and to the City Analysts was completed, 579 specimens being submitted. All these samples were taken, in turn, by one of the five Senior Health Inspectors in charge of the respective divisions. These comprised -

<u>Commodity</u>	<u>No.</u>	<u>Result</u>
Boerewors	32	3 Unsatisfactory. Fines R25.00
Cooking Oil	12	All satisfactory
Cream	33	" "
Dates	2	" "
Dripping	1	" "
French Polony	1	" "
Fruit Syrup (Lime)	1	" "
Honey	24	6 Unsatisfactory. Fines R75.00
Ice Cream	63	All satisfactory
Meat (Beef)	3	" "
Milk	219	1 unsatisfactory. No action as 21 days had lapsed.
Minced Meat	111	12 Unsatisfactory. Fines R250.00
Orange Squash	1	Satisfactory
Polony	1	" "
Polony Sausage	2	" "
Popsicle	1	" "
Raspberry Cordial	2	" "
Sausages	70	4 Unsatisfactory. Fines R60.00
Total Unsatisfactory		26
Total Fines		R410.00

Water Sampling

Although the City Engineer maintains a regular sampling and examination programme of Durban's reticulated water supplies this Department regularly submits samples both for chemical and bacteriological examination. Results indicate a high standard of purity.

This sampling also is a function of the Senior Health Inspectors in charge of the respective Divisions.

(c) Early Morning Inspections

On one morning each week, between the hours of 5 a.m. and 8 a.m., an Inspector was detailed to make surprise checks of all phases of food-handling in a selected area. These inspections covered bread and milk vehicles, food preparation premises and handling methods, and suitability of protective clothing, etc. On the whole, conditions have now attained a satisfactory level, indicating the value of these "outside of normal working hours" inspections.

(d) Beach Caterers:

A representative of this Department attended a meeting of the Committee of the Beach Caterers' Association. Various methods of protective covering of foodstuffs during delivery on the beaches were discussed. The outcome was satisfactory and suitable means of covering foodstuffs were mutually agreed upon.

Licence Applications - Hawkers and Pedlars:

In the latter stages of the year there was a spate of applications for the hawking of eggs within the City. If the hawking of this commodity becomes extensive much cause for complaint is anticipated. The age and condition of eggs when acquired by the hawker, his means of storage pending sale and the lack of means of redress by buyers of eggs found to be "off-condition" are factors that must be considered. Consequently this Department has opposed all such applications except where the applicant is an employee of approved, fixed, licensed food premises.

Applications to hawk live poultry have become common. This practice can give rise to much trouble particularly as both the seller and the purchaser may contravene the provisions of the "poultry keeping by-laws". Proper control of this type of trade is not easy.

Whaling Station - Bluff:

With the incorporation of the Bluff into the City of Durban this factory now falls within the scope of the Durban Offensive Trade Regulations. Senior officials of this Department met Executives of the Company and all implications of the Regulations were fully discussed. A comprehensive joint inspection of the factory was carried out and the Company indicated an appreciation of their responsibilities and promised full co-operation with this Department.

Removal of Piggery:

After protracted action by this Department all the pigs in a large long-established piggery in the Bellair area have now been moved to an inland farm.

Private Nursing Home:

A nursing home with many unsatisfactory features, following upon pressure from this Department, has been extensively altered and improved and is to re-open. The Director of Hospital Services has been notified that this Department will raise no objection, from a public health aspect, to re-registration of the premises as a nursing home.

Derelict Factory - Mosquito Nuisance

For some months prolific mosquito breeding conditions existed in plant and equipment in a factory left abandoned in the South Coast Junction area. The firm concerned gave this Department authority to carry out remedial measures against charge until such time as the plant could be removed or demolished. Such removal and/or demolition has now been completed and a source of nuisance removed.

Abattoir - Fly Nuisance

Considerable nuisance has been experienced in the vicinity of the Abattoir. The cause has been due to prolific development of flies in sweepings from cattle trucks on Railway property alongside the Abattoir. Representations were made to the Railway Administration and joint inspections carried out, but at the close of the year little progress had been achieved. The matter is being pressed further.

Overflowing Refuse Bins

Towards the end of the year certain nuisances arising from over-filled and insufficient refuse bins at crowded beach hotels, particularly at week-ends, were noted. The situation was aggravated by improper removal of "pig-swill" by the various operators. Early morning inspections were made and conditions noted. Where possible remedial measures were indicated on the spot. Hotel managers and "pig-swill" operators were contacted and various improvements suggested. Further, with the co-operation of the Cleansing Section, City Engineer's Department, the nuisance was reduced considerably.

Regulations Regarding Mattress Makers and Upholsterers

Irregularities in the manufacture of pillows were brought to light during the year. Pillows not bearing a required label inscribed thereon with the name and address of the manufacturer were found exposed for sale in a suburban shop. Investigations disclosed that Bantu women were carrying on a thriving business of pillow making on a vacant plot of land. Materials used were scavenged from the Tara Road refuse tipping site. As it could not be proved that the women were selling their products, legal action was taken against the shopkeeper who had the pillows exposed for sale in his shop. A fine of R15.00 was paid. A watch for a recurrence of these practices is being maintained.

Extension to City Boundaries

During August, 1962, the City was extended to incorporate the tip of the Bluff. Various food-handling, factory and other licensed premises are situated in this area. Preliminary inspection of such premises was concluded. Compliance with standards prescribed in City By-laws will be required where warranted.

Poultry Keeping

Representations were made to this Department to consider prohibiting, or severely limiting, the keeping of poultry within the City.

A cross-sectional survey of dwelling premises to determine the degree of poultry keeping was carried out. This survey disclosed that out of 4,409 properties poultry was owned by 1,069 occupiers. The majority of these poultry keepers operated on a small scale, about 89% of the 1,069 premises accommodating from 1 to 20 birds.

In the light of these findings it was decided not to press this matter providing the requirements of the existing By-laws could be complied with.

Sewer Blockages

The blockage of a sewer in the Oliver Lea Drive area gave rise to a serious nuisance and before clearance could be effected by the City Engineer a large area of land was flooded by sewage. The sewer was cleared and remedial spraying measures undertaken departmentally, Gross fly nuisance arose but was speedily eliminated.

A further major blockage at the Clairwood Race Course was attended to on a Sunday. Clearance was effected promptly by the City Engineer and following a request the fouled area was also cleansed and the soil treated to avoid an occurrence of offensive smells.

kwaMashu

Licensed premises, on the whole, were maintained in a satisfactory condition and recourse to Court action was rare. Due to expansion of trade two Bantu storekeepers found it necessary to build additional storeroom accommodation.

Complaints were received from licensed butchers in regard to illegal hawking of meat in the township. This practice was found to be rife and interfering with legitimate trade to a considerable degree. Proof of sale, identification of these persons for the issue of summons etc. made the task of prosecution and control by public health legislation impracticable. This matter was referred to the Director of Bantu Administration and to the City Licensing Officer.

The concrete lining of the main canal was completed and attention was directed to the concrete lining of sundry water furrows which discharge into the canal. Liaison with the City Engineer has resulted in certain "dead" sections of the main canal being filled in. This work eliminated conditions which could result in extensive mosquito breeding.

Conditions on the refuse tipping site were kept in a satisfactory state, about 1,500 cubic yards being dealt with each month. Approximately 1,500,000 gallons of sewage are handled daily and the sewerage works also were well maintained.

Chatsworth

Development of this township is proceeding apace. However, there is no justification, at this stage, to carry out health inspectional duties on a daily basis. Hence inspections are carried out twice weekly.

XI MILK SUPPLIES

The City's milk supplies are drawn in the main from the Midlands of Natal and East Griqualand from some 686 producers and is bulked and cooled at 11 up-country balancing stations. Thereafter it is transported to Durban mainly by insulated tankers. A certain quantity is received directly from the producers in locked cans.

The milk is pasteurised and bottled at four receiving depots in or on the periphery of the City and in addition to bottled milk, a small amount is packed in heat sealed waxed containers.

It is then delivered to sub-distributing points by refrigerated pantechnicons and final delivery to the consumer is by means of hand carts.

Milk Gallonage 1962 Average Daily Gallonage

Intake	36,139
Shrinkage	37
Distributed outside Durban	6,707.5
Consumed in Durban	29,394.5

Sampling

Regular sampling of all milk and milk products was carried out. Samples were delivered to the departmental milk laboratory for bacterial and chemical analyses. In addition, samples were submitted to the State Chemical Laboratories and to the City Analyst for chemical analyses.

Structural Requirements

The process of gradual improvement in the structures of dairy farms has continued. The following table indicates the structural progress made to 686 dairy premises during the year.

Standard of Premises	Percentage Conforming To.
91% to 100%	20.21%
81% to 90%	57.77%
71% to 80%	20.7%
61% to 70%	1.02%
51% to 60%	.3%
Below 50%	Nil

Number of Samples taken under Food, Drugs and Disinfectants Act

Milk	208
Cream	40
Ice Cream	52
Samples taken for tuberculosis examination	33

Prosecutions

Food Drugs and Disinfectants Act	Nil
Milk (and Milk Products) By-laws	4
Unsound Food (Public Health Act)	1

Balancing Stations

Regular inspections of up-country balancing stations were carried out throughout the year. The standard throughout was satisfactory as regards both structural and handling aspects.

Pasteurising Depots

Regular inspections of the pasteurising depots have been carried out and a close watch kept on handling methods and staff.

Introduction of Ice Cream

The introduction of ice cream manufactured outside the City has been permitted subject to the approval and annual registration of the manufacturer in accordance with the Milk (and Milk Products) By-laws for the City of Durban.

Pirate Milk Supplies

Regular checks were made at the Durban Railway Station and other points throughout the City regarding the possible introduction of unauthorised milk but in no instances was this practice found.

Statistics - Inspectional Programme

Total Dairy Inspections	3,303
Total City Dairy Inspections	2,017
Total Ex-City Inspections	1,286
Initial Dairy Farm Inspections	35
Country Depot Inspections/Sampling	281
Personnel Vi-Tested/Immunised	908
Personal Notices to Producers	268
Written Notices to Producers	853

Royal Agricultural Show

As in past years this Department, on the invitation of the Natal and East Griqualand Fresh Milk Producers Union, co-operated by providing a Dairies Inspector, and printed information for dissemination amongst the interested farming community of matters relating to dairy buildings and hygienic milk production.

Also in attendance was the Department's film projector unit and suitable films relating to dairy practice and milk hygiene were shown.

This year, an additional attraction was exhibited in the form of a number of models of dairy farm buildings, cowsheds, milking parlours, etc. These models were constructed and equipped by the staff of the Dairies Section. They attracted much attention, were commented on in the press and no doubt contributed to the "Highly Commended" Award which was subsequently awarded to the stall.

Laboratory Control of Milk Supplies

The following tests were performed during the year, the figures for the previous year being given in parenthesis. With very few exceptions all these tests were carried out in the City Health Department milk laboratory.

Bacterial Counts (Breed Clump Counts)	6,438	(7,438)
Presumptive B. Coli Tests	2,595	(1,817)
Tests for E. Coli Type I (faecal)	213	(255)
Methylene Blue Reduction Tests	485	(208)
Resazurin Reduction Tests	293	(120)
Phosphatase Tests (Aschaffenburg and Mullen)	2,537	(2,016)
Plate Counts (Roll Tube Method)	3,003	(1,694)
Titrateable Acidity Tests	223	(220)
Brucellosis (Stained Antigen)	689	(1,137)
Antibiotics (Disc Assay Method)	1,571	(3,879)
Sediment Tests for Visible Dirt	6,350	(7,310)
Butterfat Determinations	5	(10)
Freezing Point Determinations	3	(4)
Tests for Thermophilic Organisms	3,526	(338)

Tuberculosis (Biological)	33	(66)
Mastitis Tests (Direct Microscopic)	7,195	(8,896)
Turbidity Tests on Sterilised Milk	22	(36)
Clot on Boiling Tests	32	(10)

The following reflects a summary of tests done throughout the year on various dairy products:

(a) Pasteurised Milk

No raw milk is sold to the public. Pasteurised milk is sold by the pasteurising firms. During the course of the year a very modern milk handling factory was completed and became operational. It handles approximately 10,000 gallons of milk daily and replaced the existing factory that had become too congested.

A considerable amount of experimental work was carried out to compare our existing standards with those that are based entirely on the dye reduction tests. This work will continue and no final conclusions can be made at this stage.

The following tests were conducted on pasteurised milk:

Test	No. Samples (Bottled Milk)	Percentage Satisfactory	No. Samples (Canned Milk)	Percentage Satisfactory	No. Samples (Cartoned Milk)	Percentage Satisfactory
Phosphatase	1144 (1061)	100% (99%)	112 (53)	100% (100%)	37	100%
B. Coli (Presumptive)	1144 (801)	73% (70%)	112 (53)	77% (63%)	66	80%
B. Coli (Faecal)	206 (225)	95% (99%)				
Methylene Blue (after 18 hrs. at 65°F)	254	80%			40	92%
Resazurin (after 18 hrs. at 65°F)	264	90%			29	100%
Plate Counts	1107 (737)	48% (83%)	112	82% (100%)	66	95%
Titrateable Acidity	137 (208)	100% (100%)			4	100%
Thermoturic Organisms	579	43%			29	90%

(b) Ice Cream

Ice cream is manufactured by three companies in Durban. In addition this commodity is also introduced into the City from the Rand by two other firms. The following tests were carried out on this pasteurised commodity:

Test	No. of Samples	% Satisfactory
Phosphatase	200 (209)	100% (100%)
B. coli (presumptive)	200 (209)	65% (66%)
B. coli (faecal)	10	100%
Plate Counts	200 (209)	83% (93%)

(c) Soft Dairy Mix

Soft dairy mix is manufactured in the City by an ice-cream factory and sold to tearooms where it is dispensed to the public in a semi-frozen state by means of special machines. All soft dairy mix is pasteurised. The following tests were carried out on soft dairy mix:

Phosphatase	638 (357)	100% (100%)
B. coli (presumptive)	638 (357)	60% (65%)
Plate counts	638 (357)	91% (95%)

(d) Cream

Only pasteurised cream, processed in the City was sold to the public.

Phosphatase	150 (160)	100% (100%)
B. coli (presumptive)	150 (160)	72% (56%)
Plate Counts	150 (160)	90% (93%)

(e) Producer (Farm) Milk

Raw milk for pasteurisation arrives in the City either in cans or by insulated road tankers - more than two-thirds being transported in tankers. Individual producers are regularly sampled at inland depots before the milk is cooled and bulked. Certain tests are carried out at these balancing stations and the samples are returned to the central laboratory under refrigeration for further tests:

Test	No. of Samples	Percentage Satisfactory	
Breed Clump Count	6,350 (7,438)	76%	(77%)
Visible Dirt	6,350 (7,310)	88%	(85%)
Mastitis (Direct microscopic)	6,177 (8,896)	90%	(88%)
Brucellosis (Stained antigen)	603 (1,137)	99%	(99%)
Tuberculosis (biological)	33 (66)	100%	(100%)
Thermophilic organisms ("Flash" in-media roll tube)	2,448 (338)	75%	(70%)
Inhibitory Substances	1,305 (3,879)	97%	(97%)

The abovementioned figures point to an overall improvement in the hygienic quality of the milk. These figures include the East Griqualand area from where approximately 11% (13%) of the milk supplies are drawn.

Based on the Breed count only 8.9% (12.5%) of the total number of producers were considered to be consistently unsatisfactory. During the period under review counts for thermophilic organisms were regularly carried out on bulked herd samples. The presence of these organisms is indicative of unsatisfactory hygienic production methods and the keeping quality of the pasteurised product is adversely affected. By employing the "flash" in-media method a considerable number of these counts can be executed at a time. An arbitrary standard of regarding 50,000 organisms and more per millilitre as unsatisfactory for raw milk and 15,000 and more for pasteurised milk was adopted. Results showed that 25% of all thermophilic counts could not comply with this standard and that 20% of the total number of producers could be considered as consistently unsatisfactory. These results indicate that there is still room for improvement and special attention is being given by our field inspectorate to defaulters in this connection.

A safe margin between available fresh milk from registered sources and the actual daily intake was always maintained. Although the number of registered producers was reduced the average daily production increased from 67 gallons in 1961 to 76 gallons in the current year. The percentage of producers supplying 50 gallons and less per day decreased from 38% in 1961 to 33% and the number of larger producers increased proportionately.

Animal Diseases Affecting Milk Supplies

Mastitis: The incidence of chronic streptococcal mastitis, diagnosed by means of the microscopic examination of cream smears from all routine samples, has decreased to 10% (12% in 1961). Producers were given every assistance to combat the disease and the department provided a free diagnostic service to registered producers.

Herd samples were also tested for the presence of inhibitory substances such as antibiotics. Approximately 3% of these samples were positive for this test.

Brucellosis: A total of 603 tests, using the Stained Antigen Ring Test technique were conducted on raw bulked herd samples. Less than 1% were positive. About 1% of positive reactions were also found on 752 antigenic tests conducted on bovine blood serum by the Allerton Veterinary Research Laboratories at Allerton, Pietermaritzburg.

An active campaign to immunise susceptible animals with a reliable and readily available vaccine is being conducted by the State Veterinary Department.

Tuberculosis: A limited number of biological tests for tuberculosis were carried out on herd samples wherever indicated either by clinical examinations or from abattoir returns. No positive tests were recorded.

Only 78 herds have been registered under the Government Accredited Herd Scheme. There is no price incentive at the moment for dairymen to participate in a scheme that might involve them in considerable financial losses.

Infectious Bovine Infertility: Reliable figures are not available on the incidence of such diseases as Trichomoniasis, infectious epididymitis and vaginitis and vibriosis. Artificial insemination is, however, practised extensively in combating these diseases and the birth of more than 10,000 calves was credited to this practice in 1962 throughout the milkshed.

Other Diseases

Other diseases that have affected the production of milk directly or indirectly have been paratyphoid in calves, verminosis, plant poisoning (matricaria and seneciosis) and piroplasmosis and anaplasmosis.

General:

1. Five final year veterinary students from Onderstepoort spent three weeks in the Veterinary Hygiene Section of this Department and at the City Abattoir as part of their vocational training in Special Hygiene and Food Technology.
2. The Veterinary Medical Officer undertook the professional duties at the City Abattoir in the absence of the Abattoir Director.
3. A paper entitled "Certain Aspects of Milk Production and Distribution" was presented by the Veterinary Medical Officer at the 20th Annual Congress of the Institute of Public Health.
4. The meetings of the Natal Society of Dairy Technology were regularly attended by the Veterinary Medical Officer who also served on the Technical Sub-Committee of the above-mentioned Society.

XII FIELD HYGIENE

A marked decrease in mosquito incidence was noted in residences overlooking swamps in the southern extremity of the Bayhead under the ownership and control of the South African Railways and Harbours following upon the drainage of this reclaimed area.

Reclamation without drainage, however, at the northern perimeter resulted in severe mosquito nuisances to residents in the vicinity. Representations to the South African Railways and Harbours resulted in assurances that drainage would be provided but this assurance has as yet not been implemented. Mosquito breeding is at present being maintained at a minimum by South African Railway and Harbour Health personnel.

Biological Control

Wherever possible biological control of mosquitoes by the introduction of fish life has been substituted for spraying by this Department

Such a programme has resulted in a marked saving in the cost of insecticides (R8000 in 1959 and R4000 in 1962), relieved gangs for additional bush clearing and effected a notable decrease in mosquito development.

A close check has been maintained on all waters where fish life has been encouraged and in all instances an increase has been noted. The sewerage Maturation Ponds at kwaMashu have proved ideal for the multiplication of fish and during the year fish were netted and transferred to maturation ponds at Umlazi and Chatsworth.

No mosquito development has been located in either the Mere or Happy Valley where fish life is now in abundance.

Mosquitoes

Yards of Ditching		Oil Used		Other Insecticide	
1961	1962	1961	1962	1961	1962
286,552	371,670	1489 gals.	206 gals.	460 gals.	370 gals.

Bush Clearing:

The extent of overgrown land cleared by this section is increasing annually. in 1959, 225 acres were cleared; in 1960, 371 acres; in 1961, 451 acres and in the year under review 485 acres were cleared. This increase in output of 100% in three years has been achieved without any increase of labour force and has only been made possible as a result of the successful Departmental mosquito biological control programme, which has released labour.

Furthermore this increase can only be accurately assessed when it is borne in mind that it was accomplished during the period when burning was discontinued in favour of removal, a step taken on the recommendation of the Smog Control Officer and involving a far greater number of man hours, so much so, that the City Treasurer saw fit to increase the charges for bush clearing.

Bugs

Compound 4049 is still very effective in bug control measures and no resistant strain of bugs has been noted. Tests undertaken during the year with "SEVIN" revealed this insecticide to be an effective bug killer. However, in view of the low toxicity of compound 4049, with an L.D. 50 of 1600, as against "SEVIN" L.D. 50 of 500, it was decided to continue using the safer compound.

As a precautionary measure all personnel employed on full time anti-bug spraying are issued with protective clothing, respirators and goggles.

Insecticide Used		Rooms treated	
1961	1962	1961	1962
60 gals.	92 gals.	6,689	7,000

Rodents:

Throughout the year close liaison has been maintained with the Port Health authorities and all relevant data on rodent activity has been interchanged.

During the year 173 rodents were submitted to the State Health Department for purpose of plague index; all specimens were reported upon as 'negative'.

Poison index points have been maintained with an increased amount of poison used. There was a considerable increase in the number of rodents destroyed.

Rodents destroyed		Rodents sent for Plague index		Poisons used	
1961	1962	1961	1962	1961	1962
2,052	4,800	117	173	800 lbs. 1967 grms. (liquid)	1875 lbs. 1012 grms.

Flies:

After considerable experiments with sprays, fly destruction was confined to poisoning of adult flies using an organophosphate insecticide as the killing agent.

Insecticide used		Poison used	
1961	1962	1961	1962
5 gals.	Nil	1434 lbs.	960 lbs.

Cockroaches:

Regular spraying of manholes with compound 4049 and D.D.T. has kept the City's drains comparatively free of roaches. It would appear to be the tendency for the "Americana" roach to inhabit drains rather than the "Germanica".

Insecticide used		Manholes treated	
1961	1962	1961	1962
70 gal s.	153 gals.	36,356	45,834

Observations made during the year tend to confirm the opinion that there has been an increase in the City area of the "Germanica" species resistant to certain chlorinated hydro-carbon compounds. This resistance, however, has not been noted in the "Americana" roach.

XIII ALLIED HEALTH SERVICES

MEAT SUPPLIES:

The inspection of meat supplies entering the City is carried out at the Municipal Abattoir by qualified staff under the supervision of the Director, Dr. F.E. Cavanagh, B.V.Sc., to whom I am indebted for the subjoined report.

"Slaughterhouses:" The Durban Municipal Abattoir is the only slaughter-house permitted within the official "controlled" area bounded by Maidstone, Botha's Hill, and Winklespruit, but in actual fact serves a very much larger area than this, butchers from as far afield as Eshowe, Pietermaritzburg and Port Shepstone purchasing their requirements at this centre.

Accommodation: The number of animals slaughtered increases from year to year, and the accommodation and facilities were taxed to their utmost on many occasions during the year. In an endeavour to cope with this influx, improvements have been carried out to the cattle and sheep slaughter halls, and a tender accepted for the erection of sixty dual purpose livestock pens.

System of Slaughter: The Slaughter of Animals Act No.26 of 1934 (as amended) lays down the methods which may be used in the slaughter of animals. In Durban, bovines are first stunned with humane stunning pistols, and pigs are electrocuted, but sheep and goats are slaughtered by throat cutting to meet the religious requirements of the large Mohammedan community.

Meat Inspection: Carcases and offals are examined in accordance with the Regulations published under Public Health Act No.36 of 1919, by a staff of qualified meat inspectors under the supervision of a Veterinarian.

Treatment of Condemned Carcases, Etc.: All condemned and waste material is dealt with in terms of the Public Health Act.

Butchers' Shops: Supervision of premises throughout the City is carried out by the City Health Department.

Cold Storage: With the completion of a contract early in 1963, the conversion of the installation from the "brine" system, to the "dry air" system will be finalised, resulting in greater efficiency and economy in maintenance.

Government Commission of Enquiry: This Commission heard evidence in 1962, but its findings will not be made public until late in 1963, and consequently the City Council decision on the future of the Abattoir will be deferred until then.

Animals Slaughtered and Carcases Condemned:

	Bovines	Calves	Swine	Sheep	Goats
Whole Carcases condemned	1,869	330	1,124	1,011	55
Portions of Carcases condemned in lbs.	497,733	684	51,473	2213,722	4,844
Total No. of Animals slaughtered	114,361	11,142	61,370	520,676	19,702

The City Engineer has kindly furnished the following information on certain services of public health importance undertaken by his department.

1. CONSERVANCY

The following services were provided in the City.

<u>District</u>	<u>1962</u>	<u>1961</u>
Sydenham	372,850	372,353
Greenwood Park	445,734	424,439
South Coast	424,003	430,974
Bluff	298,793	300,159
Umhlatuzana	304,625	294,669
Mayville	396,705	412,817
	<u>2,242,710</u>	<u>2,235,411</u>

2. WATERBORNE SEWERAGE

Old Borough

It has been possible to continue the aim of providing waterborne sewerage to all properties within the Old Borough and new sewers have been laid in various districts.

With such funds and labour as the Council has been able to allocate, efforts have been concentrated on the relaying of old mains which, through age, have become defective and also inadequate as a result of the development that has taken place.

The opportunity has been taken to relay old sewers in those streets in the Central City where reconstruction has taken place.

The new Eastern Vlei sewer from Walter Gilbert Road to Sontseu Road has been put into commission. Work is progressing on the relay of the Calais Road - Melbourne Road sewer and plans are being prepared for the relay of the Western Vlei sewer which crosses the Durban Golf Course and Race Course. Progress on other sewers will depend on the availability of capital funds.

Incorporated Areas

Minor extensions have been made to the reticulation in various parts of the incorporated areas, but the existing system is nearing saturation point and until such time as the Sewerage Disposal Works have been completed, it will not be possible to bring many more properties on to the existing reticulation.

Works on the Jacobs Trunk Sewer and the Hillary main sewer have been completed in preparation for the commissioning of the Southern Disposal Works.

The areas north of the Umgeni River remain as before as regards reticulation and will have to await the completion of the Northern Disposal Works.

The policy of providing waterborne sewerage to the major Indian and Native Housing Scheme projects continues and independent means of disposal are provided for these schemes.

3. REFUSE REMOVAL

The collection and disposal of refuse was carried out regularly throughout the year. A total of 430,447 cubic yards was handled compared with 422,896 cubic yards in the previous year. The revenue from the collection of trade refuse was R71,199 compared with R72,167 in the previous year - a decrease of R968.

The mechanization of tipping procedure in regard to refuse disposal has increased immensely the efficiency of this activity.

4. STREET SWEEPING/WASHING

The sweeping of the streets of the City was continued regularly through the year and approximately 16,876 cubic yards of sweepings were collected compared with 25,434 cubic

yards collected in 1961, an increase of 1,422 cubic yards. Nightly washing of the Central City Areas was continued

5. AIR POLLUTION CONTROL

Smokeless Zones

A survey of all fuel burning appliances in the Berea, Morningside, Stamford Hill and Greyville districts was commenced with a view to declaring this area a "smokeless zone." One such zone already exists at the beach front and in the central area.

Complaints

Numerous smoke complaints were investigated, and assistance to the public to preclude further complaints was rendered by means of demonstrations, advice and tests carried out. Odour complaints from the Oil Refinery and Whaling Station were limited to 18. A recurring odour complaint emanating from a source north of the City was investigated and it became necessary to seek the co-operation of Government Departments in an endeavour to trace the source of the nuisance and in taking steps to eliminate it.

Smoke Emission Control

Smoke from locomotives, ships and 'buses was kept in check and a distinct improvement was noted in this field. Following representations made by the Department, the South African Railways appointed a new Smoke Inspector in the Durban area. More than 1,000 ships were boarded while in harbour to ensure their co-operation with the Cleaner Air Campaign.

Nine hundred and forty-eight privately owned public service vehicles and five hundred and thirty-four Corporation 'buses were taken off the road and sent to the Municipal Testing Grounds for examinations of smoky exhausts. Industrial smoke emission was further reduced during the year. Certificates of Merit were awarded to 17 firms for clean smoke records, and boiler management courses were organised in order to assist industry in the proper operation of boiler plant.

Government Commission and C.S.I.R.

Further co-operation was recorded during the year between a Government Commission dealing with the Air Pollution Prevention Bill, the National Physical Research Laboratory of the Council for Scientific and Industrial Research and the City Council.

6. WATER SUPPLIES

Water consumption

Total water consumption from August 1961 to July 1962	17,691,454,500
Daily average consumption from August 1961 to July 1962	48,469,738

Bacteriological Examinations

B.coli (most probable number in 100 c.c. water) expressed as percentages, 1961 - 1962:

(a)	<u>City Supply</u>	<u>Presumptive</u>	<u>Faecal</u>
	0	88	95
	1 - 10	11	5
	11 - 100	1	—
	101 - 1000	—	—
	Over 1000	—	—

(b) Water to Shipping

0	78	96
1 - 10	20	4
11 - 100	2	-
101 - 1000	-	-
Over 1000	-	-

Chemical Analyses

Average of Umgeni and Umlaas water (City supply)

pH	7.1
pHs	9.0
Colour (Hazen)	5
Conductivity	94
Turbidity	0.7

Parts per million of:

Total Solids	67
Dissolved Solids	67
Suspended Solids	Nil
Chlorine (Cl)	12
Fluorine (F)	-
Iron (Fe)	0.10
Silica (SiO ₂)	8.3
Ammoniacal Nitrogen	0.013
Albuminoid Nitrogen	0.064
Nitrite Nitrogen	Nil
Nitrate Nitrogen	0.15
Permanganate Value, 4 hrs.	0.5
Free Carbon Dioxide	4.5

Hardness, as CaCO₃

Total	32
Calcium	16
Non-Carbonate	2
Carbonate	30
Soda Alkalinity	Nil

From the abovementioned records it will be appreciated that the high quality of drinking water supplied throughout the City was maintained. Regular chemical and bacteriological checks were carried out in all districts and at all points of supply to shipping. New reservoirs and pipelines were sterilised before being put into commission.

7. Swimming Baths

Regular checks were maintained and British Ministry of Health Standards applied. Analytical results have been furnished regularly to this department.

8. Bathing Beaches

Bacteriological surveys of Beach and Harbour waters have been continued as in previous years and the results of these tests have been forwarded to the City Health Department at monthly intervals.

XIV LEGISLATION

EXTENSION OF BOROUGH BOUNDARIES

(a) Bluff

During the Course of the year the extremity of the Bluff was incorporated into the Borough. The large area involved consists in the main of Government-owned land used for defence purposes and the Island View oil sites occupied by a number of petroleum companies.

(b) Isipingo

The areas previously under the jurisdiction of the Isipingo Beach Town Board and the Isipingo Rail Health Committee were incorporated into the Borough of Amanzimtoti thus bringing to an end discussions as to the future of these two areas on Durban's southern boundary.

BY-LAWS:

(a) Dry-Cleaners' Establishments

In 1959 the By-laws were amended to control the "electric" dry-cleaning process where the solvent used comprised perchlorethylene. One of the conditions of approval for this type of business was that steam could only be raised in electrically heated boilers or appliances. This proved a hardship in some cases and representations were made to have the By-laws relaxed. As no public health nuisance was envisaged, a further amendment was adopted during the year to permit the raising of steam only in boilers heated by electricity or by an enclosed fuel burning appliance of a type approved by the City Medical Officer of Health and sited in a position approved by him.

(b) Food By-Laws

The By-laws adopted in 1960 precluded soil or waste pipes within any food room, so as to prevent any possibility of the contamination of foodstuffs. This, however, proved impractical in the design of many multi-storeyed buildings and some relaxation was demanded. The By-laws have now been amended to permit waste pipes within a food room provided they are below the level of all fitments to which they are connected therein.

(c) Milk (and Milk Products) By-laws: Appeal

The By-laws were amended in 1960 inter alia to prohibit a milk dealer or other person from selling any milk product for human consumption unless the same was pasteurised or sterilised in a milk depot within the City. During the year an application which was lodged by a manufacturer in the Transvaal for a certificate of registration to authorise the introduction of ice cream into the City, was refused by the City Medical Officer of Health. The applicant appealed to the Public Health Committee of the Council when legal opinion was obtained to the effect that it was legally permissible to grant registration if there was unlikely to be any danger to the public health. After detailed investigation the application was granted.

(d) Public Health By-laws: Clearance of Overgrowth

During the year the tariff for bush clearing work undertaken by the Department in default of a notice served on an owner of land was increased to be more in keeping with current costs. The amendment to the By-law also applied the tariff to any job carried out at the request of an owner.

REGULATIONS REGARDING EXCLUSION FROM SCHOOL ON ACCOUNT OF INFECTIOUS DISEASE

The protracted negotiations to secure amendment to the Regulations to bring them into conformity with current practice and medical opinion reached fruition during the year when the Minister of Health promulgated new regulations under the Public Health Act, No.36 of 1919. These regulations, regarding infectious Diseases - Exclusion of Patients and Contacts from Schools and Hostels, were published by Government Notice No. R.1905 dated 16th November, 1962.

During the course of the year the contents of the Bill were incorporated into the Regulations. The large area involved in the Bill was incorporated into the Regulations. The large area involved in the Bill was incorporated into the Regulations. The large area involved in the Bill was incorporated into the Regulations.

(b) Isolation

The most recently made the provisions of the Bill were incorporated into the Regulations. The most recently made the provisions of the Bill were incorporated into the Regulations. The most recently made the provisions of the Bill were incorporated into the Regulations.

BY-LAW

(a) By-Laws, Extension

In 1962 the By-Laws were amended to extend the "isolation" provisions to include the "isolation" provisions. In 1962 the By-Laws were amended to extend the "isolation" provisions to include the "isolation" provisions. In 1962 the By-Laws were amended to extend the "isolation" provisions to include the "isolation" provisions.

(b) Food By-Laws

The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions.

(c) Medical By-Laws, Extension

The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions.

(d) Public Health By-Laws, Extension of Government

The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions. The By-Laws were amended in 1962 to extend the "isolation" provisions to include the "isolation" provisions.

PROSECUTIONS

Code Contravened	Admitted Guilt	Found Guilty	Fine	Remarks
FOOD BY-LAWS				
Unclean conditions	18	11	293.00	1 Case: R25.00 or 25 days (Part suspended for 2 years). 1 Case: R20.00 or 20 days. 2 Cases: R15.00 or 15 days. 3 Cases: R10.00 or 10 days. 1 Case: R10.00 or 10 days (suspended for 1 year). 1 Case: R10.00 or 10 days (3/4 suspended for 1 year). 1 Case: R7.00 or 7 days. 1 Case: R6.00 or 6 days (suspended for 1 year). 1 Case: R20.00 or 20 days 1 Case: R15.00 or 15 days. 2 Cases: R10.00 or 10 days. 1 Case: R10.00 or 10 days (suspended for 1 year). 1 Case: R10.00 or 10 days (3/4 suspended for 1 year). 1 Case: R6.00 or 6 days (suspended for 1 year). or 10 days.
Exposure to contamination	5	7	120.00	1 Case: R10.00 or 10 days (3/4 suspended for 1 year). 1 Case: R6.00 or 6 days (suspended for 1 year). or 10 days.
Preparation of food in unapproved premises Unsatisfactory cleansing of utensils, etc. Unhygienic utensils, crockery, etc.	2	1 3	10.00 20.00 19.00	1 Case: R10.00 or 10 days (3/4 suspended for 1 year). 1 Case: R6.00 or 6 days (suspended for 1 year). or 10 days.
Absence of towels, nail brush and soap Absence of protective clothing	1 2	1 2	10.00 17.50	1 Case: R10.00 or 10 days (3/4 suspended for 1 year). 1 Case: R6.00 or 6 days (suspended for 1 year). 1 Case: R3.00 or 3 days. 1 Case: R5.00 or 5 days (3/4 suspended for 1 year). 1 Case: R5.00 or 5 days (3/4 suspended for 1 year). 1 Case: R5.00 or 5 days (suspended for 1 year).
Utilising foodroom as sleeping apartment Structural defects Exposure to contamination of food sold on beach Conveyance of bread in unauthorised vehicle Unclean containers Keeping of wearing apparel in foodroom Unsound foodstuffs. Unclean delivery van Inadequate hot water supply	1 1 1 2 1 1 1	1 1 1 1 1 1 1	15.00 10.00 10.00 16.00 15.00 7.50 10.00 10.00 7.00	1 Case: R10.00 or 10 days (suspended for 1 year). 1 Case: R5.00 or 5 days (suspended for 1 year). or 10 days or 7 days.

Incompatible articles in foodroom
 Absence of/inadequate refuse receptacles
 Keeping of live poultry on food premises

PUBLIC HEALTH BY-LAWS

Fly breeding

Absence of drainage

Depositing refuse on public roadway

Structural defects

Defective drainage

Defective sanitary fittings

Failure to paint exterior of premises

Unclean conditions

Inadequate lighting/ventilation

Privy where sewer available

Refuse receptacle uncovered/dirty

Keeping of pigs without a permit

MILK (AND MILK PRODUCTS) BY-LAWS

Milk below bacterial standard

Milk sold in unsealed containers

Unauthorised decanting of milk

Absence of refrigeration

BUILDING BY-LAWS

Unauthorised housing

MATTRESS MAKERS AND UPHOLSTERERS REGULATIONS

Selling unlabelled pillows

1	6.00	or 6 days (suspended for 1 year).
2	16.00	1 Case: R10.00 or 10 days.
1	10.00	1 Case: R6.00 or 6 days (suspended for 1 year). or 10 days (part suspended for 2 years).
2	70.00	1 Case: R5.00 or 5 days.
3	40.00	1 Case: Cautioned and discharged.
1	2.00	1 Case: R5.00 or 5 days.
8	85.00	2 Cases: R5.00 or 5 days.
7	65.00	1 Case: R5.00 or 5 days.
3	30.00	1 Case: R5.00 or 5 days.
2	15.00	1 Case: R10.00 or 10 days.
3	42.00	1 Case: R5.00 or 5 days.
1	15.00	1 Case: R2.00 or 4 days.
1	5.00	Cautioned and discharged.
1	5.00	
3	70.00	or 6 days (suspended for 2 years).
2	11.00	
1	1.00	
1	3.00	
1	10.00	or 10 days (suspended for 2 years).
1	15.00	

FOOD, DRUGS AND DISINFECTANTS REGULATIONS			
Preservative in minced meat	11	1	235.00
Excess preservative in sausages	7		105.00
Honey not conforming with chemical standards	10		95.00
	4		50.00
PUBLIC HEALTH ACT			
Sale of unsound foodstuffs			
TOTALS	111	46	R1,591.00
Total No. of Cases: 91			

XV STAFF AND FINANCIAL SUMMARY

Recruitment of technical staff occasioned less difficulty than had been experienced in some previous years and, generally speaking, the staff was maintained at the authorised established strength.

Health Inspectors

It is anticipated that for the immediate future vacancies for Health Inspectors will be readily filled, due to the availability of qualified personnel from the ranks of the Department's trainees. Of course, this favourable state of affairs may be short-lived and much will depend upon the nature of any new syllabus and regulations which may be introduced to supersede those presently applicable to the examination conducted by the Joint Examination Board of the Government and the Royal Society for the Promotion of Health.

Health Visitors

A number of Coloured and Indian Nurses sat for the Health Visitor's and School Nurse's Certificate at the end of the year, after completing a course of study at the M.L. Sultan Technical College in Durban. It is expected therefore that it will be possible to fill longstanding vacancies for Coloured and Indian Health Visitors in the coming year.

Mothercraft Training

In order to encourage the Department's nursing personnel to obtain the Mothercraft qualification, the City Council decided, subject to certain conditions, that special leave on full pay be granted to Health Visitors and Clinic Sisters who have completed not less than two years service, to enable them to undertake the course at the South African Mothercraft Training Centre at Claremont, Cape Province.

For many years, the Department has been unable to recruit mothercraft-trained Health Visitors and Clinic Sisters, with only the occasional exception. The City Council's generous assistance in this matter is greatly appreciated and it is trusted that within the foreseeable future the bulk, if not all, of the staff concerned will hold this very desirable qualification.

The following new positions were authorised by the City Council :

Exfoliative Cytology (Prevention of Uterine Cancer)

European : 1 Medical Consultant
1 Part-time Laboratory Technician
Indian : 2 Health Assistant (Grade II)

Maternal and Family Welfare

European : 1 Part-time Clinical Medical Officer

Staff Establishment

Section and Position	No.	Incumbent/Remarks
<u>Executive:</u>		
City Medical Officer of Health	1	Dr. A. Stephen, M.B.E., B.Sc., M.B., Ch.B., D.P.H.
Deputy City Medical Officer of Health	1	Dr. C.R. Mackenzie, M.B., B.Ch., D.P.H., D.T.M. & H.
Assistant Medical Officer of Health	1	Dr. G.L. Hilton-Barber, M.B., Ch.B., D.P.H.

Section and Position	No.	Incumbent/Remarks
Administration:		
(a) <u>European</u>		
Principal Assistant (Admin)	1	Thomson, A.H. (M.R.S.H.)
Senior Assistant (Financial)	1	Donkin, F.D.
Senior Assistant (Technical)	1	Poplett, D.J. (M.R.S.H.)
Chief Clerk	1	Kibble, G.A. (Cert. R.S.H.)
Senior Clerk (Grade I)	1	
Senior Clerk (Grade III)	2	
Clerk (Grade I)	3	
Clerk (Grade II)	4	
Clerk (Grade III)	6	
Principal Lady Assistant	2	
Senior Lady Assistant	2	
Lady Assistant	10	2 posted to Immunisation Service
Senior Typist	2	
Typist	4	
General Assistant (Unestablished)	1	
(b) <u>Bantu</u>		
Health Assistant (Grade II)	2	Posted to Tuberculosis Section
Watchman	2	
Labourer	1	
(c) <u>Indian</u>		
Clerk (Grade III)	1	
General Assistant	1	
Assistant	7	
<u>Epidemiology</u> (embracing tuberculosis, infectious diseases and venereal diseases control):		
(a) <u>European</u>		
Senior Clinical Medical Officer	1	Dr. N.L. Becker, M.B., Ch.B., D.P.H.
Operator - X-ray (Male)	1	
General Assistant	2	
Note: The following staff is posted from the Health Visiting and Health Inspection Sections for full-time duty in this section:		
<u>Tuberculosis Control:</u>		
5 Health Visitors		
1 Clinic Sister		
1 Health Inspector		
<u>Infectious Diseases and Venereal Diseases Control:</u>		
1 Senior Health Inspector		
1 Health Visitor		
(b) <u>Bantu</u>		
Health Assistant (Grade I)	15	
Health Assistant (Female)	2	
Interpreter/Cleaner	1	
Note: 2 Health Assistants (Grade II) posted from Administration Section for full-time clerical and other duties at Tuberculosis Clinics.		

Section and Position		No.	Incumbent/Remarks
(c)	<u>Indian</u> Health Assistant (Grade I)	6	
<u>Health Inspection:</u>			
(a)	<u>European</u> Chief Health Inspector	1	Johnston, M.M.
	Deputy Chief Health Inspector	1	Clayton, A.
	Senior Health Inspector	10	* Ashdown, N.D. Bannon, J.D. (retired 24.1.62) * Butler, M.W. (promoted 1.11.62) Clark, A.G. Crickmore, C.R.A. Harris, J.K. Hornby, A.V. Ingram, W.A. * McIver, E.I. (promoted 14.3.62) Smith, A.M. *+ Thomas, L.E.H. (retired 12.9.62) + Young, B.J.
	<u>Note:</u> Allocation of positions:		
	District and Food Hygiene	6	
	Housing and Plans	1	
	Epidemiology	1	
	Dairies	1	
	Field Hygiene	1	
	Health Inspector	39	Alder, C.H. Atkinson, C.E. * Bateson, J. (from 5.3.62) * Benians, P.E. * Booyens, M.M. * Brokenshaw, A.D. *+ Burgess, D.W. * Butler, M.W. (to 31.10.62) Butler, J.E. Currie, A. (from 1.3.62) *+ de Villiers, P.D. + de Beer, H.H. * Green, C.E.O. * Griffin, R.E. Griffiths, D.E. (from 1.8.62) *+ Hazle, A.D. * Hogan, J.P. Hull, V.H. (resigned 31.1.62) Jakins, T.I.N. Keen, F. * Knowles, D.H. * Marsh, H.N. McIver, E.I. (to 13.3.62) Moffitt, N.S. (from 1.8.62) * Moore, J.H. (deceased 23.8.62) * Ogden, G.B. * Pearman, E.F.J. Phillips, L.G.F. *+ Roberts, K.W.C. Roberts, A.J.L. Schou, M.S. Spence B.D. * + Spencer, D.W. *+ Stuart, R.A. (from 2.4.62 to 31.10.62) Sutherland, F.T. van Straaten, J.W. (resigned 30.4.62) Vorster, J.H. * Walsh, W.W. Woolley, G.W.R. * Worthington, C. Worthington, L.J. (from 1.3.62)
	<u>Note:</u> Allocation of positions:		
	District and Food Hygiene	34	
	Dairies	3	
	Plans	1	
	Epidemiology	1	
	No. of vacancies as at 31st December 1962 —	4	
	* Denotes Meat and Other Foods Certificate.		
	+ Denotes Tropical Hygiene Certificate.		

Section and Position		No.	Incumbent/Remarks
			Panel of Health Inspectors for emergency duties at Municipal Abattoir
			Hazle, A.D. Roberts, K.W.C. Spencer, D.W. 1 Vacancy
Health Assistant		12	Trainee Health Inspectors
Senior General Assistant		1	
General Assistant		7	Rodent Control
(b)	Bantu Health Assistant (Grade II)	2	
(c)	Indian Health Assistant (Grade I) Assistant	1 5	Rodent Control
Veterinary Hygiene:			
European			
Veterinary Medical Officer		1	Dr. A.J. Louw, B.V. Sc
Laboratory Assistant		1	
Lady Assistant		1	
Field Hygiene:			
(a)	European Supervisor	1	Nourse, A.D.
Senior General Assistant		1	
General Assistant		8	
(b)	Non-European		
Health Assistant (Grade I) (Bantu)		1	
Spotter (Mosquito) (Bantu)		11	
Spotter (Mosquito) (Indian)		2	
Labourer (Indian and Bantu)		98	
Health Visiting:			
(a)	European		
Chief Health Visitor		1	Eckhoff, E.J., Medical and Surgical, Midwifery,, Mothercraft and R.S.H. Health Visitor's and School Nurse's Certificates.
Senior Health Visitor		1	Rankin, M.H.E., Medical and Surgical, Midwifery, Mothercraft and R.S.H. Health Visitor's and School Nurse's Certificates.
Health Visitor		29	* Anderson, E.M. * Baines, K.M. * Barker, M.I. * Berghammer, A (from 7.2.62) * Boy, S. (from 1.3.62) *+ Brown, M.K. *+ Burdon, C.W. * Butler, M.A. (from 1.3.62) Dolkens, S *+ Essery, M * Goold, P. (from 18.6.62) *+ Hamlyn, E.F.
Note: Allocation of positions:			
Family Health Service		20	
Epidemiology:			
T.B. Control		5	
I.D. and V.D.		1	
Immunisation		3	

Section and Position	No.	Incumbent/Remarks
		*+ Harding, E. Hook, E.M. * Laue, H. * Longmore, F.B. * Meyerstein, S.M. *+ Mitchell, B.I. * Muller, M. * Norman, F.M. * Poulton, M.P. * Schwarz, C. (resigned 30.4.62) * Stead, R.J. * Sutherland, J.W. * Taylor, J.S. * van Dyk, I.N. (resigned 31.1.62) (b) *+ van Rooyen, M.W.A. (from 1.5.62) * Watts, D.J. * Webb, M.E. (c) *+ Whiting, A. + Wilde, M.A.
Clinic Sister	6	* Alcock, P.B. * Hardman, K.J. *+ Hunter, J.W. * Pettigrew, E. * Robinson, J.O. * Weston, M.A.
<u>Note:</u> Allocation of positions:		
Family Health Service	3	
Immunisation	2	
Tuberculosis Clinic	1	
		* Denotes Midwifery Certificate + Denotes Mothercraft Certificate
Clinic Assistant	13	
(b) Non-European		
Health Visitor (Coloured)	1	Vacant
Health Visitor (Indian)	2	* Reddy, T. 1 Vacancy
Health Visitor (Bantu)	19	* Nala, N. * Nkabinde, I. * Bhengu, M. * Mkize, L.D. * Kgoare, L. * Sibiya, F. * Ngqulunga, O.G. * Ndlovana, M.N. * Charles, G.T. * Zulu, K.M. * Moholo, D.V. * Malamba, M.V. * Mlambo, S. * Tsekiso, A. * Dotwana, H.B. * Mazibuko, P.A. * Mkwanzazi, K. 2 Vacancies
Nurse (Indian)	5	* Iyer, S. * Kalyani Reddy, G. * Reddy, R. 1 Vacancy * Denotes Midwifery Certificate

Section and Position	No.	Incumbent/Remarks
Health Assistant (Female) (Bantu)	8	
Health Assistant (Female) (Indian)	12	
Health Assistant (Grade II) (Bantu)	1	
Interpreter/Cleaner (Bantu)	5	
Interpreter/Cleaner (Indian)	4	
General Assistant (Indian)	1	
Labourer (Bantu)	1	
Labourer (Indian)	1	
Immunisation:		
Note: European staff comprising		
3 Health Visitors		
2 Clinic Sisters and		
2 Lady Assistants		
is posted from the Health visiting and Administration Sections on a full-time basis.		
Non-European:		
Nurse (Bantu)	2	Putini, D. Ntaka, E. (also holds midwifery certificate)
Health Assistant (Grade IX)(Indian)	1	
Health Assistant (Grade IIX)(Indian)	2	
Health Assistant (Grade II)(Bantu)	5	
Family Health (Child Hygiene) Service:		
Clinical Medical Officer	1	Dr. H.A.B. Pletts, M.B., B.Ch.
Part-time Clinical Medical Officer	4	Dr. M. Wagener, B.A., M.B., B.Ch. (resigned 14.12.62) Dr. E.K. McDonald, M.B., Ch.B. Dr. G.M. Gregersen, M.B., Ch.B. (resigned 29.6.62) Dr. H.E. Rose, M.B., Ch.B. (from 30.7.62) 1 Vacancy
Part-time Medical Specialist	1	Dr. L. Raftery, F.R.C.O.G., M.M.S.A., M.R.C.S., L.R.C.P.
Exfoliative Cytology: (Prevention of Uterine Cancer)		
European:		
Municipal Consultant	1	Professor Derk Crichton, M.B., Ch.B., D. Phil., F.R.C.S., F.R.C.O.G. (appointment effective from 3.1.63)
Part-time Laboratory Technician	1	
Indian:		
Health Assistant (Grade II)	2	
Maternal and Family Welfare:		
Part-time Clinical Medical Officer	1	Dr. H. Maisel, M.B., B.Ch., B.Sc. (from 1.11.62)

Section and Position		No.	Incumbent/Remarks
Health Education:			
(a)	European:		
	Health Educator	1	Goddard, Miss E.
	Technician	1	Godfrey, D.M.
	General Assistant (2nd Grade)	2	
(b)	Non-European		
	Lecturer (Coloured)	1	
	Lecturers (1 Indian and 2 Bantu)	3	
	Assistant Lecturer (Bantu)	1	
	Junior Lecturer (Bantu)	4	
	Junior Lecturer (Indian)	3	
Non-European Health and Medical Services:			
Venereal Diseases Clinic Staff:			
(a)	European		
	Senior Clinical Medical Officer (City Venereologist)	1	Dr. A.A. Wailer, M.R.C.S., L.R.C.P.
	Clinical Medical Officer (Female)	1	Dr. M. McAuliffe, L.A.H., L.R.C.P.S.I.
(b)	Non-European		
	Bantu Medical Officer	1	Dr. C.N. Dhlamini, L.R.C.P., L.R.C.S., L.R.F.P.S.
	Nurse (Bantu)	4	Cele, M. Emerson, R. * Mangole, B. * Nxumalo, V. * Denotes midwifery certificate.
	Health Assistant (Grade I) (Bantu)	2	
	Health Assistant (Grade II) (Bantu)	7	
	Interpreter/Cleaner (Bantu)	1	
Medical Bureau:			
	European:		
	Senior Clinical Medical Officer	1	Dr. M. Casson, M.D., M.R.C.S., L.R.C.P.

Total Staff Establishment

European	198	(including 8 part-time appointments)
Non-European	255	
	<u>453</u>	

FINANCIAL SUMMARY:

An abbreviated schedule of the actual cost of the services undertaken by the City Health Department for the financial year ended 31st July, 1962, is shown below:-

Expenditure

Salaries, Wages and Allowances	478,269
Drugs and Medical Requisites	18,892
Tuberculosis Hospitalisation (Government Hospitals—net cost)	40,812
“ “ (Other “ — gross cost)	162,281
Hospitalisation Infectious Diseases and Venereal Diseases	64,689
Transport and Subsidised Locomotion	41,995
Miscellaneous including Rents, Insurance, Telephones, Stationery, etc.	119,885
	<u>926,823</u>

Income

General	18,131	
Government Refunds under Public Health Act	356,629	
Recoveries from Infectious Diseases and Tuberculosis in-patients	4,937	
Health Services debited to Bantu Hostels and Locations	96,964	476,641
		<u>450,182</u>
Nett Cost		450,182

Capital expenditure is not included in the above schedule,

REPORT 'B' HOUSING

1. European Housing

During the course of the year a change has taken place in regard to European housing. There is in fact a shortage. During 1961 and the early part of 1962 there had been a decrease in privately promoted housing development, including blocks of flats. From the middle of the year, however, flat development has increased, and it is hoped that the needs of the middle and higher income groups will find a favourable balance in the near future.

From observations made it has been found that nearly all flats in newly completed buildings are soon occupied. The rapid occupation of these buildings, which are not rent controlled, would seem to stress the shortage. On the other hand, there is a constant demand for accommodation in rent controlled premises. The difference of rent in these two groups covers a range of R20 to R40 per month.

It is difficult to pinpoint the reason for this shortage. No doubt a combination of the under-mentioned factors have played their part :-

- (a) The lack of privately promoted development during the first half of 1962.
- (b) Natural increase of the population.
- (c) Influx of technicians, artisans etc. taking up positions in newly developed industrial projects. Included in this influx, allowance must be made for settlers from outside the Republic, such as Rhodesia, Kenya and overseas. Another factor, even though small is the retired couple or family settling on the Coast.
- (d) Investigations have also disclosed that there is a tendency for certain farmers to acquire flat accommodation for their families.

The City Treasurer has advised that the number of European housing applications on hand as at the 31st December, 1962, were :-

Purchasing Schemes	1,053
Letting Schemes	1,038

2. Coloured Housing

Privately promoted housing development for this section of the community has been next to nothing. Housing for this racial group, however, has been provided by Government authorities and the Durban City Council. The Council's contributions will be dealt with in the schedule elsewhere in this report. The number of Coloured housing applications with the City Treasurer as at the 31st December, 1962, were :-

Purchasing Schemes	622
Letting Schemes	327

3. Indian Housing

Private development in this sphere has made very good progress. A factor which seems to have influenced this progress is the declaration of Indian areas under the Group Areas Act. Would-be home owners now have the security to invest in property and in certain areas, houses of a very high standard have been built and compare very favourably with the best that can be found in European areas.

In addition to the private owner/builder several development undertakings have been established by land and estate agents, resulting in housing schemes in Sea Cow Lake, Reservoir Hills, Silver Glen, Mhlathuzana and Kharwastan.

The Durban City Council has played a major role in helping to provide suitable housing facilities for this section of the community. For many years progress has been slow, due to a number of factors. However, now that land has been acquired, this urgent housing problem has been tackled in a most vigorous manner. For all practical purposes the Merebank Scheme can be regarded as complete. It is very pleasing to record that the construction of houses at Chatsworth commenced during the year, and at the close of the year 819 houses had been completed. The number of Indian housing applications lodged with the City Treasurer as at the 31st December, 1962, were:-

Purchasing Schemes	5,727
Letting Schemes	1,348

4. Estimated Population in Community Groups

	Total	Percentage of Total Population
Europeans	169,212	27.46%
Coloureds	26,480	4.30%
Indian	230,803	37.46%
Bantu	189,695	30.78%

5. Municipal Housing as at December, 1962

Tabulated hereunder is a schedule reflecting the position of Municipal housing as at the 31st December, 1962.

A. Economic

	European		Coloured		Indian	
	Houses	Flats	Houses	Flats	Houses	Flats
Selling Schemes completed	1,672	—	510	—	3,085	—
Assisted/Loan Schemes	2,315	—	192	—	743	—
Letting	—	674	—	—	819	—

B. Sub-Economic

Letting (Aged Poor)	50	48	—	—	—	—
National Housing Letting	—	55	49	64	819	—
	4,037	777	751	64	5,466	—

Total Dwelling Units 11,095

Housing Units Completed during 1962

Race Group	Loan Schemes	Selling Schemes	Letting Schemes
European	27	—	—
Coloured	14	120	—
Indian	104	542	819
	145	662	819

Total dwelling units 1,636

6 Bantu Housing

In accordance with the City Council's policy, large scale housing activities have continued throughout the year on behalf of the Bantu community. These activities have been mainly in the kwaMashu housing scheme.

The development of kwaMashu is nearing completion, and when complete the original scheme is expected to house over 75,000 people. This figure will fall short of the original target and consequently consideration has been given to the extension of kwaMashu. Two new areas known

as Neighbourhood Units Nos. 11 and 12 have been planned and will be sited on the south-west side of the township. The provision of a new cemetery site of approximately 95 acres, has been included in these new areas. The extension to kwaMashu will comprise a total of approximately 825 acres and will contain 4,157 building sites, with an estimated population of 25,000. The original township plus the extension should therefore accommodate approximately 100,000 persons.

During the calendar year, 828 four-roomed houses, 606 two-roomed houses, one wooden hut and hostel accommodation comprising 2,000 beds were completed and handed over to the Department of Bantu Administration. The estimated total population of kwaMashu was 68,000 as at the 31st December, 1962, and the housing position was :-

5,944	4-roomed houses
2,359	2-roomed houses
2,502	wooden huts (1-room)
85	Block houses (1-room)
154	Serviced sites
10,944	hostel beds

In addition to the development of dwelling units, further amenities were added which included shops, a large Provincial Polyclinic and recreational facilities. The township now contains 52 trading premises, comprising general dealers, eating houses, butchers, offal dealers, fresh produce and aerated water dealers, market stalls, mahewa dealers, hairdressers, dry-cleaning receiving depots, cobblers, tailors, tinkers, bottle stores, wood and coal merchant and one garage. Fifteen schools and one nursery school are now established. A Municipal beer hall is in operation. Recreation facilities include five football fields, tennis courts, a swimming bath and a recreation hall. All religious denominations are represented with their respective churches. Towards the end of the year the electrified railway serving the scheme came into operation and three railway stations now serve the township.

Apart from this development, a further 32 "better" type houses were built for Bantu home owners during the year under review, 17 of these being situated in Lamont location, 10 at Umlazi Glebe and 5 at kwaMashu.

Other buildings completed during the year under the aegis of the Council's Bantu building programme included a creche at Chesterville, and six shops erected to traders' designs.

The Umlazi Mission township adjoining the Borough and which is being developed by the City Engineer's Department on behalf of the South African Native Trust is making good progress and a number of families previously living in the Cato Manor Emergency Camp have taken up residence in new houses in this scheme.

Cato Manor Emergency Camp

Steady progress has been maintained throughout the year in regard to shack demolitions. The rate of demolitions is dependent on the availability of alternative accommodation in other approved housing schemes. In the main, families have been re-housed in kwaMashu and in the Umlazi township. A few isolated families have been re-housed in Chesterville and Lamont. Should the present rate of progress be maintained, it is reasonable to assume that Cato Manor will be cleared of Bantu occupants during 1964.

Shack areas totally eliminated during the year are listed hereunder:

Two Sticks; Mjafete; Kwa Bengu; New Look; KwaMnguni.

Summary of Bantu Housing

<u>Locations/Townships</u> <u>Name</u>	<u>No. of Houses</u>	<u>Population</u> <u>(Estimate)</u>
1. Chesterville	1,265	7,600
2. Lamont (Sub-Economic)	1,911	11,500
3. Lamont Extension (Economic)	843	5,100
4. Umlazi Glebe	745	4,500
5. kwaMashu	11,130	57,000
78	Total	85,700

<u>Hostels/Dormitories</u> <u>Name</u>	<u>Beds</u>
1. Dalton Road (Male)	1,662
2. Grey Street (Female)	687
3. Jacobs (Female)	32
4. Jacobs (Male)	828
5. S.J. Smith (Male)	4,602
6. kwaMashu (Male)	10,944
Total	18,755

Total number of Bantu housed by Municipal Undertaking 104,455

7. Control of Premises (Slums) in Zoned Areas

There has been a gradual improvement in the Defined areas in the City. This improvement has, in some cases, reached the stage where consideration could be given to de-proclaiming some of these areas. The Department is, however, fully aware of further improvements that can be put into effect but this phase of the Department's activities must be regulated to the availability of houses for the various race groups as and when they become available.

8. Building Plans

During the course of the year a total of 2,751 plans were submitted to and scrutinized by the Department. This figure represents an increase of 242 plans in comparison with 1961.

Type of Structure	No. of Plans	No. of Units	Estimated Cost
New Private Dwellings 1/2 Rooms	—	—	—
3 rooms		19	
4 rooms		79	
5 rooms		334	
6 and over		83	
Total of Dwellings	495	515	R2,713,588
Flats 1 room		59	
2 rooms		215	
3 rooms		286	
4 and over		110	
Total	30	670	R2,648,940
Other residential buildings	3		R349,000
Industrial and Commercial Buildings	39		R2,240,500
Other New Buildings	14		R351,180
New Municipal and Government Buildings	8		R1,435,190
Additions to Residential Buildings	1,502		R1,494,391
Additions to Non-residential Buildings	655		R1,507,349
Additions to Municipal Buildings	5		R197,720
Total	2,226		R7,575,330
Grand Total	2,751	1,185	R12,937,858

The following is a summary of essential information relating to locations, etc.

SUMMARY OF ESSENTIAL INFORMATION RELATING TO LOCATIONS, etc.

Location or Township	Year Completed	Houses		Water Supply	Sanitation	Ablutions	Remarks
		Economic	Sub-Economic				
Chesterville	1946	—	1,265	Individual piped	Water borne	Showers to each house	Mother and baby clinic twice a week - City Health Department.
Lamont	Still being developed	—	1,911	Piped supply	Water borne	Showers to each house +178 communal washing gullies	Daily mother and baby clinic - City Health Department
Lamont Extension	Still being developed	843	—	Piped supply	Water borne	Showers to each house	- do -
Umlazi Glebe	Still being developed	10	735	45 Standpipes	Pit and Aqua privies	Communal shower houses	Mother and baby clinic twice a week - City Health Department.
kwaMashu	Still being developed	11,130	—	Piped supply	Water borne	Showers to each house	2 Mother and Baby clinics operate daily. Tuberculosis and Venereal Diseases clinics provided - City Health Department.

Chesterville Location is provided throughout with electrical power as are all hostels and dormitories. Electrical power is available in all other locations and townships, but only a few residents have taken advantage of this amenity.

CAUSES OF DEATH

APPENDIX 'A'

(Classified according to International Intermediate List of 150 Causes from Sixth Revision, World Health Organisation, 1948).

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total							
			Total 1961		M	Total 1961		M	Total 1961		M	Total 1961		M	Total 1961							
			M	F		M	F		M	F		M	F		M	F						
A 1	Tuberculosis of Respiratory System	001-008	13	4	17	14	9	4	13	13	102	35	137	129	27	13	40	42	151	56	207	198
A 2	Tuberculosis of Meninges and Central Nervous System	010									9	7	16	9	3	4	7	7	12	11	23	16
A 3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands	011									2	3	5	5	1	2	3		3	5	8	5
A 4	Tuberculosis of Bones and Joints	012,013				1						1	1	1				1		1	1	3
A 5	Tuberculosis, All other forms	014-019					1		1	2	10	5	15	17		3	3	6	11	8	19	25
A 6	Congenital Syphilis	020									2	1	3	1					2	1	3	1
A 10	All other Syphilis	022,023,026-029	1		1	7			2	2	5	3	8	9					6	3	9	18
A 12	Typhoid Fever	040												2								2
A 13	Paratyphoid Fever and Other																					
	Salmonella Infections	041,042																1				1
A 16	Dysentery, All Forms	045-048				5	2		2	1	29	16	45	39	2	5	7	5	33	21	54	45
A 20	Septicaemia and Pyaemia	053	4		4						4	2	6	6	1		1	6	9	2	11	17
A 21	Diphtheria	055		1	1						1	6	7	11	2		2	3	3	7	10	14
A 22	Whooping Cough	056		1	1						2	6	8	1	1	1	2		3	8	11	1
A 23	Meningococcal Infections	057																1				1
A 26	Tetanus	061								1	8	5	13	27		2	2	4	8	7	15	32
A 28	Acute Poliomyelitis	080												2						2	2	2
A 29	Acute Infectious Encephalitis	082				1				1		2	2						2	2	2	2
A 32	Measles	085				1	1		3	4	39	48	87	19	21	12	33	1	61	63	124	22
A 34	Infectious Hepatitis	092	1	1	2		1		1	2	1	2	3	2	1		1	3	4	4	8	5
A 41	Ankylostomiasis	129							1	1										1	1	
A 42	Other Diseases due to Helminths	124,126,128,130									1		1	1		2	2	2	1	2	3	3
A 43	All Other Diseases Classified as Infective or Parasitic	036-039,049,054,059,063-074,086-090,093,095,096,120-122,131-138			2																	
			2		2						1	1	1		2	1	3		5	1	6	
A 44	Malignant Neoplasm of Buccal Cavity and Pharynx	140-148	6	2	8	8					2	2	2			2	2	2	8	4	12	12

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961
A 67	Psychoses	300-309	1		1												
A 68	Psychoneuroses and Disorders of Personality	310-324, 326, 325															
A 69	Mental Deficiency																
A 70	Vascular Lesions Affecting Central Nervous System	330-334	84	99	183	7	8	15	37	32	69	79	93	172	207	232	439
A 71	Nonmeningococcal Meningitis	340	1	2	3	2		2	18	19	37	8	6	14	29	27	56
A 73	Epilepsy	353							3	1	4		1	1	3	2	5
A 75	Cataract	385	1	1	2										1	1	2
A 77	Otitis Media and Mastoiditis	391-393							1		1				1		1
A 78	All Other Diseases of the Nervous System and Sense Organs	341-344, 350-352, 354-369, 380-384, 386, 388-390, 394-398	3	2	5				6	7	13	6	4	10	15	14	29
A 79	Rheumatic Fever	400-402	6	4	10				1	1	2	5	4	9	6	5	11
A 80	Chronic Rheumatic Heart Disease	410-416							4	8	12	8	8	16	18	21	39
A 81	Arteriosclerotic and Degenerative Heart Disease	420-422	249	131	380	10	8	18	27	11	38	117	54	171	403	204	607
A 82	Other Diseases of Heart	430-434	46	44	90	2	7	9	35	22	57	27	33	60	110	106	216
A 83	Hypertension with Heart Disease	440-443	22	22	44	2	3	5	23	11	34	27	53	80	74	89	163
A 84	Hypertension without Mention of Heart Disease of Arteries	444-447	3	2	5				1	1	2	1	4	5	5	7	12
A 85	Other Diseases of Circulatory System	450-456	17	15	32	44	1	2	3	6	10	7	1	5	22	22	44
A 86	Acute Upper Respiratory Infections	460-468	10	10	20	28	1	1	7	2	9	8	2	3	18	15	33
A 87	Influenza	470-475	1		1				2		2			1	3	3	2
A 88	Lobar Pneumonia	480-483							1	1	2	2	1	3	3	2	5
A 89	Broncho Pneumonia	490	5	5	10	1	1	2	30	27	57	17	16	33	53	49	102
A 90	Primary Atypical, Other and Unspecified Pneumonia	491	48	44	92	15	2	17	128	112	240	174	156	330	365	314	679
A 91	Acute Bronchitis	500	2	1	3				5	10	15	3	8	11	10	19	29
A 92	Bronchitis, Chronic and Unqualified	501-502	20	2	22	1		1	3	1	4	11	6	17	16	8	24
A 95	Empyema and Abscess of Lung	518, 521	2	1	3				10	4	14	5	3	11	30	11	41
A 97	All Other Respiratory Diseases	511-517, 520, 522-527	18	21	39				5	10	14	8	4	9	33	29	62

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961
A 99	Ulcer of Stomach	540		1	1				1		1	3	2	5	4	3	7
A 100	Ulcer of Duodenum	541	4	1	5					1	1			4	8	2	10
A 102	Appendicitis	550-553		1	1						1			2		1	1
A 103	Intestinal Obstruction and Hernia	560,561,570	5	7	12			1	3	3	6	2	1	6	13	11	24
A 104	Gastro-Enteritis and Colitis, Except Diarrhoea of the Newborn	571,572	4	3	7	10	9	19	18			78	55	133	277	232	509
A 105	Cirrhosis of Liver	581	12	4	16	1		1	1	8	21	3	3	6	29	15	44
A 106	Cholelithiasis and Cholecystitis	584,585	1	1	2		2	2		1	1		1	1	1	5	6
A 107	Other Diseases of Digestive System	536-539,542-544,545,573-580,582,583,586,587,590	13	8	21	4	4	8	5	18	29	14	5	19	49	28	77
A 108	Acute Nephritis	591-594								1	1		2	4	2	3	5
A 109	Chronic Other and Unspecified Nephritis	600															
A 110	Infections of Kidney	610	10	2	12		2	2		6	9	10	7	17	26	14	40
A 112	Hyperplasia of Prostate	601,603,605-609	4	5	9	1	1	2	2	8	22	8	8	3	13	38	41
A 114	Other Disease of Genito-Urinary System	611-617,622-637	2		2				1	1	1	1		1	4		5
A 115	Sepsis of Pregnancy, Childbirth and the Puerperium	640,641,681,682,684	1	2	3					3	3		1	1	1	6	7
A 116	Toxaemias of Pregnancy and the Puerperium	642,652,685,686														1	1
A 117	Haemorrhage of Pregnancy and Childbirth	643,644,670-672		1	1					2	2	7	3	3	5	5	14
A 118	Abortion without mention of Sepsis or Toxaemia	650								1	1					5	5
A 119	Abortion with Sepsis	651					1	1								5	5
A 120	Other Complications of Pregnancy, Childbirth and the Puerperium	645-649,673-680,683,687-689			2			1	1				1	1		3	3
A 121	Infections of Skin and Subcutaneous Tissue	690-698									3					4	4
A 122	Arthritis and Spondylitis	720-725	2	2								2				2	2
A 124	Osteomyelitis and Periostitis	730										1	1	1	1	1	1

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961
A 126	All Other Diseases of Skin and Musculoskeletal System	700-716, 731-736	2		2												
A 127	Spina Bifida and Meningocele	738-744	1		1												
A 128	Congenital Malformations of Circulatory System	751															
A 129	All Other Congenital Malformations	754	1	2	3												
A 130	Birth Injuries	750, 752, 753, 755-759	5	2	7												
A 131	Postnatal Asphyxia and Atelectasis	760, 761	1		1												
A 132	Infections of the Newborn	762	10	7	17												
A 133	Haemolytic Disease of the Newborn	763-768	2	2	4												
A 134	All Other Defined Diseases of Early Infancy	770	3	1	4												
A 135	III-defined Disease Peculiar to Early Infancy and Immaturity	769, 771, 772	2	1	3												
A 136	Unqualified Senility Without Mention of Psychosis	773-776	30	12	42												
A 137	III-defined and Unknown Causes of Morbidity and Mortality	794	5	13	18												
AE 138	Motor Vehicle Accidents	780-793, 795	25	33	58												
AE 139	Other Transport Accidents	E810-E835	36	7	43												
AE 140	Accidental Poisoning	E800-E802, E840-E866	3		3												
AE 141	Accidental Falls	E870-E895	1	1	2												
AE 142	Accident Caused by Machinery	E900-E904	7	1	8												
AE 143	Accident Caused by Fire and Explosion of Combustible Material	E912	1		1												
AE 144	Accident Caused by Hot Substance, Corrosive Liquid, Steam and Radiation	E916	1	1	2												
AE 145	Accident Caused by Firearm	E917, E918		2	2												
AE 146	Accidental Drowning and Submersion	E919	1		1												
		E929	2	1	3												

Ref.	Cause of Death	Detailed List Numbers	European			Coloured					
			M	F	Total 1961	M	F	Total 1961			
AE 147	All Other Accidental Causes	E910-E911 E913-E915, E920-E928, E930-E965 E970-E979	8 25	1 2	9 27	11 28			1 5	22 9	
AE 148 AE 149	Suicide and Self-Inflicted Injury Homicide and Injury Purposely Inflicted by Other Persons (Not in War)	E980-E985	7	1	8	7	3	1	4	3 65	
TOTALS			937	661	1598	1635	111	94	205	247 1457	
CRUDE DEATH RATES			9.44			(9.85)			7.74 (9.67) 13.		

CAUSES OF DEATH IN RESPECT OF INFANTS (UNDER 1 YEAR)

APPENDIX 'B'

(Classified according to International Intermediate List of 150 Causes from Sixth Revision, World Health Organisation, 1948)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total	
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F
A 1	Tuberculosis of Respiratory System	001-008				4	1	5	6	2		2			6	1
A 2	Tuberculosis of Meninges and Central Nervous System	010				2	1	3	1			1			2	2
A 5	Tuberculosis, All other forms	014-019				3		3	3			1			4	4
A 6	Congenital Syphilis	020	1		1	2		2	1						2	1
A 12	Typhoid Fever	040				7		7	8			1			7	4
A 16	Dysentery, All Forms	045-048				1	1	2	2	1		1			2	1
A 20	Septicaemia and Pyaemia	053				1	1	2	2			1			2	2
A 21	Diphtheria	055				1	1	2	1						1	2
A 22	Whooping Cough	056				1	3	4	1						1	4
A 23	Meningococcal Infections	057				8		8	25						8	6
A 26	Tetanus	061				15	13	28	2	5		1	1	1	21	18
A 32	Measles	085	1		1											
A 43	All Other Disease Classified as Infective or Parasitic	036-039, 049, 054, 059, 063-074, 086-090, 093, 095, 096, 120-122, 131-138														
A 59	Lymphosarcoma and Other Neoplasms of Lymphatic and Haematopoietic System	200-203, 205										1	1		1	1
A 64	Avitaminosis and Other Deficiency States	280-286				19	12	31	26						19	14
A 65	Anaemias	290-293				1	1	2	2			1			2	2
A 66	Allergic Disorders: All Other	240-245, 253, 254, 270-277, 287-289, 294-299	1	1	1											
A 69	Endocrine, Metabolic and Blood Diseases	325				1		1				1			2	2
A 70	Mental Deficiency											1			1	1
A 70	Vascular Lesions Affecting Central Nervous System	330-334				1	3	4	1			1			1	5

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total					
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961			
A 71	Nonmeningococcal Meningitis All Other Diseases of the Nervous System and Sense Organs	340																		
A 78				2	1	1	1	11	8	19	15	6	2	8	5	18	10	28	23	
		1	1																	
A 82	Other Diseases of Heart	430-434			1				2	2	4	3	1		1		4	2	6	3
A 86	Other Diseases of Circulatory System	460-468							1	1	1					1	1	1	2	
A 87	Acute Upper Respiratory Infections	470-475			1				1		1					1			1	
A 88	Influenza	480-483							1							1	1	1	1	
A 89	Lobar Pneumonia	490							4	6	10	4	4	1	5	1	8	7	15	5
A 90	Broncho Pneumonia	491	1	1	4	9	1	10	8	75	139	173	45	51	96	90	129	117	246	275
A 91	Primary Atypical, Other and Unspecified Pneumonia	492,493																		
A 92	Acute Bronchitis	500		1	1				2	7	9	11		1	1	3	2	8	10	14
A 93	Bronchitis, Chronic and Unqualified	501,502	1						1	1	2		2	1	3	11	3	3	6	11
A 95	Empyema and Abscess of Lung	518,521		1	1					3	3	3	1		1	5	2	3	5	8
A 97	All Other Respiratory Diseases	511-517,520 522-527								2	2				1	2	2		2	1
A 102	Appendicitis	550-553								2	2	2			1	2	2	2	3	3
A 103	Intestinal Obstruction and Hernia	560,561,570			1								1		1		1		1	1
A 104	Gastro-Enteritis and Colitis, Except Diarrhoea of the Newborn																			
A 107	Other Diseases of Digestive System	571,572 536-539,542-544, 545,573-580,582, 583,586,587 600	2	2	4	7	8	15	13	140	261	178	56	35	91	70	205	166	371	261
A 110	Infections of Kidney	601,603,605-609, 611-617,622-637																		
A 114	Other Diseases of Genito-Urinary System					2	2				1	1			1	2	1	3	1	1
A 121	Infections of Skin and Subcutaneous Tissue	690-698																		
A 126	All Other Diseases of Skin and Musculoskeletal System	700-716, 731-736, 738-744																		
A 127	Spina Bifida and Meningocele	751	1		1		2	2		2	1	3	1			1	3	3	6	3

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M			F			M			F			M		
			M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961	M	F	Total 1961
A 128	Congenital Malformations of Circulatory System	754	1	2	3	2	1	2	4	5	9	7	2	9	12	10	22
A 129	All Other Congenital Malformations	750, 752, 753, 755-759	5	2	7	1	1	1	9	8	17	4	2	6	19	12	31
A 130	Birth Injuries	760, 761	1	1	2	1	1	1	15	7	22	6	3	9	22	11	33
A 131	Postnatal Asphyxia and Atelectasis	762	10	7	17	14	4	6	13	14	27	11	6	17	36	31	67
A 132	Infections of the Newborn	763-768	2	2	4	2	2	2	29	28	57	16	20	36	49	48	97
A 133	Haemolytic Disease of the Newborn	770	3	1	4	1			1		1	3		3	7	1	8
A 134	All Other Defined Diseases of Early Infancy	769, 771, 772	2	1	3	2	1	1	20	7	27	44	6	8	28	11	39
A 135	III-defined Diseases Peculiar to Early Infancy and Immaturity																
A 137	Unqualified Morbidity and Mortality	773-776	30	12	42	28	6	8	21	84	158	51	44	95	171	132	303
A 140	Accidental Poisoning	780-793, 795	1	1	2	2	5	5	1	60	105	2	2	4	68	48	116
A 141	Accidental Falls	E870-E895	1	1	2	1									1	1	2
A 143	Accident Caused by Fire and d	E900-E904															
A 144	Explosion of Combustible Material	E916								1	1	1				1	1
A 146	Accident Caused by Hot Substance, Corrosive Liquid, Steam and Radiation	E917, E918															
A 147	Accidental Drowning and Submersion	E929															
A 149	Homicide and Injury Purposely Inflicted by Other Persons (Not in War)	E910, E911, E913-E915, E920-E928, E930-E965				1			1		1				1	1	1
		E980-E985															
	TOTALS		61	31	92	65	37	59	57	544	991	962	231	186	417	686	1559
	INFANT MORTALITY RATES: (Deaths of Infants under 1 year per 1,000 live births)		27.23		(20.34)		49.62	(49.52)		148.20	(167.10)		54.77	(58.99)	82.63		(87.26)

BANTU BELIEFS AND CUSTOMS IN RELATION TO TUBERCULOSIS

APPENDIX C

For years we had known that deeply rooted Bantu beliefs, superstitions and customs strongly influenced Bantu behaviour, frequently mitigating against their receiving full benefit from medical treatment, often causing them to by-pass medical help in favour of traditional treatment even though the latter cost far more than medical fees, or changing over from hospital treatment to medicine men, to their own detriment.

From many sources over recent years there have been suggestions that the influence of the inyanga (medicine man) and belief in bewitchment were less entrenched than formerly. We have not shared this view.

In surveys, notably on tetanus neonatorum, kwashiorkor and gastro-enteritis the effect of applied Bantu beliefs often proved to be disastrous to health and not infrequently the probable cause of death, especially in infants.

But we strongly suspected that it was in tuberculosis, perhaps more than any other disease, that therapy applied to the Bantu patient by hospital and clinic was being undermined and obstructed by his strongly cherished beliefs; beliefs which rule adult behaviour regarding his condition, his conviction of the inefficacy of medical treatment in relation to himself and his family.

To suspect was insufficient. Two "last straws" impelled us to make investigations to ensure that future health education programmes might be adapted to the "deeper" need.

"Last Straw" No.1

They sat in our office. A well dressed Bantu mother and daughter of 16 years whose X-Ray two years previously had shown that she needed immediate treatment. For two years the Department's tuberculosis personnel had been following up the case urging regular attendance at the chest clinic but only spasmodic visits were made until now a later X-Ray showed a serious bilateral condition and urgent need of hospitalisation to which the mother doggedly refused consent. Finally two Bantu lecturers visited the neat home in the Bantu township and spent four hours with the mother in two sessions, and two hours with the father. The mother appeared to have capitulated and promised to be at the Department in the morning. She came: she sat aloof, her face as impassive as a sphinx. We talked to her. She sat unresponsive and silent, the atmosphere growing heavier with the unnameable in her heart. We asked the Assistant Medical Officer of Health to come and speak with kind authority to her and explain the worsening condition of her daughter - she listened, rigid, silent, expressionless. Bantu lecturers and European staff spoke understandingly to her but no lips moved, no eyes consented as she sat grim and set, apart and very lonely, beyond reach. After an hour sitting with us thus, she was taken aside by a European and spoken to in the idiom of "spiritual mysteries" which Bantu understand. The tears came and her consent ... Two years follow-up, six hours with parents and this long unrelenting hour before consent was given for one patient to be admitted to hospital!

"Last Straw" No.2

Bantu lecturers had been giving a series of health education demonstrations by means of films and models over a period of months with the permission of the Medical Superintendent of the King George V Tuberculosis Hospital.

"The Camel has his Thoughts and the Driver his"

It became clear that the patient's thoughts of his condition and the doctor's were antipodal. The doctor at the patient's bed, observing the disease, was thinking in a dimension far removed from that of the sufferer who, acknowledging his chest complaint as such, traced its cause to things which the "white doctor" did not understand. In effect he was, in his own thinking, suffering from two diseases -

- (i) The chest complaint, tuberculosis, which he thought was the product of a much more serious condition;
- (ii) the serious condition which was caused, he believed, by one or more of the 'mystical' factors with which the Bantu life is surrounded.

So in the halls of modern medicine we decided to make a test. After a lecture and live commutation on a tuberculosis film an audience of 129 patients were asked to signify by show of hands what they deeply believed about their illness.

71% were totally committed to the belief that witchcraft was the root of their trouble. Many acknowledged they were feeling better but, they added, the disease is not being cured, it is only put to sleep because when we return to our homes it wakes up. This belief favoured absconding. It was pointed out if the disease "woke up" it was because -

- (1) they had not had the doctor's 'all clear' before leaving hospital;
- (2) they had not returned regularly and for two years for check examinations, medicines and injections;
- (3) they had not eaten the correct foodstuffs;
- (4) contacts had not received treatment; and
- (5) they had been drinking heavily and not eating properly.

One point which struck them was the fact that Europeans in the same hospital suffered the same symptoms as they, received the same treatment, but were certainly not bewitched.

It was clear that much of the breakdown, relapses and carelessness amongst Bantu patients which give medical personnel so much heartbreak and discouragement were due to deeply rooted beliefs in witchcraft, medicine man, ancestral spirits and umthakati.

Study of 765 Bantu In-patients regarding influence of Tribal Beliefs on their Behaviour toward Medical Treatment for Tuberculosis:

Five Bantu lecturers for over two weeks moved from bed to bed, ward to ward, and amongst ambulant patients.

Progress was slow. Each patient was made to feel that the lecturer had a sincere interest in him, in his home, his part of the country, family and where he worked. Investigator and patient talked intimately as man to man about things dear to the Bantu heart until finally the conversation moved into enquiries about health.

WITHOUT EXCEPTION PATIENTS WISHED TO TALK ABOUT THE HIDDEN ILLNESS WHICH THE WHITE DOCTOR DID NOT UNDERSTAND. Some patients said, "These doctors take an X-ray of the lungs and treat the infection and we feel better, but they don't understand at all what CAUSED this disease. I hope the "hole" in the lung will soon be healed so that I can hurry home to get treatment from the inyanga or consult the insangoma to get a cure for the bewitchment which caused the patch in the lung." Thus they talked, thus they thought, thus they believed and thus they acted.

Before submitting the study results, it is essential to acquire an understanding, however remote and incredible to the European mind, of the power behind tribal beliefs; a power vested largely in three Colossi straddling the lives of a large proportion of the Bantu from the cradle to the grave.

The following lightly limned sketch is sufficient for the practical purpose of conveying something of the difficulties strewing the paths of health educators. There are of course many other unpredictables and imponderables of Bantu beliefs which have not been covered.

The Colossi:

- (i) The Isangoma
- (ii) The Inyanga
- (iii) The Umthakathi

(i) The Isangoma

A diviner, male or female, becomes such because usually he is convinced he has received a Call from the ancestral spirits to engage in the mysterious practices by which he learns to communicate with the spirits and interpret to his people the meanings of visitations in their lives such as illness, losses, and kindred troubles. It is alleged that the Call is frequently accompanied by supernatural signs, some of which appear on the flesh.

During his/her novitiate of about a year under the tutelage of a reputable recognised Isangoma, the novice lives a "separated" life akin to celibacy. He sits alone, avoids the "unclean", abstains from certain foods, undergoes tests until finally he is ready to communicate with the spirits.

It is this traffic with the invisible which gives him his extraordinary hold over his fellow men, especially as his prophecies and divinings often prove to be correct by subsequent happenings. Perhaps he has certain psychic powers in common with the claims of diviners of many other races. When therefore, illness strikes the kraal he is frequently consulted to find the cause; sometimes he prescribes and administers medicines, but more often he refers his client to a particular Inyanga, after diagnosing the condition. The Inyanga is the counterpart of the priest in mystery cults or religions.

(ii) The Inyanga

The Inyanga is a medicine man who plies herbs of the veld, bark, roots, fats, skins of animals for preventive and curative purposes. If he prostitutes his calling by using herbs to kill it is alleged that no medicines of his will ever heal again. It is a traditional calling usually passed from father to son, the latter understudying from one to two years before he "graduates". Years ago izinyangas (plural) specialised so that Mkize who dealt with worms and lived on the far hill would not dream of treating snake bite which was Duma's subject who lived down by the river. The Inyanga rarely fails to give herbs to induce vomiting which is called "Phalaza".

The feet of the Bantu are ever turned to the Inyanga in illness and trouble; he is a national and traditional figure; it was common for chiefs to have their own specially appointed Izinyanga; for faction fight casualties there was even a special Inyanga.

The Inyanga's shadow stretches far - people will travel miles to consult one, frequently leaving the town and free medical help to go to a man whose medicines have built up his reputation - and to pay him a steep fee!

It is claimed the Inyanga often knows what means to employ as an antidote for or to combat the evil of death dealing herbs and potions in which the third of the Colossi the Umthakathi trafficks. Thus the Inyanga is a man of great prestige and immense power.

The modern Inyanga, however, has a strong profit making incentive which may turn him into a scheming propagandist.

A white-haired African T.B. patient returning to chest clinic in a deteriorated condition after wasting time with an Inyanga was asked "Why do you return to the Inyanga after having benefitted from medical treatment?" He replied, "Oh, how he preaches! He talks till you forget all about treatment you have had; it is as though it never had been. He puts deep fear into your heart and sows it with doubts and it takes a long time to realize he wants more and more money!!"

(iii) Umthakathi

- (1) Umthakathi is a man or woman who might be termed a spiritual outlaw inasmuch as he had chosen to earn his living by trading on the baser emotions of his Bantu compatriots, such as jealousy, envy, revenge and personal hatreds, often culminating in the determination to kill.
- (2) His stock-in-trade are the harmful and poisonous herbs of the veld mixed with fats of animals; the ground neck and head of poisonous snakes also find their way into his potions. He is a sorcerer and at no time follows the healing art. He is engaged to impose illness on a victim or to cause his death by poisoning his food or khamba of beer. He may use an accomplice or perform the deed himself.

- (3) His reputation is built up on his successes. Victims, it is alleged die, but are certainly made very ill. Many legendary accounts declared to be factual even by educated Bantu, have invested him with fabulous powers. He is credited with being able to make lightning on a clear thunderless day, and we have known Bantu who state they have seen the snake he makes and that when it is killed it is hollow inside and quite unlike normal snakes. Is this latter in the tradition of the magicians of Pharaoh's court as referred to in the Old Testament?

The umthakathi figure is deeply feared and hated. He, of old, if caught in the act, was killed by the people.

- (4) He thrives because the primitive passions of the Bantu may be explosive and undisciplined. Many of the South African Bantu are still in that category. It should be understood, for instance, that it is commonplace for an enraged Bantu woman to burn down the hut of her neighbour guilty of a fancied or real offence against her, and she has been known to burn down her own hut with her husband and child within because of his defection.

It is therefore no cause for wonder that thousands of Bantu, when they are seized with an illness they do not understand, immediately believe

- (a) that they have been 'poisoned' (thakatiwe), bewitched etc. by Umthakathi;
- (b) that the person who caused the sickness, as well as the type of illness, must be 'smelled out' or 'divined' by the Isangoma;
- (c) the Inyanga must provide the healing herb for exorcising the Bantu sickness.

Three major questions put to each of the 765 patients during the investigation were :-

Question 1 - What do you believe caused this disease? How did you get it?

Answer - "Umthakathi" was the assured answer of 75% rural patients

"Umthakathi" was the assured answer of 39.53 urban patients.

Obviously, therefore, believing deeply that the cause of the illness was peculiarly Bantu and could not be treated by the white man, it would require the offices of an Isangoma to consult with ancestral spirits as to who may the enemy be and the antidote to be administered in the form of herbal potions. In some cases the Isangoma would supply the remedy, but more often he referred patients to the Inyanga (medicine man).

It was inevitable that if 75% of rural patients firmly believed that the illness emanated from the evil powers of the Umthakathi they would seek the help of the only one who in their opinion could help, namely the spiritual opposite, the Isangoma and/or Inyanga - the urban patients doing likewise.

It is interesting to note that of the 75% rurals who affirmed that their condition was caused by Umthakathi, 58% believed that it was induced by poison (idliso) of one form or another :-

- (a) by the food or drink into which had been introduced poisonous herbs;
- (b) by 'meqo'. Meqo is caused by the sprinkling of a mixture on a path over which the victim must cross, such as a threshold. It is alleged that it travels from the foot or feet upwards.
- (c) By a so-called love potion administered with good intentions by one desirous of winning love but which somehow goes awry - a considerable number of the tuberculosis patients believed they were in hospital through love potions.

The poisoning belief is a dynamic factor in the patient's life. As such it obsesses their conscious mind so that hospital patients yearn to be away to grapple with the evil through what they deem to be the only hope of success, namely the spirits of the Isangoma and the Inyanga's medicines.

Tuberculosis Contacts

It is a common belief when tuberculosis infection spreads through a kraal that Umthakathi has imposed vicious penalties for an alleged or real offence, great or small, by striking the family one by one, or that he has changed the goodwill of the ancestral spirits to anger. Often a beast must be slaughtered to propitiate the offended spirits and stay the disease.

Recently a Bantu mother wished to take her tuberculous child from a Mission hospital in order to slaughter a goat on the child's behalf. The European matron said, "I am not a prophetess but I do know that will not help the child's condition." Turning to a qualified Bantu nurse she said, "Do you believe it can?" She solemnly replied, "I believe to slaughter a goat would help."

It was patent that the next question of the investigation could be none other than -

Question - What measures did you take on first feeling ill?
Answer - 78.50% rural patients went to an Isangoma and Inyanga or Zionist prophet (the latter of a Bantu sect who imitates the methods of the Isangoma and Inyanga.)
41.47% of urban patients also took these measures.

As surely as in European practice a tuberculous suspect is X-rayed so surely every Bantu patient treated by an Isangoma or Inyanga is made to "phalaza". This is the first step towards his deliverance from that which "possesses" him.

Phalaza

To "phalaza" is to induce retching in order to evict from the chest and stomach the poison, or the evil, or the spell imposed by the Umthakathi. The herbal mixture concocted is invariably of such potency that the patient is left exhausted. Phalaza is practised domestically by the Bantu and is the staple home remedy for simple ailments such as biliousness. Great is the faith pinned in the phalaza practice and the more violent the results the greater faith in its efficacy.

Quite a number of patients in the survey acknowledged they were in hospital because of a haemorrhage which was probably caused by the potency of the "phalazisa" of the Inyanga.

A few wiser Isinyanga (medicine men) refused to phalaza patients who were patently in an emaciated state the urged them to go to hospital to have the "hole" in the lung healed knowing that phalaza would considerably worsen the condition, but admonished them to return to have the Bantu cause of the illness exorcised by phalaza after the lung was healed.

Question 3 followed a natural sequence.

Question ; After being discharged from hospital which treatment will you follow, or who will be consulted?
Answer - 59.17% of rural patients said they would go back to the traditional customs because, although the chest was better, there still was within a "something" caused by the umthakathi - a lizard, a poisoned piece of food, a poisoned grain of beer or sweet, the reason of the malaise of which European doctors were totally unaware.
35.27% urban patients replied likewise.
21.73% were uncertain as to what to do and felt they would like to hold on to a little of traditional and a little of medical treatment. It is notable that the urban patient percentages of these who follow the old order are lower than rurals. This is contributed to by :-

- (a) Health education teaching in the hospital in which the survey was taken, prepared by hospital staff and by highly trained experienced Bantu lecturers of this Department using visual aids.
- (b) An eighteen year health education programme instituted by this Department throughout all Bantu areas of the City in which tuberculosis and nutrition have been regular subjects.
- (c) The cured unrelapsed patient of the urban area is a potent witness to the wonder of hospital treatment, whereas the rural patient too often returns home to neglect treatment and re-checks and is more under the brooding influence of traditional treatment so that permanent results of healing are neither so many nor so dramatic.

In answer to question 2 and 3 it was observed that patients frequently stated that -

- (1) They only went to hospital because their money was finished and they had nothing more to pay the Inyanga and the hospital was free;

(2) The treatment they would choose after discharge would depend on their financial resources!

Unloading

Again and again in the hospital Bantu patients continually emphasized the comfort and relief it was to them to tell their secret fears and mysterious illnesses to one who would listen and understand. "We know", they would say, "that the white doctors want to help us, but if they don't understand what we are suffering from, if they don't even ask us about our illnesses how then can we have confidence that we shall recover FULLY since they know only part of the story?"

Relapsed Patients

The gross wastage of treatment in avoidable relapses of the disease in patients is deplored by all tuberculosis workers. It was interesting therefore to trace the more obvious contributory causes in 99 relapses.

Of these 99 there were 59 rural patients and 40 urban, viz:

Rurals: 47 were first relapses
11 were second relapses
1 was a third relapse
59

Of these 59: (a) 31 or 52.54% totally neglected to take pills or return for treatment in order to re-commence with an Inyanga and phalaza or took pills irregularly;
(b) 24 or 40.68% completely neglected all treatment and ignored their conditions; and
(c) 4 of these 59 drank very heavily.

Urbans: Of 40 relapses - 37 were first relapses
3 were second relapses.
Of these 40 relapses 17 or 40.50% were as (a) above
17 or 50.50 were as (b) above
and 6 40.50% were as (c) above

Nutrition

In addition many had failed to grasp the importance of nutrition because -

- (i) They had not observed the type or quality of food given them in hospital;
- (ii) Hospital staff had insufficient time to explain the why and wherefore of their diet and recapitulate the teaching; and
- (iii) patients had not grasped the part nutrition plays in the prevention and cure of their disease.

Conclusion

It is not enough to say with Pascal "the heart has its reasons which reason does not know", it is imperative rather that health education recognise the influence and power of the three colossi under which so large a majority of the Bantu live their days and formulate a health education programme in which they are skilfully included, wisely dealt with and in which they are more than matched with imaginative teachings. To ignore them is to invite unnecessary failure amongst a large proportion of patients, to ignore them is to reduce the power of preventive teaching, and to encourage the spread of infection after absconding or on discharge returning to the mysteries of ancestral spirits and the "expulsive" potions of the Inyanga. One does not ignore the factor of alcohol when dealing with an alcoholic!



