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

CITY OF DURBAN

Annual Report

OF THE

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDED 31st DECEMBER 1969

Durban Corporation

ANNUAL REPORT : 1969

REPORT 'A'

REPORT 'B'

City Health Department,
9 Old Fort Place,
DURBAN.

December 1970

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

Mr. Mayor, Ladies and Gentlemen,

I have pleasure in presenting, in terms of Section 13 of the Public Health Act, as amended, the 67th Annual Report on the public health of Durban, with which is incorporated an account of the activities of the City Health Department during the calendar year 1969.

Following the pattern of recent years Durban continued to expand commercially, industrially and as a holiday resort. Incorporation of a small area into the city increased its size from almost 98 to 102.25 square miles. The estimated population at the year's end was 709,808, an increase of some 13,500 over the previous year. The outcome of the census in 1970 is eagerly awaited as it is probable that a reluctance to rely heavily on the estimated figures will be justified.

In the European and Indian communities diseases of the heart and circulatory system remained the major cause of death, pneumonia holding this position in the case of the Coloureds and Bantu. It is of note that the second most frequent cause of death amongst the Bantu fell under the category of diseases of the heart and circulatory system.

In all race groups except the Coloureds the infant mortality showed a decrease which was welcomed. However, the rate for the Bantu of 103.39 leaves a great deal to be desired and much up hill work obviously remains to be done, including improving further their standard of living. It is as yet unlikely that family planning will make a much needed impact on the birth rate, despite the increased and sedulous health education and clinic programmes of both the Association for Maternal and Family Welfare and this Department.

The continued closure of the Suez Canal doubtless increased the business and tourist activities of this harbour city whilst the large traffic from the East, often making its first port of call at Durban, demanded a close watch on global epidemiology. In this respect it is of note that the total number of smallpox cases in the world showed a considerable decline.

No local cases of formidable epidemic diseases occurred in the City during the year, but stringent precautionary measures were enacted on two separate occasions when imported cases of Variola minor were found in a local hospital's out-patient department and at the Municipal Abattoir compound respectively. Although one quarantined contact developed the disease, no spread within the City eventuated.

The number of cases of diphtheria, 29, remained at much the same level as in the previous years, although the deaths increased from four to seven, none of the latter having ever been immunised. The ready availability of free immunisation services and wide publicity given to the disease and its prevention leaves little excuse for these tragedies. The resurgence of poliomyelitis experienced elsewhere in the Republic was also reflected in Durban, 22 cases being notified, as against none in 1967 and 13 in 1968.

The number of cases of typhoid fever rose by one case only; none the less the number of cases, 44, remained at a relatively high level for a modern city. The 16 notifications of paratyphoid fever, mainly in respect of under four year olds, were an unusual feature of the notifiable diseases, and even more so the one death from paratyphoid C infection. Viral hepatitis increased, notifications numbering 141, the Asiatic and European groups being most affected. An increase in the number of cases of tetanus was recorded, eleven cases of tetanus neonatorum and 17 of tetanus occurring. In all there were 11 deaths, giving a fatality rate of 39%, which is the same as that for the United States of America for the year under review.

The single major problem facing the personal preventive health services of the City was again pulmonary tuberculosis, although it is of note that for the second year in succession there has been a slight decrease in notifications, this applying to the Bantu community as well, who have the highest attack rate (5.89 per 1,000 population). An overall impression is not only that the slowly improving standard of living of the City Bantu is making this community less prone to attack but also that the disease is now being diagnosed at an earlier stage than some years ago. However, the notifications which numbered 1,884 clearly demonstrate the need to explore every facet in the armamentarium against this Republic wide scourge, including raising the standard of living of the groups most affected.

In April 1969, the Chest Clinic was taken over from the State by the City Council, with the result that this Department operated all facilities for the outpatient diagnosis and treatment of cases of pulmonary tuberculosis in Durban. It is pleasing to record that the "take over" proceeded smoothly, a high degree of co-operation existing

on both sides to the benefit of the patients. It is considered that the control of all tuberculosis outpatient services in the City by one authority can only be to the advantage of the patient and assist in the relentless war on this incapacitating infectious disease.

Attendances at the child health clinics remained at a very satisfactory level and the State-subsidised skimmed milk powder scheme continued to receive support. Deaths from malnutrition and kwashiorkor in the under five year olds continued to decrease and occurred only in the Bantu. In view of the ready availability of skimmed dried milk at all clinics there is no reason for any deaths to occur amongst the City children. The high proportion of deaths (41) from kwashiorkor suggests that many were imported cases.

The scheme for the early detection of uterine cancer, started in 1963 by the City Council, continued to receive increasing support, 7,306 examinations yielding 17 confirmed cases of malignancy. Since the inception of the scheme 135 proven cases of malignancy have been found from 32,380 examinations; the yield of positive cases per 1,000 examinations has decreased over the years, but this could possibly be due to the number of repeat and annual re-examinations.

Free immunisation against smallpox, diphtheria, whooping cough and tetanus both by intensive campaigns and as a routine measure continued at a high level, whilst oral immunisation against poliomyelitis was sustained at a satisfactory rate, some 131,600 doses being administered.

Early in the year, following reports of the morbidity of Hong Kong influenza sweeping the world, it was decided that certain key categories of the public should be protected. In all 7,567 persons were immunised, using a multidose jet injection apparatus. In the event the epidemic proved to be only mild in degree and symtomatology. Three cases of severe immediate anaphylactic shock occurred as well as numerous incidences of sore arms and erythematous local reactions.

Although health education was pursued by virtually all officials in the Department, the separate health education section of 21 persons spearheaded various projects and also carried on much routine work by means of films, slides, group talks with visual aids and house-to-house visiting. Drug dependence, use and misuse, was a notable inclusion on the list of topics presented, although it was strongly felt that the plethora of material offered from a wide variety of sources on this subject required co-ordinating if the best interests of the public were to be served.

Environmental sanitation and health inspectional work continued at a high standard, once again particular attention being devoted to food hygiene. In the course of the year

certain bacteriological standards for foodstuffs were promulgated and these by-laws made it possible to introduce a bacteriological food sampling programme. Preliminary bacteriological screening was carried out in the Departmental milk laboratory.

Some further palliative measures were carried out at the Indian Market but it still fell very far short of desirable hygienic standards. In addition it served as an attraction for illegal pavement vendors who contributed in constantly reducing the environs to a most insanitary state. The municipal poultry abattoir could not meet the requirements of the regulations framed under the Animal Slaughter, Meat and Animal Products Hygiene Act and only continued on a temporary certificate of registration. The early provision of a new poultry abattoir, either by the City Council or private enterprise, will be essential if slaughter of birds is not to be carried out under illegal and doubtful to say the least, sanitary circumstances.

Planning of and a start on a paper but not a chemical pulp mill, the latter having been specifically excluded in Durban, proceeded apace and it is anticipated that this offensive trade will make use of semi-treated sewage, taking an amount of over seven million gallons daily in the foreseeable future.

The use of a chemical herbicide to eliminate Kariba weed in the ponds of the Northern Sewerage Works resulted, for various reasons, in some of the weed killer being dispersed over nearby market gardens. The leaf destruction and "spotting" of plants suggested a high degree of toxicity of the chemical, and after consultations with State and professional authorities had pointed to the need for great caution, particularly because vegetables often eaten raw were affected and as translocation of this chemical in root crops was in doubt, all the saleable vegetables were seized. Fourteen days later sufficient evidence, including analytical reports, was available to withdraw the certificates of detention as the presence of the herbicide in the contaminated plant leaves was of a sufficiently low concentration to be well within acceptable limits.

Towards the end of the year new Smoke Control Regulations were promulgated, increasing the smokeless zones in the City. The increasing use of smokeless fuels and oil by industrial enterprises, hotels and like large users of fuel has eliminated much of the smoke pollution from these sources, whilst close attention to pollution abatement in offensive trades, both existing and new, has played a part in reducing not only offensive aerial but also unpleasant and harmful liquid, effluents.

Progress in implementing the City Council's 15 year programme of providing waterborne sewerage to the whole city was made, albeit not as rapidly as one would wish. Trunk sewers and reticulation laying, together with the commissioning of four pump stations, accompanied work on the three main sewage works, the two sewer sea outfalls having been completed.

Monitoring of the discharge from these and the surf zone was carried out by the Council for Scientific and Industrial Research under the control of a Steering Committee established solely for this purpose.

The cessation of sewage discharge into the harbour entrance was indeed a major accomplishment in this long term plan. None the less an efficient trouble free sewerage system covering the whole of the City continues to be the major environmental public health need confronting the municipality.

An ever growing demand for housing in all sections of municipal assisted schemes occurred, particularly amongst the Coloured community and in three racial groups despite the combined efforts of the City Council and the Department of Community Development. In regard to Bantu housing, however, State schemes where the construction was carried out by the City Council on behalf of the South African Bantu Trust proceeded apace and some 1,400 houses were handed over for occupation.

Slum clearance continued but not at a fast pace as care was needed at all times to ensure that no one was left homeless and this required a judicious balance between declarations for demolition and availability of housing being maintained. The co-operation received from the Slum Clearance Court and the Department of Community Development in this regard is worthy of mention.

Medical personnel were difficult to recruit and this hardship was accentuated by the take over of the Durban Chest Clinic. Three posts were filled by retired medical practitioners whilst even part-time posts remained vacant for long periods. Towards the year's end it was apparent that recruitment of health visitors and health inspectors to fill vacancies would pose problems in the coming year.

My thanks are due to the Mayor and City Councillors for their continued support in matters of public health and particularly to the Chairman and Members of the Public Health Committee for their active assistance and encouragement at all times. The helpfulness afforded me by the Chairman and Members of the Municipal Service Commission and also of other Heads of Departments and their staff is acknowledged with appreciation.

To the members of the Press and the South African Broadcasting Corporation I am deeply grateful for their invariable co-operation in bringing to the notice of citizens matters of concern in public health, always with studied circumspection and so acting as an essential link between my Department and the public.

In conclusion I must pay a special tribute to each and every member of the staff of the City Health Department for their loyalty and team spirit coupled with a consistently high standard of work.

Yours faithfully,

C.R. Mackenzie
M.B.; B.Ch.; D.P.H.; D.T.M. & H. (Rand); F.R.S.H.;
Honorary Senior Lecturer in Public
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CITY MEDICAL OFFICER OF HEALTH

REPORT 'A'

I. HISTORICAL AND GEOGRAPHICAL

(a) Historical Background

Since the promulgation of Durban as a borough in 1854, when only 1,200 persons occupied an area of 12 square miles, the City has rapidly increased in size mainly through the incorporation of additional areas. The largest addition was the inclusion of the health board areas of South Coast Junction, Umhlatuzana, Mayville, Sydenham and Greenwood Park in 1932, which expanded the area to 70 square miles containing 215,000 persons. The addition of kwaMashu Bantu Township in 1957 and Chatsworth Indian Township in 1961 increased the Municipal area to 86 square miles. In 1962 and 1966 respectively, the Bay Lands and Welbedagt were added, bringing the area of the City to 97 square miles.

During 1968 the boundary between Westville and Durban was altered, certain small areas of Westville being incorporated into Durban, and the European group area at the extreme western end of Reservoir Hills being transferred from the City to Westville.

In the current year, the public health area of Newlands, situated to the north west and formerly under the control of the Local Health Commission, was incorporated for development as an Indian housing scheme. This area amounts to approximately 3,000 acres resulting in the Durban area currently covering 102.25 square miles (26,456.75 hectares).

(b) Geography

Situated on the south eastern seaboard of the African continent at longitude 31° east and latitude 29° 52 minutes 30 seconds south, the City enjoys a sub-tropical climate throughout the year, so contributing to Durban being the Republic's premier holiday resort.

Durban is one of the major seaports in the southern hemisphere and handles more than 50% of the total cargo passing through South African ports.

Details of temperatures and other meteorological data are set out in the accompanying table.

(c) General Layout

Excellent facilities for bathing and surfing are provided from the City's beaches, with separate areas set aside

for the various racial groups. In addition there are many fresh water swimming baths, and extensive playing areas suitably sited throughout Durban.

The principal commercial centre is situated about a mile from the foreshore, most of the major industries are located to the south and the principal residential areas extend along the coast line and the Berea which latter commands both sea and inland views.

(d) Municipal Data

Area: 102.25 square miles (26,456.75 hectares)

Valuation: (1968 figures in parenthesis)

	Land	Buildings
Old Borough and added Areas (excluding Welbedagt, kwaMashu and Newlands)	R241,260,300 (R238,378,350)	R501,021,120 (R481,715,470)
Welbedagt	R382,760 (R382,760)	R108,810 (R102,800)
Newlands	R822,080 (-)	R733,910 (-)

Rates: (Including Water Rate)
(Cents per Rand)

	Land	Buildings
(a) Code 1 (Residential property, dwellings, maisonettes, etc.)	2.70 cents (2.57)	2.70 cents (2.57)
(b) Code 2 (Residential property, flats, boarding houses and private hotels)	2.63 cents (2.51)	2.63 cents (2.51)
(c) Code 3 (Other than residential property, but excluding agricultural land)	7.44 cents (7.02)	1.24 cents (1.17)

It is recorded that rates on land and buildings in Welbedagt and Newlands, which were incorporated in 1966 and 1969 are assessed at 80% and 20% respectively, of the General Rate applicable to the rest of the City, plus the Water Rate.

No rateable valuations are available for the kwaMashu Bantu Housing area, as in terms of Ordinance 5 of 1958, the Council may not levy rates on properties in this area without the prior consent of the Administrator of Natal.

METEOROLOGICAL DATA

1969	24 hours Shade Temperature (°C)			Relative Humidity		Barometer Readings (Inches)			Rainfall				Sunlight
Month	Max.	Min.	Mean	Min.	Ave.	Max.	Min.	Mean	m.m.	Inches	No. of days on which rain fell	Highest fall (m.m.)	Average hours of sunshine per day
January	29.0	21.4	25.0	63	84	29.91	29.71	29.80	38.0	1.50	10	13.3	7.07
February	28.9	21.7	25.1	66	85	29.98	29.78	29.86	87.6	3.44	18	10.0	5.80
March	27.5	20.4	23.7	64	85	30.08	29.93	30.00	192.2	7.56	17	70.1	6.17
April	25.4	16.9	21.2	60	80	30.12	29.93	30.01	91.6	3.61	11	50.8	6.13
May	23.6	13.2	18.2	55	79	30.30	30.04	30.12	171.7	6.76	8	109.5	6.51
June	22.8	9.6	15.3	49	78	30.19	30.03	30.11	14.8	.56	5	5.1	7.23
July	22.4	10.8	16.8	55	81	30.32	30.15	30.23	2.09	.08	1	2.09	6.31
August	23.9	12.1	17.9	50	77	30.24	30.06	30.15	3.7	.14	3	3.2	8.15
September	22.7	14.5	18.3	58	81	30.22	29.98	30.07	90.2	3.55	18	24.4	5.30
October	24.0	17.0	20.2	66	83	30.14	29.99	30.11	162.0	6.38	20	73.6	5.39
November	24.6	18.6	21.3	66	83	30.10	29.88	29.98	161.2	6.34	20	64.0	5.06
December	25.6	19.4	22.7	63	81	30.05	29.85	29.94	87.9	3.46	17	13.8	6.18
						Total for the year:			1102.99	43.38	148	-	6.28 Daily average for year

II. VITAL STATISTICS

Population (Estimated)

European	190,884	(26.90%)
Coloured	32,360	(4.56%)
Bantu	209,609	(29.53%)
Asiatic	276,955	(39.01%)
	709,808	(100.00%)

The ratio of the racial groups to the total population has not shown any major changes since the 1960 Census, when the percentages were 26.74 for Europeans, 4.43 for Coloureds, 32.62 for Bantu and 36.21 for Asiatics. Increases in the population are based on fixed annual numbers as supplied by the Director of Statistics following the last Census. Due to the establishment of a large Bantu residential area, Umlazi Township, just beyond the southern boundary of the City and an apparent immigration of Coloureds into Durban, it is likely that a change in racial proportions could be found when the Census is conducted again in 1970.

Births

Race	Male	Female	Total	1968
Legitimate:				
European	1,719	1,631	3,350	3,207
Coloured	583	579	1,163	1,166
Bantu	2,755	2,644	5,399	5,295
Asiatic	4,183	4,075	8,258	8,184
Total	9,241	8,929	18,170	17,852
Illegitimate:				
European	98	104	202	198
Coloured	212	240	452	469
Bantu	1,788	1,936	3,724	3,616
Asiatic	134	135	269	236
Total	2,232	2,415	4,647	4,519
Total Births:				
European	1,817	1,735	3,552	3,405
Coloured	796	819	1,615	1,635
Bantu	4,543	4,580	9,123	8,911
Asiatic	4,317	4,210	8,527	8,420
Total	11,473	11,344	22,817	22,371

Crude Birth Rates (Number of births per 1,000 population; 1968 figures are shown in parenthesis)

European	18.61	(18.13)
Coloured	49.86	(51.87)
Bantu	43.57	(43.11)
Asiatic	30.79	(31.16)
All races	32.15	(32.13)

The birth rates for the four races have been fairly constant over the past 5 years. Family planning clinics, which were introduced in two large Indian localities in August, 1967, may have contributed to a slight decrease in the Indian birth rate which dropped by 1.60 per 1,000 population. This represents some 340 births less than would have been the case had the previous year's rate been maintained.

Illegitimate Births (As a percentage of total births; with 1968 figures in parenthesis)

European	5.69	(5.81)
Coloured	27.99	(28.74)
Bantu	40.82	(40.58)
Asiatic	3.15	(2.80)
All races	20.37	(20.20)

Stillbirths (Rate per 1,000 live births; 1968 figures in parenthesis)

	Number		Rate	
European	37	(29)	10.53	(8.59)
Coloured	24	(32)	15.02	(19.96)
Bantu	292	(301)	33.07	(34.96)
Asiatic	143	(109)	17.06	(13.12)
All races	496	(471)	22.22	(21.51)

Although the Coloured rate has decreased by approximately 5 per 1,000 live births with a somewhat corresponding increase in the Asiatic race, the pattern has not varied to any major degree over the past decade.

Deaths

Race	Total deaths				Crude Death Rate per 1000 population	
	Male	Female	Total	(1968)	1969	(1968)
European	1,012	860	1,872	1,698	9.81	9.04
Coloured	155	132	287	264	8.87	8.38
Bantu	1,395	1,094	2,489	2,374	11.87	11.49
Asiatic	1,207	871	2,078	2,054	7.50	7.60
All races	3,769	2,957	6,726	6,390	9.48	9.18

Age at Death

The number of deaths at various ages, with the percentage of total deaths, is summarized in the following table:

	Race Groups	Age Groups											
		0-1		1-4		5-23		24-63		64 and over		Total	
		M	F	M	F	M	F	M	F	M	F	M	F
DEATHS	European	32	18	7	1	18	7	410	246	545	588	1012	860
	Coloured	42	29	9	15	11	3	68	47	25	38	155	132
	Bantu	467	446	160	195	83	53	594	294	91	106	1395	1094
	Asiatic	201	164	62	59	93	71	561	362	290	215	1207	871
	Total Non-European	710	639	231	269	187	127	1223	703	406	359	2757	2097
	Total All Races	742	657	238	270	205	134	1633	949	951	947	3769	2957
PERCENTAGES	European	3.2	2.1	0.7	0.1	1.7	0.8	40.5	28.6	53.9	68.4	100	100
	Coloured	27.1	21.9	5.8	11.4	7.1	2.3	43.9	35.6	16.1	28.8	100	100
	Bantu	33.5	40.8	11.5	17.8	5.9	4.8	42.6	26.9	6.5	9.7	100	100
	Asiatic	16.7	18.8	5.1	6.8	7.7	8.1	46.5	41.6	24.0	24.7	100	100
	Total Non-European	25.7	30.5	8.4	12.8	6.8	6.1	44.4	33.5	14.7	17.1	100	100
	Total All Races	19.7	22.2	6.3	9.2	5.4	4.5	43.3	32.1	25.3	32.0	100	100

In the non-European group 27.8 per cent of all deaths occurred under the age of one year as compared with 2.7 per cent in the European group.

Deaths under five years of age constitute 3.1 per cent of all deaths in Europeans as compared with 38.1 per cent in non-Europeans (Coloured 33.1; Bantu 50.9; Asiatic 23.4 respectively).

Deaths under 24 years of age constitute 4.4 per cent of all deaths in Europeans while among non-Europeans 44.6 per cent of all deaths occurred under 24 years of age.

The three main causes of death for the different racial groups were as follows (previous year's figures in parenthesis):

Cause of Death	Number	Percentage of Total Deaths
European		
(a) Heart and circulatory system	709 (652)	37.87 (38.40)
(b) Neoplasms	306 (286)	16.35 (16.84)
(c) Vascular lesions of C.N.S.	198 (203)	10.58 (11.95)
Coloured		
(a) Pneumonias	37 (35)	12.89 (13.26)
(b) Heart and circulatory system	34 (42)	11.85 (15.91)
(c) Neoplasms	28 (19)	9.76 (7.20)
Bantu		
(a) Pneumonias	192 (250)	7.71 (10.54)
(b) Heart and circulatory system	157 (134)	6.31 (5.65)
(c) Enteritis and diarrhoea	137 (215)	5.50 (9.06)
Asiatic		
(a) Heart and circulatory system	456 (493)	21.94 (24.04)
(b) Pneumonias	286 (309)	13.76 (15.07)
(c) Vascular lesions of C.N.S.	210 (208)	10.11 (10.14)
All Races		
(a) Heart and circulatory system	1,356 (1,321)	20.16 (20.69)
(b) Pneumonias	669 (702)	9.95 (10.99)
(c) Neoplasms	534 (495)	7.94 (7.75)

Deaths from Motor Accidents (previous year's figures in parenthesis)

European	27	(11)
Coloured	1	(4)
Bantu	16	(35)
Asiatic	96	(38)
All races	140	(88)

Suicides (previous year's figures in parenthesis)

European	11	(11)
Coloured	2	(3)
Bantu	8	(1)
Asiatic	28	(12)
All races	49	(27)

Infant Mortality (Deaths under the age of 1 year and rate per 1,000 live births, with 1968 figures in parenthesis)

	Number of Deaths		Rate	
European	50	(66)	14.22	(19.55)
Coloured	71	(43)	44.63	(26.82)
Bantu	913	(925)	103.39	(107.43)
Asiatic	365	(439)	43.54	(52.82)
All races	1,399	(1,473)	62.68	(67.26)

Although the Bantu rate is still high in comparison with the other race groups, nevertheless the figure of 103 represents a substantial improvement over previous years, viz., 388 in 1955, 246 in 1960 and 117 in 1965.

Maternal Deaths (Deaths from causes related to childbirth and rate per 1,000 live births, with 1968 figures in parenthesis)

	Number of Deaths		Rate	
European	1	(-)	.28	(-)
Coloured	-	(-)	-	(-)
Bantu	10	(6)	1.13	(0.70)
Asiatic	8	(9)	.95	(1.08)
All races	19	(15)	.85	(0.68)

A satisfactory level is being maintained in this sphere of mortality.

III. COMMUNICABLE DISEASES

INTRODUCTION

Although there were no local cases of formidable epidemic disease during the year, certain precautionary measures had to be taken because smallpox cases (Variola minor) from surrounding rural areas, were diagnosed in the City. In October, 2 Bantu children aged 2 years and 6 years were brought into the City from Shembe's Village north of Durban and Umbumbulu south of the City, respectively. These cases were diagnosed at King Edward VIII Hospital and quarantined at the State Health Department's quarantine station at Fynnlands. Certain close contacts were also quarantined at Fynnlands. Early in November another Bantu child aged 5 years from the Mapumulo district was brought to the City because of a rash, and this also proved to be smallpox. This child was also quarantined at Fynnlands. Unfortunately, it had stayed in the Abattoir Compound where the father is employed, for five days prior to diagnosis. Thirty nine women and children who were residing in this compound and were contacts of the child, were also removed to the Fynnlands quarantine station, as their vaccination state was unsatisfactory. One of these child contacts subsequently developed smallpox whilst in quarantine. All personnel at the Abattoir were immediately vaccinated, a total of 1,541 vaccinations being performed. No further cases occurred at the Abattoir or, for that matter, in Durban.

During the year numerous other reports of suspect cases of smallpox were received by this Department and visits were necessary to exclude such a diagnosis.

Global Epidemiology

This Department makes continual reference to the weekly epidemiological record of the World Health Organisation for two purposes, namely:-

(a) to keep informed of the incidence of disease in neighbouring African territories as well as the African continent as a whole, and

(b) to analyse disease trends as they occur throughout the world.

Certain of these comparisons are set out hereunder:-

Poliomyelitis:

While there has been a steep fall in the incidence of this disease in Europe, North America and Australasia during the sixties, in most of the tropical and semi-tropical parts of the world the incidence has been stationary or even increasing. The following table presents poliomyelitis notifications for approximately the first 9 months of 1969 set out under six broad areas with the figure of South Africa included for comparison:

Area	Notifications
Europe	475
United States of America	16
Canada, Australia and New Zealand	5
Africa	3,726
South Africa	681
Central and South America	1,527
Asia	758

It will be appreciated that much of the data from the less developed countries is scanty.

Poliomyelitis virus type I is still responsible for the majority of all the cases given.

Smallpox:

Following an intensified eradication programme initiated by the World Health Organisation in 1966 there has been a considerable decline in the total number of cases of smallpox notified in the world. Present trends show that only Central Africa and limited areas in Asia have an incidence of more than 5 cases per 100,000 population. In South Africa this figure is from 0 - 0.49 cases per 100,000 inhabitants.

Tetanus:

It is interesting to note that preliminary figures for the United States of America for 1969 show that tetanus mortality was also approximately 39 per cent of cases, which is the identical figure for Durban for this year.

A. NOTIFIABLE DISEASES:

Notifications

In comparison with the previous year there was a large increase in the number of cases of viral hepatitis cases notified; also there were 16 cases of paratyphoid fever compared with none in 1968. There were also increases in notifications over the previous year in respect of gonococcal ophthalmia, leprosy, meningococcal meningitis, poliomyelitis, scarlet fever and tetanus. The number of notifications of diphtheria, encephalitis, erysipelas and typhoid fever were approximately the same, while there was a decrease in the number of notifications of puerperal sepsis.

Disease	E	C	B	A	Total	Attack Rate per 1000 Population
Diphtheria	-	1	14	14	29	.0409
Encephalitis	9	2	6	3	20	.0282
Erysipelas	2	-	-	-	2	.0028
Gonococcal Ophthalmia	1	-	8	1	10	.0141
Insecticidal Poisoning	1	-	-	-	1	.0014
Leprosy	-	-	8	1	9	.0127
Meningococcal Meningitis	4	4	17	10	35	.0493
Paratyphoid fever	12	1	3	-	16	.0239
Poliomyelitis	1	2	17	2	22	.0309
Puerperal Sepsis	-	-	15	5	20	.0282
Scarlet Fever	63	-	-	1	64	.0902
Tetanus	-	1	17	10	28	.0394
Typhoid Fever	6	5	24	9	44	.0619
Viral Hepatitis	41	4	21	75	141	.1986
Total	140	20	150	131	441	.6210

Diphtheria

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1940. The number of cases notified for 1969, viz 29, is one less than for 1968. Of these 29 cases one was a Coloured, fourteen were Bantu and fourteen were Asiatics. Seven cases died, comprising four Bantu and three Asiatics, none of whom had received any immunisation against the disease.

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1940 to 1969
(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	0.44	-	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	0.24	-	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
3	3	0.02	-	-	6	0.22	1	16.67	17	0.09	1	5.88	12	0.05	3	25.00	38	0.06	5	13.16
4	5	0.03	-	-	2	0.07	-	-	15	0.08	2	13.33	11	0.05	5	45.45	33	0.05	7	21.21
5	1	0.006	-	-	2	0.07	-	-	13	0.07	2	15.38	3	0.01	-	-	19	0.03	2	10.53
6	2	0.01	-	-	1	0.03	1	100.00	16	0.08	3	18.75	21	0.08	6	28.57	40	0.06	10	25.00
7	1	.005	-	-	2	0.07	-	-	18	0.09	5	27.78	8	0.03	2	25.00	29	0.04	7	24.14
8	1	.005	-	-	6	0.19	-	-	9	0.04	1	11.11	14	0.05	3	21.43	30	0.04	4	13.33
1969	-	-	-	-	1	0.03	-	-	14	0.07	4	28.57	14	0.05	3	21.43	29	0.04	7	24.14

Of the 29 notifications, 26 were clinical cases and 3 were carriers. The immunisation state of these cases is depicted hereunder:

Details	26 Clinical Cases	3 Carriers
3 doses of vaccine	3	2
2 doses of vaccine	-	-
1 dose of vaccine	-	-
No previous vaccine	23	1

Fourteen of the cases were under 5 years of age, twelve were in the age group 5 - 9 years, and the remaining three cases were aged eleven, thirteen and sixteen years.

Encephalitis

There were 20 notifications of this disease during the year which is the same as recorded for the previous year. The following table sets out the aetiology of these cases and also indicates the racial incidence. Deaths are recorded in parenthesis.

Aetiology	E	C	B	A	Total
Virus Encephalitis	5(-)	1(1)	4(1)	2(1)	12(3)
Measles Encephalitis	1(-)	-(-)	2(2)	1(-)	4(2)
Mumps Encephalitis	3(-)	1(-)	-(-)	-(-)	4(-)
Total	9(-)	2(1)	6(3)	3(1)	20(5)

Both deaths from measles encephalitis were in respect of Bantu infants under one year of age.

Erysipelas

The two notifications during the year were in respect of the same person, a European male aged 94 years. The second attack of erysipelas occurred four months after the first.

Gonococcal Ophthalmia

The 10 cases notified were all infants under the age of four weeks, 9 of whom were notified by the King Edward VIII Hospital, Special Clinic.

Leprosy

Nine cases, comprising eight Bantu and one Asiatic, were notified, which is five more than for the previous year. The cases varied in age from 25 years to 62 years, the sex distribution being four males and five females. The Asiatic case claimed to have confined himself to Durban for the previous 40 years, while all the Bantu had moved between this City and their homelands. One of the Bantu cases was a re-admission to the Leper Institution at Amatikulu.

Malaria

Five cases of malaria were notified during the year, all of whom were infected outside the Republic's borders. In all instances plasmodium falciparum was responsible for the infection; there were no deaths.

Meningococcal Meningitis

The 35 notifications for 1969 represent eight more than the number notified during the previous year. Four deaths were recorded comprising one European, one Coloured, one Bantu and one Asiatic.

The following table sets out the notifications since 1955 with deaths in parenthesis:

Year	E	C	B	A	Total
1955	7 (-)	- (-)	4 (-)	3 (-)	14 (-)
1956	5 (-)	3 (-)	22 (-)	3 (-)	33 (-)
1957	5 (-)	1 (-)	6 (-)	6 (-)	18 (-)
1958	6 (-)	2 (-)	11 (-)	4 (-)	23 (-)
1959	4 (-)	2 (-)	- (-)	2 (-)	8 (-)
1960	2 (-)	2 (-)	2 (-)	- (-)	6 (-)
1961	1 (-)	- (-)	4 (-)	1 (1)	6 (1)
1962	2 (-)	- (-)	3 (-)	- (-)	5 (-)
1963	2 (-)	- (-)	1 (1)	1 (-)	4 (1)
1964	5 (-)	1 (-)	3 (1)	2 (2)	11 (3)
1965	7 (1)	2 (1)	16 (2)	5 (-)	30 (4)
1966	8 (-)	3 (1)	11 (1)	5 (2)	27 (4)
1967	6 (2)	4 (1)	20 (3)	4 (-)	34 (6)
1968	5 (1)	3 (2)	15 (3)	4 (1)	27 (7)
1969	4 (1)	4 (1)	17 (1)	10 (1)	35 (4)

Poliomyelitis

The 22 notifications during the year comprised one European, two Coloureds, 17 Bantu and two Asiatics. The number of notifications is nine more than the previous year. While the single European case was an adult male aged 31 years, who had not been immunised against the disease, the non-European cases' ages and immunisation states were as follows:

Age	0-11 months	1 yr.-1 yr. 11 months	2 yrs.-2 yrs. 11 months	3 yrs.-3 yrs. 11 months
Doses Oral Vaccine	3 Doses: 2 2 Doses: 2 1 Dose: 2 0 Doses: 5	0 Doses: 3	3 Doses: 1 0 Doses: 5	3 Doses: 1
Total Cases	11	3	6	1

One death was recorded, a Bantu child aged four months from Chesterville who had not received any immunisation against the disease.

The following table sets out the notifications in racial groups since 1955:

Year	E	C	B	A	Total
1955	66	5	7	3	81
1956	82	18	32	26	158
1957	113	7	27	16	163
1958	13	1	7	6	27
1959	23	-	21	7	51
1960	9	1	29	8	47
1961	3	3	21	2	29
1962	-	-	4	-	4
1963	1	-	20	5	26
1964	-	-	7	1	8
1965	-	-	9	-	9
1966	1	-	12	6	19
1967	-	-	-	-	-
1968	-	3	10	-	13
1969	1	2	17	2	22

Virus studies were performed on the stools of 16 patients and Type I poliovirus was isolated in three and Coxsackie virus in a further three instances. One of the Type I poliovirus isolations was in respect of an infant who had had two doses of oral vaccine, some six months previously, the other two cases having had no poliomyelitis immunisation. Of the three Coxsackie isolations, one was from an infant who had had three doses of oral vaccine, the remaining two cases having had no poliomyelitis immunisation.

Puerperal Sepsis

The 20 notifications received are seven less than the 1968 figure and consisted of 15 Bantu and five Asiatics. Thirteen of these cases gave birth to their babies in local hospitals.

Rabies

The campaign against this disease amongst livestock in Natal by the Division of Veterinary Services which began in 1960, continued and no confirmed case of rabies was recorded in the province. Natal remains a gazetted rabies infected area and control measures such as restricting the movement of domestic carnivores and compulsory inoculation of dogs, are still in force. In Durban the Division of Veterinary Services inoculated 2,304 dogs against rabies during the year.

Scarlet Fever

There were 64 notifications of this disease during the report period, an increase of seven over the previous year. Sixty three of these cases were Europeans and one was a Chinese.

Thirteen cases were admitted to hospital whilst the remainder were nursed at home, where conditions were satisfactory for isolation and treatment.

Tetanus

The following table sets out the ages and racial incidence of the 28 tetanus notifications which occurred during the year. Eleven of the cases were in respect of tetanus neonatorum. Eleven deaths were recorded and these are included in parenthesis in the table. Once again attention is drawn to the very high mortality rate of this disease, 39 per cent of cases having died.

Ages	E	C	B	A	Total
0 - 31 days	-	1 (1)	9 (1)	1 (1)	11 (3)
1 month to 5 months	-	-	-	-	-
6 months to 11 "	-	-	-	-	-
1 year to 4 years	-	-	-	-	-
5 years to 9 years	-	-	1	2 (1)	3 (1)
10 years to 19 years	-	-	3 (2)	2 (1)	5 (3)
20 years to 29 years	-	-	-	4 (1)	4 (1)
30 years to 39 years	-	-	1	-	1
40 years and over	-	-	3 (2)	1 (1)	4 (3)
Total	-	1 (1)	17 (5)	10 (5)	28 (11)

The table below sets out the notifications of tetanus since the disease became notifiable in December, 1964. Deaths are recorded in parenthesis:

Year	E	C	B	A	Total
1965	-	4 (2)	15 (5)	9 (1)	28 (8)
1966	-	- (-)	22 (14)	9 (4)	31 (18)
1967	-	- (-)	24 (12)	3 (2)	27 (14)
1968	-	- (-)	9 (4)	8 (6)	17 (10)
1969	-	1 (1)	17 (5)	10 (5)	28 (11)

Typhoid Fever

Forty four cases of typhoid fever were notified during 1969, six Europeans, five Coloureds, 24 Bantu and nine Asiatics. This is one more than in 1968. There were eight deaths, all of whom were Bantu.

Three of the cases, one European and two Asiatics, were employed as medical technologists and in the course of their duties handled blood, stool and urine specimens. It was considered that this was the source of infection in these three cases. Seven medical technologists in Durban have contracted typhoid fever during the past six years and this emphasises the high degree of infectivity of Salmonella typhi organisms and, more important, the need for strict and adequate precautions in the laboratory.

The routine examination of stool and urine specimens from certain contacts of all notified cases did not produce any Salmonella typhi isolations.

There was no particular seasonal incidence of the disease and the following table shows the age groups involved:

Years	0-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50+	Total
Cases	6	7	4	9	6	1	5	2	4	44

Twelve cases of typhoid fever occurred in the kwaMashu Township, six in Lamontville, five in Chatsworth and two in Chesterville.

TYPHOID : NOTIFICATIONS AND DEATHS : 1940 TO 1969

(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
1941	24	.26	2	8.33	1	.12	-	-	70	.98	23	32.86	15	.17	6	40.00	110	.48	31	28.18
1942	123	1.16	10	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
1943	68	.64	6	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
1944	37	.34	6	16.21	3	.34	-	-	108	1.36	37	34.26	46	.47	11	23.91	194	.69	54	27.83
1945	17	.15	2	11.76	5	.58	1	20.00	62	.86	19	30.65	28	.28	6	21.43	112	.39	28	25.00
1946	18	.14	-	-	7	.68	-	-	113	1.04	38	33.63	39	.34	9	23.08	177	.49	47	26.55
1947	14	.11	-	-	21	1.98	2	9.52	108	.99	29	26.85	67	.57	10	14.93	210	.57	41	19.52
1948	7	.05	1	14.29	7	.64	-	-	57	.52	9	15.79	24	.20	4	16.67	95	.26	14	14.73
1949	12	.09	-	-	5	.44	-	-	21	.19	8	38.10	10	.08	3	30.00	48	.13	11	22.92
1950	16	.12	-	-	2	.16	1	50.00	36	.28	15	41.67	40	.31	2	5.00	94	.24	18	19.15
1951	7	.05	-	-	1	.07	-	-	66	.49	24	36.36	24	.17	6	25.00	98	.23	30	30.61
1952	9	.07	-	-	1	.06	-	-	54	.38	10	18.52	37	.25	2	5.41	101	.23	12	11.88
1953	4	.03	-	-	-	-	-	-	53	.36	11	20.75	16	.10	-	-	73	.16	11	15.07
1954	5	.04	-	-	4	.22	-	-	74	.48	9	12.16	9	.06	2	22.22	92	.19	11	11.96
1955	8	.05	-	-	3	.16	-	-	73	.44	4	5.48	16	.10	-	-	100	.20	4	4.00
1956	5	.03	-	-	1	.05	-	-	52	.30	3	5.77	9	.05	-	-	67	.13	3	4.48
1957	6	.04	1	16.66	1	.04	-	-	110	.61	6	5.45	5	.03	1	20.00	122	.22	8	6.56
1958	7	.04	-	-	5	.19	-	-	246	1.32	22	8.13	20	.09	2	5.00	278	.49	24	8.63
1959	6	.04	-	-	1	.04	1	100.00	280	1.45	21	7.50	16	.07	2	12.49	303	.51	24	7.92
1960	8	.05	1	12.50	4	.16	-	-	71	.39	3	4.22	7	.03	-	-	90	.16	4	4.44
1961	2	.01	-	-	2	.08	-	-	39	.21	2	5.13	16	.07	1	6.25	59	.10	3	5.08
1962	5	.03	-	-	-	-	-	-	25	.13	-	-	11	.05	-	-	41	.07	-	-
1963	1	.01	-	-	3	.11	-	-	25	.13	1	4.00	6	.03	-	-	35	.06	1	2.86
1964	2	.01	-	-	1	.04	-	-	30	.15	3	10.00	10	.04	-	-	43	.07	3	6.98
1965	5	.03	-	-	1	.03	-	-	23	.12	-	-	10	.04	-	-	39	.06	-	-
1966	-	-	-	-	3	.10	-	-	37	.18	3	8.11	12	.05	-	-	52	.08	3	5.77
1967	2	.01	-	-	2	.07	-	-	23	.11	1	4.35	10	.04	-	-	37	.05	1	2.70
1968	4	.02	-	-	-	-	-	-	20	.10	3	15.00	19	.07	-	-	43	.06	3	6.98
1969	6	.03	-	-	5	.15	-	-	24	.11	8	33.33	9	.03	-	-	44	.06	8	18.18

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1940. Since 1966 these statistics refer only to cases where S. typhi was the causative organism.

Paratyphoid Fever

Sixteen notifications were received, made up of 12 Europeans, one Coloured and three Bantu. One death was recorded, a Bantu child of four months who died of S. paratyphi C infection. Twelve of the cases were aged four years and under, five of these being less than one year old. The remaining four cases were aged 13, 22 (two) and 49 years.

Four cases were paratyphoid A, nine were paratyphoid B and three were paratyphoid C infections.

Viral Hepatitis

One hundred and forty one notifications were received of which 41 were Europeans, four were Coloureds, 21 were Bantu and 75 were Asiatics. Nine deaths were recorded, viz: one European, three Bantu and five Asiatics. Ninety one of the notifications were in respect of hospitalised cases, almost entirely all the Asiatic and Bantu notifications stemming from this source.

Six of the cases had received blood transfusions prior to the onset of the illness and from the case histories, a diagnosis of homologous serum jaundice must be considered.

B. OTHER INFECTIOUS DISEASES

The only statistics available to indicate the prevalence of non-notifiable diseases are obtained from two sources:

(i) admissions of cases to hospital for isolation and treatment; and

(ii) monthly returns by school principals.

Table I : Admissions of Cases to Hospitals:

Disease	E	C	B	A	Total
Chickenpox	9	1	14	2	26
Measles	39	23	243	35	340
Mumps	5	-	2	3	10
Rubella	-	-	-	1	1
Whooping Cough	1	-	26	5	32

Table II : School Notifications (European, Coloured and Asiatic only)

Month	Chicken-pox	Measles	Mumps	Rubella	Whooping Cough
January	6	44	26	4	16
February	18	127	88	12	18
March	9	94	130	5	13
April	9	94	162	11	16
May	6	97	134	4	8
June	10	77	142	8	9
July	38	138	157	13	5
August	70	322	223	8	13
September	69	304	258	18	4
October	95	257	222	12	18
November	109	175	198	33	4
December	5	33	34	1	-
Total	444	1,762	1,774	129	124

Obviously these figures indicate trends only and do not reflect the total number of cases occurring in the City.

C. MEDICAL EXAMINATION OF BANTU WORK-SEEKERS

Male Bantu seeking employment in the City are medically examined before registration at the Municipal Bantu Administration Department and during 1969 the following examinations were performed:

Adults	58,124
Juveniles	8,563
	66,687

This figure represents a small decrease of 2,095, compared with the previous year.

All male Bantu were routinely vaccinated on the occasion of their medical examination and during the year 65,098 vaccinations in all, were performed. In addition, the following numbers of persons were referred to hospitals and clinics for various conditions, viz:

Venereal disease	3,838
Scabies	59
Bilharzia	57

As from 1st August, 1969, Bantu females were also referred to the Durban Chest Clinic for chest X-Ray so that now all work-seekers from rural areas and those domestic servants changing their employment are routinely X-Rayed at the Chest Clinic for the Bantu Administration Department. During the year the following figures were recorded:

	Male	Female	Total
Total Bantu X-Rayed	7,429	5,964	13,393
Cases of active pulmonary tuberculosis discovered	43	53	96
Cases of presumably inactive pulmonary tuberculosis discovered	27	15	42

IV. TUBERCULOSIS

INTRODUCTION

The following figures represent the number of known current cases of pulmonary tuberculosis in Durban at the end of the year 1969:

Race	City Cases	Ex-City Cases
European	1,215	195
Coloured	1,243	141
Bantu	11,219	3,172
Asiatic	4,191	217
Total	17,868	3,725

The total number of City cases is 6% higher than last year, whilst the total of ex-City cases is only .4% higher. Closed case files are not included in this table. City cases are those which have been assessed as the financial responsibility of this Municipality, while the ex-City cases are those for whom Durban is not financially liable. This ex-City group comprises:

(i) cases living outside the Durban Municipal area but working and receiving treatment in Durban;

(ii) country cases (particularly Bantu) who have come to Durban because of their illness and are then found to be suffering from pulmonary tuberculosis whilst sojourning in this City;

(iii) known pulmonary tuberculosis cases who are either visiting relatives or have permanently moved to Durban.

STATISTICS OF CITY CASES

(a) Pulmonary Tuberculosis

(i) Notifications

The number of notifications of pulmonary tuberculosis received during 1969 is set out below together with the figures since 1961:

Year	E	C	B	A	Total
1961	117	96	1,648	416	2,277
1962	129	85	1,524	332	2,070
1963	121	77	1,355	316	1,869
1964	121	110	1,256	479	1,966
1965	100	98	1,336	532	2,066
1966	102	105	1,656	549	2,412
1967	133	149	1,566	575	2,423
1968	79	103	1,262	495	1,939
1969	81	100	1,234	469	1,884

The attack rates per 1,000 population were:

Year	E	C	B	A	Total
1961	.70	3.74	8.82	1.86	3.78
1962	.76	3.21	8.03	1.44	3.35
1963	.70	2.82	7.04	1.33	2.97
1964	.69	3.91	6.43	1.96	3.06
1965	.56	3.03	6.74	2.12	3.14
1966	.56	3.52	8.23	2.14	3.60
1967	.76	4.85	7.68	2.18	3.55
1968	.42	3.27	6.11	1.83	2.78
1969	.42	3.09	5.89	1.69	2.66

The age group distribution of pulmonary tuberculosis cases notified during 1969 were:

Ages	E	C	B	A	Total
0 - 4 years	7	25	228	80	340
5 - 14 years	1	7	169	58	235
15 - 24 years	10	15	173	126	324
25 - 44 years	18	32	433	134	617
45 - 64 years	30	18	205	57	310
65 years and over	15	3	26	14	58
Total	81	100	1,234	469	1,884

Source of Notifications

Of the 1,884 new pulmonary tuberculosis cases notified the sources of notification were:

Tuberculosis clinics	1,457;
Hospitals	418;
Private practitioners	9.

Comment

Once again, 77% of new notifications were from tuberculosis clinics, almost all of the remaining 23% being from hospitals.

Of the 1,884 notifications, 48 were in respect of children 0 - 4 years old with a positive "Heaf" test and having no evidence of pulmonary tuberculosis on X-Ray, or of having received B.C.G. immunisation. This latter factor is unreliable as mothers, particularly in regard to newborns, are not always aware of such immunisation, and moreover, marks do not usually remain as evidence of B.C.G. inoculation.

It is pleasing to record that the incidence rate of pulmonary tuberculosis showed a decrease in all non-White race groups. The figure remained static for the European group. Overall impressions are that not only is the continually improving standard of living of the City Bantu making him less prone, but also that the disease is being diagnosed at earlier stages than some years ago. The need for hospitalisation is reduced and the ultimate outlook much brighter. The following measures all contributed to this end:

1. Contact tracing in this Department is thorough and intensive;

2. B.C.G. school programmes with prior tuberculin testing has improved case finding in these age groups;

3. many firms have pre-employment X-Rays for their staff (at a marginal tariff);

4. the mobile mass X-Ray service provided by the State Health Department for firms (at a very low tariff) is a most useful, if not essential, service.

The same, however, cannot be said of the Rural Bantu who come to Durban because of their illness and attend this Department's clinics. They are often extremely ill and require immediate hospitalisation, with chest X-Rays showing gross bilateral pulmonary tuberculosis making them ready candidates for chronic pulmonary tuberculosis.

(ii) Deaths

Deaths of City cases, corrected for inward and outward transfer, are set out below together with the figures since 1961:

Year	E	C	B	A	Total
1961	14	13	129	42	198
1962	14	15	133	37	199
1963	14	6	129	22	171
1964	9	8	108	23	148
1965	15	13	120	30	178
1966	11	10	57	19	97
1967	9	7	82	24	122
1968	7	10	73	16	106
1969	6	3	50	21	80

The corresponding death rates per 1,000 population were:

Year	E	C	B	A	Total
1961	.08	.51	.69	.19	.33
1962	.08	.57	.70	.16	.32
1963	.08	.22	.67	.09	.27
1964	.05	.28	.55	.09	.23
1965	.08	.44	.60	.11	.27
1966	.06	.33	.28	.07	.14
1967	.05	.23	.40	.09	.18
1968	.04	.32	.35	.06	.15
1969	.03	.09	.24	.08	.11

Comment

The table clearly shows the decrease in total deaths and in the death rate over the past eight years. A factor of increasing importance in reducing the death rate is that many cases are being discovered at earlier stages of the disease than heretofor.

(b) Non-Pulmonary Tuberculosis

(i) Notifications

The total notifications of non-pulmonary tuberculosis are set out below:

Year	E	C	B	A	Total
1961	1	4	102	44	151
1962	14	5	56	33	108
1963	2	-	50	30	82
1964	6	1	50	44	101
1965	2	2	50	48	100
1966	2	-	46	37	85
1967	-	-	29	31	60
1968	1	-	45	37	83
1969	-	1	35	41	77

These 77 notifications have been analysed according to age groups as follows:

Ages	E	C	B	A	Total
0 - 4 years	-	1	1	1	3
5 -14 years	-	-	-	2	2
15 -24 years	-	-	6	12	18
25 -44 years	-	-	21	14	35
45 -64 years	-	-	6	10	16
65 years and over	-	-	1	2	3
Total	-	1	35	41	77

Comment

A further 24 cases were notified as suffering from pulmonary tuberculosis in addition to other existing tuberculous involvement. Of the total 101 infections of non-pulmonary tuberculosis, the commonest conditions were:

Tuberculous lymphadenitis	30 cases
Tuberculous meningitis	18 "
Tuberculous bone conditions	12 "
Tuberculous peritonitis	9 "
Tuberculous endometritis	8 "

(ii) Deaths

The number of deaths from non-pulmonary tuberculosis for the past nine years, corrected for inward and outward transfer, were:

Year	E	C	B	A	Total
1961	1	2	32	14	49
1962	-	3	36	11	50
1963	1	-	19	10	30
1964	1	-	28	12	41
1965	1	1	21	5	28
1966	1	5	29	5	40
1967	1	1	29	9	40
1968	-	2	17	5	24
1969	-	2	12	7	21

The corresponding death rates per 1,000 population were:

Year	E	C	B	A	Total
1961	.006	.078	.171	.062	.081
1962	-	.113	.190	.048	.081
1963	.006	-	.099	.042	.048
1964	.006	-	.143	.049	.064
1965	.005	.034	.105	.019	.042
1966	.006	.167	.144	.019	.059
1967	.005	.033	.142	.034	.059
1968	-	.063	.082	.019	.034
1969	-	.062	.056	.025	.030

HOSPITAL FACILITIES

Natal is divided into Central, Southern, Northern and Zululand zones for the purpose of hospitalisation of pulmonary tuberculosis cases. Durban falls into the Central zone together with the magisterial areas of Umlazi, Pinetown, Camperdown, Ndwedwe, Inanda, Lower Tugela and Mapumulo.

The tuberculosis bed capacity of each hospital situated in the Central zone was as follows:

Hospital	E	C	B	A	Total
1. King George V Hospital	82	60	1,317	155	1,614
2. F.O.S.A. T.B. Settlement	-	-	-	186	186
3. Charles James SANTA Centre, Umlazi	-	-	280	-	280
4. Botha's Hill T.B. Settlement	-	-	177	-	177
5. Osindisweni Mission, Verulam	-	-	181	-	181
6. McCord Mission Hospital	-	-	38	-	38
7. St. Mary's Mission, Mariannhill	-	-	73	-	73
8. Umlazi Mission Hospital	-	-	59	-	59
9. Ekuphilisweni Mission, Kearsney	-	-	46	-	46
10. Illovo Sugar Estates Hospital	-	-	43	-	43
11. Montebello Mission Hospital	-	-	90	-	90
12. Umpumulo Mission Hospital	-	-	47	-	47
Total	82	60	2,351	341	2,834

On the 31st December, 1969, these hospitals contained the following numbers of patients who were this City's financial responsibility:

Hospital	E	C	B	A	Total
1. King George V Hospital	19	26	228	91	364
2. F.O.S.A. T.B. Settlement	-	8	12	72	92
3. Charles James SANTA Centre	-	-	81	-	81
4. Botha's Hill T.B. Settlement	-	-	37	-	37
5. McCord Mission Hospital	-	-	9	1	10
6. Osindisweni Mission Hospital	-	-	9	-	9
7. Umlazi Mission Hospital	-	-	5	-	5
8. St. Mary's Mission Hospital	-	-	1	-	1
9. Illovo Sugar Estates Hospital	-	-	1	-	1
Total	19	34	383	164	600

A further 22 Durban cases were hospitalised in tuberculosis hospitals outside the Central zone, namely Richmond Hospital with 20 Bantu patients and Rosetta Hospital with two European patients. Only eight patients were hospitalised in local Provincial hospitals.

All Hospital Admissions

During 1969, a total of 1,739 City cases were admitted to various hospitals and were made up of 91 Europeans, 94 Coloureds, 1,142 Bantu and 412 Asiatics. This total reflects a decrease of nine compared with the previous year's admissions. Discharges of City cases numbered 1,227 comprising 83 Europeans, 66 Coloureds, 770 Bantu and 308 Asiatics. One hundred and forty patients absconded or left hospital against medical advice which is a slightly higher figure than for the previous year. Where possible, these patients were immediately followed up by the field staff of this Department to ensure continuation of treatment at the tuberculosis clinics, and re-hospitalisation if possible.

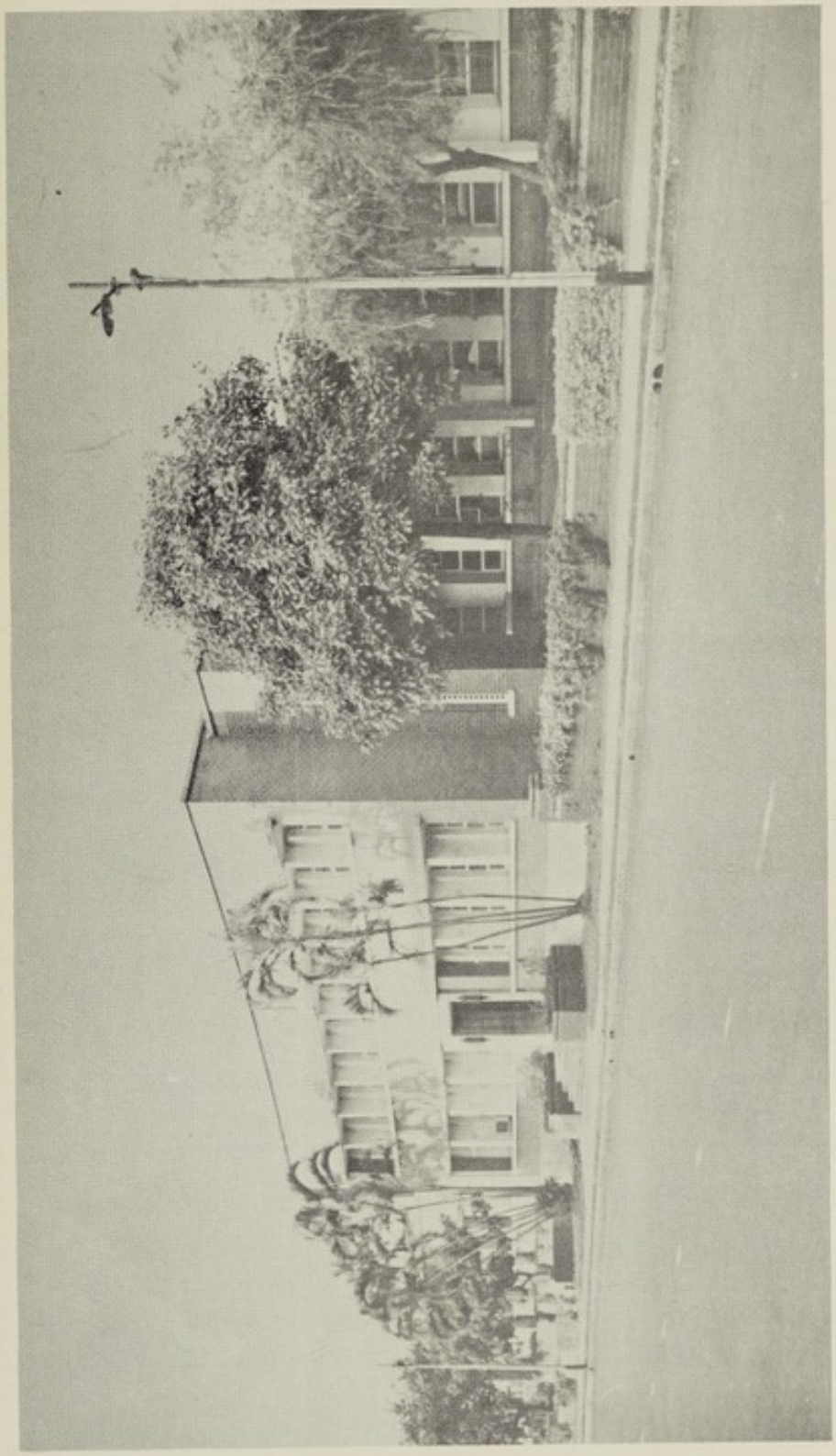
With the exception of Bantu males, some difficulty continued to be experienced during the year in obtaining hospital beds for tuberculosis patients, particularly Asiatic males.

King George V Hospital

This large hospital is situated within the borough of Durban and is administered by the State Health Department. As at the end of the year, 65% of hospitalised City cases were being accommodated in this institution. The Medical Superintendent has kindly provided the following statistics relating to patients at King George V Hospital for 1969:

King George V Hospital	E	C	A	B	Total
Admissions	301	103	327	2,170	2,901
Discharges (including deaths)	293	107	316	2,189	2,905
Deaths	16	7	23	226	272

King George V Hospital		
Year	Irregular discharges as a percentage of all discharges	Pulmonary Tuberculosis "Relapse" rate (ratio of re-admissions to total admissions)
1961	18.5%	15.5%
1962	12.5%	16.8%
1963	13.0%	16.2%
1964	11.0%	17.0%
1965	8.1%	17.3%
1966	8.7%	16.0%
1967	7.0%	9.5%
1968	4.7%	10.9%
1969	5.8%	8.9%



DURBAN CHEST CLINIC

OUT PATIENT SERVICES

On the 1st April, 1969, the Durban Chest Clinic was taken over by the City Council from the State with the result that the Durban City Health Department now operates all outpatient facilities for the diagnosis and treatment of pulmonary tuberculosis in Durban. Shortly before this take-over, the State Health Department limited the admission of cases to the clinic so that only cases that were the legal responsibility of Durban were seen there. This policy was followed by this department as it was felt that peri-Durban local authorities would become conscious of the need to provide adequate facilities in their own areas. A particular problem was the rural Bantu patient, as the availability of facilities in the country areas were considered inadequate. To overcome this, arrangements were made by the State Health Department for such cases to be referred as outpatients to King George V Hospital where they were attended to during a daily afternoon outpatient session.

Clinic Venues

The following table reflects the outpatient clinic facilities provided by the Department:

Clinic	Race	Day
Durban Chest Clinic	White and Non-White	Monday to Friday
Cato Manor	Non-White	Mondays only
kwaMashu	Bantu	Monday to Friday
Merebank	Asiatic	Fridays only
Chatsworth	Asiatic	Tuesdays and Thursdays
Lamontville	Bantu	Wednesdays only

X-Ray facilities are made available at all clinics.

Clinic Statistics

(A) In view of the different form of statistics kept by the State Health Department, figures for the Durban Chest Clinic for the period 1/1/1969 to 31/3/1969 (i.e. prior to the take-over) are presented separately as follows:

(i) X-Rays

Pre-employment 70 mm. X-Rays		9,514
Influx control 70 mm. X-Rays		1,980
Government departments		224
Mass X-Ray of suspects and contacts -		
	Borough	4,409
	Ex-Borough	1,193
Shipping and other firms - 100 mm. and large plate X-Rays		1,107
Clinical interviews - 100 mm. and large plate X-Rays -		
	Borough	5,044
	Ex-Borough	3,772
Total X-Rays taken at Durban Chest Clinic		27,243

(ii) Notifications

Borough	386
Ex-Borough	310

(iii) Tuberculin Tests

Heaf tests performed -		
	Borough	1,120
	Ex-Borough	401
Heaf tests read -		
	Borough	903
	Ex-Borough	209
Heaf tests found to be positive -		
	Borough	611
	Ex-Borough	126

(iv) B.C.G. Immunisations

Borough	546
Ex-Borough	122

(v) Streptomycin Injections

Borough	4,293

(vi) Other Injections

Borough	149

(vii) Sputum Examinations

Positive sputa	320
Negative sputa	1,990
	2,310

(viii) Hospital Admissions

European		10
Coloured	- New cases	12
	- Re-admissions	6
Bantu	- New cases	319
	- Re-admissions	129
Asiatic	- New cases	65
	- Re-admissions	5
Total Admissions		546

(B) Statistics for the Durban Chest Clinic from 1/4/1969 to 31/12/1969, together with those for the remaining pulmonary tuberculosis outpatient clinics for the whole calendar year 1969, were as follows:

Details	Durban Chest Clinic from 1/4/69	Cato Manor	kwa-Mashu	Mere-bank	Chats-worth	Lamont-ville	Total
Number of Sessions	188	49	250	49	100	52	688
Total Attendances	77,772	5,614	43,625	6,971	19,175	11,202	164,359
Contacts Seen	6,399	604	3,024	292	1,217	892	12,428
Suspects Seen	5,818	399	3,832	877	1,723	979	13,628
Tuberculin Tests	4,161	663	2,764	760	1,745	1,208	11,301
B.C.G. Inocula-tions	1,836	273	2,220	611	1,312	555	6,807
Strepto-mycin Injections	7,600	268	4,283	59	880	640	13,730
X-Rays	66,135	1,566	8,703	1,398	4,031	2,435	84,268

The progressive rise in total attendances over the past few years at the peripheral clinics was not sustained during 1969. Nevertheless, despite an overall decrease in tuberculin tests, B.C.G. vaccinations and Streptomycin injections, there was an increase in contacts, suspects seen as well as X-Rays taken.

During 1969 the following numbers of persons were admitted to the peripheral clinics for the first time:

Cato Manor	kwa-Mashu	Mere-bank	Chatsworth	Lamont-ville	Total
1,010	8,083	1,163	2,934	1,873	15,063

Investigations of these persons yielded the following cases of pulmonary tuberculosis:

Details	Cato Manor	kwa-Mashu	Mere-bank	Chats-worth	Lamont-ville	Total
Pulmonary Tuberculosis cases	85	672	48	188	177	1,170
Pulmonary Tuberculosis cases as a percentage of clinic admissions	8.4%	9.8%	4.2%	6.4%	9.4%	7.7%

Due to a shortage of tuberculin during the latter half of the year, school B.C.G. programmes had to be halted and likewise the clinics were without tuberculin. The State Health Department subsequently overcame the supply difficulties as tuberculin is now manufactured at Onderstepoort. The following table analyses the tests performed at the various clinics:

Tuberculin Tests	Durban Chest Clinic	Cato Manor	kwa-Mashu	Mere-bank	Chats-worth	Lamont-ville
Tests done	4,161	663	2,763	760	1,745	1,208
Tests read	2,468	626	2,148	714	1,595	1,086
Percentage read	59.3%	94.4%	77.7%	93.9%	90.8%	89.9%
Positive	939	386	1,169	279	649	668
Negative	1,567	240	979	435	946	418

B.C.G. ADMINISTRATION

In Durban B.C.G. is administered to the following major groups:

(i) Newborns delivered at King Edward VIII Hospital, McCord Zulu Hospital and St. Aidan's Mission Hospital, and recently at the Shifa Hospital;

(ii) Tuberculin negative reactors attending the tuberculosis clinics; and

(iii) Tuberculin negative reactors discovered on routine testing of non-White school children.

Asiatic, Bantu and in addition Coloured schools were visited and Class I, Standard VI and Standard X pupils at the Bantu schools, and Class I and Standard VIII pupils at the Asiatic and Coloured schools were tuberculin tested and those negative given B.C.G. vaccine.

The number of B.C.G. immunisations administered in the City during the year was made up as follows:

Newborns at King Edward VIII Hospital	15,422
Newborns at McCord Zulu Hospital	2,112
Newborns at St. Aidan's Mission Hospital	3,304
Newborns at Shifa Hospital	250
Municipal Tuberculosis Clinics	6,807
Durban Chest Clinic (1/1/1969 to 31/3/1969)	668
Non-European Schools	6,834
Total	35,397

FIELD WORK AND CONTROL PROGRAMMES

The field staff are responsible for the investigation of cases, referral of contacts and suspects, maintaining contact with tuberculosis cases and their families, and tracing defaulters. Health education plays an important role in their daily duties.

With the incorporation of Newlands on the 1st April, 1969, an extra Bantu Health Assistant was engaged and the total field staff at the year end comprised five European Health Visitors, one European Health Inspector, 17 Bantu and eight Asiatic Health Assistants. Field visits for 1969 totalled 79,100 (72,011 in 1968) made up of 4,962 visits to Europeans, 4,098 to Coloureds, 43,944 to Bantu and 26,096 to Asiatics.

MOBILE MASS X-RAY FOR COMMERCE AND INDUSTRY

The State Health Department has 70 mm. mobile mass X-Ray units available and provided a service for commerce and industry at 25 cents per head. During the year 36,889 X-Rays were taken in Durban.

SUPPLEMENTARY FEEDING OF INDIGENT TUBERCULOSIS CASES

A sum of R9,000, subject to 7/8ths refund by the State Health Department, was available in 1969 for the purchase of suitable foodstuffs for supplementing the diet of indigent tuberculosis patients. A special vitaminised maize supplement, as well as a protein supplement, was included in food parcels made up at this Department's central premises and then distributed to patients at the various clinic centres.

During 1969, 6,690 rations were distributed, a lower figure than the 8,449 rations given out in 1968. In the comment on the notification rate of pulmonary tuberculosis cases, attention was drawn to reasons for the decrease in incidence of the disease. For these same reasons, the demand for supplementary feeding has also diminished, bearing in mind the qualifications laid down by the State Health Department for the allocation of rations.

The table below refers to the number of patients on rations, as well as the rations given to the various race groups during the year:

Age Group (Years)	E		C		B		A		Total	
	Pat-ients	Rations	Pat-ients	Rations	Pat-ients	Rations	Pat-ients	Rations	Pat-ients	Rations
0 - 4 years	-	-	2	42	8	225	17	365	27	632
5 - 8 years	-	-	7	227	14	448	26	617	47	1292
9 -12 years	-	-	1	8	9	377	12	341	22	726
13 years and over	-	-	18	544	97	2515	31	981	146	4040
Total	-	-	28	821	128	3565	86	2304	242	6690

DOMICILIARY ASSISTANCE

The Natal Anti-Tuberculosis Association, a foundation member of the South African National Tuberculosis Association, is responsible for a considerable amount of care relief in the form of financial aid to families stricken with tuberculosis. The five European tuberculosis Health Visitors from this Department serve on the "Care Committee" and provide the necessary information regarding the circumstances of tuberculosis cases and their families which are thoroughly investigated before any grants are made.

There was a fair increase in funds made available during 1969, and the following table reflects the amounts of money distributed to tuberculosis families in recent years:

Year	Amount
1963	R14,683
1964	R15,635
1965	R16,290
1966	R17,325
1967	R17,525
1968	R17,445
1969	R18,775

Much credit is due to the Natal Anti-Tuberculosis Association for their magnificent effort in providing this urgently needed assistance.

V. VENEREAL DISEASES

INTRODUCTION

This report is in respect of all special clinics operated in this City but does not reflect cases treated at hospitals, by district surgeons or private practitioners, as no return to the local authority is legally required.

There are three special clinics in Durban. They are situated at Addington Hospital for Europeans and Coloureds, at King Edward VIII Hospital for Bantu and Asiatics, and in the kwaMashu Bantu Township for Bantu only. The former clinic is conducted by the Provincial Administration and the latter two by the City Health Department.

NEW CASES

The total number of new cases of all races seen in Durban at the special clinics during 1969 was 22,808 compared to 21,628 for 1968. Of these, 16,062 were new City cases and this represents a rate of 2.26 per 100 population for 1969 which is exactly the same rate as the previous year. The following table sets out the numbers of new City cases in each racial group since 1967, with the rate per 100 population indicated in parenthesis:

Year	E	C	B	A	Total
1967	610 (0.33)	427 (1.39)	12,467 (6.12)	791 (0.30)	14,295 (2.09)
1968	601 (0.32)	366 (1.16)	14,011 (6.78)	770 (0.28)	15,748 (2.26)
1969	548 (0.39)	336 (1.04)	14,309 (6.83)	869 (0.31)	16,062 (2.26)

TOTAL ATTENDANCES

The total attendances of City and ex-City cases at all three clinics was 55,654, an increase of 1.60 per cent over the previous year's total of 54,777.

CLINIC SERVICES

Addington Hospital: This clinic, conducted by the Provincial Administration, is situated in the grounds of Addington Hospital. The Durban Municipality reimburses the Provincial authorities on a per capita basis in respect of City cases treated. One session is held each day from Monday to Saturday for Europeans and Coloureds. Attendances (City and ex-City cases) for the year were as follows:

Race	New Cases			Total Attendances		
	M	F	Total	M	F	Total
European	703	75	778	1,965	234	2,199
Coloured	336	44	380	1,178	142	1,320

Congella and kwaMashu: The Congella clinic is conducted by this Department and is situated in the grounds of the King Edward VIII Hospital. This clinic is open all day Mondays to Fridays with a late session on Tuesday afternoons.

The kwaMashu clinic is also conducted by this Department and functions for one three-hour morning session per week at Goodwin's Cottage in the kwaMashu Bantu Township.

Attendances (City and ex-City cases) at these two clinics during the year were:

Race	New Cases			Total Attendances		
	M	F	Total	M	F	Total
Bantu	14,955	5,693	20,648	37,548	12,603	50,151
Asiatic	666	336	1,002	1,374	610	1,984

TREATMENT

During 1968 benzathine penicillin was introduced in place of penicillin aluminium monostearate and continues to be used at this Department's clinics. Clinical impressions of benzathine penicillin are good. In addition patients require fewer injections which in turn is less time consuming for the staff and more patients are likely to get a full course of treatment.

No penicillin deaths occurred during the year, neither were there any allergic reactions of note to this drug.

ADMISSIONS TO HOSPITAL

As stated in last year's annual report the policy in regard to hospitalisation of infectious venereal disease cases had to be adjusted following a directive from the State Health Department. No cases of venereal disease were hospitalised during 1969 although it was felt that some highly infectious instances of gross secondary syphilis may well have warranted admission of the patient.

CONTACTS

Contact tracing continued to be fruitful and 48.99 per cent of contacts cited by patients attended for investigation and treatment at King Edward VIII Hospital and kwaMashu clinics.

SIDE ROOM

Side room examinations were undertaken on urethral and vaginal smears and spun urine deposits for gonococci and other organisms. At the Congella and kwaMashu clinics the following examinations were performed:

Smears - 23,676 with 7,820 positive for gonococci (33.03%)

Urines - 1,242 with 632 positive for gonococci (50.89%)

LABORATORY

The findings of serological examinations carried out at the State laboratories in Durban for Congella and kwaMashu Special clinics' patients are set out below:

Kolmer, VDRL reactions: 28,283 tests with 7,147 positive findings (25.27%)

ANTE-NATAL CASES

A total of 1,764 ante-natal cases were serologically tested at the Congella and kwaMashu clinics. Of these 781 (44.28%) were found to be positive and given treatment.

VENEREAL DISEASES IN DURBAN DURING 1969

(N.B. This table refers to number of diseases diagnosed NOT number of cases)

	DETAILS	NEW CASES										TOTAL ATTENDANCES									
		Eur.		Col.		Bantu		Asiatic		Total		European		Coloured		Bantu		Asiatic		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	Sero-Negative Primary Syphilis	-	-	2	-	111	8	2	-	115	8	15	-	15	-	339	18	4	-	373	18
2.	Sero-Positive Primary Syphilis	4	2	11	-	1,013	247	15	8	1,043	257	152	39	107	8	3,210	658	40	12	3,509	717
3.	Secondary Syphilis	4	-	-	1	122	610	1	16	127	627	4	6	13	19	302	1,513	1	35	320	1,573
4.	Tertiary Syphilis (Clinically Recognised)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Latent Syphilis (Diagnosed on Result of sero-logical test alone)	-	1	3	2	679	665	10	26	692	694	23	8	31	22	2,589	2,188	38	75	2,681	2,293
6.	Neuro-Syphilis	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	4	-	4	-
7.	Congenital Syphilis (under 1 year)	-	-	-	-	56	62	-	3	56	65	-	-	-	-	140	181	-	7	140	188
8.	Congenital Syphilis (over 1 year)	-	-	-	-	6	10	1	4	7	14	-	-	-	-	13	38	3	23	16	61
	Total Syphilis	8	3	16	3	1,987	1,602	30	57	2,041	1,665	194	53	166	49	6,593	4,596	90	152	7,043	4,850
9.	Gonorrhoea	474	64	240	23	4,642	7	249	-	5,605	94	1,360	156	774	69	11,400	12	514	2	14,048	239
10.	G.C. Vulvo-Vaginitis	-	-	-	3	-	888	-	89	-	980	-	-	-	3	-	1,881	-	141	-	2,025
11.	G.C. Ophthalmia	-	-	-	-	11	5	-	1	11	6	-	-	-	-	30	15	2	2	32	17
	Total G.C. Infections	474	64	240	26	4,653	900	249	90	5,616	1,080	1,360	156	774	72	11,430	1,908	516	143	14,080	2,281
12.	Ulcus Molle	-	-	3	-	1,997	322	107	19	2,107	341	-	-	6	1	4,894	663	226	38	5,126	702
13.	Lymphogranuloma Venereum	-	-	-	-	57	2	1	-	58	2	-	-	-	-	139	3	4	-	143	3
14.	Granuloma Inguinale	-	-	-	-	58	2	1	-	59	2	-	-	-	-	111	4	1	-	112	4
15.	Venereal Warts	6	-	8	1	433	168	16	12	463	181	14	-	27	3	1,506	454	44	29	1,591	486
16.	Non-specific Urethritis	65	2	17	-	5,851	85	221	7	6,154	94	157	1	50	2	13,293	175	436	11	13,936	189
17.	Non-Venereal	148	7	75	15	714	2,809	48	165	985	2,996	244	19	158	22	1,446	5,241	78	256	1,926	5,538
	Total	219	9	103	16	9,110	3,388	394	203	9,826	3,616	415	20	241	28	21,389	6,540	789	334	22,834	6,922
	Grand Total	701	76	359	45	15,750	5,890	673	350	17,483	6,361	1,969	229	1,181	149	39,412	13,044	1,395	631	43,957	14,053
	Total of Races	777		404		21,640		1,023		23,844		2,198		1,330		52,456		2,026		58,010	

STATISTICAL SUMMARY : CITY AND EX-CITY CASES TREATED IN 1969

Details	European				Coloured				Bantu				Asiatic				Total		Grand Total
	City		Ex-City		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	474	74	229	1	294	42	42	2	11,451	2,858	3,504	2,835	588	281	78	55	16,062	6,746	22,808
Total Attendance	1,627	230	338	4	1,112	132	66	10	29,293	6,527	8,255	6,076	1,236	495	138	115	40,652	15,002	55,654

VI. MATERNAL AND CHILD HEALTH

The prime aim of this aspect of the departmental programmes is the furtherance of preventive and promotive health work amongst expectant and nursing mothers and infants and children up to the age of 5 years. Over the years the general public has attained a better understanding of the conception of positive health, both physical and mental and this outlook must not only be maintained but also continually encouraged and broadened. This unceasing education of a large sector of the public in health matters devolves particularly on the highly experienced team of health visitors as well as involving medical and ancillary staff.

It is neither possible nor desirable to give isolated attention to an individual in a family unit. Thus, being aware of the importance of the family as a sociological unit in the community, attention is often directed to other members of the family such as the school child, the school leaver, the aged and those with physical and/or mental disabilities. The problems encountered may be not only of a medical nature but are often complicated by social overlay. By virtue of her training, knowledge and experience and her ready acceptance into the home, the health visitor is very well equipped for this responsibility to resolve what problems she can and to refer others to the appropriate agencies. A further function of this section is the statutory control and registration of midwives in private practice.

This Department continued to assist the family planning programmes of the Natal Association for Maternal and Family Welfare and to provide family planning sessions at the 3 previously established clinic venues. A service in a fourth area was begun. Family planning services provided by this Department are conducted in conjunction with child health sessions, being regarded as an integral part of maternal and child health programmes. Further extension of the phased take-over from the Association has and is being severely hampered by lack of medical staff.

The duties and responsibilities of this section naturally embrace all racial groups and areas of the City and require a large staff consisting of full and part-time clinical medical officers, health visitors, clinic sisters, nurses, clinic assistants, nurse aides, health assistants, general assistants and interpreter/cleaners under the overall direction of an Assistant Medical Officer of Health.

Details of the staff establishment of the Maternal and Child Health Section for 1969 and preceding years are tabulated below and although staff allocated to Immunisation services (which are organised as part of this Section) are included, personnel engaged in the Tuberculosis, Infectious Diseases and Venereal Diseases Sections of the Department are excluded.

Post	E	C	B	A	Total 1969	Total 1968	Total 1967
Senior Clinical Medical Officer	1	-	-	-	1	(1)	(1)
Clinical Medical Officer	1	-	-	-	1	(1)	(1)
Part-time Medical Specialist	1	-	-	-	1	(1)	(1)
Part-time Clinical Medical Officer	5	-	-	-	5	(5)	(5)
Chief Health Visitor	1	-	-	-	1	(1)	(1)
Deputy Chief Health Visitor	1	-	-	-	1	(1)	(1)
Senior Health Visitor	1	-	1	1	3	(3)	(3)
Health Visitor	23	4	18	11	56	(51)	(49)
Clinic Sister	5	-	-	-	5	(5)	(5)
Nurse	-	-	4	8	12	(12)	(11)
Clinic Assistant	10	-	-	-	10	(10)	(11)
Nurse Aide	-	*5	16	23	44	(40)	(36)
Overseer	-	-	-	1	1	(1)	(1)
Health Assistant	-	-	4	4	8	(8)	(8)
General Assistant	2	-	-	1	3	(3)	(2)
Interpreter/Cleaner	-	-	7	8	15	(15)	(13)
Watchman	-	-	1	-	1	-	-
Total	51	9	51	57	168	(158)	(149)

* Includes 1 nurse-aide/seamstress

In addition to the abovementioned medical officers, the Section was again able to utilise a "panel" of 4 medical practitioners, 2 of whom provided regular medical coverage for school immunisation programmes throughout the year and 2 assisted at child health clinics when required during staff shortage.

Comparison of the staff establishments over the three year period reflects a steady expansion in respect of health visitors and nurse aides, primarily to meet the growing demands of the family planning service.

A. MATERNAL HEALTH

(i) Ante-Natal Clinics

An ante-natal clinic service is provided by the Department for Europeans, Coloureds and Asiatics who have elected to be confined in their own homes by registered European and Coloured midwives as well as unregistered Asiatic midwives authorised to practice within the Durban Municipal area. A medical officer is in attendance at all ante-natal sessions and the routine of taking smears from most attenders for exfoliative cytology continued. Of the 530 cases so examined no cases of malignancy were found. A limited district service is conducted by Addington Hospital for the European and Coloured race groups. Midwifery facilities for the Asiatic and Bantu groups are provided by the Natal Provincial Hospital service. At kwaMashu restricted midwifery facilities at the Provincial Administration's Polyclinic continued to be provided for the Bantu in that township. The service included delivery facilities at the clinic and post-natal district nursing.

Post-natal visits to all races are undertaken by health visitors who follow up birth notifications.

Details of attendances at Departmental ante-natal clinics and home visits are set out below:

Details	E	C	A	Total 1969	Total 1968
Ante-natal clinic sessions	12	11	98	121	117
Attendances	58	87	1,373	1,518	1,755
Rhesus factor tests	27	30	567	624	765
Exfoliative cytology tests	17	23	490	530	664
Haemoglobin tests	20	30	609	659	773
Kolmer/VDRL tests	19	29	560	608	797
Ante-natal visits	31	7	324	362	364
Post-natal visits	15	15	412	442	955

Of 1,518 cases it was necessary to refer three Europeans and 151 Asiatics for hospital delivery due to excessive multiparity, ill-health or a history of previous complicated confinements.

(ii) Facilities for Maternity Cases

Accommodation for maternity cases in Durban is provided at the following Provincial and private hospitals:

Institutions	Maternity Beds				
	E	C	B/A	Total 1969	Total 1968
1. Provincial					
Addington Hospital	40	44	-	84	85
King Edward VIII Hospital	-	-	211	211	241
2. Private Hospitals					
St. Aidan's Hospital	-	-	*24	24	24
St. Augustine's Hospital	38	-	-	38	30
McCord Zulu Hospital	-	-	68	68	60
Mothers' Hospital	46	-	-	46	46
Parklands Nursing Home	24	-	-	24	24
Shifa Hospital	-	-	*14	14	14
Total	148	44	317	509	524

* Asiatics only

(iii) Supervision of Midwives

Listed midwives are supervised by one European Health Visitor. Their equipment and registers are examined regularly, home visits made to ante-natal and post-natal cases and any stillbirths amongst district cases as well as to the midwives' homes. All notified cases of puerperal sepsis and ophthalmia neonatorum are visited by a health visitor from the Epidemiology Section. Details of midwife supervision are set out below:

Details	E	C	A	Total 1969	Total 1968
Certificated midwives listed	2	2	-	4	5
Confinements attended	84	46	71	201	184
Non-certificated midwives listed	-	1	44	45	50
Confinements attended	-	7	645	652	898
Confinements by unlisted midwives(i.e.illegal operators)	-	2	17	*19	9
Midwives applicances examined	3	6	309	318	327
Visits to midwives at home	-	5	250	255	155
Warnings to listed midwives not complying with regulations	-	-	1	** 1	9

* This figure represents only those cases of illegal midwifery traced and visited post-natally and does not include the alleged large number of births which do not come to the notice of the Supervisor of Midwifery.

** In addition numerous verbal warnings are issued by the Supervisor during the course of her duties to persons believed to be practising midwifery without authority.

(iv) Total number of Confinements conducted in Durban by Midwives on district only (including midwives employed by the Natal Provincial Administration)

Midwives	E	C	B	A	Total 1969	Total 1968
Certificated	68	75	803	394	1,340	1,408
Non-certificated	-	6	-	660	666	852
Total	68	81	803	1,054	2,006	2,260

(v) Family Planning

During 1962 the Department seconded a part-time clinical medical officer to the Natal Association for Maternal and Family Welfare, and in 1963 the City Council authorised the appointment of an Indian nurse to assist at that Association's clinics. In 1967 the City Council adopted a recommendation that there be a phased take-over of family planning services from the Association. Accordingly, in August 1967, family planning clinics were commenced at Merebank and both the Asiatic clinics at Chatsworth. Further expansion has been hampered by the difficulty experienced in recruiting medical officers to fill two newly created part-time posts, whereas suitably trained nursing personnel are readily available. Added to this difficulty is the very real problem of finding suitable venues in which to conduct family planning clinics. Thus the only extension that could be implemented was at the Newlands clinic where the service was introduced in September 1969, primarily for Asiatics but with a small number of Bantu women attending.

All family planning clinics are conducted as part of an integrated preventive family health service in conjunction with established child health clinic sessions and with a medical officer in attendance to whom all new cases and old cases due for re-examination are referred.

Although oral contraceptives are prescribed for the majority of clinic attenders, during August 1969 it was decided to introduce a long acting progestogen by injection at three monthly intervals for selected patients. Injections given totalled 134 and this method is proving both satisfactory and acceptable. No mechanical or intra-uterine devices are used in this Department's clinics although with proposed expansion it may well be necessary to consider greater diversity of methods.

Details of attendances at Departmental family planning clinics are:

Venue	Sessions	First Attendance	Re-attendance	Total 1969	Total 1968
Asiatic Clinics:					
Chatsworth Unit 2	149	589	5,784	6,373	4,644
Chatsworth Unit 10	680	680	7,336	8,016	5,537
Merebank	150	275	4,295	4,570	3,563
Newlands - (from 1.9.1969)	14	41	49	90	-
Total	463	1,585	17,464	19,049	13,744
Bantu Clinic: Newlands	15	25	23	48	-
Grand Total	478	1,610	17,487	19,097	13,744

Of the total attendance of 19,097, 3,735 patients were examined by the medical officers. Extensive records are kept of all cases and despite the publication of a report on the possible harmful effects of oral contraceptives of high oestrogen content, the decision to continue to use those preparations regarded as being within safe limits was made.

Defaulters continued to present a problem and were visited at home to ascertain the reason for default. Such visiting proved worthwhile, resulting in re-attendance at clinic in many instances whilst affording an excellent opportunity not only for reassuring the mother, but also for the dissemination of general health education. Reasons for default included pregnancy (almost invariably due to patient 'failure'), discomfort, illiteracy and misunderstanding of instructions. family opposition, change of address, preference for contraceptive methods not offered by the Department's clinics, and, rarely, alleged lack of privacy in crowded clinics. The latter refers almost exclusively to the shy self-conscious patient, with exaggerated fears which are invariably dispelled by tactful reassurance on home visiting.

(vi) Cervical Exfoliative Cytology

In addition to the ante-natal cytology service, statistics for which are recorded under Ante-Natal clinics, this Department has, since 1963, offered a cytology service to Durban women attending private medical practitioners. The former tests are performed by the State Health Laboratory in terms of Government Notice No.514 of 1966, whilst the latter, (Council Scheme), are processed by the Cytology Unit of the Natal Provincial Laboratory at Addington Hospital. The cost to the Department is R1.00 per patient but to the patient and practitioner there is no charge in respect of the cytology. The total number of exfoliative cytology examinations carried out under the Council Scheme for the early detection of cancer, since the inception of the scheme, appears hereunder:

Year	Total Examinations	Repeat Examinations	Confirmed Malignancy
1963	2,614	34	12
1964	2,915	324	18
1965	3,807	590	25
1966	4,754	611	26
1967	5,199	630	22
1968	5,785	718	15
1969	7,306	1,326	17
Total	32,380	4,233	135

The adjoining table further analyses the 1969 totals with particular reference to race and age groups. In addition to the number of initial smears, to this subtotal has been added an analysis of repeat examinations i.e. annual or request. This is being done following the suggestion that where the number of cases of confirmed malignancy remains low, in spite of an increased total of examinations done, the reason is that many such smears were performed as annual or request repeat examinations and that therefore the total examinations performed is somewhat loaded. It is felt that a statistically valid comment cannot be made at this stage.

The number of cases of proven malignancy detected by cytology and confirmed by histological examination are also reflected. As response to written requests for follow-up reports directed to the medical practitioners generally remained poor, the tedium of final telephonic confirmation of cases continued.

EXFOLIATIVE CYTOLOGY

EXAMINATIONS

YEAR: 1969

AGE GROUP IN YEARS	EUROPEANS				COLOUREDS				BANTU				ASIATIC				TOTALS			GRAND TOTAL	CONFIRMED MALIGNANCY	
	Initial	RA	RR	Total	Initial	RA	RR	Total	Initial	RA	RR	Total	Initial	RA	RR	Total	Initial	RA	RR		1969	1968
Under 30	1,905	194	21	2,120	43	1	1	45	3	1	-	4	123	7	-	130	2,074	203	22	2,299	1	2
30-39	1,677	329	61	2,067	46	8	-	54	2	-	-	2	111	4	2	117	1,836	341	63	2,240	6	3
40-49	1,142	350	59	1,551	29	3	1	33	3	-	-	3	69	10	2	81	1,243	363	62	1,668	5	4
50-59	482	164	26	672	3	1	-	4	-	-	-	-	21	1	2	24	506	166	28	700	3	4
Over 60	176	41	4	221	2	-	-	2	-	-	-	-	2	-	-	2	180	41	4	225	2	2
Not stated	130	27	4	161	5	-	-	5	-	-	-	-	6	1	1	8	141	28	5	174	-	-
Totals	5,512	1,105	175	6,792	128	13	2	143	8	1	-	9	332	23	7	362	5,980	1,142	184	7,306	17	15

RA : Repeat Annual

RR : Repeat Request

Initial Smears = 82%
Repeat Annual Smears = 16%
Repeat Request Smears = 2%

100%

B. CHILD HEALTH

(i) Clinics

The child health clinics in the City, which are held at 36 venues throughout the Municipal area to serve the various racial groups, were well attended during 1969. The major function of the service is advisory and educational for mothers of babies from birth to school-age.

The problem of suitable venues for expanding services remained a problem and in three instances was relieved only by instituting additional clinic sessions.

The premises used varied from fixed hired halls to modern purpose-designed municipal clinic buildings. Of the latter, one operates on different days for Europeans and Coloureds in the centre of the City, and three in Asiatic townships. The Asiatic clinic complexes accommodate Child Health, Family Planning and Tuberculosis services. A further two clinics, on enlarged master clinic lines, are currently being erected for Bantu and Asiatics in kwaMashu and Chatsworth townships respectively.

Noteworthy changes effected during the year were:-

(a) Newlands, formerly within the area of jurisdiction of the Local Health Commission was incorporated into the City of Durban on 1st April, 1969, from which date clinic sessions were commenced, mainly for Asiatics but also for the remaining Bantu population in that area.

The existing clinic building is rented by this Department and although far from ideal, will continue to be used until a purpose-designed complex is built at a future date, doubtless in conjunction with a projected township. A medical officer is in attendance at all sessions. Initially only child health and immunisation services were offered, on a thrice weekly basis, but from 1st September a family planning service was introduced in conjunction with the existing sessions. Dried skimmed milk (State Scheme) and other dietary assistance was issued, on the same basis as at other clinics in the City. Combined typhoid-paratyphoid A and B vaccine is administered to children and adults as this is considered a necessary precaution in view of the lack of proper sewerage facilities and inadequate water supply in the area.

Home visiting in this essentially rural area presents problems; the terrain is hilly and roads sparse, the houses and shacks are very scattered and addresses are difficult to find, as in some cases the identifying pegs have disappeared.

Despite these difficulties attendances at clinic sessions showed a gradual but sustained increase.

(b) An extra weekly session at the Overport and Warwick Avenue European clinics was commenced in August to alleviate congestion at these well-attended clinics.

(c) Following increased attendances at the Red Hill clinic for Coloureds, sessions were increased from fortnightly to weekly.

(d) With reduced attendances at the Virginia and Red Hill European clinics, sessions were reduced from weekly to alternate weeks.

Details of sessions and attendances at all clinics are shown in the following tables:

EUROPEAN

Clinic Venue	Sessions	Attendances
Aliwal Street	49	3,086
Bellair	25	883
Cunningham Road	11	272
Durban North (2 venues)	49	2,055
Fynnlands	49	4,423
Greyville	52	4,497
Hillary	24	1,119
Mayville (Westridge)	49	2,072
Montclair	51	4,303
Morningside	51	3,171
Old Fort Place	81	1,883
Overport	70	3,722
Red Hill	25	1,169
Sea View	49	2,399
Virginia	40	1,218
Warwick Avenue	169	10,695
Wentworth	52	3,107
Woodlands	52	2,743
Total	948	52,817
Total 1968	950	54,868

There was a 2,051 decrease in attendances in this group. Decrease in sessions and thus in attendances at Red Hill (356) and Virginia (753) together show a total of 1,109 less than the 1968 figures. On the other hand increases in sessions and thus in attendances at Overport (204) and Warwick Avenue (1,247) show a combined total of 1,451 more than the 1968 figure. With the exception of three other clinics (Aliwal Street, Bellair and Fynnlands) which showed a 453 combined total increase in attendances, all the remaining clinics together showed a total decrease of 1,256 in numbers.

The decrease in attendances is directly attributable to the shortage of health visitors and consequent limited time devoted to home visiting and serves to stress that essential aspect of the work.

COLOURED

Clinic Venue	Sessions	Attendances
Austerville	99	10,967
Mayville	82	6,940
Red Hill	33	5,198
Sparks Estate	199	13,707
Warwick Avenue	102	8,341
Wentworth Government Village	49	9,072
Total	564	54,225
Total 1968	567	57,564

Again the decrease in attendances (3,339) is considered to be the result of insufficient time available for home visiting.

BANTU

Clinic Venue	Sessions	Attendances
*Cato Manor	49	147
Chesterville	201	21,531
Goodwin's Cottage, Rydalvale - both at kwaMashu	278 367	46,539 61,264
Lamontville	386	29,491
Lancer's Road	147	21,740
*Newlands(from 1/4/69)	134	4,183
Total	1,562	184,895
Total	1,476	175,742

* At these two clinics, sessions are run concurrently for Bantu and Asiatics.

The total attendance showed an excellent growth of 8,153 due to increased attendances at both the kwaMashu and the Lamontville clinics.

ASIATIC

Clinic Venue	Sessions	Attendances
Asherville	96	11,600
*Cato Manor	98	5,835
Chatsworth Unit 2	247	27,337
Chatsworth Unit 10	298	32,499
Clairwood	206	22,663
Lancer's Road	252	38,554
Mayville	147	10,988
Merebank	250	20,551
*Newlands (from 1.4.69)	133	7,035
Reservoir Hills	52	4,898
Total	1,779	181,860
Total 1968	1,599	184,566

* At these two clinics, sessions are run concurrently for Bantu and Asiatics.

A 2,706 decrease in total attendances is noted. Whereas substantially increased attendances were recorded at Asherville, Chatsworth Unit 10 and Reservoir Hills, all the other clinics showed decreased attendances. In the case of Lancer's Road and Mayville this is attributed to the removal of many residents previously attending these clinics to the Chatsworth area and the probability that many such cases have not yet attended the Chatsworth clinics. A disturbingly large decrease of 4,985 was recorded at Merebank clinic. As with the overall decrease for this group, this latter, too, is almost certainly due to the limited home visiting time available for this racial group.

The total number of clinic sessions and attendances for all racial groups were as follows:

Details	E	C	B	A	1969 Total	1968 Total
Clinic sessions	948	564	1,562	1.779	4,853	4,592
Clinic attendances	52,817	54,225	184,895	181,860	473,797	472,740
New cases	3,225	1,789	12,370	10,671	27,855	26,105
Cases seen by doctor	3.483	3,924	7.850	5,362	20,619	18,347

General Comment

Although the final table reflects increased totals in all categories and community groups compared with 1968, the boost given by the increase in the Bantu figures must be borne in mind and the overall figures cannot then be viewed with complacency, especially as Bantu figures tend frequently to be inflated by attendance of sick children who should not be attending preventive and promotive clinics. However, their mere presentation requires them at least to be screened and referred if it is decided that they should not be given even simple treatment. Nonetheless all such cases receive health education to a varying degree and a check on their immunisation state is also carried out.

(ii) Home Visiting

On receipt of the birth notification, all mothers except those confined by private practitioners were visited as soon as possible after discharge from hospital, or after termination of the midwive's attendance in the homes. Further home visits were made when considered necessary and covered a wide range of facets of child and family health, including feeding, nutrition and behaviour problems, physical illness or handicaps or mental ill health, family planning and immunisation defaulters, as well as routine follow-ups. Throughout all domiciliary visiting health education was constantly disseminated.

To assess the type of problems encountered when home visiting and to analyse work loads, a revised system of recording these visits was commenced in March. All health visitors and other staff under their supervision submitted a daily record of the types of visit made and the number of premises visited.

Concern is expressed that as clinics have had large attendances and although increased sessions were instituted to allow the health visitors more time for interviewing each mother at the clinics, they were unable due to staff shortage to spend sufficient time with the mothers in their homes. This is disturbing, as a service such as this can almost stand or fall on the domiciliary aspect of the work.

A total of 287 visits were made to "protected" infants, foster children and cases of neglect at the request of the Durban Child Welfare Society. Six of these were visits to Coloured and 281 were to European children.

Details of home visits conducted are as set out in (a) below and (b) on the following two pages:

(a) Home Visits for January and February, 1969

Home Visits	E	C	B	A	Total
First Visit	386	370	2,079	1,412	4,247
Re-visit	1,592	293	846	1,173	3,904
Total	1,978	663	2,925	2,585	8,151

Wasted visits during this period: 1,059

(b) The revised schedule with details of classification, in use from March 1969, is set out in the following two tables, the first being an analysis of home visiting by Child Health staff and the second, an analysis of home visiting to the various race groups.

HOME VISITING BY CHILD HEALTH STAFF

1969

Staff	Number of Premises Visited	INVESTIGATIONS												Total
		New Births (a)	Behaviour Problems (b)	Routine (c)	Family Planning (d)	Defaulters (di)	Feeding Advice (e)	Illness (f)	Immunisation (g)	Mental Health (h)	Health Education* (i)	Miscellaneous** (j)	Wasted (k)	
European	14,970	3,599	491	3,237	1,708	60	5,567	2,243	4,209	180	2,365	1,490	2,850	27,999
Coloured	1,640	582	-	75	53	4	128	23	854	1	4	30	504	2,258
Bantu	15,166	4,190	43	1,723	1,546	5	3,691	1,240	7,445	141	3,896	1,371	2,370	27,661
Asiatic	11,489	4,653	3	192	1,867	1,166	753	102	6,188	19	896	292	1,673	17,804
Total	43,265	13,024	537	5,227	5,174	1,235	10,139	3,608	18,696	341	7,161	3,183	7,397	75,722

HOME VISITING TO VARIOUS RACE GROUPS

1969

Community	Number of Premises Visited	INVESTIGATIONS												
		New Births (a)	Behaviour Problems (b)	Routine (c)	Family Planning (d)	Defaulters (di)	Feeding Advice (e)	Illness (f)	Immunisation (g)	Mental Health (h)	Health Education* (i)	Miscella-neous** (j)	Wasted (k)	Total
European	9,108	1,438	474	2,623	351	15	3,896	1,759	2,193	74	971	777	2,072	16,643
Coloured	2,990	1,088	6	186	378	4	674	193	1,495	11	428	171	672	5,306
Bantu	15,960	4,332	46	1,977	1,687	5	3,987	1,313	7,699	193	4,047	1,642	2,415	29,343
Asiatic	15,207	6,166	11	441	2,758	1,211	1,582	343	7,309	63	1,715	593	2,238	24,430
Total	43,265	13,024	537	5,227	5,174	1,235	10,139	3,608	18,696	341	7,161	3,183	7,397	75,722

NOTE: * Health education, being constantly disseminated is, of course, an integral part of all home visits.

** Under "Miscellaneous" the following were included: neglect, protected infants, ante-natal cases, handicapped children, kwashiorkor, geriatics and any other category not listed.

The total of 8,151 for January and February 1969 reflected visits to individuals whereas from March to December 1969 the total premises visited were 43,265, and the total investigations were 75,722. During 1968 the total home visits were 70,653. This total represents individuals visited. Of this 40,640 were first visits and 30,013 were re-visits.

(iii) State Subsidised Skim Milk Powder Scheme

The distribution of State subsidised dried skim milk powder at Child Health clinics for the prevention of kwashiorkor continued throughout the year, a total of 180,712 lbs. being issued, of which 11,204 lbs. were given free of charge, to indigent families. The majority of this milk was distributed at the non-white clinics, the mothers paying 5 cents per package.

Towards the end of 1968 and the beginning of 1969 it became apparent that because of the need the allocation of 200,000 lbs. of skimmed milk powder granted annually by the State Department of Health to this Department needed reviewing in the light of the rapid growth of the non-White population, the proposed opening of new clinics in 1970 and the increased acceptability of this commodity to these race groups.

In 1968 the allocation had been exceeded by 6,936 lbs. so in 1969 extremely careful issue by health visitors was necessary. The allocation was accordingly adjusted to allow the issue of up to 240,000 packages per annum or 20,000 packages per month, the authority only being obtained late in the year.

(iv) Other Dietary Assistance

Additional dietary assistance at kwaMashu was given by the Council's Bantu Administration Department from the Bantu Revenue Account (Beerhall profits). This includes:

(i) a varying amount of full cream powdered milk issued free of charge and used for babies too young for skimmed milk powder; and

(ii) fresh milk sold at 3 cents per pint, also in varying amount but at least 1,000 pints are allocated to each of the two clinics per day.

Another source of assistance is through two voluntary organisations which supply in limited quantity:

(i) full-cream powdered milk which is sold at 15 cents a pound to selected cases where this milk is necessary but parents cannot pay the retail price; and

(ii) a pre-cooked cereal issued to needy cases at 5 cents per package or free of charge to indigents.

(v) Kwashiorkor

Special attention is paid to cases of kwashiorkor encountered at the clinics and when home-visiting, although statutory notification of this disease was rescinded on 5th April, 1968, under The Public Health Act No.36 of 1919, as amended. Many such cases are found, especially in the Bantu townships where for some reason the family concerned have not yet come within the orbit of the clinic. These cases are advised on feeding and nutrition and urged to attend clinic to receive dietary assistance through the issue of dried skimmed milk powder, but nevertheless constant follow-up is needed. Home visits to kwashiorkor cases and deaths frequently led to the discovery of other cases in the family or of malnourished children needing clinic advice and health education. These visits, in turn, often led to regular clinic attendances, great improvement in physical condition and at the same time immunisation was effected.

Malnutrition

Deaths from malnutrition (including kwashiorkor) under five years, are reflected below:

Year	E	C	B	A	Total
1961	-	2	109	17	128
1962	-	2	102	8	112
1963	-	2	83	4	89
1964	-	1	78	7	86
1965	-	-	72	3	75
1966	-	1	27	3	31
1967	-	3	19	5	27
1968	-	-	52	3	55
1969	-	-	45	-	45

Note: (a) Of the Bantu deaths, 41 were due to kwashiorkor and four to malnutrition other than kwashiorkor.

(b) As deaths from kwashiorkor were not investigated during 1969 the figure of 45 probably includes a number of ex-City and imported cases.

In 1968 there were 50 deaths from kwashiorkor, 48 being Bantu and 2 Asiatics.

(vi) Crèches, Play Centres, Nursery Schools and Places of Care

Numerous routine visits were paid to these institutions throughout the year. These pre-school institutions are registered with the relevant authority i.e. the Department of Social Welfare, the Department of Coloured Affairs, the Department of Bantu Administration and Development or the Education Department of the Provincial Administration. During inspections advice is given on subjects which include hygiene and cleanliness, nutrition and diet, the latter especially where all-day care is provided. The occupation of the children in regard to play is also noted and advice given where necessary. Where new institutions apply for registration or established ones seek to extend, a Departmental "Code of Practice" serves as the yardstick.

(vii) Lectures, Demonstrations and In-service Training

Lectures, demonstrations and in-service training were given to Addington Hospital midwifery students, Diploma of Nursing students (European and Bantu), final year General Nursing students from King Edward VIII Hospital, B.Sc. (Nursing) students (University of Natal), the Coloured and Asiatic Public Health Nursing students from the M.L. Sultan College and non-European Medical students.

In July, teachers of hygiene in European schools attended for films, lectures and a demonstration on Child Health.

VII. IMMUNISATION

Maintaining an adequate immunisation coverage of the population at risk to prevent outbreaks or spread of infectious disease remains one of the many important functions of the Department. Facilities, free of charge, are provided at Departmental Child Health clinics throughout the City for the immunisation of susceptible individuals against diphtheria, whooping cough and tetanus, poliomyelitis as well as vaccination against smallpox. A similar provision is also made at the central immunisation clinic in this Department's building. In addition, at the latter venue, food-handlers are inoculated against typhoid and paratyphoid fever.

B.C.G. vaccination in the control of tuberculosis is described in the chapter dealing with that subject for obvious reasons.

To ensure a satisfactory response parents are reminded of immunisation when their infants reach the age of three months by postcards despatched by this Department and are requested to take their children to the nearest clinic or private medical practitioner for the necessary immunisation.

Children of all races at nursery schools, places of care and primary schools are visited by the Department's school teams. To those children under three years of age the triple antigen (diphtheria - whooping cough - tetanus) is administered, whereas combined diphtheria and tetanus vaccine is given to those over three and under 10 years of age. All such immunisation is carried out only after careful checking of past immunisation records and, of course, with parental consent.

In common with past years many children over 10 years of age, especially immigrants, were referred by the Education Department as they had had little or no immunisation. Initially the previous policy was followed i.e. such older children received the diphtheria and tetanus antigens separately, so reducing the chance of reactions by using adsorbed dissolved floccules followed by dissolved floccules for the diphtheria component. However, towards mid-year it became evident that with this rather drawn out course of injections and the heavy load on the school teams, many children might not complete the course before the year end. Acting on advice from the South African Institute for Medical Research, Johannesburg, it was decided to follow this routine only for children with reaction or allergic histories and to revert to combined diphtheria-tetanus antigen for the remainder. This proved safe, there being no untoward reactions reported and the courses were expeditiously completed.

For school immunisation programmes continued use was made of two hydraulically-operated multi-dose jet injection instruments. These machines, well suited to mass programmes, were used extensively in this field in schools. During April, May and June they were used for the administration of Hong Kong influenza vaccine to groups of adults at risk and/or key personnel. In both instances they continued to prove simple of operation and acceptable to both children and adults.

Further immunisation was carried out in the field from two purpose-designed mobile immunisation vans operating mainly in outlying areas for the non-White races, where clinic facilities are limited. These vans were used particularly successfully in providing a systematic coverage of Indian and Bantu townships.

Vaccination against Smallpox

Vaccination against smallpox continued at all child health clinics, in the field and at the request of many non-European school principals for unvaccinated children in schools (the latter in pursuance of the strict enforcement of producing proof of vaccination on school entry).

In October, following the admission to King Edward VIII Hospital of two Bantu children found to have smallpox, the outpatient department contacts were traced and vaccinated as were the contacts of both fathers who were employed in Durban. Control measures without the City were undertaken by the State Health Department in the areas of origin of the two patients.

The number of vaccinations carried out during 1969 is reflected in the following table:

Vaccinations	E	C	B	A	Total 1969	Total 1968
Primary vaccinations	3,243	1,833	8,126	10,772	23,974	26,796
Re-vaccinations	402	393	18,018	1,433	20,246	3,078
Total	3,645	2,226	26,144	12,205	44,220	29,874

The increase in total vaccinations was due in the main to an intensive school programme in Bantu schools. In addition to the above, 65,098 Bantu work-seekers were vaccinated against smallpox at the Bantu Administration Department, making a grand total of 109,318 vaccinations for the year. This figure does not include vaccinations performed in Durban by private medical practitioners, the Port Health Officer or the various other persons vaccinated by District Surgeons for international travel and so forth.

Combined Diphtheria, Whooping Cough and Tetanus Immunisation

This triple antigen was administered to children from three months to three years of age, mainly at the departmental child health clinics but also at places of care and nursery schools as summarised below:

Age Group	DWT Dose	E	C	B	A	Total
Under 1 year	1st	2,906	1,678	6,551	8,520	19,655
	2nd	2,809	1,516	4,272	7,621	16,218
	3rd	2,666	1,402	3,482	6,663	14,213
	Total	8,381	4,596	14,305	22,804	50,086
1 - 3 years	1st	171	52	1,632	1,047	2,902
	2nd	148	66	1,270	906	2,390
	3rd	202	80	1,309	1,057	2,648
	Booster	1,574	1,044	1,251	4,807	8,676
	Total	2,095	1,242	5,462	7,817	16,616
Grand Total		10,476	5,838	19,767	30,621	66,702

The total for 1968 was 64,427

Combined Diphtheria and Tetanus Immunisation

Pre-school institutions, infant schools and primary schools were visited by the two school teams to immunise and give booster doses of vaccine against diphtheria and tetanus to children below the age of 10 years. This combined antigen was also administered in clinics. Details are summarised hereunder:

Age Group	DT Dose	E	C	B	A	Total
Under 1 year	1st	7	19	28	45	99
	2nd	12	5	12	20	49
	3rd	8	4	5	13	30
	Total	27	28	45	78	178
1 - 6 years	1st	236	162	1,409	1,814	3,621
	2nd	156	104	899	1,289	2,448
	3rd	114	84	726	1,147	2,071
	Booster	1,826	1,031	937	5,359	9,153
	Total	2,332	1,381	3,971	9,609	17,293
School age	1st	689	346	2,383	4,957	8,374
	2nd	570	379	2,267	4,552	7,768
	3rd	359	338	2,025	4,149	6,871
	Booster	2,057	1,262	515	4,677	8,511
	Total	3,675	2,325	7,190	18,335	31,525
Grand Total		6,034	3,734	11,206	28,022	48,996

The total for 1968 was 38,622

Tetanus Immunisation

Tetanus prophylactic vaccine was administered mainly to school children, as shown in the following table:

Age Group	Dose	E	C	B	A	Total
School age	1st	151	98	1	26	276
	2nd	47	46	-	33	126
	3rd	24	26	-	405	455
	Booster	2,459	400	665	4,983	8,507
	Total	2,681	570	666	5,447	9,364
Adult	1st	31	10	93	19	153
	2nd	22	1	92	17	132
	3rd	12	3	-	5	20
	Booster	9	7	-	22	38
	Total	74	21	185	63	343
Grand	Total	2,755	591	851	5,510	9,707

The total for 1968 was 11,495

Immunisation against Poliomyelitis

Full details are given below:

Age Group	Dose	E	C	B	A	Total
Under 1 year	1st	3,511	1,687	7,201	9,305	21,704
	2nd	3,382	1,502	4,423	8,019	17,326
	3rd	3,143	1,391	3,729	7,138	15,401
	Total	10,036	4,580	15,353	24,462	54,431
1 - 4 years	1st	333	218	4,768	2,962	8,281
	2nd	342	160	2,579	2,315	5,396
	3rd	625	182	2,244	2,665	5,366
	Total	1,300	560	9,591	7,942	19,393
5 - 9 years	1st	420	108	13,994	1,212	15,734
	2nd	386	76	6,947	945	8,354
	3rd	600	71	4,372	2,464	7,507
	Total	1,406	255	25,313	4,621	31,595
10-19 years	1st	312	106	5,036	1,022	6,476
	2nd	217	108	123	1,866	2,314
	3rd	303	86	1,284	5,025	6,698
	Total	832	300	6,443	7,913	15,488
20 years and over	1st	810	61	1,124	807	2,802
	2nd	653	85	96	1,833	2,667
	3rd	645	137	67	4,426	5,275
	Total	2,108	283	1,287	7,066	10,744
Grand	Total	15,682	5,978	57,987	52,004	131,651

The total for 1968 was 155,976

The programme in Bantu schools continued at the request of the principals, hence the large number in the 5 - 9 year age group as these children had not been able to produce certificates of immunisation on school entry.

Typhoid Control

Clinics are held twice weekly throughout the year for Vi-tests to be performed on selected food-handlers and for the administration of typhoid, paratyphoid A and B vaccine. The figures below reflect not only these inoculations, but also include TAB immunisations effected in the Newlands area since 1st April, 1969 (2,038 injections):

Vi-tests	E	C	B	A	Total 1969	Total 1968
Blood samples	10	1	559	10	580	741

No positive results were recorded.

TAB Vaccine	E	C	B	A	Total 1969	Total 1968
1st Dose	79	9	802	659	1,549	760
2nd Dose	47	6	595	474	1,122	601
3rd Dose	30	1	295	609	935	6
Booster	8	1	568	110	687	673
Total	164	17	2,260	1,852	4,293	2,040

Immunisation against Hong Kong Influenza

In April it was decided to immunise certain categories of the public with vaccine to provide protection against an anticipated epidemic of influenza. The influenza virus vaccine used was Monovalent Type A2, AICHI strain (Hong Kong variant). The categories included doctors and nurses, key staff of municipal departments and other essential workers. Most of the vaccine was issued by the State Health Department but some was purchased by the City Council.

Immunisation commenced on 9th April, 1969, with the staff of this Department. Thereafter personnel of the remaining municipal departments and doctors and nurses in Durban were immunised. Where it was not practical for large numbers of staff to attend the central clinic in this Department, teams visited the various departments and outlying stations and full use was made of the multidose jet injection instruments.

Vaccine was also supplied to Nursing Homes catering for the aged.

In all 7,567 persons were immunised.

It must be recorded that three severe cases of immediate anaphylactic shock occurred, all of which responded to prompt emergency treatment. Of these three cases of definite allergic shock, one had no previous history of allergy whereas the other two had, but failed to disclose this until after their incidents. Sequelae reported included numerous sore arms and erythematous local reactions, two abscesses and a few influenza-like symptons.

VIII. HEALTH EDUCATION

INTRODUCTION

Health education of the public was pursued in general by virtually all officials in the Department and in particular by the health education section. Thus, apart from spearheading special projects, the latter continued with routine daily programmes throughout the year, amongst all racial groups of the community. The methods used varied with the occasion and included films and talks, talks from the mobile health education unit, group talks and house-to-house visiting. In addition to films, other visual aids utilised were models, charts and slides in the constant channelling of health education to the people of Durban.

The section has a staff of 21, falling under the direction of a European male Health Educator, assisted by a European Health Visitor. The other personnel comprise one European Technician, two European General Assistants, one Coloured Lecturer, seven Bantu male and one Bantu female lecturers, one Asiatic female and six Asiatic male lecturers.

A notable inclusion on the list of topics was that of the drug problem - drug dependence, misuse and abuse, which was presented to selected audiences. Films on this subject have been previewed wherever possible and one on LSD and a series of film strips on drugs were purchased by this Department. Unfortunately films are extremely difficult to obtain as they come in the main from America, are expensive, often cannot be purchased but have to be hired at high cost for a period of years, whilst the distributing companies are somewhat reluctant to send films for preview purposes, so making it virtually impossible to know whether a particular film is suitable for the varied audiences or even of any value for health education purposes. Because the buying of films under these circumstances is not without an element of chance the departmental film library has expanded but gradually. It has, however, been possible to view, inter alia, films imported by other agencies and organisations, some of which appertained to this now apparently world-wide problem of drug addiction. However, with so many different groups expressing interest in and offering support to a drug education programme coupled with the publication of a plethora of articles and ideas, a note of caution needs to be sounded lest the general public becomes completely confused, over-alarmed and sees the problem out of all perspective to its true magnitude. On the other hand, a morbid curiosity could be roused to experiment with drugs, or the problem could be minimised or dismissed as being virtually non-existent. A co-ordinating body appears to be essential to guide the actions of the various groups, along the desired channels, particularly those lacking expertise on the subject.

During the year a party of 28 high school boys, selected by a service organisation from high schools throughout Natal, spent a whole day at this Department to gain an insight into the work of a city health department. At this now annual presentation of talks, lectures and demonstrations on a wide variety of topics, opportunity was taken of showing a film on LSD to the group to ascertain the impact of the film and subject on teen-agers of this intellectual level. To the adult the film invariably provokes a definite aversion to the use of drugs. The scholars were asked after seeing the film to submit written but impromptu and anonymous impressions and remarks. The results were of interest as from 25 replies, 15 adjudged the film excellent and of great value and suggested it be shown to school children and the general public, five felt that although the dangers of LSD were well depicted it also tended to arouse curiosity about drug-taking, and the remaining five felt that the film could be improved upon by showing more facts on the effect of LSD, and as one expressed it "by having more horror in it." Three boys submitted no comment.

From the foregoing it is clear that the promotion of education directed against abuse is an extremely difficult undertaking, especially the showing of suitable visual aids and in this regard it has been the policy of this section to show such films to the European staff of this Department before either purchasing or presenting to other audiences. This Department was a pioneer in the field of health education in general, and now, with this great current problem in our midst, it is right that we should proceed wisely yet spare no effort in anti-drug education.

A further interesting extension of the work of this section occurred when the Newlands area was incorporated within the City of Durban in April 1969. This area, populated mainly by Asiatics but with a small Bantu population too, presented the opportunity of taking health education to semi rural peoples. Schools were visited and a start was made in disseminating health education to persons in this area where shacks predominated, dwellings being sometimes almost inaccessible and where standards of personal and environmental hygiene were indeed low. Until this portion of the City is redeveloped it will present a constant challenge to the health educator.

The work performed during the year amongst the various racial groups was as follows:

WHITE COMMUNITY

Programmes for various groups of the public using 16 mm films, followed by talks and discussions, were held at various venues throughout the City and also in the auditorium. Talks supported by slide transparencies and/or film strips were also presented. New films with a public health aspect were previewed and, where suitable, viewed by departmental staff.

(a) European Schools

Eight visits were made to six schools at which various subjects were covered and 16 mm films shown, followed on each occasion by discussion, a policy adopted for all film presentations and for all race groups. The subjects presented included problems of growing up (for girls only), dental caries, hookworm, rabies, insect pests, playground safety, your milk supply, bilharzia, smoking, the human body, what is disease?, body defences against invasion by disease, and tuberculosis.

In addition the Durban Teachers' Training College was visited for the showing of a film on bilharzia, followed by the usual discussion.

(b) Departmental Auditorium

(i) South African Railways and Harbours Apprentices

Two hundred and seventy eight first-year apprentices, attending in two groups viewed a presentation of films and participated in a discussion period. Subjects on the programme were resuscitation, first-aid and accidents, workshop and road safety, alcoholism, venereal disease, smoking and bilharzia.

(ii) Social Clubs

On nine occasions members of four Municipal social clubs viewed films ranging from air pollution, through the housefly, cockroaches and LSD to smoking and alcoholism.

(iii) Other Groups

Representatives of local chemical manufacturing companies spent a morning at a symposium held in the auditorium on the subjects of food and utensil contamination and sterilisation and health hazards attached to the use of insecticides and pesticides. Demonstrations were given on pests and pest control, on methods of bacteriological sampling by the Agar sausage technique and films were shown on food hygiene and food poisoning, the housefly and occupational safety.

Members of the Pest Control Association of Natal were shown films on the housefly, the rat and occupational safety. A demonstration on pests and pest control was also given to the group.

Lectures supported by slides delivered by guest speakers and arranged by the National Building Research Institute were given to members and staff of both the City Engineer's and Health Departments. The subjects included evaluation of new building techniques, slope stability and building development.

Members of the Institute of Water Pollution Control visited the auditorium on two occasions for talks and slide presentations on the re-use of waste water, biological oxidation and aeration of rivers.

The Town Planning Section of the City Engineer's Department arranged a topical film show for all interested staff embracing the planning of towns and cities.

Health Educators and Social Workers of the South African National Cancer Association attended a presentation of films and film strips on drugs and alcoholism.

The panel of speakers from the Pharmaceutical Society, who are delivering talks on drugs to schools and other interested bodies, also visited the Department and viewed films and film strips on this subject.

(c) Other Venues

A group of Natal Provincial Administration teachers of hygiene on a refresher course visited the Department for talks on child care and behaviour patterns and then were shown the work being performed at Departmental Child Health Clinics.

Nursing sisters from various hospitals in Natal who were studying for the Sister Tutor's Diploma came to the Department for information on health education methods. Following an introductory talk in the auditorium, field observations were undertaken of lecturers of this section addressing street groups as well as school-children in schools in the Bantu and Asiatic residential areas.

Groups of student nurses at Addington Hospital on four occasions were shown films covering the subjects of bilharzia, the house fly, the rat problem, tuberculosis, venereal disease, food and nutrition, and typhoid.

Student midwives at Addington Hospital were shown the slide presentation of the functions of this Department and given a short talk. During Careers Week, arranged by Rotary at the Natal College for Advanced Technical Education, talks were given to interested groups of school children on the services provided by a public health department.

Two public institutions were visited, at one, films on the problems of growing up, and the relationship of smoking to health, were presented, while at the other, a film on venereal disease was shown.

Films on the subject of the population explosion and family planning were shown to a women's church group, while the patients, staff and friends of a treatment and rehabilitation centre for alcoholics were shown film strips on drugs.

Finally, a group of St. John's Ambulance members were entertained to an evening of health films, the subjects being bilharzia, rabies, the house fly, tuberculosis, and the rat problem.

COLOURED COMMUNITY

Unfortunately the section was without a Coloured lecturer for part of the year. Despite this the Coloured race group was not entirely neglected and work was carried out where and when possible by other members of the section, in particular the European Health Visitor. Films were shown at schools and to women's groups organised in the Wentworth and Assegai areas and talks were also given. House-to-house visiting was carried out in a limited way and a variety of subjects were covered.

The work is summarised as follows:

(a) Film Shows

(i) Coloured Schools: A total of 11 schools were visited, when 56 film presentations were made, the subjects including disease transmission, body defences against disease, the human body, dental caries, the problem of growing up, insect pests as carriers, and bilharzia.

(ii) Adult Coloured Groups: A total of seven women's groups were visited and 17 film presentations of subjects such as nutrition, transmission of disease, the human body, and family planning were shown.

(iii) Other Groups: A hostel for Coloured girls was also visited where films on the subject of the human body, body defences against disease, and the problem of growing up were presented.

(b) Group Talks

Fourteen talks were given to women's groups at clinics and in private homes, the subjects being family planning, antenatal care, child care, nutrition, scabies, tuberculosis and other infectious diseases.

(c) Domiciliary Visits

Talks on subjects which appeared to be most needed were given by the lecturer on a house-to-house basis and some 3,000 such visits were made. The subjects emphasized were child care, family planning, the need for general immunisation and general hygiene.

BANTU COMMUNITY

(a) Film Shows

At schools in the Bantu townships and at factories films were presented, in all instances the films were followed by talks and question time. All films were presented by a lecturer in Zulu and proved most popular. Every Bantu school in the Durban area was visited, nutrition being the main subject stressed, and it is hoped that when this generation grows to adulthood all will have at least a recollection of the importance of a balanced diet in attaining and maintaining good health.

(i) Bantu Schools: In the 40 schools visited over 180 film presentations were shown covering, apart from nutrition, a variety of health topics such as bilharzia and tuberculosis.

(ii) Factories: The seven film presentations were directed towards subjects such as general cleanliness and food handling hygiene.

(iii) Other Groups: A number of groups from the kwaMashu Polyclinic, the Lamont Youth Employment Centre, St. John's Ambulance Association, and student nurses from King Edward VIII Hospital were shown health films ranging from the human body and nutrition to bilharzia and venereal diseases in 11 film viewings.

(b) Talks from the Loudspeaker Van

These talks continued to be a popular and highly acceptable form of transmitting health education, always attracting large audiences often from considerable distances. Subjects dealt with included tuberculosis, bilharzia, nutrition, immunisation, alcoholism and such special subjects as refuse control and the objections to illegal structures. New topics introduced included the value of the child health clinics, and registration of births as well as an explanation of the necessity to do so and the correct procedure to be followed. This latter topic was especially appreciated as a knowledge of this important requirement was sadly lacking.

In all, 1,198 talks were delivered.

(c) Group Talks

Small groups of people were gathered together from three or four adjacent houses by individual lecturers and talks were then given in a conversational manner, problems and queries being dealt with to the apparent satisfaction of all. Groups of 20 - 50 persons were also attracted by the loudspeaker and gathered at the van for a talk. This method was effective for talks on venereal disease and family planning. The latter subject was dealt with by the female lecturer, and for this subject groups of 60 - 70 women were usual. Further groups were assembled by the use of the portable loudhailer. The subjects dealt with in 14,411 such talks, apart from those mentioned, covered almost the whole gamut of health education, but especially pulmonary tuberculosis, nutrition, child care, food handling and the need for smallpox vaccination.

(d) Domiciliary Visits

Lecturers continued to support the anti-poliomyelitis campaign in the housing schemes by house-to-house visiting and checking on the immunisation state of the children. The female lecturer also used this method of meeting the public for health talks, dealing with child care and family planning. Where necessary and in special cases, house visiting was also carried out to cover such matters as venereal disease, tuberculosis, and nutrition. In all over 6,000 talks and visits were made.

(e) Special Groups

Two lecturers were invited to speak at the annual seminar of the National Development and Management Foundation of South Africa on the subject of nutrition. Their talk was supported by a showing of colour transparencies.

ASIATIC COMMUNITY

Work amongst the Asiatic community was carried out with the use of films and talks, talks from the loudspeaker van, group talks and house-to-house visiting.

Films were extremely popular but suitable venues scarce, there being a paucity of communal and other halls in Asiatic areas. Churches were used for film shows and the Department is indeed grateful to the ministers concerned for their helpful co-operation. Nonetheless, the obvious problem exists in that certain groups will attend only at certain church venues whilst shunning others.

On the whole it is pleasing to record that some increased interest in adult health education was evinced by this section of the community.

(a) Film Shows

Both 16 mm films and 35 mm film strips followed by talks were presented at schools, to adult groups and to special groups. Details of film shows are as follows:

(i) Asiatic Schools: Film presentations numbering 73 and covering mainly bilharzia, tuberculosis, and lice, were given at 23 different schools.

(ii) Adult Asiatic Groups (Women): Thirty five women's groups were shown a variety of films in the course of 35 different presentations.

(iii) Factories: At three factories workers were shown films covering clean food, food poisoning, cleanliness and health.

(iv) Special Groups: King Edward VIII Hospital student nurses, student public health nurses from M.L. Sultan Technical College, and student nurses from St. Aidan's Hospital were shown films on appropriate topics in the course of 16 viewings.

(b) Talks from the Loudspeaker Van

In general this method of health education is not as popular with the Indian community as with the Bantu. Perhaps the van cannot compete with the radio! This method is, however, used on occasion in densely populated areas and the subjects must of necessity be of a fairly general health nature.

(c) Group Talks

Groups were formed by calling the people together from the loudspeaker van and by lecturers calling on a house-to-house basis. In this way reasonable numbers have been reached and some good work performed in the course of some 340 talks to groups.

In addition, eight talks on tuberculosis were given at three schools in Chatsworth and 22 talks in seven schools at Merebank. These talks were not presented in conjunction with films but were supported by the showing of visual aids such as X-Ray plates of healthy and diseased lungs.

(d) Domiciliary Visits

Amongst this race group health education is best presented by visits although this is indeed a laborious method of reaching a large population with an immense variety of interests.

Talks most frequently given dealt with general hygiene and all aspects of personal and home cleanliness, scabies, nits and lice.

Lecturers continued to support the anti-poliomyelitis mobile van by visiting families and checking on the immunisation state of the children.

In all, well over 40,000 talks were given in the course of the year.

GENERAL

(i) During the early part of the year new films on mouth-to-mouth and mouth-to-nose resuscitation methods became available and all staff, of all races of this Department, members of the City Police Department, and staff of the Cleansing Section of the City Engineer's Department were shown the films. Following the films a model kindly lent by the Red Cross Society was used to instruct personnel in these life-saving techniques by practical demonstration.

(ii) Members of the Department were shown eleven various films and slides of interest as and when the opportunity arose.

(iii) During Anti-Tuberculosis Week and Alcohol Information Week, lecturers spoke on these subjects in schools and in the field.

(iv) A prominent health educationist from America who had worked extensively amongst Puerto Ricans visited the section and expressed his satisfaction at the methods in use as well as the results achieved.

IX. HEALTH INSPECTION

STAFF

During the year the establishment of the Health Inspectorate was maintained at almost full strength and the four posts of Indian health inspector for the Chatsworth Township, referred to last year, were duly filled.

Arising from the incorporation of the Newlands area into the City, as a forerunner to the development of a new Indian township, an Indian health inspector and a health assistant were engaged for environmental sanitation duties respecting current conditions and after redevelopment.

COMPLAINTS

The Department received 3,960 complaints during the year (3,579 in 1968) which are analysed as follows:

Animal Keeping	5	Offensive Smells	182
Bugs	20	Poultry Keeping	44
Cockroaches	47	Refuse Dumping	215
Conservancy Services	2	Refuse Removals	48
Drainage -		Rodents	435
Appurtenances	19	Sanitary Accommodation	35
Defects	444	Shacks (illegal)	4
Fleas	10	Smoke/Air Pollution	17
Flies	259	Structural Defects	149
Food -		Uncleanliness of Premises	496
Unhygienic Handling	37	Vacant Land	593
Unsound	34	Ventilation/Lighting	2
Housing -			
Illegal	18		
Overcrowding	42		
Miscellaneous	115		
Mosquitoes	688		

All of these complaints were promptly investigated and appropriate action taken where necessary.

INSPECTIONS

Visits carried out to all classes of premises by the Health Inspectorate and ancillary personnel are summarised on the following page:

Food-handling Premises		Other Premises	
Bakeries	465	Barracks/Compounds	1,279
Boarding Houses	1,648	Dwellings	102,091
Butcheries	4,197	General Dealers	7,120
Dairies (mainly ex-City and Depots)	3,369	Hairdressers	729
Food Manufactories	778	Laundries/Dry-cleaners and Depots	901
General/Fresh Produce Dealers	16,078	Lodging Houses/Flats	12,253
Hotels (Liquor licensed)	1,505	Offensive Trades	649
Milk Bars	295	Sundry - Trading	13,318
Offensive Trades	347	Non-trading	37,584
Restaurants/Eating Houses	6,985		
Tea Rooms	1,760		
Sundry	3,528		

Arising from these inspections, which totalled 216,879, the following action was taken:

Personal notices issued at time of inspection	16,594
Written notices served	3,816
Letters	1,502
Prosecutions instituted (counts)	215

LICENSING/REGISTRATION

(a) Trade Licence Applications

Reports on public health implications, respecting the state of premises and trades to be conducted therein, were submitted on 3,151 new applications lodged with the City Licensing Officer. In many instances there were departmental requirements or by-law shortcomings necessitating re-inspection and further report when compliance had been effected.

(b) Animal Keepers

Twenty two permits were renewed in terms of the Public Health By-laws during the year, and four new permits were granted for a total of:

8 bovines	20 cats*	274 dogs*
38 goats	478 horses	8 sheep

* Kept in kennels etc. for reward.

(c) Mattress Makers/Upholsterers

In terms of the Regulations under the Public Health Act, 36 annual certificates were issued of which 10 were in respect of new applications.

(d) Food Vending/Vehicles

In accordance with the demands of the Food By-laws, certificates of registration were issued in the following instances:

Perishable food vehicles	14
Non-perishable food conveyances	509
Hawkers' and pedlars' vehicles	60
Vending machines (hot and cold perishable food)	6

(e) Offensive Trades

The number of trades current during the year amounted to 144 of which 91 were operating under indefinite permission and 53 were for limited periods. The latter figure included 11 new applications in the following categories:

Cement works	2	Metallurgical works	1
Chemical works	3	Processing mineral oil products	3
Hides and skins storage	1	Paper mills	1

In my report for 1966 mention was made of the proposed establishment of a pulp and paper mill on 40 acres of land at Merebank, within the City, which understandably gave rise to a number of public health reservations. Since then planning has progressed to the stage where active construction commenced and consideration had to be given during the current year to the question of permission in terms of the regulations. The project had changed from that originally envisaged and now no chemical pulping will be undertaken on the premises, all such pulp being obtained elsewhere in a washed and at least 50% dry state. There will be some mechanical pulping of pine wood in a groundwood mill plant but this will cause no public health nuisance. An interesting feature of this undertaking is that it will draw an ultimate maximum quantity of 7.7 million gallons per day of secondary treated effluent from the City Council's sewage works, to be used for industrial purposes excluding fire drills etc. The effluent will be separately piped to the works after purification to the following minimum standard:

(i) the oxygen absorbed by the sewage effluent from acid $\frac{N}{80}$ potassium permanganate in FOUR (4) hours at 27°C shall not exceed 10 parts per million;

(ii) free and saline ammonia (as N) shall not exceed 15 parts per million;

(iii) The pH shall be between 5.0 and 7.5;

(iv) E. coli Type I shall not exceed 5 per 100 ml.

The company will subject the effluent to further treatment to conform to the standard required for the processing technique. The plant, which is expected to be operational by April, 1971, will be the largest in the Republic with an expected output of 300,000 tons of paper per year.

ENVIRONMENTAL SANITATION

(a) Sewerage

As remarked elsewhere in this report, the two main ocean outfalls were commissioned thus alleviating the difficulty of proper disposal. Nevertheless surcharges were not eliminated completely as reticulation difficulties remained. Overflows occurred at various points but in most instances the cause was due to obstructions. In every case the City Engineer's Department undertook remedial measures to abate the nuisance, and where necessary, this Department put anti-pest precautions in hand.

Extensive reticulation work was carried out in the Sea View, Bellair and Hillary suburbs and this greatly improved conditions which had been prevalent due to the unsuitability of the soil for septic tank soakage purposes. The areas of Montclair and Woodlands were connected to the sewer and only a small section of Mobeni Industrial Estate remained unsewered. In the northern part of the City approximately 60 connections were completed in the Kenville area which again relieved a difficult situation due to the nature of the soil. In the case of the Department of Community Development's housing scheme for Whites at Falloden Park at Hillary it was necessary for the City Engineer to permit the discharge of filtered soakpit effluent into the storm water drain, as an interim measure until the sewer was available, to prevent seepage into roadways.

Progress regarding sewerage reticulation is reported in the chapter on Allied Services.

(b) Public Sanitation

During the year a number of functions took place where it was necessary for the City Engineer to provide temporary toilet accommodation, such as in the case of the Air Pageant with an estimated attendance of 90,000 people at Virginia Airport. Every effort was made to supervise these facilities to obviate nuisances but this proved a most difficult task in the absence of temporary sewer connections.

Temporary facilities were provided on two occasions at the Kings Park Stadium for the Provincial and International rugby matches in July and August. In this case, however, there is a shortfall in permanent facilities and, whilst it may always be necessary to supplement accommodation for extraordinarily large crowds, improved permanent facilities are nevertheless necessary. A departmental sub-committee has considered the problem and called upon the sporting authority concerned to provide additional sanitation.

A portion of the Beach foreshore on Snell Parade has been used by the Bantu community for years but only very limited numbers of public conveniences were provided. Bathing, however, enjoyed increased popularity at this venue and, with estimated attendances in the order of 15,000 per day in summer, the need for supplementation arose. Due to zoning problems the authorities concerned are reluctant to develop this beach but agreement was reached to enable additional facilities to be provided.

(c) Refuse

(i) Tipping Sites

The South African Railways Administration established a new tip at the Bayhead situated approximately two miles from residential accommodation. The health staff took adequate steps to ensure that no nuisance arose and pest control was well in hand.

The Tara Road tip on the Bluff, used for some years for the disposal of domestic and industrial refuse, was closed during the year but it will still be open on a limited scale for garden refuse, rubble and sand. This brings to an end the source of fly, rodent and odour nuisances which have affected surrounding householders from time to time over past years.

A neighbouring local authority established a domestic refuse tip very close to the City boundary which gave rise to a fly problem in the housing estate nearby. The public health problem was overcome and it is understood that the authority concerned will close the tip as soon as possible.

Until recently a portion of the sewage from the Chatsworth Indian Township was passed through stabilisation ponds but on the commissioning of the ocean outfall the use of these ponds was discontinued. A start has been made in filling in the empty ponds with industrial and domestic refuse which had previously been disposed of at the Tara Road tip. Precautionary measures included a covering of lime and in due course a top fill of clean soil.

(ii) Removals

The refuse collection service is undertaken by the Cleansing Section of the City Engineer's Department throughout the City with the exception of the Bantu townships where the service is undertaken by the Department of Bantu Administration. Householders generally in the City have enjoyed a tri-weekly refuse removal service but the City Engineer experimented this year with a twice-weekly service. A close watch was maintained by this Department to evaluate the public health implications but no problems arose by the end of the year.

(iii) Dumping

The illegal dumping problem unfortunately increased and in certain areas refuse of all description was deposited on undeveloped road verges and vacant sites. Not only does the practice create unsightly conditions but often also gives rise to public health nuisances. Efforts were made in public areas to discourage the practice by the erection of suitable warning notices but with scant result. Even in built-up districts where litter bins are provided there appeared to be no diminution in the casual discarding of rubbish.

Whenever possible, prosecutions were instituted against offenders but seldom is direct evidence available. With a view to strengthening the Department's hand in this matter it was recommended to the City Council that the General By-laws be amended to place responsibility upon employers not to permit their servants to dispose of refuse in an improper place.

(d) Composting

For a number of years the City Engineer's Department used a site near the nightsoil dilution station on the Springfield Flats for the manufacture and sale to the public of compost from road sweepings, domestic refuse, grass cuttings and stercus. For economic reasons the Municipal project was eventually abandoned and the project was taken over by a private company. A number of conditions were imposed from the public health viewpoint to prevent obnoxious conditions arising or the disposal of compost unfit for public use.

FOOD HYGIENE

(a) Food Inspection

In terms of the Regulations relating to Food Inspection framed under the Public Health Act, large quantities of food were inspected and seized by the Health Inspectorate as a preliminary to condemnation

orders by a medical officer of health. This arose from the routine inspection of stocks in shops, the examination of a variety of foodstuffs as the result of complaints and the surveillance of produce arriving at or offered for sale on the City markets from local sources and other parts of the Republic. Also many requests were made by local wholesalers and retailers for a review of food stocks on their premises, any found to be unsound being surrendered for condemnation and destruction.

Food destroyed as unfit for human consumption is summarised as follows:

City Markets

3,983 bags and pockets	Cabbages, carrots, green peppers, chillies, green beans, green peas, onions, cucumbers, cauliflowers, lemons, beetroot, turnips, leeks, sweet potatoes and granadillas.
2,783 trays, boxes and crates	Tomatoes, grapes, pears, apples, lettuces, bananas, pineapples, and radishes.

There were also 66 dressed fowls and ducks, 21 portions of giblets and 8½ lbs. salted snoek.

Other Traders

54,575 tins, jars and bottles	Fish, meat, jam, fruit, vegetables, soup, etc.
1,302 cartons, packets	Cereals, frozen meat and fish, poultry, sweets, rice, figs and yeast.
3,372 lbs.	Frozen fish and meat, cereals, dried fruit, yeast, flour, samp and boerewors.

There were also 447 dressed chickens and two crayfish.

Reasons for condemnation included "blown", rusted or leaking tins; decomposition as the result of week-end breakdowns of supermarket refrigeration; contamination and damage by rodents; weevil infestation and normal deterioration of perishable foodstuffs.

As a result of an explosion in a large cold storage room, 1,279 cartons of meat, each weighing 50 lbs., were rendered unsound due to the contents being charred and impregnated with fumes from burning polystyrene. This stock had to be condemned and destroyed as unfit for human consumption.

(b) Food Sampling

(i) Chemical Analyses

In accordance with routine procedure under the Food, Drugs and Disinfectants Act, 1929, or Regulations framed thereunder, samples of food totalling 556 items were submitted for analysis either by the State Clinical Laboratories in Pretoria or the City Analyst in Durban. A wide range of commodities was sampled, including the following:

Coffee	5	Meat - minced	79
Condiments, sauces	29	polonies	16
Cooking oil	3	processed	7
Cordials/squashes	10	sausages	85
Curry/chilli powders	17	Milk products -	
Fish preparations	15	cream	36
Honey	18	ice cream	52
Jam/preserves	4	milk	144
Mayonnaise	6	Powders, Various food	10
		Vinegar	15

Of the aforesaid samples 25 were found to be unsatisfactory, viz:

Condiments	1	Meat - minced	1
Cordials/squashes	2	sausages	7
Curry/chilli powders	4	Mayonnaise	2
Honey	1	Vinegar	7

Legal proceedings were instituted and fines in the sum of R550 accrued.

(ii) Bacteriological Examinations

The Departmental staff is very conscious of the vulnerability of perishable food in this local sub-tropical climate and has for some time been engaged on various experimental tests in the departmental laboratory, but with the promulgation of standards in the Food By-laws in May it was possible to adopt a bacteriological examination programme officially. During the remainder of the year 124 samples of ready-to-eat foods were taken. These included vacuum-packed pre-cooked meats, pies, cream cakes, fish cakes, meatballs, cooked sausages, portions of cooked meat and chicken, hamburgers and hotdogs. Samples were purchased at random from restaurants and other food establishments in the City and subjected to examination in the Department's laboratory. Of these samples, 16 were found to contain undesirable contaminants and, in accordance with policy, the licensees concerned were advised in writing of the results and warned to pay special attention to all aspects of food hygiene. It was and still is the practice to take further samples two weeks later from the same sources for submission to the Council's Consulting Pathologist for formal examination in terms of the By-laws. Of the specimens so submitted four disclosed bacterial contamination and legal proceedings were instituted in each case.

With a view to assisting the operators of these and other food establishments in tracing foci of contamination, surveys utilising the "agar sausage" technique were continued during the year. The results were often illuminating to managements and assisted them in improving their procedures.

(c) Contamination

Following receipt of a complaint that sandwiches purchased from a local take-away food establishment contained foreign matter, investigation revealed that the chicken and mayonnaise filling contained fragments of glass. Legal proceedings were taken against the licensee of the establishment concerned and the verdict of the Court was a fine of R15 (or 15 days imprisonment).

(d) Surveys

The routine programme of planned surveys of all types of food-handling premises was continued during the year primarily to check upon hygiene but also to review structural conditions, furnishings and equipment. Arising from the surveys, conducted by each district health inspector of establishments within his area, it was inevitable that the inspectorate had to devote attention to corrective measures in many cases. The results of the survey were as follows:

Establishment	Number of Premises		Inspections	Notices Served
	As at 31/8/68	As at 28/8/69		
Butcheries	268	265	2,250	389
Restaurants	423	434	3,601	717
Liquor Licensed	126	119	832	202
Factories	95	94	591	86
Boarding Houses, etc.	176	184	1,202	144
Total	1,088	1,096	8,476	1,538

Visits were regularly made to food establishments during the early morning and in the evening to check upon deliveries from manufacturers and to supervise food preparation practices.

(e) Premises

(i) Indian Market

During the course of the year certain palliative improvements were effected, mainly concerning the provision of better stalls for poultry dealers and a new toilet block for the convenience of non-Europeans.

Complaints were lodged respecting the insanitary condition of public footpaths and roads surrounding the Market and this was found to be due in no small measure to the illegal trading activities which are carried on. The City Engineer intensified the street sweeping activities within this precinct but the overall picture showed little improvement. Much departmental attention was devoted to conditions in the stalls within the market particularly the question of relieving congestion, provision of food storage bins, proper bread and cake storage and refrigeration facilities. Refuse also presented a problem inside the market due to the unsatisfactory structural conditions and the lack of security which, if anything, encouraged the activities of scavengers who culled through contents of the bins indiscriminately scattering waste matter in all directions.

Due to the very restricted size of the perimeter stalls a number of traders developed a practice of storing bulk goods on the adjacent public pavement causing exposure to the elements and contamination by human, animal and other agencies. Whilst minor improvements can be carried out by the authorities concerned the fundamental shortcomings from the public health viewpoint can be overcome only by complete rebuilding.

(ii) Poultry Abattoir

The Chief Meat Hygiene Officer drew the attention of the Director of Markets to conditions existing at the poultry killing depot which could not meet the requirements of regulations under the Animal Slaughter, Meat and Animal Products Hygiene Act, 1967, and under the circumstances the City Council requested the Director to close the establishment after the tenants had been given three months notice to vacate the premises. This appeared to be a satisfactory solution to the problem but concern was felt by the City Health Department as to the probable situation which would obtain when the present facilities were no longer available, since the number of birds slaughtered was in the region of 9,000 weekly. Several large poulterers and the public would perforce have to adopt other arrangements and, in the absence of adequate local legislation, it was difficult to foresee how slaughtering could be prevented at various unsuitable places in the City or under possibly worse conditions elsewhere.

Following representations by this Department, the Chief Meat Hygiene Officer indicated that he was willing to consider granting a temporary certificate of registration to allow the poultry dealers, farmers, etc., the opportunity of building premises which would comply with the requirements of public health legislation, and accordingly the City Council resolved not to enforce the termination of tenancies during the period for which a certificate of registration was granted. This deferment, however, was of a temporary nature and improved facilities will have to be provided within the near future.

(iii) Beach Front Catering

In July a Council-owned but privately occupied restaurant situated at the South Beach was partly destroyed by fire, the kitchen being completely gutted and all cooking and food preparation activities obviously had to cease. Furthermore, the building had outgrown its acceptability from the public health viewpoint and congested conditions in the food preparation department gave cause for concern. The City Council, however, resolved that the premises should be re-instated to their previous standard provided that all the limitations and requirements of the City Medical Officer of Health were met by the tenant. It was further resolved that the City Valuator and Estates Manager be authorised to amend the existing monthly tenancy agreement to incorporate these conditions and provided further that the agreement could be cancelled in the event of any redevelopment proposals in respect of South Beach area, involving the provision of a new restaurant, being implemented.

(iv) Cafe-de-move-on

Many years ago the City Council supported a departmental objection to the continuance of rights to operate night coffee stalls, pie carts and similar cafes-de-move-on. During the year under review, the last cafe-de-move-on business closed through a sale of execution by the Court, thus terminating a source of anxiety on public health grounds which had existed for years. Modern concepts of food hygiene could not be reconciled with food preparation and cooking in a cart or the washing of eating utensils in a public thoroughfare.

(f) Public Gatherings

Several events took place involving extraordinarily large public gatherings where vast quantities of food had to be prepared for the patrons. Typical of these events was the Durban July Handicap, the Virginia Air Pageant and the Wallabies vs. Natal rugby match. In the case of the Greyville Race Course and the Kings Park Rugby Stadium basic food-handling facilities are available, but in other instances it is the policy to insist upon pre-preparation of food at approved premises elsewhere and limit service to disposable plates, cups, etc.

BUILDING CONTROL

(a) Plans

A total of 1,321 plans for new development and major alteration and addition to premises, other than in respect of housing, were referred by the City Engineer for scrutiny, approval and recording from the viewpoint of public health. Many plans necessitated reports requiring adaptation to meet Departmental requirements and led to discussions with owners and architects. A number of prestige projects warranted ad hoc meetings between the principals and the municipal departments concerned whereat various implications affecting ventilation, lighting and similar public health considerations were examined and resolved.

Development arising from these plans fell into the following main categories -

New commercial/industrial buildings	126
New State/municipal buildings	35
Other new buildings	17
Alterations (excluding housing, State/municipal premises)	1,102
Alterations to State/municipal premises	41
	1,321

(b) Relaxation of Standards

In terms of the Food By-laws, as amended, Certificates of Relaxation were granted respecting storage area in two cases and minimum kitchen size in four instances. The plans were approved accordingly.

X. MILK SUPPLIES

The City's milk supplies are drawn largely from the Midlands and southern parts of Natal, as well as East Griqualand. The latter area produced 12.5% (12.2%) of the total amount of fresh milk in the City's milkshed. (All figures in parenthesis indicate the comparable figure for the previous year).

Milk from 545 (567) registered producers was either bulked and refrigerated at inland balancing stations and transported to the City in insulated tankers or consigned directly from the dairy farms to the City by road transport in cans. Milk was also collected from 63 (57) refrigerated bulk storage tanks on producers' premises by tankers, usually on alternate days. This latter method of holding milk on the farm was considered ideal and its progressive extension will be welcomed.

On arrival a major portion of the milk is pasteurised and bottled at three dairy factories situated within the City and on the periphery. The bottled milk is then delivered in refrigerated pantechnicons to distribution depots from whence final delivery to households is effected by means of hand carts or electric "prams."

Only heat-treated milk is sold in the City, and apart from pasteurised milk, a daily average of 4,878 (4,810) gallons of milk was sterilised. The balance of the incoming milk was used for production of ice-cream, cream, skim-milk and various cultured milk products, all of which were heat-treated.

Milk Gallonage

The average daily intake of raw milk during 1969 was 51,321 (48,709) gallons. After processing, approximately 26% (25%) of this milk was sold in adjoining towns and to shipping.

Sampling

Regular sampling of milk and milk products was carried out and samples submitted to the departmental milk laboratory, the City consultant pathologists, the City analysts, the local State Health laboratory and the State Chemical Laboratory in Pretoria. Details follow hereunder and on the following page:

I. Samples taken under the Food, Drugs and Disinfectants Act and submitted to:

(i) City Analysts	Cream	18	(37)
	Ice Cream	24	(47)
(ii) State Chemical Laboratory	Milk	156	(153)
	Cream	18	(nil)
	Ice Cream	24	(nil)

II. Samples submitted to City Pathologists for bacteriological examination:

Milk	156	(153)
Cream	5	(2)
Ice cream and soft dairy mix	33	(35)

III. Samples submitted to State Health Laboratory for biological tuberculosis examination:

Milk	17	(7)

IV. Samples submitted to the Departmental Milk Laboratory:

Raw bulked herd milk	5,224	(5,541)
Pasteurised milk	757	(755)
Pasteurised cream	166	(194)
Ice cream	745	(773)
Soft dairy mix	302	(407)
Iced confections	143	(226)

Arising from the above, one and five prosecutions under the Public Health Act and the Milk (and Milk Products) By-laws respectively, were instituted.

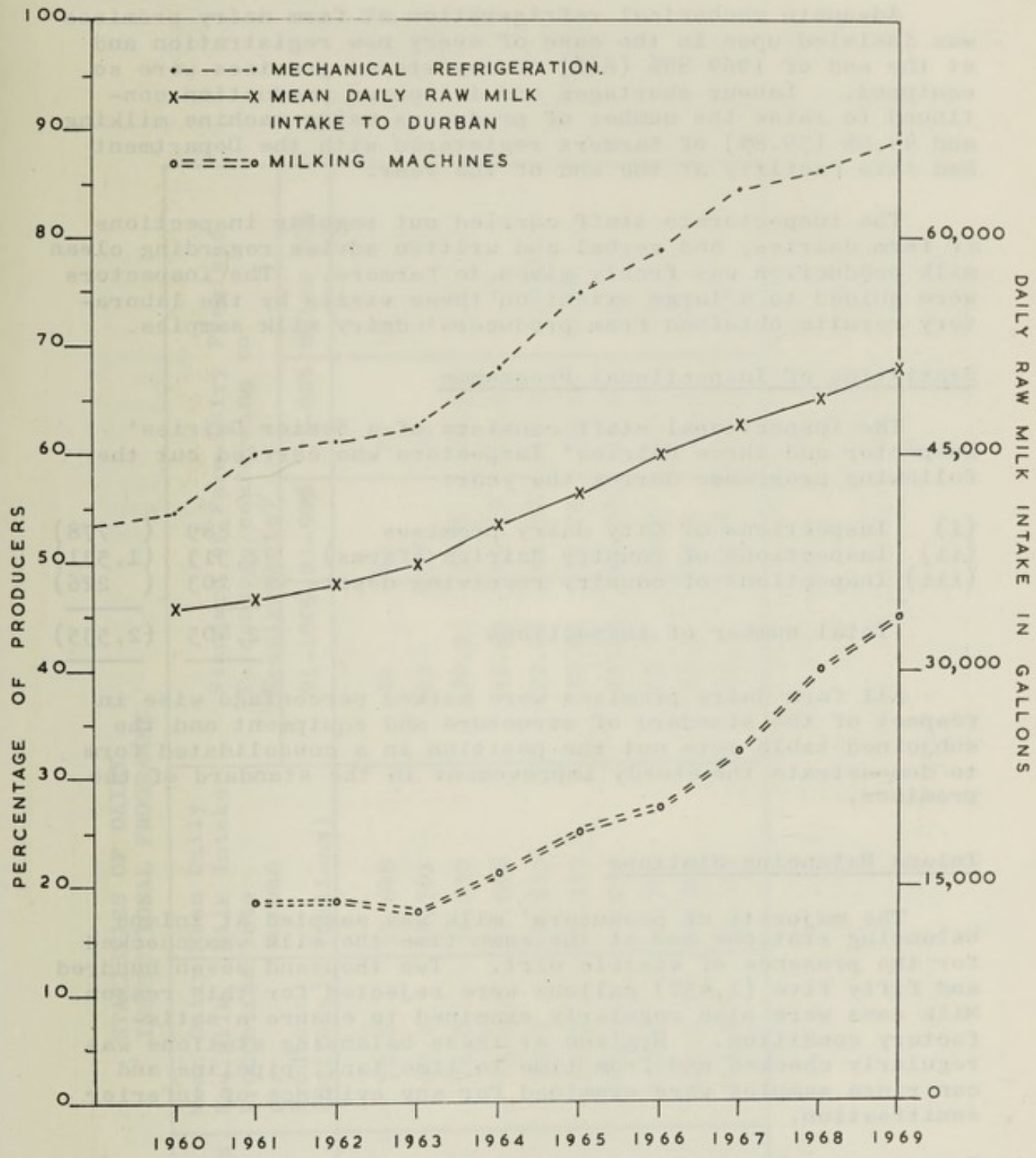
Milk Producers and Production

During the period under review 17 (39) new producers were registered and 39 (69) went out of production leaving a total of 545 (567) registered producers at the year's end.

The mean daily production of fresh milk by registered producers rose to 77,196 (71,214) gallons in spite of the reduction in the number of producers, thus an average of 141.6 (125.6) gallons per producer per day was reached. This gallonage increase is due very largely to the extremely favourable climatic conditions that prevailed prior to and during the winter months, and also to the fact that dairy economics forced out many a smaller producer and caused big producers to expand. The accompanying histogram clearly illustrates this point. This trend finds favour from the milk control point of view as fewer producers are involved, and big producers tend to be more progressive and consequently the product is of a generally higher standard than that of the small dairy farmer.

The nadir of production occurred during May when the daily average was only 72,490 gallons, while at the zenith 83,331 gallons was reached in November.

CLASSIFICATION OF REGISTERED MILK PRODUCERS ON A BASIS OF DAILY PRODUCTION
PERCENTAGE OF PRODUCERS
GALLONS OF MILK
UNDER 50
50 — 100
101 — 150
151 — 200
OVER 200
1960
43·5
32·0
15·0
5·0
4·5
1961
38·7
37·7
15·0
4·5
4·1
1962
34·8
39·0
15·3
5·2
5·7
1963
28·0
39·0
20·0
7·0
6·0
1964
27·5
36·0
19·4
10·3
6·8
1965
19·0
36·0
21·7
11·7
11·6
1966
16·1
36·1
23·7
12·0
12·1
1967
17·4
34·6
21·9
12·7
13·4
1968
15·9
32·9
23·6
12·8
14·8
1969
13·0
32·7
24·6
12·1
17·6



DEMONSTRATION OF INCREASES IN MEAN DAILY RAW MILK INTAKE TO THE CITY AND PERCENTAGE OF REGISTERED PRODUCERS EQUIPPED WITH (a) MECHANICAL REFRIGERATION, AND (b) MILKING MACHINES

Adequate mechanical refrigeration at farm dairy premises was insisted upon in the case of every new registration and at the end of 1969 88% (86%) of registered premises were so equipped. Labour shortages and increased production continued to raise the number of producers using machine milking and 44.6% (39.8%) of farmers registered with the Department had this facility at the end of the year.

The inspectorate staff carried out regular inspections of farm dairies, and verbal and written advice regarding clean milk production was freely given to farmers. The inspectors were guided to a large extent on these visits by the laboratory results obtained from producers' dairy milk samples.

Statistics of Inspectional Programme

The inspectional staff consists of a Senior Dairies' Inspector and three Dairies' Inspectors who carried out the following programme during the year:

(i)	Inspections of City dairy premises	889	(778)
(ii)	Inspections of country dairies (farms)	1,313	(1,531)
(iii)	Inspections of country receiving depots	203	(226)
	Total number of inspections	2,405	(2,535)

All farm dairy premises were marked percentage wise in respect of the standard of structure and equipment and the subjoined table sets out the position in a consolidated form to demonstrate the steady improvement in the standard of the premises.

Inland Balancing Stations

The majority of producers' milk was sampled at inland balancing stations and at the same time the milk was checked for the presence of visible dirt. Two thousand seven hundred and fifty five (1,452) gallons were rejected for this reason. Milk cans were also regularly examined to ensure a satisfactory condition. Hygiene at these balancing stations was regularly checked and from time to time tank, pipeline and can rinse samples were examined for any evidence of inferior sanitisation.

Pasteurising Depots and Ice Cream Factories

Frequent checks were carried out on the general hygiene of the personnel and premises where milk was bottled and ice cream manufactured. Where required, assistance was given in tracing the source of any post-pasteurisation contamination. The factories' own laboratory staffs maintained extensive quality control tests.

All staff at milk depots and factories likely to come into contact with milk and milk products were Vi-tested and immunised against typhoid. A total of 564 (749) persons were affected.

STATISTICS OF DAIRY
INSPECTIONAL PROGRAMME

Year	Number of Registered Producers	Mean Daily Raw Milk Production per Producer (Gallons)	Mean Daily Milk Intake into Durban (Gallons)	Standard of Farm Dairy Premises Percentage conforming to Requirements			
				91-100%	81-90%	71-80%	Below 70%
1960	710	72.0	33,648	16	42	29	13
1961	735	67.4	34,701	13	39	39	9
1962	659	76.0	36,139	20.2	57.8	20.7	8.6
1963	621	75.4	37,646	21.63	59.19	18.85	0.33
1964	600	95.3	40,313	22.01	61.10	16.0	0.010
1965	618	91.3	42,313	22.81	57.28	19.57	0.34
1966	596	105.6	45,012	21.65	62.75	15.60	Nil
1967	597	116.2	46,780	23.9	62.3	13.8	Nil
1968	567	125.6	48,709	23.2	62.9	13.9	Nil
1969	545	141.6	51,321	21.5	64.0	14.5	Nil

Laboratory Control of Milk Supplies

The Veterinary Medical Officer, assisted by two Lady Laboratory Assistants in the departmental laboratory, was responsible for the carrying out of the following tests, mostly on a routine basis:

Tests for visible dirt	5,052	(5,470)
Presumptive E.coli determinations	2,840	(2,936)
Tests for E.coli I (faecal)	560	(398)
Plate counts (Astell roll tube)	2,858	(3,072)
Breed clump counts	26	(24)
Thermoduric organism counts	7,218	(6,737)
Resazurin dye reduction tests	5,280	(5,807)
Methylene Blue reduction tests	114	(192)
Phosphatase tests (Aschaffenburg and Muller)	2,436	(2,567)
Brucellosis stained antigen ring tests	565	(1,249)
Mastitis (leucocyte counts)	5,630	(5,482)
Inhibitory substances (T.T.C. method)	5,799	(4,324)
Clot-on-boiling tests	26	(24)
Sterilised milk (Turbidity test)	26	(24)
Examination for Salmonellosis in pasteurised milk products	75	(-)
Examination of prepared foods:		
(i) Enterobacteria	143	(-)
(ii) Coagulase-positive staphylococci	143	(-)
(iii) E. coli I	143	(-)

(a) Pasteurised Milk

Three samples of this commodity, one from each of the processing factories, were taken every week day and tested with the following results:

Test	Number of samples (bottled milk)	% Satis-factory	Number of samples (milk in cans)	% Satis-factory	Number of samples (milk in cartons)	% Satis-factory
E. coli (presumptive)	757 (755)	88% (92%)	138 (144)	93% (88%)	124 (144)	91% (88%)
E. coli I (faecal)	172 (162)	99% (100%)	9 (25)	100% (100%)	20 (20)	100% (100%)
Phosphatase	757 (755)	100% (100%)	138 (144)	100% (100%)	124 (144)	100% (100%)
Total counts	757 (755)	78% (90%)	138 (144)	94% (93%)	124 (144)	83% (91%)
Thermoduric counts	709 (755)	63% (73%)	138 (144)	96% (84%)	124 (144)	95% (86%)
Inhibitory substances	33 (30)	100% (100%)	- (4)	- (100%)	- (3)	- (100%)

An arbitrary standard of 15,000 organisms per ml was applied in the case of thermoduric bacteria.

Samples of sterilised milk were regularly tested for sterility, always with satisfactory results.

(b) Ice Cream

Supplies of this product come from two local factories, one in Pretoria and one in Boksburg. Factory wrapped and packed samples from each of these factories were regularly tested with the results set out below:

Test	No. of Samples	% Satisfactory
E. coli (presumptive)	386 (360)	95% (95%)
E. coli I (faecal)	19 (20)	100% (100%)
Total counts	386 (360)	99.2% (99%)
Phosphatase	386 (360)	100% (100%)

In addition, samples of bulk ice cream (scoops) were regularly taken from tea-rooms and restaurants as a check on the hygiene of storing and serving this product. Premises from which good results were regularly obtained on scooped ice cream were sampled relatively infrequently, more attention being paid to those establishments serving ice cream of poor bacteriological quality so that any inferior hygienic practices could be eliminated. Sampling was undertaken from a total of 86 (140) different outlets with results recorded hereunder:

Test	No. of Samples	% Satisfactory
E. coli (presumptive)	359 (413)	43.6% (50%)
E. coli I (faecal)	146 (127)	100% (90%)
Total counts	359 (413)	67.5% (77%)
Phosphatase	359 (413)	100% (100%)

(c) Soft Dairy Mix

Forty one (27) tea-rooms and vehicles were licensed to dispense soft dairy mix. The results of regular tests carried out on this product were as follows:

Test	No. of Samples	% Satisfactory
E. coli (presumptive)	302 (407)	69.3% (69%)
E. coli I (faecal)	81 (64)	100% (100%)
Total counts	302 (407)	92.5% (90%)
Phosphatase	302 (407)	100% (100%)

(d) Cream

Only pasteurised cream, processed by the three registered milk dealers, was sold to the public and this too was frequently sampled and tested:

Test	No. of Samples	% Satisfactory
E. coli (presumptive)	166 (194)	76% (86%)
E. coli I (faecal)	28 (14)	75% (100%)
Total counts	166 (194)	90% (96%)
Phosphatase	166 (194)	100% (100%)

(e) Iced Confections

Milk is incorporated in some of these "iced lollies" and they were therefore included in the routine testing programme:

Test	No. of Samples	% Satisfactory
E. coli (presumptive)	143 (226)	70% (75%)
E. coli I (faecal)	51 (31)	100% (100%)
Total counts	143 (226)	90% (90%)

(f) Producer (Farm) Milk

The bulked raw milk of each registered producer was sampled approximately once per month by a dairies' inspector at the receiving depot and returned to the laboratory under refrigeration. Results of tests carried out on these samples follow:

Test	No. of Samples	% Satisfactory
Resazurin (1 hour)	5,187 (5,541)	92.5% (94%)
Visible dirt	5,043 (5,470)	86.5% (95%)
Inhibitory substances (T.T.C.)	4,982 (3,812)	93% (89%)
Thermoduric count	5,224 (5,404)	81% (81%)
Mastitis (leucocyte count)	4,997 (5,482)	94% (95%)
Brucellosis (ring test)	565 (1,249)	96% (94%)
Tuberculosis (biological)	17 (7)	94% (100%)

The standards applied in interpreting the tests were:

One hour Resazurin test - fail if a reading of less than $2\frac{1}{2}$ occurs;

Thermoduric organisms - unsatisfactory if the count exceeded 50,000 per ml;

Leucocyte count - positive mastitis if the count exceeded one million cells per ml.

(g) General

In addition to the above tests, tanker supplies of raw milk arriving in the City were regularly examined as were the tankers themselves to ensure that sanitisation was always of a high degree. One hundred and seventy two line milk samples were tested in order to trace possible points of contamination.

A number of samples of farm water supplies were bacteriologically examined at the request of the producers. This was considered an important aspect of the work as the incidence of mastitis and the production of clean milk must often hinge on the quality of the water used. Wherever unsatisfactory results were obtained the dairymen were urged to chlorinate their water supply.

Animal Diseases Affecting Milk Supplies

Mastitis

Routine leucocyte counts on producers' raw milk supplies revealed that 6% of samples were positive for mastitis. It is noteworthy, however, that the samples examined were all from bulked herd milk and with the resulting diluting effect many herds were doubtless falsely assessed as being free of the disease. The true position might well be that over 90% of dairy herds are affected by sub-clinical mastitis, a very high proportion considering that this condition is by far the most economically important dairy herd disease.

The Division of Veterinary Services continued to carry out investigational work on mastitis at various centres in Natal, and the departmental laboratory was of assistance to farmers in examining milk samples for the identification of sub-clinical and carrier cases. Advice was also freely given on prophylactic and therapeutic measures.

Tuberculosis

Seventeen biological tests for tuberculosis were carried out on herd milks whenever indicated, either by clinical examination or abattoir returns. One of these samples proved to be positive and the "follow-up" showed that although the animals comprising the herd were negative to the tuberculin test, one of the Bantu milkers was an "open" pulmonary tuberculosis case. This person was admitted to hospital for treatment.

The Division of Veterinary Services reported that there were 142 accredited tuberculosis-free herds in Natal and East Griqualand and some 36,603 head of cattle were tuberculin-tested in the region during the year. It is expected that control of this disease will be accelerated as the State has now introduced a scheme whereby private

practising veterinarians are enabled to carry out tuberculin testing at State expense on behalf of the Division of Veterinary Services.

Brucellosis

Approximately 4% of the 565 samples of producers' milk gave positive or suspicious results to the stained antigen ring test. Of the 3,972 serum samples subjected to agglutination tests at the Allerton Veterinary Diagnostic Laboratory approximately 6.4% were either positive or suspicious.

It is expected that the incidence of this disease will drop rapidly during the next few years as it has now become compulsory for all heifer calves to be inocculated with the Strain 19 vaccine before attaining the age of 10 months.

Other Diseases

Erosive conditions such as infertility and internal parasitism remained as troublesome as ever although the growing popularity of artificial insemination showed signs of bearing fruit in the overall control of infectious infertility diseases. Tick-borne diseases, Lumpy Skin disease, and mineral and plant poisoning caused no unusual mortality but nevertheless played a part in adversely affected milk production.

General

(i) In addition to milk and water samples the departmental laboratory examined 143 samples of prepared foods for the presence of pathogens and faecal contamination.

(ii) Ten final year Veterinary Science students spent a three weeks vacational training period in the Veterinary Hygiene Section of the Department and the City Abattoir, seeing practical veterinary public health work as part of their course in Special Hygiene.

(iii) Senior non-European medical students from Natal University were shown all aspects of milk and meat control as carried out in the City.

XI. FIELD HYGIENE

The Field Hygiene section of the Health Inspectorate is responsible for the control of domestic pests primarily on townlands and in Municipal buildings, but also on privately owned property in default of public health notices served on occupiers. The clearance of overgrowth, where necessary, is carried out at tariff rates on request. The control of mosquitoes, flies, rodents and other pests is maintained by a European staff and over 100 labourers, and an account of their activities follows:

MOSQUITOES

(a) Complaints

A very late summer rainfall accounted for a greater number of mosquito complaints investigated during the months of March through May than in previous years. The seasonal inundation affecting expanses of low-lying ground, particularly in the Sea Cow Lake area, inevitably occurred and inadequate surface drainage in this area once again gave rise to gross mosquito breeding of Culex and Anopheles species. However, it is anticipated that with the encroachment of industry into this area and the reclamation of large tracts of land, the mosquito problem which has plagued the residents for many years will be substantially reduced in the foreseeable future.

During the year, 688 complaints were investigated. The sources of mosquito development in most cases were discarded water retaining articles which favoured the multiplication of Culex fatigans and Aedes species. An analysis of foci nuisances is shown below, with last year's figures given in parenthesis:

Miscellaneous containers	334	(317)
Other drains and sub-floor areas	69	(52)
Defective septic tanks/soakpits	61	(59)
Buildings under construction	28	(47)
Natural swamps	27	(23)
Obstructed stormwater drains	26	(61)
Sanitary fitments	15	(22)
Undetermined	66	(62)
Unsubstantiated	62	(40)
	688	(683)

(b) Biological Control

A mere of some 4 - 5 acres in the southern part of the City has, for many years, been deliberately stocked with fish for the biological control of mosquito breeding. Unfortunately, a fault in a factory pipeline resulted in heavy pollution with a most offensive liquid.

This pollution caused an extemely high aquatic life mortality and over 4,000 lbs. of dead fish had to be removed departmentally and suitably disposed of to obviate any public health hazard. Within three weeks Culex mosquito development was apparent and rapidly reached extensive proportions. In view of the magnitude of the problem, a larvicide was used which was selective in character, being non-toxic to the introduced species of fish, other aquatic life and vegetation.

On several occasions during the year, closure of the Umgeni River mouth by tidal sand banks resulted in a rise in the river water level and the back-flow flooded the Beachwood Swamps and adjoining low-lying areas, so causing fish mortality and an upsurge of mosquito development in the area.

Intensive mosquito control measures coupled with the daily mechanical removal of sand from the river mouth, alleviated the position, but conditions only returned to normal after the seasonal rains and the subsequent re-opening of the river mouth.

Routine culling of Tilapia fish from the sewage maturation ponds at kwaMashu and the stabilisation ponds at Chatsworth was continued to prevent overstocking.

(c) Anti-malaria Precautions

The possibility of malaria occurring in Durban was kept in mind throughout the year. Routine field surveys were conducted by a staff of 10 Bantu and three Indian spotters who submitted 3,120 anopheline larvae for examination in the departmental laboratory. No malaria vectors were identified.

The extent of ditching and draining measures undertaken can be gauged from the total of 529,343 linear yards in 1969 as compared with 379,632 yards the previous year. Larvicide used amounted to 1,033 gallons.

FLIES

The number of complaints received and investigated totalled 259 and the sources of nuisance, the figures in parenthesis referring to last year, were:

Garden cuttings/compost heaps	64	(56)
Refuse receptacles	43	(32)
Poultry keeping	22	(28)
Refuse dumped on vacant land	17	(2)
Manure/stables	10	(28)
Sports fields	5	(2)
Miscellaneous conditions	43	(17)
Undetermined	25	(14)
Unsubstantiated	30	(24)
	259	(203)

An organophosphate insecticide has again proved to be most effective for the control of fly infestation although other chemicals were also used.

The most prolific form of Musca domestica development experienced arose from sewer surcharges and blockage overflows. Spillage of sewage often covered an extensive area and remained offensive for a considerable period, thus providing ideal conditions for fly breeding.

When infestation was particularly excessive, excellent results were obtained by a three-phase technique employing a 0.5% pyrethrin solution with thermal fogging equipment followed by dusting the affected area with 1% diazinon and then strategically locating fly baits of fish treated with an organophosphate compound on the perimeter and adjacent premises.

RODENTS

(a) Complaints

During the year 435 complaints were investigated and appropriate action taken.

(b) Infestation

Rodent activity was gauged by index points established at strategic points throughout the City. In the main, blood anti-coagulant poisons were used but where a quick kill was required phosphorus was employed.

Rattus rattus and Rattus norvegicus were most commonly found although some species of multimammate mouse were found, mainly in partly cultivated fields in Chatsworth.

(c) Rodent-proofing

The building out of rats in new commercial undertakings is strictly enforced by progressively inspecting building work to ensure that rodent-proofing measures specified are incorporated during construction.

(d) Control in Harbour Areas

The joint anti-rodent campaign with the State Port Health authorities was maintained in the harbour and contiguous areas when this Department visibly destroyed 1,963 rodents, used 4,169 lbs. of dry and 18½ gallons of diluted liquid poison. In all, 143 rodents were submitted for plague indexing.

(e) Anti-rodent Measures

During the year many rodent problems arose and the following serves to illustrate their diversity:

A large central supermarket was found to be rat infested and the proprietors commissioned local pest eradicators who applied the advice and instructions tended by this Department. This nuisance was successfully abated but had posed not only a serious public health danger but had also led to considerable stock damage.

The Lamont Bantu Village housing some 30,000 persons became unduly infested with Rattus norvegicus. The extermination programme, undertaken departmentally, took four months and covered the entire area. Some 500 rodent carcases were recovered and 152 lbs. of cyanide dust was used.

Damage to beef carcases (condemned in due course) caused by Rattus rattus in the cork linings of cold rooms led to the question of disinfestation. Fumigation was considered hazardous to employees and undesirable because of the possible contamination of the remaining meat; poisoning on the other hand posed the problem that the rodents would not find poison sufficiently attractive in view of the availability of choicer food. In the event all the available brands of blood anti-coagulants were used to bait different containers left in one empty cold room for three days. It was of interest to note that the rats showed a preference for one particular brand of anti-coagulant, even leaving all the others untouched. This brand was then employed in the remaining cold rooms with complete success.

BUSH CLEARING

Suburban development in Durban's sub-tropical conditions inevitably creates problems which arise from the juxtaposition of new dwellings and vacant stands which periodically become overgrown with vegetation and provide foci for illegal dumping of garden and miscellaneous refuse from which mosquito, rodent and fly nuisances occur and in which snakes are alleged to infest, vagrants misuse and delinquents harbour. By long established practice the lodging of a complaint by a resident causes a public health notice to be served on the owners of the land if the existence of an actual or potential nuisance is confirmed. Private enterprise has never successfully entered this field and it remains for the Department to undertake whatever cutting and removal measures as may be necessary and the cost at set tariff rates is recovered from the owner of the vacant plot.

During the year 593 complaints of overgrown vacant land were investigated and as a result 453 acres were cleared and R18,935 recovered in costs.

FIELD HYGIENE BUSH CLEARING

GANG AT WORK

Work of this nature is undertaken by a staff of eight labour gangs comprising over a hundred labourers, mainly Bantu. In accordance with policy, two of these gangs, one Indian and one Bantu, are stationed in their own areas and supervised by an overseer of their own race. The remaining six gangs are under European supervision and carry out bush clearing operations in the remainder of the City. This labour force is also engaged routinely in work associated with storm water ditches and furrows, swamps and the biological control of mosquitoes. It is at all times available for diversion to meet any public health emergency which may arise.

COCKROACHES

Only 47 complaints to the Department were recorded and in most instances the public regarded sewer and storm water drains as the source of this pest. However, surveys often revealed heavy infestation in cracks and crevices in the pavement area from which cockroaches emerged in very large numbers after treatment, whereas the maligned drains were usually found to be comparatively free from infestation, probably due to routine departmental spraying measures conducted in the sewers over many past years.

The treatment of large Municipal office blocks, beach change-rooms booths, markets, Bantu hostels and storm water drains and foul water sewers using modern equipment and, in most cases residual insecticides, resulted in a very satisfactory state being achieved.

Diazinon 0.5% solution was found to be effective in controlling B. germanica and although this species is resistant to 1% - 2% malathion the latter gave good results in the control of P.americana and P.australasia which are found in greater abundance. A new species of cockroach, at present unidentified, is being located in increasing numbers within buildings and in compost heaps in some parts of the City but no public health hazard is envisaged as it appears susceptible to the usual pesticides.

BED BUGS

The control of cimex infestation in Municipal Bantu hostels has been conducted by this Department since 1961. The measures employed proved most satisfactory during the year and no resistance to the insecticide used was noted. A total of 1,627 rooms were treated for bed bug infestation in sub-economic dwellings at the Chatsworth and Merebank Indian townships, the cost of 20 cents per room being recovered from the occupiers.

PEST CONTROL OPERATORS

The extent of business conducted by commercial operators in the City has increased considerably this year. The emphasis with this type of service has been in relation to the control of cockroaches and wood-boring insects.

Following upon the steps taken locally to effect some control by a licence agreement over these operations, a meeting of peri-Durban local authorities was convened where the implications were considered at length and agreement reached to introduce a similar method of control.

During the year 19 businesses already in existence agreed to accept the conditions contained in the licensing agreement, to be followed by a further 22 new concerns which started operations thereafter. In all 93 operators presented themselves for examination to obtain approval as pest operators. The oral examination covered various aspects such as hazards attached to the misuse of pesticides, first aid, and the various applications of insecticides.

When it became apparent that a fairly high standard of knowledge was required by the Department before a certificate of approval would be issued, the necessary steps were taken by the managements to ensure a better training of personnel.

In the main, the majority of firms have abided by the conditions set out in the licensing agreement and checks are periodically made of registers in regard to pesticide use, dilution proportions, operators' particulars, purpose of application, etc.

Whilst the measures adopted serve a useful purpose it remains undoubted that national legislation is necessary.

XII. ALLIED HEALTH SERVICES

Certain public health or ailied functions are undertaken by sister departments and the City Health Department is indebted to the heads of departments concerned for the following information:

ABATTOIR SERVICES

Slaughter stock has shown a steady increase during the year under review, particularly in the case of pigs where throughput has increased by approximately 50%. This is due to certain other abattoirs, previously registered for export purposes, having been deprived of this status. The promulgation of Standing Regulations framed under the Animal Slaughter, Meat and Animal Products Hygiene Act, has resulted in improved hygiene standards, particularly in connection with the transporting of meat. A considerable number of full enclosed, insulated vehicles with provision for the hanging of meat have already been provided by meat traders and it is estimated that in the near future all meat traders vehicles will comply with the Regulations.

Animals Slaughtered and Carcasses Condemned - 1969
(last year's figures are given in parenthesis)

Animal	Slaughtered	Condemned		
		Carcasses	Quarters	Portions (lbs.)
Bovines	145,748 (136,864)	1,180	41	415,056.5
Swine	121,883 (85,699)	1,244	8	70,009
Sheep	901,765 (757,969)	1,336	269	1,336,959
Goats	16,920 (22,503)	57	3	5,595
Total	1,186,316 (1,003,035)	3,817	321	1,827,619.5

As no directive regarding the provision of a new abattoir has as yet been received from the Abattoir Commission, very little progress has been made in this regard. Existing facilities are being strained to their maximum capacity and it is extremely doubtful whether this state of affairs can carry on for very much longer. If throughputs continue to increase at the rate which has been evident over the past year, considerable expenditure will be necessary to provide additional facilities to cope with increased slaughtering needs as well as cold storage facilities, additional lairage and hanging hall space. If these facilities are not extended it may soon be necessary to curtail slaughtering in which case meat shortages might very well occur.

CEMETERY AND ALLIED SERVICES

Particulars with regard to the disposal of human remains were as follows (last year's figures shown in parenthesis):

Race Group	Interments	Pauper Burials	Cremations*
White	1,163 (1,204)	6 (7)	1,403 (1,375)
Asiatic	1,113 (1,175)	3 (5)	615 (565)
Bantu	6,376 (6,822)	672 (560)	-
Other	355 (311)	7 (7)	-
Total	9,007 (9,816)	688 (579)	2,018 (1,940)

* Not undertaken by Municipality.

GENERAL ENGINEERING AND ALLIED SERVICES

(a) Water

(i) Durban's main source of water is the Umgeni River, on which two major water conservation works have been built:

The Nagle Dam, which is situated where the river's catchment is 259,000 hectares in extent, holds 25,000,000 cubic metres of water when full. The aqueducts are capable of conveying 410,000 cubic metres of water daily to the Water Purification Works at Durban Heights and it is the Council's intention to increase their capacity to 592,000 cubic metres daily in the near future.

The Government's Midmar Dam on the upper reaches of the river, conserves water from some 77,700 hectares of catchment. It holds reserves for the use of Pietermaritzburg, Cato Ridge and Hammarsdale and is also used to augment the supplies drawn by Durban from its Table Mountain Waterworks (Nagle Dam).

The Umlaas River, from which Durban once derived its entire supply, is used to provide about 59,200 cubic metres of water daily but during the drought in the early part of 1969 the river failed for the first time to yield its full quota.

Durban's existing water purification capacity totals 468,000 cubic metres daily, whilst the peak draw has been of the order of 427,000 cubic metres on a hot, dry day.

Development of the City's water distribution system has continued steadily commensurate with demand for water in various parts of the City. Further progress has been made on the programme of cleaning and cement mortar lining all the old cast iron water mains in the City - a programme designed to reduce dirty water complaints and improve the reticulation's capacity where it has deteriorated with age and rust encrustation.

At the close of the year under review, the new balancing reservoir at the Durban Heights Purification Works was nearing completion - a unique circular structure with a tent-shaped roof which will hold 345,500 cubic metres of water when full.

(ii) Bacteriological and Chemical Sampling

A full range of samples was bacteriologically examined and chemically analysed and the results show a continued high level quality of purified water. A summary of chemical analyses of water sampled at the inlet points to two main purification works of Durban Heights and Northdene, from the sources of Umgeni and Umlaas Rivers respectively, is set out below:

	Durban Heights	North-dene
Temperature °C.	21.2	19.2
pH	7.4	7.5
pHs	9.2	8.2
Colour (Hazen Units)	35	10
Conductivity (rec.m/ohms)	70	437
Turbidity (p.p.m.)	10.1	2.0
Parts per Million of:		
Total Dissolved Solids	78	297
Chlorion (Cl)	8	69
Iron (Fe)	0.30	0.04
Silica (SiO_2)	12	7
Ammoniacal Nitrogen	0.02	0.15
Nitrate Nitrogen	0.3	0.2
Permanganate Value, 4 hrs.	1.1	1.3
Sulphate (SO_4)	2.8	42
Sodium (Na)	6.0	75
Potassium (K)	1.3	3.8
Free Carbon Dioxide	2.6	5.3
Hardness as $CaCO_3$		
Total Hardness	25.8	84
Calcium Hardness	13	42
Non-Carbonate Hardness	0	0
Soda Alkalinity	5	11
Total Alkalinity	31	94

(iii) Beaches and Public Swimming Baths

Surveys of beaches from Beachwood to Isipingo were carried out twice monthly.

Control of the purification of water in eight European swimming baths and six paddling ponds as well as five Coloured/Indian/Bantu baths and one Indian paddling pond was maintained by regular visits, analytical checks and advice to Pool Supervisors.

(b) Public Cleansing Services

The disposal of refuse by land reclamation methods still continues satisfactorily at Chatsworth and Stromia Road. The Tara Road site, for a long period utilised for the disposal of industrial and domestic refuse, is now used for garden and other similar refuse only.

The recently emptied sewage oxidation ponds at Lamont are now being reclaimed by refuse tipping and the reclamation of this area will make available several sports fields for the Bantu group.

Progressive modernisation of the fleet of refuse collection vehicles was continued with the acquisition of two compressor-type vehicles of 15 cubic metres capacity, each of which permits the loading of 45 cubic metres of uncompacted refuse.

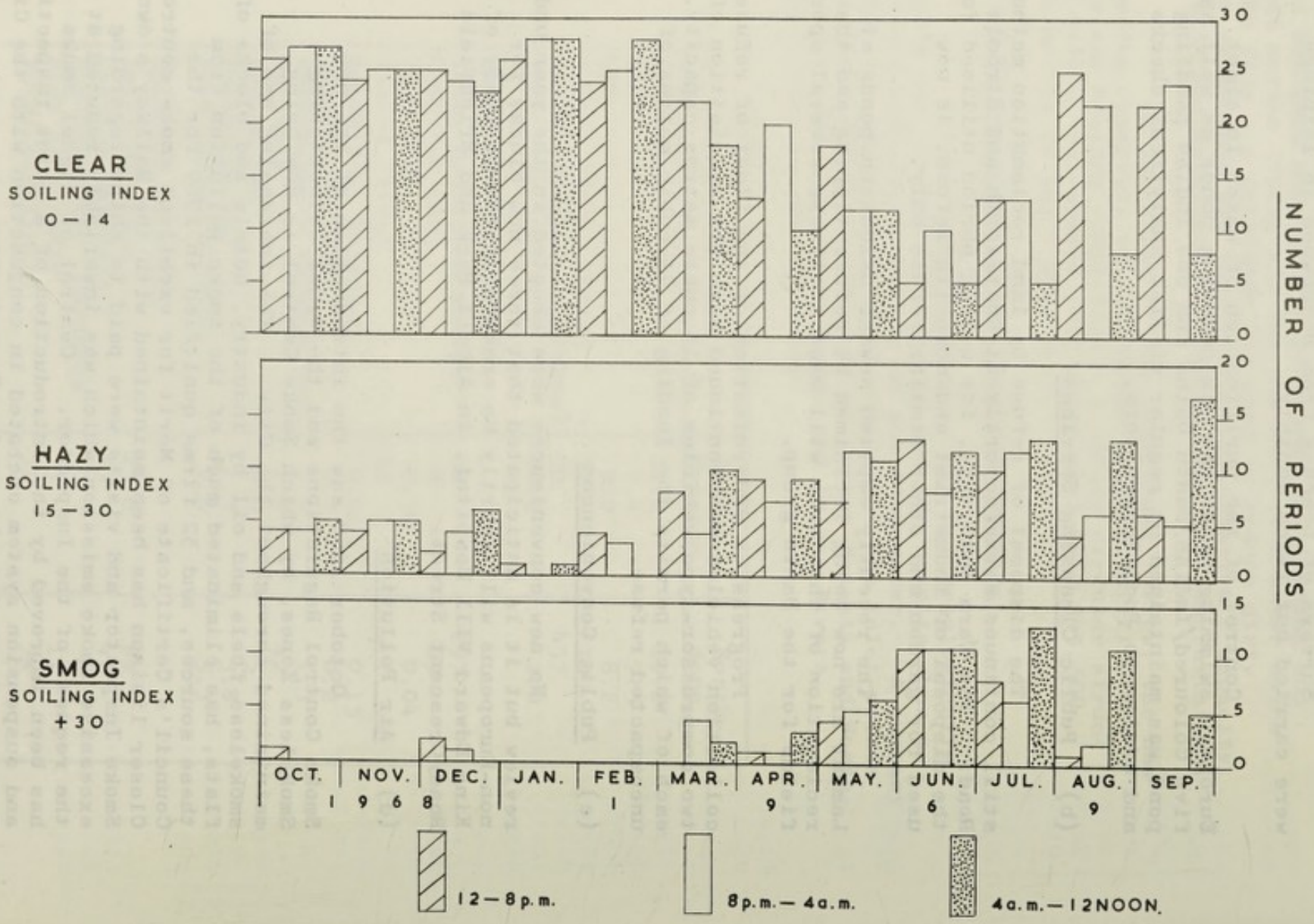
(c) Public Conveniences

No new conveniences were erected in the year under review but it is anticipated that three new blocks for non-Europeans will shortly be erected in the vicinity of King Edward VIII Hospital, in Albert Park and Brickfield Road/Crescent Street.

(d) Air Pollution

October 1969 saw the introduction of the new Smoke Control Regulations and the Order establishing Smokeless Zones, by which Smoke Control is now being maintained throughout the City. The increasing use of smokeless fuels and oil by industry, hotels and blocks of flats, has eliminated much of the smoke pollution from these sources, and 52 firms qualified in 1969 for the Council's Certificate of Merit for excellent smoke control. Closer liaison has been maintained with the Railway's own Smoke Inspector and visits were paid to ships regarding excessive smoke emission which was invariably reduced at the request of the Inspector. Control of diesel smoke has been improved by the introduction of a joint inspection and suspension system operated in conjunction with the City Police and the City Licensing Department.

AIR POLLUTION EVALUATION: DURBAN 1968/69



The control of dust and odour emission by Durban firms has been satisfactory and the pollution levels in Durban compare favourably with results obtained in other South African cities. The chart illustrates the build-up of air pollution during the winter inversion season, March to July.

Good development control is a corner stone of the Durban Cleaner Air Campaign, and throughout the year all trade licence applications, building plans, applications for permission to conduct offensive trades and applications to purchase Corporation land for industry were reviewed to ensure that adequate provision is made for the control of air pollution from smoke, ash, grit, dust, fumes and odours.

(e) Progress with 15-Year Sewerage Reticulation Programme, etc.

(i) Trunk and Main Sewers

The Umhlatuzana Trunk Sewer is now operational as far as Nottingham Road, Mobeni, whilst a further section of this trunk sewer in the vicinity of Welbedagt Road was constructed during the course of the year.

On the Umbilo/Mayville Trunk Sewer, the crossing of the Amanzimnyama Stream was carried out, together with construction at Hulett Lane and Karim Lane, and in the vicinity of Titren Road. The construction of the section of the upper Umbilo main sewer which connects to the Hillary housing scheme has been completed and this has been connected temporarily to the old Umbilo main sewer.

The construction of the first section of the Durban North trunk sewer was completed in Riverside Road from the major pump station to Chettiar Road, whilst the Reservoir Hills and Palmiet trunk sewers were also commenced during the course of the year.

(ii) Reticulation

During the year the construction of further sewerage reticulation was completed at Hillary, the Bluff, Sea View, Montclair and Reservoir Hills. Other work which was commenced in the Athlone area of Durban North, Parkhill, Sea View and a further portion of the Bluff which drains towards the bay was still in progress at the end of the year.

(iii) Pump Stations

The pump station at Carolina Crescent, Woodlands, was completed and put into operation and a start was made on the construction of the pump station at Badulla Drive to serve the Merebank housing scheme.

The new Point Sewage Pumping Station was put onto full-scale operation to deliver sewage from the central area to the new Treatment Works. With this changeover, discharge of sewage through the outfall pipes at the harbour entrance ceased.

The new Jacobs Sewage Pumping Station which diverts most of the sewage from the Bluff Outfall Tunnel to the new Southern Sewage Treatment Works was also commissioned.

The new North Coast Road Pumping Station was put into service to pump sewage from the Parkhill Valley catchment to the Northern Works. With this arrangement the existing Sea Cow Lake Road Pumping Station is now being used to handle the effluent from National Chemical Products which was previously discharged into the Umgeni River.

(f) Sewage Treatment Works

The Southern Works has been planned for an ultimate capacity of 410,000 cubic metres per day, and the first stage development, for 90,000 cubic meters per day, is now in full operation. This Works produces a settled effluent for discharge to sea through the 4,250 metre long Umlaas Outfall. The sludge is digested and then subjected to a heat treatment process before being pressed into a sterile cake.

The Central Works which has an ultimate capacity of 135,000 cubic metres per day has also been commissioned, the first stage development being for 90,000 cubic metres per day. This Works produces a settled effluent for discharge to sea through the 3,000 metre long Bluff Outfall, and the raw sludge is incinerated.

The Northern Works has been constructed for the initial development of 45,000 cubic metres per day in a layout to handle 112,500 cubic metres per day, and the present flow to these Works, which is of the order of 2,250 cubic metres per day, is being handled in sewage stabilisation ponds.

Sewer Sea Outfalls

The two sewer sea outfalls referred to above have capacity of 225,000 cubic metres per day (Umlaas) and 135,000 cubic metres per day (Bluff). The discharge from these outfalls is being monitored by the Council for Scientific and Industrial Research under control of a Special Steering Committee.

(g) Trade Effluent Control

The Trade Effluent Section has continued monitoring industrial effluents to ensure that there are no serious discharges to sewer or stormwater.

In addition, close liaison with industrialists has resulted in their greater awareness of the pollution problems of a large City, and secured their co-operation for better housekeeping on industrial premises.

XIII. GENERAL

CONFERENCES

The City Council authorised the attendance of two Bantu Health Visitors at the annual meeting of the Bantu Child Welfare Work Committee held in Johannesburg on two days in February.

In April an Assistant Medical Officer of Health (Dr. N.L. Becker) attended the Biennial Congress of the South African Nutrition Society held in Cape Town.

The Medical Officer of Health was a delegate to the 47th Congress of the South African Medical Association held in Pretoria from 6th to 12th July 1969. During the same month, the Durban Child Welfare Society held a three day symposium entitled "The Child Today" which was attended by the Deputy Medical Officer of Health (Dr. G.L. Hilton-Barber) and an Assistant Medical Officer of Health (Dr. M.B. Richter); several officials were present at sessions of particular interest and benefit to themselves.

The Assistant Medical Officer of Health (Dr. M.B. Richter) also attended the Annual General Meeting of the National Council for Maternal and Family Planning in Cape Town in August.

Two Bantu health educators were authorised to attend a course on the treatment of alcoholism held at Botha's Hill, Natal, over four days in September. This seminar was arranged by the South African Council on Alcoholism.

REFRESHER COURSE

The University of Cape Town held a refresher course for general practitioners from the 27th to 31st January, 1969, and the course included:

(i) Case presentations by senior members of the teaching staff in the major clinical subjects;

(ii) panel discussions by groups of consultants on selected topics; and

(iii) lectures and practical demonstrations.

The City Medical Officer of Health had attended three similar courses since 1965 at his own expense but on this occasion the City Council resolved that he should attend and be granted the usual travelling and subsistence allowances.

LEGISLATION

(a) Notifiable Infectious Diseases

On 30th May, 1969, the Minister of Health declared viral hepatitis a notifiable disease throughout the Republic and this notice replaced the one gazetted in 1966 which was restricted to the municipal areas of Johannesburg, Pretoria, Durban and Port Elizabeth. The declaration of acute primary pneumonia and influenzal pneumonia as a notifiable disease which had stood since 1924 within the borough of Durban was rescinded by Government Notice No. 3388 of 26th September, 1969.

(b) Plenary Powers - Food Legislation

With a view to expediting the transaction of municipal business, authority was granted to delegate certain powers to the following extent:

(i) The Public Health Committee of the City Council was authorised to exercise the powers of the Council in regard to providing comments on proposed regulations under public health legislation, such as the Food, Drugs and Disinfectants Act, etc. where the views or recommendations or approval of the Council were sought;

(ii) the City Medical Officer of Health was granted authority to furnish professional and/or technical advice or comment in regard to proposed Government or Provincial legislation in matters of public health concern subject, where necessary, to the responsible committee being informed of the salient points;

(iii) in terms of Section 3 (5) of the Food, Drugs and Disinfectants Act, 1929, and Section 141 bis of the Local Government Ordinance, No. 19 of 1942, every duly appointed health inspector must be authorised to exercise the powers under these legislative measures, and it has been the practice in the past to obtain Council authority in each case when new appointments were made. The City Council on 18th August, 1969, resolved for the future that every duly appointed health inspector shall ipso facto be authorised as an inspector in terms of this legislation.

(c) Amendment of Food By-laws

Following on a comprehensive review of the food by-laws late in 1968, certain amendments were submitted to the City Council and became effective during this year.

The changes mainly concerned:

(i) A revision of the minimum kitchen dimensions in food establishments and the giving to the City Medical Officer of Health discretion to permit relaxation where there was adequate justification;

(ii) a new provision laying down a minimum size for storage accommodation;

(iii) an obligation to provide toilets for the use of patrons; and

(iv) new specifications for meat vans entailing the hanging of carcasses clear of the floor as well as total enclosure of the vehicle.

An entirely new departure was the introduction of bacteriological standards for food, the pattern of which follows:

Manufactured, processed, pre-cooked, prepared or ready-to-consume food:

(a) no decomposition shall have occurred;

(b) antibiotics shall not be present;

(c) organisms of the genera Salmonella and Shigella, the species Vibrio cholerae, coagulase-positive Staphylococcus aureus, any other pathogen and Escherichia coli type I shall not be present.

In the case of water which enters into, or is used in the composition or preparation of food, or in the form of frozen confections or other water products, or water to be used for the washing of food containers, or in the case of ice:

(a) the count of presumptive coliform organisms shall not exceed two per 100 millilitres;

(b) no typical faecal coli shall be present; or

(c) when tested at 37°C the total count of viable organisms shall not exceed 100 colonies per millilitre.

CHEMICAL ANALYSES

A contract had existed from 1895 with Messrs. Puntan and Kloot, chemical analysts, and periodically, albeit at very infrequent intervals, requests were made for a revision of the tariff for chemical examination fees, the last occasion being in 1948 and penultimately in 1921. During the year the present City analysts, Messrs. Harding-Kloot and Martin advised that the surviving partner had decided to retire and had sold the practice to The Corner House Laboratories (1968)(Pty.) Limited. It was agreed that the contract for the analysis of 300 samples (250 food and 50 water) at a flat rate of R4.20 would lapse in favour of a revised arrangement with the new firm.

It is fitting to record that the City analysts have afforded considerable services to the City at relatively little cost to the Council, and it is a matter of regret that this long association has had to be terminated.

CHEMICAL CONTAMINATION OF VEGETABLES

On 8th October, 1969, a chemical herbicide was sprayed on ponds of the Northern Sewerage Works by a contractor in an endeavour to eliminate Kariba weed, but unfortunately and for various possible reasons, some of the weed-killer was dispersed over an area mainly to the south-west of the Works and caused damage to vegetables and flowers. A member of the staff of this Department reported that the vegetables at a number of market gardens and the intervening grass in the Sea Cow Lake area showed marked spotting and leaf destruction which had developed over a short space of time. In the light of the fact that the evidence pointed to the dispersion of the toxic weed-killer having affected the vegetables, notices of detention pending examination and enquiry were served on the occupiers of the gardens under the Regulations relating to Food Inspection.

In the meanwhile extensive investigations, including consultation with various State and professional authorities, were carried out to ascertain the safety or otherwise of the contaminated vegetables for human consumption, including chemical analyses of the affected plants, the possibility of the condition being a plant disease having quickly been excluded. At this stage the weight of opinion pointed to the need for extreme caution. Very extensive examination of all vegetables at the Squatter's Market, Indian Market and Trent Road Market and all other likely outlets for the vegetables was put in hand and maintained and, where necessary, contaminated vegetables were seized, although the quantities were relatively small at these points.

A wide variety of vegetables was involved in this whole episode, ranging from lettuces and leaks through beetroots and carrots to mealies, although those giving cause for the most immediate concern comprised chard, lettuce, celery, herbal leaves, mint, and like items which are eaten raw. Information on the translocation of the chemical in vegetables was sought in case root crops such as carrots and beetroot, in the course of growing, would accumulate the chemical and possibly prove harmful.

By 22nd October sufficient evidence was available, including analytical reports and information received from the State Health Department, to withdraw the certificates of detention and so release all vegetables as they were no longer regarded as a danger to health, but it was advocated that the affected leaves of the plants should be removed prior to eating. The results of the chemical analysis to hand at the time of release of the vegetables, demonstrated the presence of the herbicide in affected plant leaves, but in a low concentration, below that of an acceptable tolerance.

CHARD AND MEALIES

DAMAGED BY A CHEMICAL HERBICIDE.

BUILDING BY-LAWS LIAISON

The Department continued its membership of the Building By-laws Liaison Committee which regularly met under the chairmanship of the City Engineer and which is representative of departmental interests, the Natal Provincial Institute of Architects and the Master Builders and Allied Trades Association. Many matters were dealt with during the course of the year but the main aspect of public health importance was related to refuse storage areas.

It was recommended to the City Council that the By-laws be amended to lay down a minimum area to be set aside for refuse storage respecting dwellings as distinct from other buildings. In the former case the minimum size specified is 9 square feet, but in regard to the latter it is 100 square feet and increases in area according to the bulk of the building.

Furthermore the concept of permitting refuse storage areas within buildings in the form of a room specially approved for the purpose and complying with various engineering, public health and fire precaution aspects was agreed upon.

INCORPORATION

The Administrator-in-Executive Committee, by Proclamation No. 36 dated 27th March, 1969, incorporated the Local Health Commission's Public Health Area of Newlands within the City of Durban. The land involved comprised approximately 3,000 acres which the City Council requires for the construction of an Indian township, designed for some 8,250 housing units, to be built over the next 10 years.

AWARDS TO STUDENT NURSES

The following nurses were selected to receive the Durban City Council's awards for outstanding students training in the City:

Addington Hospital

Lesley Elizabeth Manders	Gold Medal
Nancy Strydom	Silver Medal

St. Augustine's Hospital

Carla Christina Greven	Rolled Gold Fob Watch
Jennifer Jean Manion	Stainless Steel Fob Watch

Entabeni Hospital

Patricia Ann Landman	Rolled Gold Fob Watch
Carol Judith Butler	Stainless Steel Fob Watch

King Edward VIII Hospital

Helen Mthombeni	Rolled Gold Fob Watch
Zubeda Ballim	Stainless Steel Fob Watch

McCord's Zulu Hospital

Hilda Ntombikanina	Rolled Gold Fob Watch

MEDICAL BUREAU

A clinic is held for the pre-employment medical examination of prospective European, Coloured and Indian municipal staff by Senior Clinical Medical Officers of this Department, daily in the case of males and on two afternoons per week for females. These examinations are supported by chest X-Rays.

The clinic also provides facilities for special classes of employees who enjoy a free medical service by virtue of their appointments to the Fire, City Police, Beach and Licensing Departments prior to 1st August, 1965. Firemen, traffic constables, lifesavers and testing ground staff recruited after that date are compulsory members of the medical aid scheme and therefore arrange their own medical attention. Because of this limited medical service there has been a progressive decrease in the number of attendances as demonstrated by the totals of 1,455, 1,166, 994 and 815 for the years 1966 to 1969 respectively.

In terms of the Conditions of Service heads of departments may refer an employee to a Medical Board with a view to consideration being given to retirement on medical grounds. Each board consists of not less than two of the Department's medical officers and their reports and recommendations are submitted to the Municipal Service Commission.

The Medical Bureau's activities can be summarised as follows:

Service	European		Non-European	Total
	Males	Females		
Pre-employment examinations	1,278	419	574	2,271
Consultations	815	-	-	815
Medical boards	16	2	15	31

PROSECUTIONS

Contravention	Admitted Guilt	Found Guilty	Fines Paid	Remarks
PUBLIC HEALTH BY-LAWS			R	
Food				
Unclean conditions	28	6	885.00	1 case : R50.00 (or 25 days) 2 cases: R30.00 (or 30 days) 2 cases: R25.00 (or 25 days) 1 case : R15.00 (or 15 days)
Exposure of food to contamination	15	3	420.00	1 case : R50.00 (or 25 days) 2 cases : R10.00 (or 10 days)
Unclean food delivery van	1	1	40.00	1 case : R10.00 (or 10 days)
Unclean/unsound utensils	2		30.00	
Absence of overalls	4		60.00	
Failure to provide hot water	1		10.00	
Failure to provide soap/towels	5		65.00	
Structural conditions	2		55.00	
Personal clothing in a storeroom	4	1	85.00	1 case : R20.00 (or 20 days)
Delivery of food in a non-purpose designed vehicle	1		8.00	
Unsound food	1	1	70.00	1 case : R20.00 (or 20 days)
Keeping of live animals	2	2	50.00	1 case : R15.00 (or 15 days) 1 case : R10.00 (or 10 days)
Incompatible use of food room	2	1	50.00	1 case : R20.00 (or 20 days)

Contravention	Admitted Guilt	Found Guilty	Fines Paid	Remarks
			R	
Food (continued)				
Food not stored below 45°F	1	2	25.00	1 case : R10.00(or 10 days) 1 case : Not guilty
Defective fixtures and fittings	1		20.00	
Failure to provide serving tongs	1		10.00	
Utensiis not cleansed with detergents	1		20.00	
Unregistered vehicle	1		6.00	
Passenger sitting on food	1		10.00	
Milk (and Milk Products)				
Ice cream not conforming to bacterial standards	5	1	155.00	1 case : R30.00(or 30 days)
Milk obtained from unregistered source	1		25.00	
Nuisances				
Unclean conditions	18	1	370.00	1 case : R15.00(or 15 days)
Defective water closet	1		10.00	
Conveyance of manure	1		20.00	
Structural defects	8	1	215.00	1 case : R25.00(or 25 days)
Defective drainage system	7		105.00	
Defective sanitary fitments	4		55.00	
Failure to provide refuse receptacles	5		95.00	
Failure to repaint exterior of premises	2		40.00	
Failure to provide effective drainage	7		115.00	

Contraventions	Admitted Guilt	Found Guilty	Fines Paid	Remarks
			R	
Nuisances (continued)				
Fly development	3		50.00	
Mosquito development	6		110.00	
Slaughtering of animals in unapproved premises		1	10.00	1 case : R10.00(or 10 days)
Dry-cleaners and Laundries				
Unclean conditions	1		35.00	
BUILDING BY-LAWS				
Housing persons in premises not approved for human habitation	1		10.00	
Failure to provide sanitary accommodation	2		45.00	
GENERAL BY-LAWS				
Depositing refuse on a public roadway	3	1	85.00	1 case : R30.00(or 30 days)
FOOD, DRUGS AND DISINFECTANTS REGULATIONS				
Non-conformity with chemical standard -				
boerewors	3		70.00	
honey	1		30.00	
sausages	1		20.00	
vinegar	8		165.00	
Non-permitted colouring -				
cayenne pepper	1		30.00	
chilli powder	1		30.00	
curry powder	1	1	35.00	1 case : R10.00(or 10 days)
fish masala	1		20.00	

Contraventions	Admitted Guilt	Found Guilty	Fines Paid	Remarks
FOOD, DRUGS AND DISINFECTANTS REGULATIONS (continued)			R	
Insufficient oil - mayonnaise	1		15.00	
Contained preservative - minced meat	1		20.00	
Excess preservative - sausages	3		85.00	
Non-permitted sweetening - cordial	1		30.00	
PUBLIC HEALTH ACT				
Sale/exposure : unsound food	4	1	150.00	1 case : R15.00(or 15 days)
Refusing inspector access to property	1		40.00	
SLUMS ACT				
Failure to demolish a declared slum	8	6	265.00	1 case : R30.00(or 30 days) 1 case : R15.00(or 15 days) 2 cases: R10.00(or 10 days) 1 case : R 5.00(or 5 days) 1 case : Not guilty
Total	185	30	4,474.00	

XIV. STAFF AND FINANCIAL SUMMARY

STAFF RECRUITMENT

Extreme difficulty was again experienced in filling vacancies for full-time and part-time medical positions. A post of Clinical Medical Officer and two posts of part-time Medical Officers had, at the end of the year, been vacant for nine months and eight months, respectively. Further, three positions of Clinical Medical Officer were filled by retired doctors on a full-time temporary basis.

The authorised establishment for the Health Inspectorate and Child Health Sections was not maintained, due to retirements and resignations. Four positions of Health Inspector, two of Health Visitor, one of Clinic Sister and three of non-European Health Visitor, were vacant at the year's end. However, as a number of Health Assistants (Trainee Health Inspectors) in this Department were successful in obtaining the National Diploma for Public Health Inspectors some vacancies will be filled from this source.

AMENDMENTS TO STAFF ESTABLISHMENT

The following amendments to the staff establishment were authorised by the City Council and, where applicable, the approval of the Secretary for Health for part-refunds in terms of the Public Health Act, was obtained.

The take-over of the Durban Chest Clinic from the State Health Department on 1st April 1969, necessitated an additional 44 posts and consequent on the incorporation of the Public Health Area of Newlands, on the same date, an additional 11 posts were provided for health services in that area. Eleven other posts were created in order to cope with the expansion of the Department's field services.

Section	Group	Designation of Post	No. of Posts	Remarks
(a) Additions to Establishment effective from 1st April, 1969				
Durban Chest Clinic				
Tuberculosis Clinics	European	Part-time Radiologist	1	
	-do-	Senior Clinical Medical Officer	1	
	-do-	Clinical Medical Officer	4	
	-do-	Clinic Sister	2	
	-do-	Radiographer	2	
	-do-	X-Ray Technician	1	
	-do-	Clinic Assistant	3	
	-do-	Senior Assistant	1	
	-do-	Chief Clerk (Grade II)	1	
	-do-	Lady Clerk	1	
	-do-	Lady Assistant	2	
	-do-	Typist	1	
	Indian	Health Assistant	3	
	-do-	Nurse	1	
	Bantu	Health Assistant	3	
	-do-	Nurse	1	
	-do-	Nurse Aide	5	
	Coloured	Nurse Aide	1	
	Indian	Nurse	2	
	Bantu	Interpreter/ Cleaner	2	
	-do	Labourer	6	
			44	

Section	Group	Designation of Post	No. of Posts	Remarks
(b) Additions to Establishment effective from 1st April, 1969				
Incorporation of Newlands Area.				
Health Visiting	European	Part-time Medical Officer	1	
	Indian	Health Visitor	1	
	-do-	Nurse Aide	1	
	Bantu	Nurse	1	
	-do-	Nurse Aide	1	
	Indian	Interpreter/ Cleaner	1	
	Bantu	Watchman	1	
Tuberculosis	-do-	Health Assistant	1	
Health Inspection	Indian	Health Inspector	1	
	-do-	Health Assistant	1	
Field Hygiene	-do-	Spotter	1	
			11	
(c) Other Additions to Establishment				
Health Visiting	Coloured	Health Visitor	1	(w.e.f. 19.5.69)
	-do-	Nurse Aide	1	(w.e.f. 27.10.69)
	Indian	Health Visitor	2	(w.e.f. 19.5.69)
	-do-	Nurse Aide	1	(w.e.f. 19.5.69)
	Bantu	Health Visitor	2	(w.e.f. 1.4.69)
	-do-	Nurse Aide	2	(w.e.f. 19.5.69)
Maternal and Family Welfare	European	Part-time Medical Officer	2	(w.e.f. 19.5.69)
			11	
(d) Posts deleted from Establishment				
Health Visiting	European	Clinic Assistant	1	(w.e.f. 27.10.69)

Regrading and Redesignation of Posts

Arising from a departmental application, one post of Clerk was redesignated (Senior Clerk Grade II) and regraded, and one post of Assistant (Indian) was redesignated Assistant (Laboratory) and regraded accordingly.

Salary Grades

(i) The City Council authorised revised salary grades for all medical personnel in this Department from 1st November, 1969, but the City Medical Officer of Health, who fell under a different category, was not included.

(ii) The City Council also approved of a general revision of salaries and wages applicable to non-European employees in the Municipal Service, with effect from 1st November, 1969.

(iii) The holiday bonus for European employees was improved from 5% to 8⅓% of total annual pensionable emoluments with a maximum of R200 per annum and R100 per annum for married and single personnel, respectively.

STAFF ESTABLISHMENT

Section and Position	No.	Incumbent/Remarks
EXECUTIVE		
City Medical Officer of Health	1	Dr. C.R. Mackenzie, M.B.; B.Ch.; D.P.H.; D.T.M.& H. (Rand); F.R.S.H.
Deputy City Medical Officer of Health	1	Dr. G.L. Hilton-Barber, M.B.; Ch.B.; D.P.H.
Assistant Medical Officer of Health	2	Dr. N.L. Becker, M.B.; Ch.B.; D.P.H. Dr. M.B. Richter, M.B.;B.Ch.; D.P.H.
ADMINISTRATION (a) European		
Principal Assistant	1	Donkin, F.D.
Personal Assistant	1	Poplett, D.J., M.R.S.H.
Senior Assistant (Technical)	1	Kibble, G.A., Cert. R.S.H.
Senior Assistant (Financial)	1	Dyer, R.B., Cert. R.S.H.
Chief Clerk (Grade I)	2	Blignault, L.V., Cert. R.S.H. Shackell, N.W.
Chief Clerk (Grade II)	2	* Aitkenhead, V.J. Cert. R.S.H.
*Meat and Other Foods Certificate +Tropical Hygiene Certificate		*+ Behn, A.L. Cert.R.S.H.
Senior Clerk (Grade II)	4	1 Vacant (new position 24.11.69)
Clerk	11	1 Post (promoted to Senior Clerk Grade II)
Principal Lady Assistant	2	

Section and Position	No.	Incumbent/Remarks
Senior Lady Assistant	3	
Lady Assistant	7	
Chief Typist	1	
Senior Typist	1	
Typist	4	
General Assistant (Unestablished)	1	
(b) Asiatic		
Clerk (Grade III)	1	
General Assistant	1	
Assistant	7	1 Post redesignated Assistant (Laboratory) and transferred to Veterinary Hygiene
(c) Bantu		
Health Assistant	1	
Watchman	2	1 Vacant
Labourer	1	
EPIDEMIOLOGY (embracing tuberculosis, infectious diseases and venereal diseases control)		
(a) European		
Senior Clinical Medical Officer	2	Tuberculosis Clinics Dr. P.R. Henson, M.R.C.S.; L.R.C.P.; D.P.H. Dr. E.A. MacIldowie, L.M.S. (transferred to Durban Chest Clinic w.e.f. 1.4.69) Dr. E.H.M. Scott, M.B.;B.Ch.; D.P.M.(Rand)(w.e.f. 2.6.69)
X-Ray Technician	1	Tuberculosis Clinics
Operator X-Ray (male)	1	-do- -do-
General Assistant	2	(1 for Home Disinfection Unit; 1 for Immunisation Service)
Note: The following staff was posted from the Health Visiting and Health Inspection Sections for full-time duty to:-		
Tuberculosis Control		
5 Health Visitors		Field control
2 Clinic Sisters		Tuberculosis clinics
1 Health Inspector		Field control
Infectious Diseases and Venereal Diseases		
1 Senior Health Inspector		Field control
1 Health Visitor		

Section and Position	No.	Incumbent/Remarks
(b) Asiatic		
Health Assistant	8	Field control
Health Assistant	1)	Tuberculosis clinics
Nurse Aide	2)	
Interpreter/Cleaner	1)	
Labourer	1	Home disinfection unit
(c) Bantu		
Health Assistant	17	Field control (1 new position 1.4.69) 1 Vacant (w.e.f. 5.6.69)
Health Assistant	1)	Tuberculosis clinics
Nurse Aide	2)	
Interpreter/Cleaner	2)	
Durban Chest Clinic (new positions)		Tuberculosis Clinic
Senior Clinical Medical Officer	1	Dr. E.A. MacIldowie, L.M.S. (w.e.f. 1.4.69)
Clinical Medical Officer	4	Dr. A.G.T. Thomas, M.D.;B.S.; D.P.H. (w.e.f. 1.4.69 - transferred to Venereal Diseases Clinic 1.12.69) Dr. R.W.W. Bowes, M.R.C.S.; L.R.C.P.; M.A. Cantab.(w.e.f. 1.4.69) Dr. A.D. Nisbet, M.B.;B.Ch. (Rand) (w.e.f. 1.4.69) Dr. M.L. Lowe, M.B.; B.Ch.; B.A.O.; (w.e.f. 1.4.69 - resigned 31.7.69) Dr. T.F. Kethro, M.B.;Ch.B.; D.I.H.; D.P.H. (w.e.f. 1.12.69) 1 Vacant (w.e.f. 20.12.69)
Part-time Clinical Medical Officer	1	Dr. M.L. Lowe, M.B.; B.Ch.; B.A.O.; (w.e.f. 1.8.69 - resigned 19.12.69)
Part-time Consultant Radiologist	1	Dr. E.H. Fine, M.B.; B.Ch. (Rand); D.M.R.D.; R.C.P.; (w.e.f. 1.4.69)
(a) European		Administration (w.e.f.1.4.69)
Senior Assistant (Tuberculosis)	1	Murphy, M.T.G.
Chief Clerk (Grade II)	1	*+ Johnston, R.B.(transferred from Health Inspection)
Lady Clerk	1	Grice, E.A.
Lady Assistant	2	
Typist	1	
* Meat and Other Foods Certificate + Tropical Hygiene Certificate		

Section and Position	No.	Incumbent/Remarks
(b) Asiatic		
Health Assistant	3	
(c) Bantu		
Health Assistant	3	
Interpreter/Cleaner	2	
Labourer	6	
(a) European		Clinical (w.e.f. 1.4.69)
Radiographer	2	Chettle, B.G. (Certificate Radiography) Corke, C.C. (National Diploma Radiography)
X-Ray Technician	1	
Clinic Sister	2	Davidson, J.H.J. Lang, G.
Clinic Assistant	3	
(b) Asiatic		
Nurse	1	Gounden, E.V.
Nurse Aide	2	
(c) Coloured		
Nurse Aide	1	
(d) Bantu		
Nurse	1	ø Ndlovu, M.L.
Nurse Aide	5	
HEALTH INSPECTION		
(a) European		
Chief Health Inspector	1	Johnston, M.M.
Deputy Chief Health Inspector	1	Smith, A.M. (retired 7.5.69) Ashdown, N.D. (w.e.f. 8.5.69)
Senior Health Inspector	12	* Ashdown, N.D. (promoted to Deputy Chief Health Inspector) Clark, A.G. Crickmore, C.R.A. * Green, C.E.O. Harris, J.K. * Hogan, J.P. Hornby, A.V. (transferred to City Engineer's Department 1.4.69) Ingram, W.A. * Knowles, D.H. (w.e.f. 1.4.69) * McIver, E.I. * Roberts, A.J.L. (w.e.f. 1.4.69) *+ Roberts, K.W.C. * Sutherland, F.T. *+ Spencer, D.W. (w.e.f. 26.5.69)
Note: Allocation of positions: District Sanitation 7 Food Hygiene 1 Housing, Plans and Slums 1 Infectious Diseases 1 Dairies 1 Field Hygiene 1		
Note: All Health Inspectors hold a certificate recognised in terms of the Public Health Act and additional qualifications as indicated		

Section and Position	No.	Incumbent/Remarks
Health Inspector	40	Alder, C.H.(resigned 31.12.69)
		*+ Ayre, N.P.W.
		*+ Black, D.N.
		*+ Blair, E.A.
		* Booyens, M.M.
		Brickell,G.R.(w.e.f.18/2/
		* Brokenshaw, A.D. 69)
		*+ Bruwer, W.F.
		*+ Burgess,
		* Cannon, D.C. (resigned 31.12.69)
Note: Allocation of positions:		* Coreejes, G.J.
		Cox, W.A. (w.e.f. 18.2.69)
District and Food Hygiene 33		*+ Currie, A.
Dairies 3		*+ Davies, O.S.
Housing and Plans 1		*+ de Villiers, P.D.
Epidemiology 1		*+ Dunbar, A.M.
Slums 2		* Griffin, R.E.
		* Hiron, B.V.
		*+ Hook, T.C.
		*+ Hull, V.H.
		*+ Johnston, R.B.(appointed Chief Clerk Grade II)
* Meat and Other Foods Certificate		Keen, F.
		* Kimber, J.F.
+ Tropical Hygiene Certificate		* Knowles, D.H. (promoted to Senior Health Inspector)
		* Marsh, H.N.
		*+ McCawley, F.G.I.
		* Miles, A.R.
		*+ Moffitt, N.S.
		*+ Ogden, G.B.
		*+ Pearman, E.F.J.
		* Phillips, L.G.F.
		* Roberts, A.J.L. (post redesignated Senior Health Inspector)
		* Schou, M.S.
		*+ Smith, L.J.
		Soanes, B.G. (w.e.f. 20.3.69)
		*+ Spencer, D.W. (promoted to Senior Health Inspector

Section and Position	No.	Incumbent/Remarks
Health Inspector (continued)		* van Rooyen, H.M.(resigned 13.3.69)
		*+ Walsh, W.W.
		*+ Whitaker, D.G.M.
		* Worthington, C. (retired 20.8.69)
		*+ Worthington, R.C.
		*+ Young, N.R.
		4 Vacant (various periods)
Health Assistant	16	Trainee Health Inspectors 1 Vacant
General Assistant	7	Rodent control
(b) Asiatic		
Health Inspector	7	* Hirasen, Velu Munsamy, G. Narothan, D. (w.e.f. 26.3.69) Surbun, K.(w.e.f.26.3.69) Singh, U. (w.e.f.26.3.69) Kharwa, S.(w.e.f. 3.4.69) 1 New position 1.4.69
Health Assistant	4	1 New position 1.4.69
Assistant	5	Rodent control
(c) Bantu		
Health Inspector	2	Tutshana, L.(w.e.f.11.9.69) Ngulunga, G.(w.
Health Assistant	2	
VETERINARY HYGIENE		
(a) European		
Veterinary Medical Officer	1	Dr. A.J. Louw, B.V.Sc. (resigned 3.4.69) Dr. W.B. Hobbs, B.V.Sc. (w.e.f. 8.4.69)
Laboratory Assistant	2	
(b) Asiatic		
Assistant (Laboratory)	1	1 (new position 16.6.69)
FIELD HYGIENE		
(a) European		
Supervisor	1	Cox, L.J.A.
Senior General Assistant	1	
General Assistant	8	1 Vacant

Section and Position	No.	Incumbent/Remarks
(b) Asiatic		
Overseer	1	
Spotter	3	1 (new position 1.4.69)
Assistant	2	
Labourer	12	
(c) Bantu		
Overseer	1	
Health Assistant	1	
Spotter	10	
Labourer	84	
HEALTH VISITING		
(a) European		
Chief Health Visitor	1	Rankin, M.H.E., Medical and Surgical, Midwifery, Mothercraft, Health Visitor's and School Nurse's Certificates
Deputy Chief Health Visitor	1	Harding, E., Medical and Surgical, Midwifery, Mothercraft, Health Visitor's and School Nurse's Certificates
Senior Health Visitor	1	Stead,R.J., Medical and Surgical, Midwifery, Mothercraft, Health Visitor's and School Nurse's Certificates
Health Visitor	28	Øx Anderson, E.M. Øx Atkinson, B.J. Øx Bewick, S.M.B.(w.e.f. 25.2.69) Øx Bricknell, M.B. Øx Brown, M.K. Ø Butler, M.A. Øx Essery, M.V. Ø Frame, C.E. Ø Frickel, M.A. Øx Hamlyn, E.F. Hook, E.M. Ø Lloyd, A.A.M.M.(resigned 30.11.69) Ø McCagie, S.M. (resigned 31.5.69) Ø Margetson, I.M.(w.e.f. 3.2.69) Øx Mitchell, B.I. (retired 31.12.69) Ø Muller, M.
Note: Allocation of positions:		
Family Health Services 19		
Epidemiology:		
T.B. Control 5		
V.D. and I.D. 1 6		
Immunisation 3		
Note:		
Ø - Midwifery Certificate		
x - Mothercraft Certificate		

Section and Position	No.	Incumbent/Remarks
Health Visitor(continued)		Ø Pettigrew, E. Ø Robertson, O.M. (w.e.f. 3.11.69) Ø Robinson, J.O. Ø Schärf, A. (resigned 31.8.69) Øx Schwarz, C.J.P. Ø Strickland, M.A. Ø Sutherland, J.W. Ø Truscott, J.A. Ø Tyzack, P. Ø Ward, J. Ø Watts, D.J. Ø Webb, M.E. Ø Winter, B.G.(resigned 31.12.69) 2 Vacant
Clinic Sister	7	Ø Hawksworth, S.M. Øx Hunter, J.W. (retired 20.12.69) Ø Martin, M.E.S. Ø McCall, G.M. Ø Nickson, M.A. Ø Strydom, D.M. Venter, E.G. 1 Vacant (w.e.f.21.12.69)
Note: Allocation of Positions: Family Health Service 3 Immunisation 2 Tuberculosis 2		
Clinic Assistant	9	1 Vacant (1 post replaced by Nurse Aide Coloured w.e.f. 27.10.69)
(b) Coloured		
Health Visitor	4	Ø Charles, G.T. Ø Deane, D.P.A. Ø Ward, R.G. 1 Vacant (new position 19.5.69)
Nurse Aide	4	1 Vacant (new position 27.10.69)
Nurse Aide/Seamstress	1	
(c) Asiatic		
Senior Health Visitor	1	Ø Naidoo, R.R.
Health Visitor	11	Ø Jacob, S. Ø Manogaran, R.A. Ø Munien, P. (w.e.f. 1.4.69) Ø Naidoo, K. Ø Naidu, S. Ø Nair, K. Ø Nair, R.G. Ø Sadanandan, R.F. Ø Reddy, T. 1 Vacant (new position 19.5.69) 1 Vacant (new position 19.5.69)

Section and Position	No.	Incumbent/Remarks
Nurse	5	Ø Ambigay, S. (resigned 31.1.69) Ø Anthony, A. Ø Isaac, D.E.S. (w.e.f. 3.2.69) Ø Mogambery, C. (w.e.f. 1.5.69) Ø Tholasiamah, T. Ø Naidu, S.
Nurse Aide	23	1 (new position 1.4.69) 1 Vacant (new position 19.5.69)
General Assistant	1	
Interpreter/Cleaner	8	1 (new position 1.4.69) (appointment 17.6.69)
(d) Bantu		
Senior Health Visitor	1	Ø Zulu, K.M.
Health Visitor	18	Ø Bhengu, M. Ø Dotwana, H.B. Ø Kgoare, L. Ø Malamba, M.V. Ø Mazibuko, P.A. Ø Mkize, L.D. Ø Mkwanazi, K. Ø Mlambo, S.P. Ø Moholo, D.V. Ø Nala, N. Ø Ndlovana, M.N. Ø Nkosi, A.J. (w.e.f. 30.12.69) (new position) Ø Ngqulunga, O.G. Ø Nkabinde, I. Ø Ntaka, E.N. Ø Sibiya, F. Ø Tsekiso, A.N. 1 Vacant (new position 19.5.69)
Nurse	1	Vacant (new position 30.12.69)
Nurse Aide	16	1 (new position 1.4.69) 2 Vacant (new positions 19.5.69)
Interpreter/Cleaner	7	
Watchman	1	1 (new position 1.4.69)

Section and Position	No.	Incumbent/Remarks
IMMUNISATION		
Note: European comprising:		
3 Health Visitors 2 Clinic Sisters and 2 Clinic Assistants are posted to this Section from the Health Visiting Section on a full-time basis. The services of Part-time Medical Officers, appointed to a panel, are employed on a sessional basis.		
(a) Indian		
Nurse	2	Ø Shunmugan, M. Ø Balraj, K. (w.e.f. 13.1.69)
Health Assistant	4	
Overseer	1	
(b) Bantu		
Nurse	3	Ø Gumede, B. Khahledi, M. Putini, D.
Health Assistant	4	
FAMILY HEALTH (CHILD HEALTH) SERVICE		
Senior Clinical Medical Officer	1	Dr. H.A.B. Pletts, M.B.; B.Ch.
Clinical Medical Officer	1	Dr. H.E. Rose, M.B.; Ch.B.; (w.e.f.1.8.69) Dr. E. Shirley, M.B.; Ch.B. (resigned 30.6.69)
Part-time Clinical Medical Officer	5	Dr. P.T.A. Bell, M.B.; B.S.; L.R.C.P. (new position 3.4.69) Dr. L.E.J. Chapman, B.Sc.; M.B.; B.Ch.; D.P.H. Dr. E.K. McDonald, M.B.; Ch.B. Dr. M. Ness, M.B.; B.S. Dr.H.Kennedy,M.B.:Ch.B.
Part-time Consultant Obstetrician and Gynaecologist	1	Dr. S.T. Trezise, M.B. Ch.B.; M.R.C.O.G.

Section and Position	No.	Incumbent/Remarks
EXFOLIATIVE CYTOLOGY		
Asiatic		
Health Assistant	1	1 Vacant
MATERNAL AND FAMILY WELFARE (Planned Parenthood)		
(a) European		
Part-time Clinical Medical Officer	1	Dr. P. Kirtle, M.B.; B.S.
Part-time Medical Officer	2	2 Vacant (new positions 19.5.69)
(b) Asiatic		
Nurse	1	Ø Govender, P.
HEALTH EDUCATION		
(a) European		
Senior Health Inspector	1	Hazle, A.D., Public Health Inspector, Meat and Other Foods and Tropical Hygiene Certificates
Technician	1	Godfrey, D.M.
Health Visitor	1	Ø Schlemmer, P.A. (w.e.f. 23.7.69)
General Assistant	2	
(b) Coloured		
Lecturer	1	1 Vacant (w.e.f.1.7.69)
(c) Asiatic		
Lecturer	1	
Junior Lecturer	5	
Junior Lecturer (Female)	1	
Note: Ø denotes Midwifery Certificate		
(d) Bantu		
Lecturer	2	
Assistant Lecturer	1	1 Vacant (w.e.f.31.12.69)
Junior Lecturer	4	1 Vacant (w.e.f. 1.5.69)
Junior Lecturer (Female)	1	

Section and Position	No.	Incumbent/Remarks
NON-EUROPEAN HEALTH AND MEDICAL SERVICES		
NON-EUROPEAN VENEREAL DISEASES CLINICS		
(a) European		
Senior Clinical Medical Officer (City Venereologist)	1	Dr. S. Ward, M.R.C.S.; L.R.C.P.
Clinical Medical Officer	2	Dr. J.H. Meiring, M.B.; Ch.B. (resigned 30.6.69) Dr. H.B. Savage, M.R.C.S.; L.R.C.P. Dr. A.G.T. Thomas, M.D.; B.S.; D.P.H. (temporary appointment 1st to 31.3.69) Dr. A.G.T. Thomas, M.D.; B.S.; D.P.H. (w.e.f. 1.12.69)
(b) Bantu		
Nurse	4	Cele, M. Emerson, R. Ø Nxumalo, V. Ø Zikalala, Z.A.
Health Assistant	9	
Interpreter/Cleaner	1	
MEDICAL BUREAU		
Senior Clinical Medical Officer	1	Dr. M. Casson, M.D.; M.R.C.S.; L.R.C.P.
TOTAL STAFF ESTABLISHMENT		
European	229	(Includes 1 unestablished and 10 part-time appointments)
Non-European Coloured 11 Asiatic 128 Bantu 216	355	
	584	

Consultant Pathologists to the Department	Natal Clinical Laboratories
Consultant Chemical Analysts to the Department	The Corner House Laboratories (1968) (Pty.) Limited

FINANCIAL SUMMARY

An abbreviated statement of the cost, excluding capital expenditure, of the services undertaken by the City Health Department for the financial year ended 31st July, 1969, with comparative figures for the preceding year, is set out below:-

Expenditure	1968/69	1967/68
	R	R
Salaries, Wages and Allowances	952,577	841,125
Medical Requisites	26,377	22,815
Tuberculosis Hospitalisation -		
Government Hospitals : Nett Cost	43,767	39,626
Other Hospitals : Gross Cost	209,514	222,378
Hospitalisation of Infectious Diseases including Venereal Diseases	35,149	39,672
Transport and Subsidised Locomotion	67,449	61,583
Miscellaneous, including Electricity, Insurance, Rents, Telephones and Stationery	252,310	231,587
	1,587,143	1,458,786

Income	1968/69	1967/68		
	R	R		
General, including hospital fees recovered	49,109	57,565		
Government part-refunds: Public Health Act	558,424	504,287		
Health Services debited to Bantu Hostels and Locations	134,896	121,145	742,429	682,997
		Nett Cost	844,714	775,789

1968/69

GROSS EXPENDITURE: R1,587,143

FOR EACH

R

WHERE IT CAME FROM

BOROUGH FUND REVENUE ACCOUNT	53c
GOVERNMENT PART REFUND ON SALARIES, HOSPITAL FEES, CLINICS AND HOSPITAL FEES RECOVERED	35c
BANTU REVENUE CONTRIBUTION	9c
FEES AND GENERAL INCOME	3c

WHERE IT WENT

SALARIES, WAGES, ALLOWANCES AND ALLIED STAFF EXPENDITURE	60c
HOSPITAL AND AMBULANCE FEES, DRUGS AND LABORATORY SERVICES	19c
MISCELLANEOUS, INCLUDING ELECTRICITY, WATER, TELEPHONE, RENTS, RATES, INSURANCE ETC.	15c
LOAN CHARGES ON CAPITAL	4c
REPAIRS, MAINT. & RENEWALS	2c

APPLIED TO INDIVIDUAL SERVICES

TUBERCULOSIS CONTROL AND CLINICS	26c
HEALTH INSPECTION INCLUDING FIELD HYGIENE	26c
ADMINISTRATION	19c
CHILD HEALTH AND FAMILY PLANNING	19c
INF. DISEASES & IMMUNISATION	6c
VENEREAL DISEASES	2c
HEALTH EDUCATION	2c

NET COST PER CAPITA: R1.19c PER ANNUM

POPULATION: 709,808

REPORT "B"

HOUSING

A. DEMAND FOR HOUSING

The demand for housing based on the number of applications recorded in the Housing Section of the City Treasurer's Department as at 31st December, 1969, was as follows:

Racial Group	Purchasing Schemes	Letting Schemes
European	1,455	465
Coloured	1,355	554
Indian	12,604	5,107
Total	15,414	6,126

Bantu housing is dealt with separately by the Municipal Department of Bantu Administration.

It is apparent from the above schedule that there is an ever growing demand for accommodation in all sections of Municipal Assisted Housing and the total demand figure compared with the previous year's figures is 3,214 applications greater. Furthermore, applications for housing are also submitted directly to the State Department of Community Development but particulars of these are not available.

The Government, through its Department of Community Development, has, in approving funds for housing development, imposed a condition that the units erected are to be allotted by that Department for the resettlement of persons affected by the Group Areas Act. This is the prime reason for the steadily increasing backlog of unfulfilled applications on record in the Housing Section of the City Treasurer's Department.

B. EUROPEAN HOUSING

The project for 114 houses in the southern section of the Hillary Housing Scheme was virtually completed and only 10 houses remained to be finished. Approvals to the second stage of development in this scheme comprising 170 economic flats and nine duplex units were received and in the preparation of the necessary documents for the invitation of tenders was put in hand. A further project comprising the erection of 114 economic dwellings in the northern section of the Hillary Scheme received City Council approval and was submitted for National Housing Commission approval.

All necessary approvals to the proposed block of 77 sub-economic flats in Leathern Road were received and tenders for the erection of the building are to be invited early in 1970.

Construction of the Home for Retired Durban Citizens in Goodwin Drive (464 units of accommodation) progressed to roof level and is due for completion during the latter half of 1970. Another scheme for aged persons, comprising 28 single rooms at Arcadia Homes was submitted to the National Housing Commission for approval. These two schemes are received with considerable satisfaction and will contribute very materially to a long felt need.

Furthermore, a European township with an ultimate number of 2,300 dwellings at Umkumbaan is in the course of planning.

C. COLOURED HOUSING

Apart from the completion of the scheme covering the erection of 74 economic houses at Sparks Estate, no other housing for this group was undertaken during the year although a scheme for 231 economic flats (letting scheme) off Rippon Road in the Sydenham area was submitted, and National Housing Commission approval for the project is being sought.

During the year, however, the Department of Community Development completed 179 economic dwelling units and 200 sub-economic units. In addition, that Department also accepted tenders for a further 197 economic units and 548 sub-economic units, most of which were under construction by the end of the year. All these dwellings are on State land in the Wentworth area.

Despite this development, the demand for housing for the Coloured community is still most acute and this position has been accentuated by the influx of large numbers of Coloureds, mainly from the Transkei.

D. INDIAN HOUSING

(a) Chatsworth

Further allocations of Government Housing funds permitted the construction of houses and services during the year and in addition to contracts already in hand, tenders for the erection of 788 better class houses were accepted. In all, 1,893 houses were completed during the 12-month period, and of these 45 were of the better type.

Schemes in progress in this township, together with schemes which have been approved but not yet commenced, include the following number of dwelling units:

Economic Selling Schemes	734
Economic Letting Schemes	2,238
Sub-Economic Letting Schemes	841
Total	3,813

ECONOMIC HOUSING
AND

SUB-ECONOMIC HOUSING

AT CHATSWORTH

(b) Newlands and Phoenix Indian New Towns

The Newlands area was incorporated into the City and negotiations for the acquisition of the various properties required for the proposed new housing development were put in hand. In regard to the Phoenix scheme, this area was zoned for the Indian race group during the year and agreement was reached with the Department of Community Development concerning the acquisition of the first catchment area to be developed which comprises some 900 acres of land. It is expected that these two new Indian townships will provide more than 30,000 dwellings.

F. BANTU HOUSING

kwaMashu Bantu Housing Scheme

Apart from the work on special buildings within the scheme, including the Township Centre, and the construction of a major football stadium, housing development was confined to completing the final neighbourhood unit where 796 houses were handed over for occupation during the year.

Umlazi Glebe

The City Council's application in respect of a 17,000 bed hostel project was referred back for reconsideration with the view to a reduction in the net cost per bed. Amended schemes were investigated and a revised project providing accommodation of a slightly lower standard will be submitted for both Council and Government approval.

Schemes being developed by the City Council on behalf of the South African Bantu Trust

At the Umlazi Bantu Township the construction of housing, services, schools, etc., proceeded at a steady rate and during the year 1,415 houses were handed over for allocation - it is anticipated that funds to maintain this rate of development during the coming year will be made available by the Trust.

An agreement covering further Bantu housing development by the City Council on behalf of the South African Bantu Trust was concluded and this covers an extension to the present Umlazi Scheme, as well as the development of a new township, to be known as Ntuzuma, to the north of the City. Work in both these additional areas is to be commenced during 1970.

The following details reflect the Municipal Bantu housing position in Durban as at the 31st December 1969:

Institution and Type of Accommodation	Number of Units	Estimated Number of Persons Housed
(a) Municipal Family Housing		
Lamont and Lamont Extension	1,909	20,700
Lamont Extension Economy Housing Scheme	851	9,300
Chesterville	1,265	9,300
kwaMashu	15,002	102,000
	19,047	132,000

(b) Municipal Single Accommodation (For Men)	Beds
Dalton Road Location	1,450
Jacobs Location	886
S.J. Smith Location	4,481
kwaMashu Location (Hostel Unit)	16,880
Umlazi Glebe (Housing Units)	2,993
(For Women)	
Thokaza Women's Hostel, Grey Street	684
	27,374

In addition to permanent residents at these institutions, tickets for casual accommodation are issued nightly and lodgers permits are issued in family locations.

Other forms of Bantu housing include Bantu owned properties, domestics housed on employers' residential premises, Government and Provincial accommodation, and premises licensed under Section 9 (4) of the Bantu (Urban Areas) Consolidation Act No. 25 of 1945, as amended.

F. SLUM CLEARANCE

The Department's routine programme was continued throughout the year by an inspectorate comprising two health inspectors under the guidance of a senior health inspector, whose services were unfortunately only available on a part-time basis. The section, under the direction of the Deputy City Medical Officer of Health, made detailed inspections of 193 premises which were surveyed and processed for presentation to the Slum Clearance Court for the Durban area.

The premises concerned were occupied by various race groups including 88 by Indians, 37 by Coloureds, 24 by Europeans and two by Bantu. Premises occupied by more than one group comprised 42.

A number of the properties were multi-unit in layout, ranging from two dwelling units in some cases to six in others, making an overall total of 265 buildings. Occupants comprised 706 family units of 3,291 persons.

The Slum Clearance Court was convened on 45 occasions and, after due enquiry, issued slum declarations respecting 58 premises. The Court ordered demolition in the majority of cases, the remainder being to repair and renovate.

Not all cases presented were declared slums as these were not proceeded with for various reasons, usually because the owners had volunteered to demolish in terms of the Housing Act or the premises were being acquired by one of the official re-housing departments.

Since 1965, when slum clearance was resuscitated in Durban, to the end of the current year, this Department dealt with 844 premises involving 1,127 actual buildings. These were occupied by 2,826 family units comprising 14,390 persons.

The Slum Clearance Court issued 310 slum declarations, calling for complete demolition in the case of 230 premises, and partial demolition or repair of the remainder.

It is significant that many owners when faced with the prospect of action under the Slums Act preferred then to remedy the unsatisfactory structural situation themselves. In this category were 176 properties demolished and 17 repaired.

Seventy five premises were acquired by the City Council or the State Department of Community Development and these were not proceeded with under the Act.

It is a matter for regret that certain owners or deceased estates resisted compliance with slum court directives within a reasonable period and were prosecuted by this department in consequence. There were 38 cases instituted from which fines or admissions of guilt recovered amounted to R660.

G. DEMOLITIONS AND CONVERSIONS

In terms of the Housing Act no person may demolish, or convert to other use, housing accommodation without the approval of the Minister, for which purpose application must first be lodged with the local authority.

During the year, 389 applications were submitted respecting premises occupied, or previously occupied, by 188 European families, 22 Coloured, 161 Indian, two Bantu, and 16 various races. These premises were found at the time of investigation to be 73 owner occupied, 89 vacant and 227 occupied by tenants. In the latter category, departmental recommendation was conditional upon the occupiers obtaining alternative accommodation.

These applications for permission to demolish or convert dwellings were lodged with the undermentioned projects in view:

Flats/maisonettes	137
Commercial purposes	49
Non-dwellings/reconditioned in brick	46
Industrial usage	30
Municipal services (housing, roads, abattoirs, sewerage and open space development)	10
Hotel development	3
Social centre, sporting facilities, religious purposes, place of care, subdivision of site	6
No immediate development (mainly slums)	108
	389

H. BUILDING PLANS

Plans for residential development submitted for departmental approval on public health grounds totalled 3,812, which are summarised as follows:

Accommodation	Rooms						Units	Plans
	1	2	3	4	5	6+		
Dwellings	-	31	110	535	196	245	1,117	1,117
Flats	332	1,293	974	250	-	-	2,849	124
Other residential	-	-	-	-	-	-	-	5
Additions								2,566
Total							3,966	3,812

CAUSES OF DEATH

APPENDIX 'A'

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

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 1	Tuberculosis of Respiratory System	001-008	6	2	8	7	4	1	5	10	40	25	65	73	14	8	22	16	64	36	100	106
A 2	Tuberculosis of Meninges and Central Nervous System	010		1	1					2	7	4	11	10	2	2	4	3	9	7	16	15
A 3	Tuberculosis of Intestines, Peritoneum, and Mesenteric Glands	011												2		2	2			2	2	2
A 4	Tuberculosis of Bones and Joints	012,013										2	2					1		2	2	1
A 5	Tuberculosis, All Other Forms	014-019						1	1		4	3	7	5				1	4	4	8	6
A 6	Congenital Syphilis	020					1		1		2	1	3	2					3	1	4	2
A 12	Typhoid Fever	040									6	2	8	3					6	2	8	3
A 13	Paratyphoid Fever and Other Salmonella Infections	041,042										3	3							3	3	
A 16	Dysentery, All Forms	045-048								1	8	2	10	11	2		2	2	10	2	12	14
A 20	Septicaemia and Pyaemia	053	2	7	9	4	2	3	5	1	2	4	6	6	3	5	8	3	9	19	28	14
A 21	Diphtheria	055										4	4	1	1	2	3	3	1	6	7	4
A 22	Whooping Cough	056									1	4	5	1					1	4	5	1
A 23	Meningococcal Infections	057		1	1	1		1	1	2	1		1	3	1		1	1	2	2	4	7
A 26	Tetanus	061						1	1		5		5	4	2	3	5	6	7	4	11	10
A 28	Acute Poliomyelitis	080									1		1						1		1	
A 29	Acute Infectious Encephalitis	082					1		1		1	2	3	2		1	1	4	2	3	5	6
A 32	Measles	085					6	2	8	1	21	18	39	55	12	14	26	25	39	34	73	81
A 34	Infectious Hepatitis	092	1		1	2				1	2	1	3	1	2	3	5	6	5	4	9	10
A 42	Other Diseases due to Helminths	124,126,128,130												1				1				2
A 43	All Other Diseases Classified as Infective and Parasitic	036-039,049,054,059 063-074,086-090,093, 095,096,120-122, 131-138									1		1	1		1	1		1	1	2	1
A 44	Malignant Neoplasm of Buccal Cavity and Pharynx	140-148	8	1	9	13	1		1		2		2	3	1	1	2	3	12	2	14	19
A 45	Malignant Neoplasm of Oesophagus	150	2	1	3	4	3		3	5	18	7	25	25	5	3	8	8	28	11	39	42
A 46	Malignant Neoplasm of Stomach	151	16	6	22	22	2	2	4	2	5		5	2	18	5	23	16	41	13	54	42
A 47	Malignant Neoplasm of Intestine except Rectum	152,153	11	17	28	17						1	1	1	4	2	6	3	15	20	35	21
A 48	Malignant Neoplasm of Rectum	154	3	6	9	8								1	1		1	4	4	6	10	13
A 49	Malignant Neoplasm of Larynx	161	5		5	3	1		1		2		2	1	1		1		9		9	4
A 50	Malignant Neoplasm of Trachea, Bronchus and Lung, not specified as Secondary	162,163,166	63	17	80	58	6	1	7	3	8	3	11	10	5	2	7	3	82	23	105	74

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 51	Malignant Neoplasm of Breast	170		22	22	37		1	1			2	2	2		2	2	1		27	27	40
A 52	Malignant Neoplasm of Cervix Uteri	171		4	4	2		2	2	3		15	15	17		8	8	7		29	29	29
A 53	Malignant Neoplasm of Other and Unspecified Parts of Uterus	172-174		8	8	7		1	1	1						7	7	1		16	16	9
A 54	Malignant Neoplasm of Prostate	177	5		5	10	1		1		2		2	2	1		1	3	9		9	15
A 55	Malignant Neoplasm of Skin	190,191	3	2	5	3				1	1	1	2					2	4	3	7	6
A 56	Malignant Neoplasm of Bone and Connective Tissue	196,1977	1	2	3	4					1		1	1	1	1	2	1	3	3	6	6
A 57	Malignant Neoplasm of All Other and Unspecified Sites	155-160,164,165,175, 176,178-181,192-195, 198,199	31	46	77	74	5	1	6		19	9	28	28	9	7	16	18	64	63	127	120
A 58	Leukaemia and Aleukaemia	204	7	4	11	13				4		1	1	3	4	1	5	8	11	6	17	28
A 59	Lymphosarcoma and Other Neoplasms of Lymphatic and Haematopoietic System	200-203,205	5	4	9	6	1		1		3	2	5	4	2		2	4	11	6	17	14
A 60	Benign Neoplasms and Neoplasms of Unspecified Nature	210-239	2	4	6	5					2		2	4	3	1	4	2	7	5	12	13
A 63	Diabetes Mellitus	260	4	4	8	16	1	2	3	2	3	3	6	9	14	28	42	42	22	37	59	67
A 64	Avitaminosis and Other Deficiency States	279-286	1		1						30	23	53	54				6	31	23	54	60
A 65	Anaemias	290-293	2	1	3	2					1	3	4	1	4	2	6	6	7	6	13	9
A 66	Allergic Disorders; All Other Endocrine, Metabolic and Blood Diseases	240-245,253,254, 270-277,287-289, 294-299	3	7	10	13	1	2	3	5	8	8	16	8	33	12	45	42	45	29	74	68
A 67	Psychoses	300-309																				
A 69	Mental Deficiency	325	1		1														1		1	
A 70	Vascular Lesions Affecting Central Nervous System	330-334	77	121	198	203	8	16	24	27	47	37	84	64	102	108	210	208	234	282	516	502
A 71	Non-meningococcal Meningitis	340		2	2	4	6	2	8		16	11	27	22	8	5	13	14	30	20	50	40
A 72	Multiple Sclerosis	345																				
A 73	Epilepsy	353	3		3	1					2	3	5	4	4	1	5	4	9	4	13	9
A 74	Inflammatory Diseases of Eye	370-379													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	2	2	4	7				3	3	1	4	9	5	3	8	9	10	6	16	28
A 79	Rheumatic Fever	400-402	1		1			1	1		2	1	3			4	4	4	3	6	9	4
A 80	Chronic Rheumatic Heart Disease	410-416	1	1	2			1	1			5	5	4	3	3	6	7	4	10	14	11

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 81	Arteriosclerotic and Degenerative Heart Disease	420-422	293	161	454	400	6	4	10	14	3	4	7	8	160	78	238	221	462	247	709	643
A 82	Other Diseases of Heart	430-434	78	81	159	147	5	9	14	14	56	36	92	70	64	59	123	131	203	185	388	362
A 83	Hypertension with Heart Disease	440-443	5	15	20	33	1	5	6	8	13	8	21	28	31	27	58	113	50	55	105	182
A 84	Hypertension without mention of Heart	444-447	3	1	4	3					9	2	11	7	7	4	11	7	19	7	26	17
A 85	Diseases of Arteries	450-456	27	16	43	44	1		1	3	6		6	7	5	2	7	4	39	18	57	58
A 86	Other diseases of Circulatory System	460-468	10	16	26	25		1	1	3	8	4	12	10	4	5	9	6	22	26	48	44
A 87	Acute Upper Respiratory Infections	470-475												1				2				3
A 88	Influenza	480-483	1	1	2	1					1	1	2	1	1	1	2	3	3	3	6	5
A 89	Lobar Pneumonia	490	25	11	36	23	6	4	10	7	22	12	34	28	15	3	18	27	68	30	98	85
A 90	Bronchopneumonia	491	49	59	108	85	17	9	26	26	81	73	154	211	125	127	252	260	272	268	540	582
A 91	Primary Atypical, Other, and Unspecified Pneumonia	492, 493	4	6	10			1	1	2	3	1	4	11	9	7	16	22	16	15	31	35
A 92	Acute Bronchitis	500	1	1	2	1				1	2	1	3	1	6	4	10	10	9	6	15	13
A 93	Bronchitis, Chronic and Unqualified	501, 502	15	5	20	16	1		1	2	1	1	2	5	8	5	13	12	25	11	36	35
A 95	Empyema and Abscess of Lung	518, 521	2		2		1		1	1	5		5	2	3	1	4	1	11	1	12	4
A 97	All Other Respiratory Diseases	503,511-517,520, 522-528	30	24	54	28	4	3	7	3	69	50	119	126	18	8	26	10	121	85	206	167
A 99	Ulcer of Stomach	540	4	4	8	3					3		3		2	1	3	7	9	5	14	10
A 100	Ulcer of Duodenum	541	2	1	3	1													2	1	3	1
A 102	Appendicitis	550-553				2												1				3
A 103	Intestinal Obstruction and Hernia	560,561,570	4	4	8	5						1	1	3				2	4	5	9	10
A 104	Gastro-enteritis and Colitis, except Diarrhoea of the Newborn	571, 572	2	3	5	6	7	1	8	4	52	85	137	215	55	52	107	124	116	141	257	349
A 105	Cirrhosis of Liver	581	6	13	19	9	2		2		12	7	19	18	21	7	28	10	41	27	68	37
A 106	Cholelithiasis and Cholecystitis	584-585														1	1			1	1	
A 107	Other Diseases of Digestive System	536-539,542,544,545, 573-580,582,583,586, 587	17	13	30	30	2	4	6	4	114	84	198	187	16	10	26	24	149	111	260	245
A 108	Acute Nephritis	590		1	1	1		1	1					1	1		1	2	1	2	3	4
A 109	Chronic, Other and Unspecified Nephritis	591-594	7	6	13	23		3	3	1	4	4	8	7	10	12	22	24	21	25	46	55
A 110	Infections of Kidney	600	1	3	4	6	1	1	2	1	5	2	7	5		5	5	5	7	11	18	17

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 112	Hyperplasia of Prostate	610				2																2
A 114	Other Diseases of Genito-urinary System	601,603,605-609, 611-617,622-637		1	1	3					1	1	2	2				2	1	2	3	7
A 115	Sepsis of Pregnancy, Child-birth and the Puerperium	640, 641, 681, 682, 684										1	1			1	1	1		2	2	1
A 116	Toxaemias of Pregnancy and the Puerperium	642, 652, 685, 686														2	2			2	2	
A 117	Haemorrhage of Pregnancy and Childbirth	643, 644, 670-672										3	3	2		2	2	1		5	5	3
A 118	Abortion without mention of Sepsis or Toxaemia	650										1	1			2	2	2		3	3	2
A 119	Abortion with Sepsis	651		1	1							5	5	3		1	1	5		7	7	8
A 120	Other Complications of Pregnancy, Childbirth, and the Puerperium	645-649,660, 673-680, 683, 687-689												1								1
A 121	Infections of Skin and Subcutaneous Tissue	690-698		1	1	1												2		1	1	3
A 122	Arthritis and Spondylitis	720-725		1	1					1					1	1	2	1	1	2	3	2
A 124	Osteomyelitis and Periostitis	730																			-	-
A 126	All Other Diseases of Skin and Musculoskeletal System	700-716,731-736, 738-744	3	2	5					1	4	4	8	2	1		1	5	8	6	14	8
A 127	Spina Bifida and Meningocele	751						1	1			1	1			1	1			3	3	
A 128	Congenital Malformations of Circulatory System	754	2	1	3	3	1	1	2	1		1	1	8	4	3	7	8	7	6	13	20
A 129	All Other Congenital Malformations	750,752,753, 755-759	2	2	4	3	1	1	2	2	3	5	8	5	2		2	5	8	8	16	15
A 130	Birth Injuries	760, 761	2		2	2	1	1	2		13	7	20	18	9	1	10	6	25	9	34	26
A 131	Post-natal Asphyxia and Atelectasis	762		1	1	2	1	2	3	1	19	6	25	20	3	6	9	9	23	15	38	32
A 132	Infections of the Newborn	763-768	3		3		2		2	6	16	16	32	44	12	13	25	53	33	29	62	103

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 133	Haemolytic Disease of the Newborn	770				1					1		1	1					1		1	2
A 134	All Other Defined Diseases of Early Infancy	769,771,772									1	5	6	9	4	2	6	7	5	7	12	16
A 135	Ill-defined Diseases Peculiar to Early Infancy, and Immaturity Unqualified	773-776	15	12	27	32	13	12	25	17	83	83	166	129	51	43	94	100	162	150	312	278
A 136	Senility without mention of Psychosis	794	4	17	21	9		2	2	1		1	1	3	9	4	13	3	13	24	37	16
A 137	Ill-defined and Unknown Causes of Morbidity and Mortality	780-793,795,796	71	66	137	162	19	20	39	49	350	338	688	575	127	62	189	215	567	486	1053	1001
AE138	Motor Vehicle Accidents	E810-E835	23	4	27	11		1	1	4	13	3	16	35	76	20	96	38	112	28	140	88
AE139	Other Transport Accidents	E800-E802,E840-E866				1	1		1		3		3	7	5		5	3	9		9	11
AE140	Accidental Poisoning	E870-E896					4	1	5						1	1	2	2	5	2	7	2
AE141	Accidental Falls	E900-E904	4	2	6	2				1				3	3		3	1	7	2	9	7
AE142	Accidents Caused by Machinery	E912												1	1		1		1		1	1
AE143	Accidents Caused by Fire and Explosion of Combustible Material	E916				1		1	1					4	3	15	18	12	3	16	19	17
AE144	Accident Caused by Hot Substances, Corrosive Liquid, Steam and Radiation	E917,E918								2		1	1	1	2	2	4	2	2	3	5	5
AE145	Accident Caused by Firearm	E919				2																2
AE146	Accidental Drowning and Submersion	E929	5	1	6	1	2		2	2	10		10	3	9	2	11	9	26	3	29	15
AE147	All Other Accidental Causes	E910,E911,E913-E915, E920-E928,E930-E962	17	6	23	10	3	1	4	5	103	15	118	50	24	10	34	22	147	32	179	87
AE148	Suicide and Self-inflicted Injury	E963,E969-E979	8	3	11	11	2		2	3	3	5	8	1	17	11	28	12	30	19	49	27
AE149	Homicide and Injury Purposely Inflicted by Other Person (Not in War)	E964,E980-E985	1	1	2	1	1	1	2		26	5	31	35	14		14	2	42	7	49	38
	TOTALS		1012	860	1872	1698	155	132	287	264	1395	1094	2489	2374	1207	871	2078	2054	3769	2957	6726	6390
	CRUDE DEATH RATES		9.81		(9.04)		8.87		(8.38)		11.87		(11.49)		7.50		(7.60)		9.48		(9.18)	

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

APPENDIX 'B'

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

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 1	Tuberculosis of Respiratory System	001-008									1	2	3	6		1	1		1	3	4	6
A 2	Tuberculosis of Meninges and Central Nervous System	010									1	1	2	1					1	1	2	1
A 5	Tuberculosis, All Other Forms	014-019									1		1	1					1		1	1
A 6	Congenital Syphilis	020					1		1		2	1	3	2					3	1	4	2
A 13	Paratyphoid Fever and Other Salmonella Infections	041, 042										2	2							2	2	
A 16	Dysentery, All Forms	045-048									1		1		1		1		2		2	
A 20	Septicaemia and Pyaemia	053				1	2	1	3					2	1		1	1	3	1	4	4
A 23	Meningococcal Infections	057				1												1				2
A 26	Tetanus	061						1	1		1	2	3	2		1	1	3	1	4	5	5
A 28	Acute Poliomyelitis	080									1		1						1		1	
A 29	Acute Infectious Encephalitis	082									1	2	3	1		1	1		1	3	4	1
A 32	Measles	085					2		2		5	7	12	26	3	4	7	7	10	11	21	33
A 34	Infectious Hepatitis	092				1				1								1				3
A 43	All Other Diseases Classified as Infective and Parasitic	036-039,049,054,059, 063-074,086-090,093, 095,096,120-122, 131-138									1		1						1		1	
A 60	Benign Neoplasms and Neoplasms of Unspecified Nature	210-239												1								1
A 63	Diabetes Mellitis	260																				
A 64	Avitaminosis and Other Defiency States	279-286									5	1	6	6					5	1	6	6
A 65	Anaemias	290-293										1	1		1		1	2	1	1	2	2
A 66	Allergic Disorders; All other Endocrine, Metabolic and Blood Diseases	240-245,253,254, 270-277,287-289, 294-299				1					2	1	3	1	1	1	2	2	3	2	5	4
A 69	Mental Deficiency	325	1		1														1		1	
A 70	Vascular Lesions Affecting Central Nervous System	330-334						1	1		1	3	4	2	3		3	9	4	4	8	11
A 71	Non-meningococcal Meningitis	340				1	5	1	6		11	3	14	13	3	2	5	3	19	6	25	17
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								3
A 81	Arteriosclerotic and Degenerative Heart Disease	420-422	1		1	1				1									1		1	2
A 82	Other Diseases of Heart	430-434	1		1	1	1		1			1	1	1	1	1	2	2	3	2	5	4

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 87	Acute Upper Respiratory Infections	470-475																1				1
A 88	Influenza	480-483															-				-	-
A 89	Lobar Pneumonia	490	1		1	1					2	1	3	4		1	1	6	3	2	5	11
A 90	Bronchopneumonia	491		1	1	3	3	1	4	5	35	40	75	113	42	29	71	74	80	71	151	195
A 91	Primary Atypical, Other and Unspecified Pneumonia	492,493									1		1	4	2	2	4	2	3	2	5	6
A 92	Acute Bronchitis	500				1					1	1	2	1		1	1	6	1	2	3	8
A 93	Bronchitis, Chronic and Unqualified	501,502	1		1	1								2	2	1	3		3	1	4	3
A 97	All Other Respiratory Diseases	503,511-517,520, 522-528	1	1	2	1					24	9	33	25	1		1	3	26	10	36	29
A 102	Appendicitis	550-553																1				1
A 103	Intestinal Obstruction and Hernia	560,561,570		1	1									2						1	1	2
A 104	Gastro-enteritis and Colitis, except Diarrhoea of the Newborn	571,572	1		1	4	5	1	6		41	65	106	171	36	38	74	93	83	104	187	268
A 107	Other Diseases of Digestive System	536-539,542-544,545, 573-580,582,583,586, 587				2		1	1		62	47	109	91	1		1		63	48	111	93
A 108	Acute Nephritis	590																			-	-
A 109	Chronic, Other and Unspecified Nephritis	591-594												1				1				2
A 110	Infections of Kidney	600					1		1					1					1		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																1				1
A 127	Spina Bifida and Meningocele	751						1	1			1	1			1	1			3	3	

Ref.	Cause of Death	Detailed List Numbers	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTALS			
			M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968	M	F	Tot.	1968
A 128	Congenital Malformations of Circulatory System	754	1	1	2	2	1	1	2	1				6	3	3	6	6	5	5	10	15
A 129	All Other Congenital Malformations	750,752,753,755-759	1		1	3	1	1	2	2	3	2	5	5	2		2	5	7	3	10	15
A 130	Birth Injuries	760,761	2		2	2	1	1	2		13	7	20	18	9	1	10	6	25	9	34	26
A 131	Post-natal Asphyxia and Atelectasis	762		1	1	2	1	2	3	1	19	6	25	20	3	6	9	9	23	15	38	32
A 132	Infections of the Newborn	763-768	3		3		2		2	6	16	16	32	44	12	13	25	53	33	29	62	103
A 133	Haemolytic Disease of the Newborn	770				1					1		1	1					1		1	2
A 134	All Other Defined Diseases of Early Infancy	769,771,772									1	5	6	9	4	2	6	7	5	7	12	16
A 135	Ill-defined Diseases Peculiar to Early Infancy and Immaturity Unqualified	773-776	15	12	27	32	12	12	24	17	83	83	166	129	51	43	94	99	161	150	311	277
A 137	Ill-defined and Unknown Causes of Morbidity and Mortality	780-793,795,796	2	1	3	2	3	4	7	9	129	135	264	208	19	11	30	34	153	151	304	253
AE139	Other Transport Accidents	E800-E802,E840-E866												1								1
AE140	Accidental Poisoning	E870-E896																1				1
AE141	Accidental Falls	E900-E904																			-	-
AE147	All Other Accidental Causes	E910,E911,E913-E915, E920-E928,E930-E962	1		1	2	1		1		2	1	3	1		1	1		4	2	6	3
		TOTALS	32	18	50	66	42	29	71	43	467	446	913	925	201	164	365	439	742	657	1399	1473
		INFANT MORTALITY RATES (DEATHS OF INFANTS UNDER 1 YEAR PER 1000 LIVE BIRTHS)	14.22		(19.55)		44.63		(26.82)		103.39		(107.43)		43.54		(52.82)		62.68		(67.26)	