

Report of the Medical Officer of Health on the public health and sanitary circumstances of Johannesburg.

Contributors

Johannesburg (South Africa)

Publication/Creation

Johannesburg : [Municipal Printer], [1973]

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CITY OF JOHANNESBURG

**CITY HEALTH
DEPARTMENT**

**REPORT OF THE
MEDICAL OFFICER OF HEALTH**

1973



22501419186



*Met die komplimente
van die
Stadsgeneesheer*

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of the
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CITY OF JOHANNESBURG

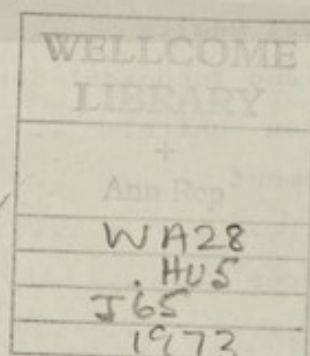
REPORT OF THE MEDICAL OFFICER OF HEALTH

1973

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CITY OF JOHANNESBURG

REPORT OF THE MEDICAL OFFICER OF HEALTH

1973

HIS WORSHIP THE MAYOR AND COUNCILLORS
OF THE CITY OF JOHANNESBURG

I have the honour to present my report for the calendar year 1973 on the activities of the City Health Department, the vital statistics of the city, and the main relevant features in regard to the health, sanitary circumstances and housing of its multi-national communities.

A chronic shortage of personnel, coupled with general expansion and large scale building activities especially in the centre of the city, makes the control of established services and the provision of new health facilities a matter of extreme difficulty.

Surrounding towns also show phenomenal growth, thus making increasing demands for instance on the extensive sewerage system which now drains and purifies waste water for areas far outside the boundaries of the metropolitan area. Increased traffic using the expanding motorways of the city takes its toll of human life.

The take-over of vital statistics by the Department of Statistics, Pretoria, has not yet been extended to the Black population and still has many problems to deal with in regard to other population groups. In addition, the collection of sophisticated data inevitably lags behind the rapid expansion of health services so that important aspects of health such as nutritional status and age/morbidity rates need urgent assessment.

2.

The July beautification campaign initiated by His Worship the Mayor was intended to educate citizens to realise that litter is not only the enemy of health and environment but costs the city's cleansing services close on one million rand a year. The anti-litter campaign has not met with any spectacular success but will be continued on a long-term basis.

The Department remains a continuing source of practical training for various student disciplines, involving health personnel at all levels in demonstrations, lectures and practical work.

N.B. In this report figures shown in parenthesis refer to those of the previous year (1972).

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SECTION I

NATURAL CONDITIONS

The city of Johannesburg is situated in latitude 26 degrees 11 minutes south and longitude 28 degrees 4 minutes east, approximately 483 km from the nearest sea coast. The altitude of the centre of the city at Joubert Park is approximately 1 810 m above sea level.

The municipal area covers 50 890 ha or 508,9 sq km. Nine big regional parks cover a total area of 377,36 ha. There are 3 757 ha of other park sites and open spaces.

The city lies on the crest of the Witwatersrand ridge on a high inland plateau almost at the northern limit of the highveld area of the Transvaal province. The ridge stretches approximately 142 km to the east and west, forming one of the main watersheds of the country. All streams are perennial, those on the northern side being tributaries of the Limpopo River and proceeding to the Indian Ocean, while those to the south proceed to the Orange River and Atlantic Ocean. The only nearby river with a continuous flow is the Vaal River.

The city is not located on a navigable river or seaboard, with the result that the Jan Smuts Airport has become the major point of entry.

The meteorological and topographical features generally favour the dispersal of atmospheric pollution. Temperature inversion is often encountered but usually does not persist later than 10 h 00 or 11 h 00. In the winter months morning and afternoon inversions can be very severe, resulting in smoke concentrations of the same order as those of similar sized British cities.

The climate is essentially temperate although the city is within 3 degrees of the Tropic of Capricorn. With bright warm days and cool nights there is a marked diurnal range of temperature. The average daily period of sunshine is about 9 hours.

Approximately 80% of the rainfall takes place in summer, generally as high intensity storms with long intervening dry periods.

The figures furnished below are from the Weather Bureau's monthly reports for Joubert Park, Johannesburg.

RAINFALL AND TEMPERATURE

Month	Rainfall				Temperature in °C			
	Normal		1973		Average of Daily Maxima		Average of Daily Minima	
	Average for Month	No of rain days	Total for Month	No of rain days	Normal	1973	Normal	1973
	mm		mm					
January	149,6	15	84,8	10	24,6	27,8	14,7	16,4
February	129,4	12	57,5	8	24,2	24,1	14,4	14,2
March	110,4	12	77,5	11	23,3	25,7	13,3	15,8
April	47,7	7	83,3	9	21,5	18,7	11,2	10,0
May	24,5	4	0,0	0	18,4	18,5	7,9	8,5
June	6,5	1	0,0	0	16,0	16,4	5,4	5,4
July	10,5	2	0,0	0	16,0	16,4	5,0	5,4
August	10,1	2	11,5	3	19,0	17,9	7,4	6,6
September	25,6	4	80,5	3	21,9	22,4	9,8	10,3
October	65,0	9	94,2	13	23,9	22,2	12,0	12,3
November	126,5	13	102,0	9	24,2	23,3	13,1	12,3
December	141,1	15	94,0	12	24,6	23,3	14,1	13,6
TOTALS	846,9	96	685,3	78				

SECTION II

VITAL STATISTICS

Mortality statistics for the White, Coloured and Asian population groups have been submitted for the current year by the Department of Statistics, Pretoria, in 17 categories (ICD 8th Revision) but without detailed coding. As the 7th Revision was used by the local authority until 1971 and changes in classification and coding inevitably occur when handled by a different department, no comparison will be made with previous findings in these 3 population groups.

In the Blacks however mortality statistics are still being obtained directly from the Bantu Commissioner and Registrar of Births and Deaths and comparisons are possible.

Infantile Mortality Rate

The infantile mortality rate has been calculated on notified births with a rate of 44,22 for all races, varying in range between 18,07 in Whites and 60,93 in Coloureds. The rate in Blacks has shown a steady decline as can be seen in the following table.

Infantile Mortality Rate for Blacks

1967	1968	1969	1970	1971	1972	1973
93,22	101,11	100,36	95,48	73,87	61,77	54,27

Mortality Statistics in Blacks

It is noted that 1 520 Blacks (1 393) were classified as having died from symptoms of ill-defined conditions, ie 24,04% (21,15%) of the total number of deaths.

Diseases of the circulatory system accounted for 1 098 (632) or 17,36% (9,6%) of the total. On further analysis of this apparent increase, it is noted that no less than 323 of the 1 098 cases died from "ill-defined heart disease" and only 22 from ischaemic heart disease. A further 154 died of hypertensive heart disease, 235 from cerebral haemorrhage, 67 from subarachnoid haemorrhage and 36 from cerebral thrombosis.

There were 76 deaths from neoplasm of the oesophagus, 67 of which were in males. Malignant neoplasm of the cervix uteri accounted for 28 Black female deaths and cancer of the breast for 11.

A decrease is noted in deaths due to accidents, poisonings and violence with a death rate of 2,02% (2,44%).

In diseases of the nervous system 69 died of meningitis, of which 25 were under the age of one year. Twenty-six died of epilepsy. The death rate from diseases of the nervous system decreased from 0,82 to 0,22%.

(STATISTICS FOR THIS SECTION ARE
CONTAINED IN APPENDICES D AND E)

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SECTION III

FAMILY HEALTH

From 11 health centres, 41 subsidiary and 11 mobile clinic venues promotive and preventive services continue to operate for the citizens of Johannesburg. The services offered include child health clinics for infants from birth to 2 years of age; medical examinations of children attending child health clinics and pre-school institutions; immunisation for infants, school children, immigrants and persons deemed to be at risk by virtue of their occupation; inspections of children's institutions; family planning and cancer prevention clinics; a geriatric screening clinic and health education as well as domiciliary visiting by public health nurses. Psychiatric clinics staffed by officials of the State Department of Health operate in Council-owned premises in the White, Coloured and Black areas. In the western and southern Coloured and Asian areas tuberculosis services are being integrated with family health services.

The international immunisation service operated by the Department on behalf of the State Department of Health for many years was handed back on 1 October 1973.

Three Council-controlled creches in the Black areas were transferred to the Non-European Affairs Department in June 1973.

Child Health

Child health clinics were held at 63 venues with 109 weekly sessions. In the Black areas a Saturday morning session is available at each family health centre for the special benefit of the working mother.

Except in the Coloured areas, attendances were less than those of the previous year for no obvious reason.

Following a series of interesting lectures and demonstrations given by Dr A Muschen of the Lambeth Clinic in London, a developmental screening clinic for toddlers was started as a pilot study at one health centre.

Medical officers of different racial groups now receive the same remuneration, with the result that a full complement has been available in the non-White areas. It was therefore possible to provide more medical coverage for infants at the child health clinics.

Domiciliary Visiting

Domiciliary visiting remains one of the most important functions of the public health nurse. Once birth notifications are received, mothers of new babies are visited and advice given, if needed, especially on child care and feeding problems. Immunisation defaulters are reminded of the services available. Attenders at family planning, cancer prevention, child health and geriatric screening clinics as well as at one toddler clinic are visited and referrals made.

The number of births investigated totalled 29 455, showing a decrease in Whites and Blacks, but a slight increase in the Coloured and Asian population groups.

Fewer home visits were made than in the previous year especially in the Black areas. This difference may be accounted for by the increasing attention given to family planning clinics which form part of the routine duties of the public health nurse.



A child health clinic in Soweto

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Geriatric Screening

A geriatric screening clinic for senior citizens aged 65 years and over continues to operate weekly at one health centre. A total of 2 394 adults, of whom 96 were new attenders, visited the clinic. Nearly 300 were referred to their general practitioners, Provincial hospitals and other special clinics or organisations. Of these clinic attenders, 181 persons were screened, 100 for the first time. As transport to and from the health centre is a problem for the aged, the local branch of the Red Cross Society kindly arranged to transport 506 attenders to and from the geriatric clinic and 53 to points of referral.

Immunisation

The low incidence or absence of diseases such as diphtheria, tetanus, smallpox and poliomyelitis reflects continuing effective immunisation within the Johannesburg area.

Measles immunisation continues to be offered to non-White children aged 8 months to 4 years and to institutionalised White children. A total of 14 920 children, of whom 110 were Whites, was immunised.

Although measles is not a notifiable disease, an analysis of cases admitted to the C.M.R. non-White Hospital showed the following figures. Out of a total of 240 cases of measles admitted in 1973, 17 (7) had been immunised previously. There were 93% in the age group 0 to 4 years but of these 14% were under the age of 8 months. Immunisation had not been offered prior to this age as it was expected that maternal antibodies would still be sufficient to have some protective value. Of the 240 hospital cases, 106 were known to have been unimmunised. No records in respect of the remainder were available.

Rubella immunisation is offered in primary schools to all adolescent school girls aged approximately 12 years.

Immunisation against rabies was offered to municipal abattoir workers. A very satisfactory antibody response of 97 to 100% was found in the 74 workers who completed courses or received boosters. A total of 29 did not complete their course.

Family Planning and Cancer Prevention

Family planning and cancer prevention services are offered from 14 clinics. A total of 43 110 individuals attended, 12 270 for the first time. The most suitable contraceptive is offered to each individual according to her personal needs.

The intra-uterine device appears to be most favoured.

Cervical screening continues but is still limited by the number of slides which can be screened by the Department's cytotechnician and the South African Institute for Medical Research.

Out of a total of 5 563 cervical smears taken, reports on 4 649 were received before the end of the year. Of the latter, 0,6% showed the presence of carcinoma in situ, 94% were negative and 5,4% showed atypical or dysplastic cells. In the 3 965 smears screened by the Department's cytotechnician, 67% revealed cells of bacterial origin and the presence of Trichomonas or Candida infections.

The follow-up of patients showing suspicious and positive smears presents a very important but difficult problem. Difficulties arise in tracing those who do not return to family planning clinics at which the smears are taken and in persuading those who require treatment to go to hospital for further investigation or surgery.

Hysterectomies were performed on 12 of the 28 cases with carcinoma in situ. Seven of the Blacks could not be traced, others refused further treatment or are still being investigated.

Children's Institutions

Re-organisation during the year with new personnel who required orientation as Inspectresses put a heavy load on the Chief Inspectress of this section.

The practical application of gazetted Provincial standards for creches and creches-cum-nursery schools has brought to light many problems indicating lack of uniformity and other factors regarding consent use, conflicting requirements for control by State, Province and local authorities, and the lack of legal control of persons looking after 6 or less children for gain in their own homes.

The need for day care centres for children has become increasingly urgent because of high rise buildings, greater employment of women, more families with only one responsible parent and the increased awareness of the need for early education. Some centres controlled by non-profit organisations, even when in receipt of a subsidy, have been forced to close due to financial problems.

In the Coloured areas day care centres were visited and monthly discussions held with all the supervisors. The lack of training for Coloured nursery school teachers has led to the formation of

a sub-committee of WITSCO to organise demonstrations and lectures for creche personnel in the Coloured and Asian areas.

Day care centres in the Asian areas do not conform to standards and are as yet not registered.

The 3 Black creches which were handed over to the Non-European Affairs Department in 1973 and now run by the West Rand Bantu Affairs Administration Board are still being inspected by personnel of this Department.

In the White areas 6 815 pre-school children were being cared for in 120 day centres (74 half-day and 46 full-day) in 1973, while approximately 1 200 were known to be cared for by 200 private 'child minders' who care for 6 or less children in their homes.

In the Coloured areas 6 institutions provide all-day care for 405 pre-school children. Five Asian associations care for approximately 300 children and 4 405 Black children attend at 42 centres.

During the year 779 telephone enquiries were received regarding placement of children in White day care centres and 165 interviews were held by the personnel of this section with members of the public.

A total of 96 inspections of existing institutions were made by the Inspectresses of the section, and 26 properties were inspected where the establishment of centres was contemplated.

(STATISTICS FOR THIS SECTION
ARE CONTAINED IN APPENDICES
F TO K)

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SECTION IV

HEALTH EDUCATION

There is a growing awareness in society of the need to interpret "health" in its broadest possible sense.

The public, at the level of the individual, family and community, should participate actively, either to maintain health at an optimum level or to attain it by influencing behaviour patterns

for instance with regard to smoking habits, alcohol, drugs, nutrition, family planning and sexual behaviour.

During the year great stress was laid on the need for involvement of health educators with community leaders. Increased liaison was established with voluntary and official organisations as well as groups undertaking health education.

Programmes and Activities

Besides the day-to-day counselling which all health personnel undertake routinely in the course of their preventive work, health education discussions, preferably in small groups at family health centres, have dealt notably with the problems of gastro-enteritis in babies, environmental cleanliness, family planning and tuberculosis. The introduction of a pre-school record card at family health clinics has been preceded by in-service training.

At the Southern Areas Health Centre health education sessions at the geriatric clinic have proved to be of great value. An ante-natal programme introduced at the local Hospital will be integrated in the planning of parent education, and family health care programmes will be presented at regular advertised times at the Health Centre.

Public health nurses and health inspectors visited 3 schools for Coloureds and provided sessions on surface sanitation. The programme was well received, but cannot be extended due to insufficient personnel. A parent-teachers' meeting at a White college was also addressed on this subject.

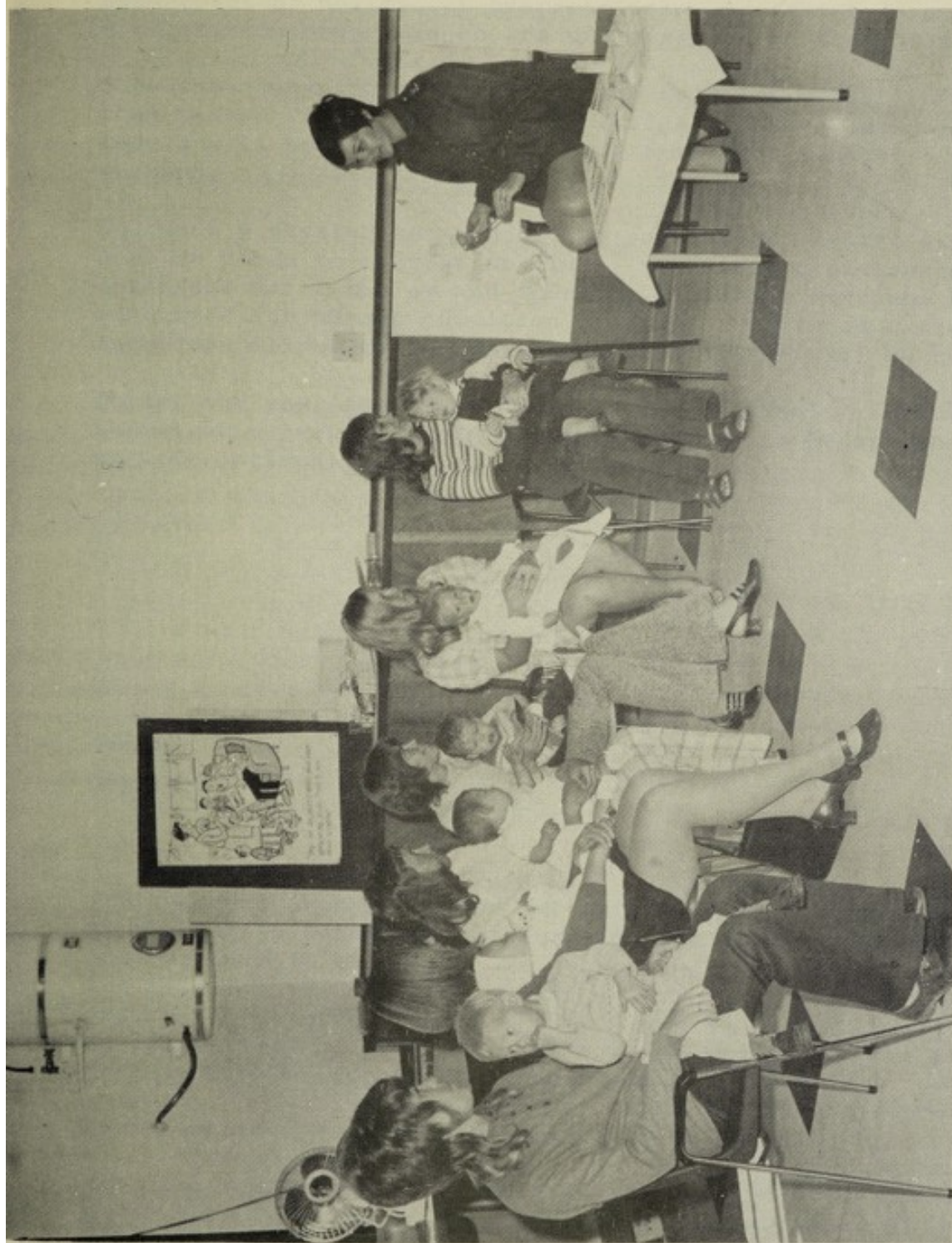
Much in-service training was carried out in an attempt to integrate family planning and total health care.

School holiday programmes were continued. In several institutions for Whites and for Coloureds programmes included discussions on sexually transmitted diseases, family planning, menstruation and fertility.

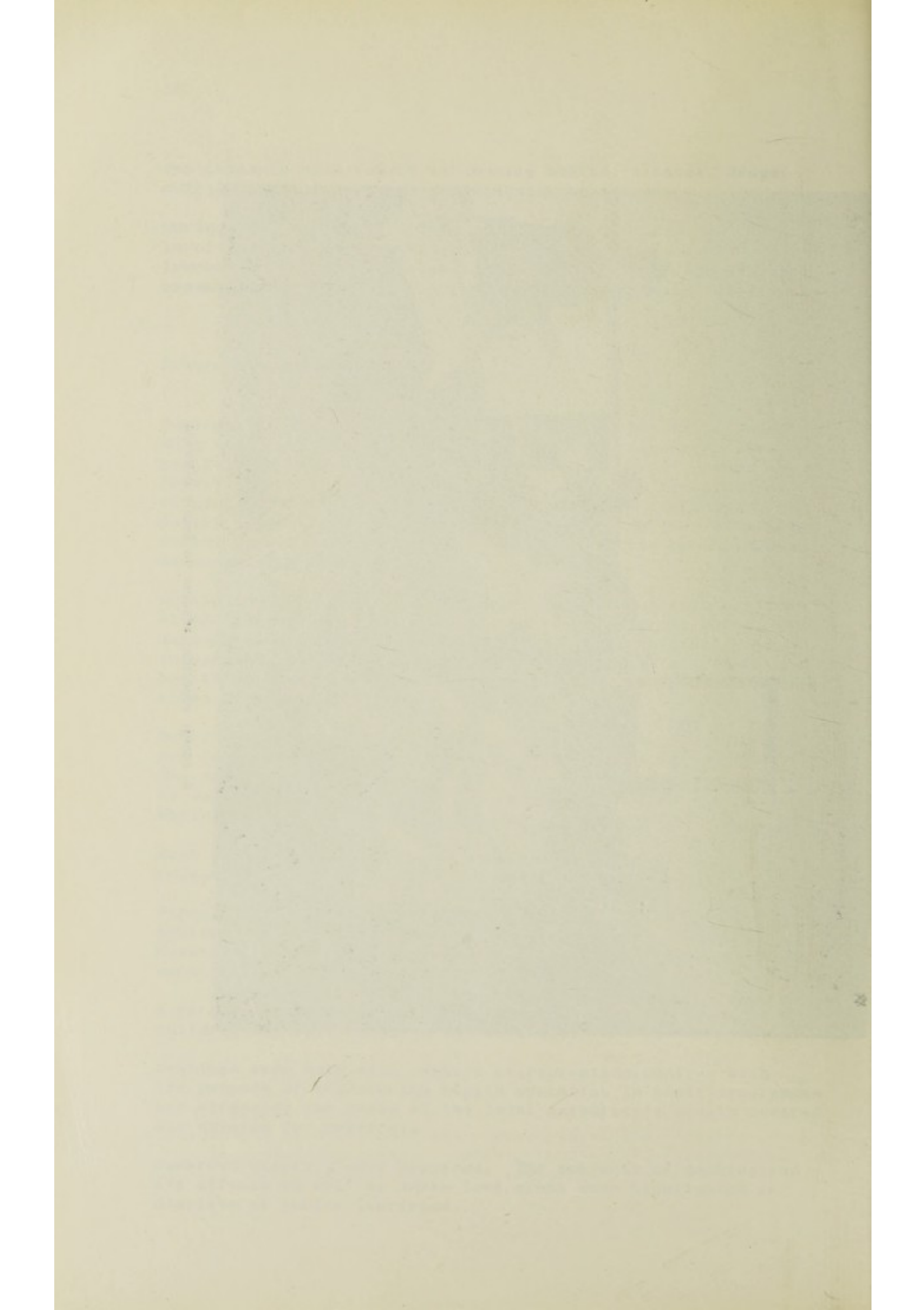
A parent education trial project dealing with the needs of children was well received and attended.

Meetings were held with workers at recreation centres with the purpose of introducing health education in their programmes and stressing the value of the local authority's health centres and clinics for referral.

Numerous displays were prepared. The subjects of smoking and its effects as well as smoke-free zones were highlighted in displays at public libraries.



A health education session on family planning



At the request of the Department of Information and the State Department of Health, an overseas team was assisted in making a television programme on the urbanisation of Black families.

A health education resources centre is being established so that tested films, slides, film strips, posters, pamphlets and models will be catalogued and made available to health education workers.

To reach a greater section of the population, health education must be taken to recreation clubs, voluntary organisations, institutions, commerce and industry. Evening sessions are advocated for parent education classes. Health education in long-term illnesses and degenerating diseases will be considered.

During the year the Chief Medical Officer (Health Education) undertook a tour to study health education in Europe and attended an international congress in France.

SECTION V

RESEARCH

The two most urgent reasons for establishing a research division in the Health Department of Johannesburg were firstly the need for continually assessing and monitoring expanding health services, and secondly the need to compile and evaluate worthwhile data with regard to changing disease patterns and mortality in the multi-racial setting of the city. With rapid westernisation and urbanisation of the Blacks, health statistics will become more uniform, and differences based on different immune responses and racial characteristics may become obscured.

With the establishment of this division in 1972, the personnel, under the direction of an Assistant Medical Officer of Health, consisted of one medical officer and one public health nurse, both seconded from the family health service.

Great difficulties are still experienced in attempting to use for research purposes the statistical data submitted routinely by the various sections of the Department. There is a great lack of uniformity aggravated by changes in the organisational structure of the Department in 1971. Retrospective studies

attempted, such as the assessment of cervical cytology findings based on Pap smears taken at family planning clinics, and the value of prophylactic home visiting and follow-up of gastro-enteritis as well as health education in the Black areas, were frustrating because of incomplete and inconclusive data.

A pilot study to assess the prevalence of rickets in a Black community was carried out but it was found that extensive liaison would be required with hospital services, with the result that this project was deferred for the present.

Research Projects

1 Blood Pressure Survey

Field work relating to this study was carried out in conjunction with the Professor of African Medicine at the University of the Witwatersrand to determine the range of blood pressure levels in the Blacks and its relationship to selected physical and environmental factors. A total of 10 360 adults of both sexes were assessed of which 10 000 random cases of varying ages were examined at the Bantu Registration Examination Centre. Five Black sisters from the polyclinics were specially trained to take accurate, standardised blood pressure recordings and complete questionnaires. Blood specimens were tested for chemical analysis. Returns were checked in preparation for computerisation.

2 Ischaemic Heart Disease

A retrospective study on variations in mortality levels of ischaemic heart disease in different population groups was finalised. Once again the inadequacy of available data was evident but the upward trend of deaths in Whites from this condition and the rarity of cases in Blacks was confirmed. Within the limits of this study no indication was found of an increase in the mortality rate of Blacks as a result of urbanisation and westernisation.

3 Deaf Screening

Facilities and methods used for deaf screening as well as for diagnosis and treatment of hard-of-hearing persons of all races in the city were studied. The data has been collected and the project will be completed in 1974.

4 Evaluation of a Comprehensive Community Health Service Project at the Southern Areas Health Centre

The implementation of recommendations for the introduction of a comprehensive health service in relation to the Southern Areas Health Centre had been in the field since the beginning of 1972. As a second health centre was in the process of being erected in the White areas, an urgent assessment of what had been accomplished at the first health centre in the White areas was needed.

In addition to the collection of statistics for the period January 1972 to July 1973, a field study was carried out for a period of one week involving both the personnel at the Health Centre and a comparable group of public health nurses working in similar socio-economic areas in the rest of the city. Their activities were studied to decide which services could with benefit be extended to other health services. This evaluation will be completed in 1974. Recommendations made as a result of this study will form the basis for further research.

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SECTION VI INFECTIOUS AND NOTIFIABLE DISEASES OTHER THAN TUBERCULOSIS

The total number of in-patients treated at the Fever Hospital for Whites during 1973 was 1 694 (1 764) accounting for 12 339 (12 514) patient days.

Of the 1 672 cases admitted during the year, 1 099 were private patients and 319 hospital patients, 254 coming from other local authorities. There were 12 deaths.

Non-White cases of infectious diseases are still being treated at the C.M.R. Hospital which is administered by a private company with medical cover provided by the Department. The reduction in the number of cases admitted during the year was mainly due to a decrease in the number of measles cases. Admissions totalled 1 115 (1 723) of which 434 were local cases.

In order of numerical importance the first 4 final diagnoses in Whites were gastro-enteritis, viral hepatitis, meningo-encephalitis and bacterial meningitis.

In the case of non-Whites measles was the most frequent diagnosis. There were 350 (336) cases of gastro-enteritis in Whites at the Fever Hospital, of whom 2 died. All cases admitted suffering from this disease were private cases. Considering the high number of admissions, the mortality rate was low.

Viral hepatitis was made a notifiable disease in Johannesburg at the end of 1966. Though many cases were admitted to hospital in 1973, very few have been Australia antigen positive in contrast to findings in 1972. A number of cases originally referred with the provisional diagnosis of viral hepatitis proved to be suffering from malaria. There were no deaths in Whites but 7 in Blacks.

A total of 338 suspected cases of meningo-encephalitis in Whites were admitted but only 171 finally confirmed. This disease is epidemiologically important, but in the vast majority of cases it is a relatively benign condition with rapid recovery and few sequelae. Nevertheless there were 2 deaths.

A total of 73 Whites were diagnosed as suffering from bacterial meningitis, 4 dying of meningococcal infection.

Measles cases showed a welcome reduction in number. In Whites there were 92 (253) admissions, 46 (157) with complications or double pathology. There were no White fatalities. Of the 652 cases in Blacks, 244 local cases accounted for 16 out of 43 deaths.

In Blacks diphtheria occurred in 3 local and 4 imported cases with one death. Two local and 2 imported cases of poliomyelitis were admitted to the C.M.R. Hospital as well as 8 cases from other local authorities. No diphtheria or poliomyelitis cases occurred in Whites.

The rapid detection of one case of cholera and its detention at the Fever Hospital was followed by identification and surveillance of 9 contacts.

Twenty-two cases of typhoid were notified, 19 of which occurred in Blacks. In addition, 15 cases were admitted to the C.M.R. Hospital from other local authorities.

Two cases of trypanosomiasis and 28 cases of malaria contracted these diseases outside the municipal boundaries.

Venereal Diseases

The incidence of venereal diseases is still on the increase as can be seen in the attendance returns from 4 urban clinics, the Bantu Registration Examination Centre and clinics in Soweto, Noordgesig and Western Coloured Township.

Routine examination of males at the Bantu Registration Examination Centre identified 1 417 (1 079) new cases of syphilis and 1 944 (1 686) of gonorrhoea. In females examined new cases totalled 606 (669) and 69 (17) respectively. Gonorrhoeal infections in females are probably often asymptomatic or masked by other clinical problems.

At the Bantu Registration Examination Centre it was noted that penicillin-sensitive cases seemed to be on the increase. In spite of all precautions 2 or 3 individuals still showed marked anaphylactic reactions after penicillin injections and had to be hospitalised.

(STATISTICS FOR THIS SECTION
ARE CONTAINED IN APPENDICES
L AND M)

SECTION VII

TUBERCULOSIS

The incidence of tuberculosis does not seem to decrease from year to year.

Breakdown of notified cases into age groups showed the highest number in the Coloured population to occur in those individuals under the age of 5 years or over 30 years. In non-mining Blacks the lowest numbers were between the ages of 10 and 20 years with very high numbers under the age of 5 years and a steady increase from the age of 20 years onwards. The finding in non-mining Blacks is reflected in the following table.

Notified Cases of Tuberculosis
in non-mining Blacks

Age in Years	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29
Males	238	147	32	43	130	141
Females	226	127	38	75	131	88

Age in Years	30 - 39	40 - 49	50+	TOTAL
Males	322	405	485	1 943
Females	138	103	139	1 065

(Of these 3 008 cases, a total of 2 984
had pulmonary tuberculosis.)

Tuberculosis Control Programme

The tuberculosis control programme initiated in 1968 was continued for all population groups except Whites.

Number of 70 mm X-rays taken

Bantu Registration Examination Centre ..	137 429	(130 775)
Tuberculosis Control Programme (Urban Areas)	74 295	(64 639)
Tuberculosis Control Programme (Black Areas)	30 763	(42 073)
	242 487	(237 487)

The total number notified as cases of tuberculosis during the year, as a result of their X-ray findings, was:

Bantu Registration Examination Centre	268
Tuberculosis Control Programme (Urban Areas) ..	214
Tuberculosis Control Programme (Black Areas) ..	266
	748

In terms of Government Gazette No R 1754 of 28 September 1973, it has been made mandatory for parents to ensure that their children receive BCG immunisation within 6 months of birth. It is accepted practice in non-White population groups for all new births and tuberculosis negative contacts to be immunised. During 1973 twenty-five schools and 8 creches were visited in Black areas for this purpose. Routine BCG immunisation for newborn White infants will be offered in 1974 at immunisation clinics preferably before the age of 2 months, but is contraindicated in infants who are ill, suffer from eczema, who are underweight, on steroid treatment or suffering from hypogammaglobulinaemia.

In March 1973 a Japanese BCG vaccine was introduced replacing the British vaccine. A comparison of the 2 vaccines was made by studying reactions to vaccination in 2 groups of 100 children.

School Programme for Blacks (including creches)

Number of children:

Heaf tested		31 097
Vaccinated with BCG		27 710
X-rayed		3 532
Given INAH tablets		3 281
Notified as suffering from tuberculosis		172

The majority of principals and teachers were co-operative. There is a great need for a planned health education programme to be implemented in the schools.

Presently 10 Black tuberculosis clinics provide 16 sessions weekly. In the Coloured and Asian areas the tuberculosis service is being integrated into the family health service.

Social workers are present on clinic days and work in collaboration with SANTA, investigating cases and obtaining assistance for the Association. Non-White patients receive supplementary foodstuffs at these clinics.

At the Charles Hurwitz SANTA Centre at Baragwanath, with 430 beds, medical care is offered by tuberculosis medical officers of the Department. All patients not requiring immediate hospitalisation at Baragwanath Hospital are referred to the transit ward at the Centre for referral to other centres, admission, or treatment in the out-patient department. The transit ward which was established in 1972 is now fully operative.

At the C.M.R. Hospital 391 local cases of tuberculosis were admitted and 339 from other local authorities. Of these cases 87 died.

(STATISTICS FOR THIS SECTION
ARE CONTAINED IN APPENDICES
N TO R)

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SECTION VIII

CURATIVE, MIDWIFERY AND DENTAL SERVICES

Curative and Midwifery Services

The out-patient, domiciliary, midwifery and dental services continued according to a well-established pattern. Curative and midwifery services were conducted from polyclinics in the Black and Coloured areas on behalf of the Transvaal Provincial Administration.

The Council's decision in 1972 to equate salaries of medical practitioners and dentists irrespective of race attracted the services of 9 non-White medical practitioners and 2 dentists to the municipal service. The White medical practitioners still working in the clinics were, with the exception of 4, well beyond the retiring age.

One clinic in the areas for Blacks was completely staffed by non-White personnel.

Dental Services

Dental services were rendered from 4 clinics in Soweto and for 3 months from a clinic in Eastern Bantu Township. Acquisition of new equipment and conveyance allowed for an extension of prophylactic dentistry into schools and creches. An increase of 57% attendance for conservative treatment was noted at one clinic where a bus had been made available to transport the children between the schools and the clinic.

Examination of Black Workseekers :
Cases of Syphilis

	1973		1972		1971		1970		1969	
	m	f	m	f	m	f	m	f	m	f
Number of new cases diagnosed	1 417	606	1 079	669	876	908	1 018	860	1 555	696
% of total examined	1,1	2,2	0,8	2,6	0,6	3,4	0,7	3,7	1,1	4,1

m = males f = females

(STATISTICS FOR THIS SECTION
ARE CONTAINED IN APPENDIX T,
AND FOR VENEREAL DISEASES IN
APPENDIX M)

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SECTION X

ENVIRONMENTAL HEALTH

At the end of the year there were 36 vacancies for learner and qualified health inspectors and pest control overseers. Ten out of 46 posts for health inspectors were filled by pensioners employed on a temporary basis. Although 6 individuals qualified and were appointed as health inspectors, the continuing shortage of personnel as well as the large proportion with limited experience seriously affected the proper functioning of the Environmental Health Branch. Assistance was however provided during the latter part of the year when permission was obtained from the Council to allow 8 pest control overseers to take limited action with regard to public health nuisances observed during their routine inspection of premises for rodent and mosquito control.

One of the major responsibilities of the Environmental Health Branch is the approval of business premises for the issue of trading licences. At present persons are allowed to commence trading before premises comply with the Council's by-laws. The result has been that many businesses trade for lengthy periods without effecting compliance, thus necessitating numerous inspections and reports. Active assistance by senior and divisional inspectors was needed to make efficient handling of heavy demands, especially in the central city area, possible.

Reports were submitted on 12 applications for new townships.

Development in the southern suburbs is extremely rapid and has created a tremendous demand for new services, particularly sewer reticulation.

The Carlton Centre complex is virtually structurally complete, with the hotel, 19 food shops and 115 non-food businesses operative. Work on the Oriental Plaza is progressing well. Extensive building activities are in progress at the City Deep fresh produce market and abattoir.

At the proposed site for the Witwatersrand College for Advanced Technical Education difficulties have been experienced in evacuating buildings for demolition, preventing the dumping of waste material on vacant stands, and protecting unoccupied buildings from vandals. In other White areas illegal occupants are still found in dwellings and shacks.

The 11 caravan parks and 2 pleasure resorts within the municipal area have been well maintained. The swimming pool at Van Wyk's Rust has not been reconstructed but a chlorination plant has been installed and the bacteriological standard of the pool water improved. The water of the Wemmer Pan has been treated regularly and no recurrence of the nuisance caused by the excessive breeding of midges has been experienced.

Prosecutions are resorted to when necessary for contraventions of the Public Health Act, the Food, Drugs and Disinfectants Act No 13 of 1929, and the Council's by-laws.

Prosecutions		1973	1972
Total number of persons prosecuted ..		818	821
Total number of charges		917	1 006
Found guilty/		623	757
Total fines imposed		R12 715	R10 530

In addition 283 (234) spot fine tickets were issued. Of these 132 were paid and 10 withdrawn. Fines resulted in R2 037 being paid. The remaining cases were disposed of by normal summons proceedings.

Samples of foodstuffs were taken under the Foodstuffs, Cosmetics and Disinfectants Act of 1972 as amended and in terms of the Standard Milk By-laws. Water samples were submitted to the Division of Health Chemistry, State Department of Health, the South African Institute for Medical Research and the Laboratory and Technical Services Branch of the Department for tests, analyses or identification in terms of the Council's Sanitation By-laws.

Food Control

The control of food-handling premises received priority. In most cases a satisfactory standard of hygiene was maintained. Practical advice proves beneficial in the better class establishments, but in poor areas licensees are unable to afford the expense of modernising and re-equipping their premises. Frequent prosecutions, although warranted, may result in a business being closed, with the field left open to illegal food suppliers over whom no control can be exercised. The litter created by these hawkers can also not be reduced while penalties imposed are too low to have a deterrent effect.

Illegal trading is on the increase in developing Coloured and Asian areas with inadequate shopping facilities, as well as at schools and bus termini in the central city area. In Black townships licensed hawking is allowed from stalls provided for trade in fruit, vegetables and offal. In Lenasia however 14 out of 21 applications for new hawkers' licences were refused as applicants intended using residential premises for business purposes.

Numerous requests to examine consignments of food were received, especially following mechanical breakdown of a refrigeration plant. A total of 32 626 pig carcasses imported on permit by 3 meat processing factories were submitted for re-inspection at the abattoirs or alternatively at the factories.

Following tests carried out on the keeping qualities of cold meats as sold in retail stores, an amendment to the Food Handling By-laws in regard to refrigeration temperatures was submitted.

There were 7 reported outbreaks of food poisoning involving a total of 45 persons. One outbreak, involving 14 Black building workers and resulting in one fatality, was suspected to have

been caused by the ingestion of food contaminated with an insecticide. Two outbreaks involving 8 and 14 persons respectively were due to the consumption of smoked turkey contaminated with *Clostridium perfringens*. Recommendations have been made following these 2 latter outbreaks to improve methods of handling dressed poultry especially turkeys. The causes of the other 4 outbreaks could not be determined. Out of a total of 1 499 samples taken under the Foodstuffs, Cosmetics and Disinfectants Act of 1972, as amended, and submitted to the Division of Health Chemistry, State Department of Health, 59 did not comply with prescribed standards.

A total of 148 specimens and 408 swabs were submitted to the S.A.I.M.R. for bacteriological examination and identification. A 46,7% failure rate was obtained for utensil swabs tested by the Laboratory and Technical Services Branch.

Hygiene Control

Health education of students, food-handling personnel and management in hotels, restaurants, food factories, canteens and hospital kitchens constitute the main activity of the Hygiene Control Division. Practical demonstrations and lectures, supplemented by films and slides are organised, dealing with food-handling, cleanliness and layout of kitchens and improved methods of routine cleaning.

The 2 Black health inspectors have been able to converse with a total of 328 Black employees in their home language. Requests for more frequent visits by these health inspectors have been received from the management of hotels and restaurants as the turn-over of Black food-handling personnel is very high.

Regular inspections of nursing homes, homes for the aged and homes for the socially inadequate are made to attend to general sanitation, cleanliness in kitchens, food-handling and laundry facilities. For this purpose close liaison is maintained with the personnel of the Nursing Homes and Midwives Division of the Department.

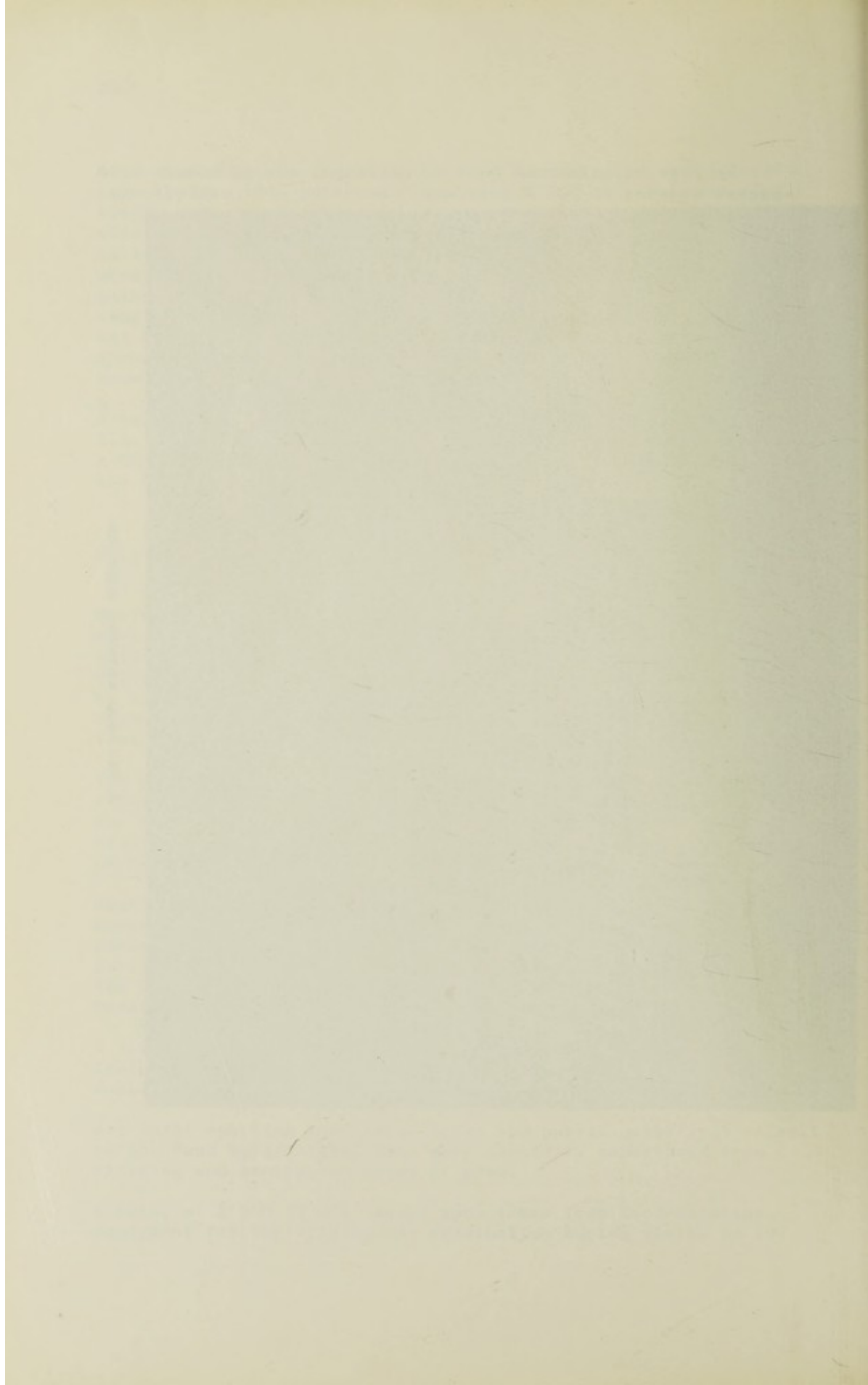
A total of 426 plans involving food-handling premises and including nursing homes and homes for the aged were examined for compliance with the Council's Public Health By-laws.

All major sporting functions, fetes and public gatherings as well as the Rand Agricultural Show were carefully supervised from a catering and sanitation point of view.

A total of 2 300 (2 054) swabs were taken from food-handling equipment for bacteriological examination during visits to 190



A food shop warranting inspection



(147) premises. Fifty percent (30%) of the articles swabbed had colony counts in excess of the permitted count of 100. This increased percentage as compared with the previous year is attributed to the sampling of equipment from some of the smaller tea rooms and restaurants which had not previously been visited for this purpose.

Premises where excessive colony counts were obtained were re-visited. Advice was given with regard to washing procedures for food-handling equipment. Legal proceedings were instituted successfully in 2 cases where no improvements were effected following advice.

An investigation was also carried out into the efficiency of cleaning and disinfecting procedures in 5 meat processing factories.

Milk

The average daily consumption per person of pasteurised milk in the municipal area was 0,25 l (0,19 l) during 1973.

Permits were issued to 661 (620) milk producers. Their average total daily production was 343 700 l, all of which was transported to the city in milk tankers. Milking machines were used by 532 producers. In accordance with the Standard Milk By-laws supervision was undertaken by adjacent local authorities when these farm dairies were situated outside the municipal borders. This arrangement resulted in reciprocal supervision of 51 and 64 farm dairies by the Germiston and Johannesburg Health Departments respectively.

Within the municipal area 5 plants pasteurised the 310 800 l of milk consumed in the city daily. Only 28 300 l were introduced daily under permit from milk pasteurising plants operating outside the municipal area. All milk and milk products are tested according to the methods prescribed in the Standard Milk By-laws which were accepted in Johannesburg in November 1972.

A total of 5 453 samples of raw milk was taken on producers' premises. Of these, 2 347 samples were submitted to the Laboratory and Technical Services Branch for bacteriological examination and analyses for butter fat and added water. The remaining 3 106 samples were submitted to the Abattoir's Laboratory for biological tests and to determine the presence of inhibiting agents.

Of the samples examined bacteriologically, *Escherichia coli* type 1 bacteria was present in 29,8%.

At the Abattoir Laboratory positive tests were obtained for mastitis, tuberculosis and brucellosis in 331, 2 and 1 519 samples respectively. In addition to the positive ring tests for brucellosis, 343 showed positive agglutination tests. Of 57 samples showing the presence of inhibiting agents, 1,8% (2,6%) were due to penicillin. Remedial action was taken.

A very disturbing finding by the Laboratory and Technical Services Branch using the Hortvet Cryoscope method to establish the presence of added water in milk was that 6,2%, 9,8% and 34,4% of samples of raw milk, tanker milk and pasteurised milk respectively contained added water. Samples of raw milk are collected from the refrigerated bulk collecting tanks on the farms and tanker milk from the transport tankers when their loads are discharged at the pasteurising plants. By submitting smaller numbers of milk samples to the Division of Health Chemistry, State Department of Health, it was possible for that laboratory also to use this method and so provide a legal basis for prosecution by confirming the findings of the Laboratory and Technical Services Branch. Following action taken by the Department, only 9,7% of 62 further samples taken of pasteurised milk contained small percentages of added water.

To determine the efficacy of the tanker washing procedures at the 5 milk pasteurising plants, 159 swabs from milk contact surfaces after washing gave unsatisfactory results in the majority of cases. More supervision will be needed.

A total of 1 299 miscellaneous samples including samples of cream, butter, yoghurt, cottage cheese and fruit juices established that 154 samples did not comply with prescribed standards. Legal proceedings were instituted against 81 offenders. The standard of yoghurt was generally good. Cottage cheese could be improved. Butter milk and sour milk were poorly handled and improvement in production is urgently required.

Ice cream and sherbet samples were obtained from 53 soft serve machines in retailers' premises and 125 from manufacturers' premises. Sixteen samples showed the presence of *Escherichia coli* type 1 bacteria and one showed an excessive total colony count. As established in previous years, most of the unsatisfactory samples were obtained from the retail end of the selling line, particularly soft serve products.

Milk hawking which used to be prevalent in the south-western areas has been replaced almost completely by licensed milk shops. Only 2 illegal hawkers were found. Of 34 samples of milk taken in these areas, 33 were satisfactory.

Water

The average daily consumption of water was 406 Ml (360 Ml). Usually the quality of potable water tested was within the desirable limits prescribed by the S.A.B.S. Specification 241 - 1971 for coliform organisms. There was a 50% improvement in the *Escherichia coli* counts over those obtained in 1972. As in previous years, most of the unsatisfactory results were obtained from tests on overhead tanks and the random samples sent in from power stations and sewage works.

The general bacteriological standard of swimming bath water was found to be similar to that obtained in previous years. Promulgation of new swimming pool by-laws is awaited, which would make it possible to test all private pools offering bathing facilities to the public. There has been an improvement in the bacteriological quality of borehole water from farm dairies supplying milk to the city. However, 58,5% of samples contained coli-aerogenes organisms and 43,4% *Escherichia coli*. The importance of pure water for washing dairy utensils cannot be overstressed as this could be one of the largest contributing factors to the poor quality of raw milk delivered to Johannesburg.

Due to Rand Water Board reticulation not being available to the agricultural plots in the southern areas, boreholes in these areas are in general use for domestic purposes. Water samples were taken from the 71 boreholes and following cleaning and disinfection of the holding tanks, all, except 2 which are situated on unoccupied property, have proved to be satisfactory.

Seventy-eight applications for the testing of borehole water supplies in terms of the Council's Sanitation (General) By-laws were received. Of these, 52 were found to be suitable for potable purposes on the initial test, 15 required remedial measures and the rest will be re-tested in 1974.

Inspection of Plans

Due to the increase in size and height of buildings now being erected, it is becoming increasingly difficult to comply with the Council's Building By-laws with regard to the provision of natural means of lighting and ventilation to all habitants' rooms.

The number of building plans examined for compliance with the relevant Building, Drainage and Public Health By-laws totalled 13 127 (12 124). The estimated value of buildings for which plans were approved was R91 587 034 (R98 291 632). The 656 plans dealt with in the south-western area consisted mainly of alterations, drainage and extensions to buildings.

Slums

Extensive slums action was not taken because of continued housing shortage in the lower income bracket and was confined to vacant and derelict properties. A total of 166 slum declarations are still outstanding. The terms of the slums order has been complied with in 50 instances, but the declarations have not as yet been rescinded. One property, declared a slum under the Slum Amendment Act of 1971, has been demolished. Another was dealt with by the Slum Clearance Court but a decision was held over until January 1974.

Eight owners of properties considered to be in a slum condition received courtesy notices. Of these properties, 4 have been demolished, one renovated and 2 are in the process of being renovated.

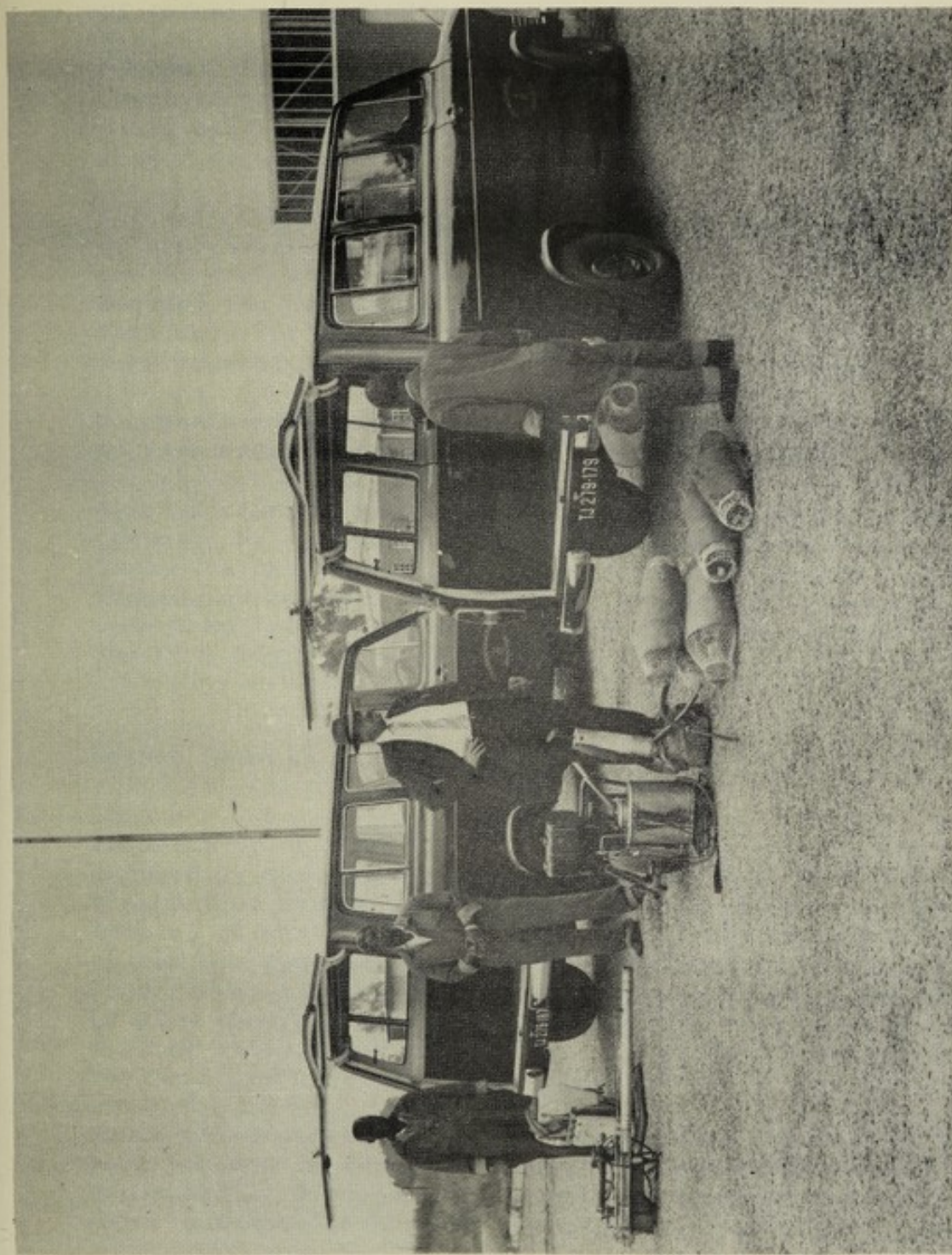
Various other activities of the section are reflected below.

	Granted		Refused		Outstanding	
	1973	1972	1973	1972	1973	1972
Demolition permits	346	350	4	42	17	11
Conversions (residential to business premises)	38	30	5	14	7	11

A total of 218 (281) premises were demolished and 15 (13) converted, not including those demolished or converted by Government Departments or the Provincial Administration.

Pest Control

Anti-rodent measures, which included the surveying of properties for rodent infestation and the setting of traps and gassing of premises, were carried out throughout the municipal area. A large veld area was also surveyed in the south-western and southern districts reaching to the boundaries of Roodepoort, Albertyn and Germiston and including the Rand Airport. All burrows were gassed and, where this method of control could be used with safety, poisoned bait was distributed. No increase in the rodent population in these areas was observed.



Pest control vans

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SECTION XI

All rodent carcasses, other than those submitted for test purposes, are now incinerated in the incinerator which has been installed at the Pest Control Depot. All examinations of rodents submitted to the South African Institute for Medical Research proved negative for *Pasteurella pestis* but 2 from different areas and caught at different times were found to have traces of infection by *Rickettsia* organisms which could cause tickbite fever. Further specimens from these areas showed no evidence of this infection.

All water courses, dams, swamp areas, vleis and accumulation of stormwater on ungraded roads and potholes were sprayed for the control of mosquitoes. No malaria vectors were identified amongst the batches of mosquitoes submitted to the South African Institute for Medical Research for identification. Specimens were identified as being of the *Culex* and *Aedes aegypti* species.

No specimens of snails examined by the Institute showed signs of bilharzia infection.

All municipal compounds and refuse tips were sprayed. Numerous requests by various municipal departments were attended to, involving the eradication of bugs and cockroaches. The annual fogging of sewers and stormwater drains for cockroaches was undertaken in conjunction with the Sewer Maintenance Branch of the City Engineer's Department.

Refuse Removal

In spite of an anti-litter publicity campaign and the measures adopted by the City Engineer's Department to facilitate the disposal of garden refuse, the nuisance caused by illegal dumping of waste material on vacant stands, streets and open spaces has continued to be a major source of complaint. Inspections, notices and prosecutions in connection with this problem absorb a great deal of valuable time. Three refuse tipping sites under the control of the City Engineer's Department have been regularly inspected and generally well controlled.

Hundreds of derelict cars and thousands of tons of refuse have been removed in the south-western areas at the request of the Department. Disused cars on private property continue to be a major nuisance because of unsightliness and rodent harbourage.

Composting sites under the control of the Parks and Recreation Department have been well controlled. Race horse stables have been routinely inspected. Many complaints regarding poultry in built-up areas were received and given attention.

A total of 1 392 881 (1 243 45 $\frac{1}{4}$) tons of refuse was removed departmentally and by commercial and industrial organisations. The average length of streets swept daily was 2 210 km (2 073 km).

Public Conveniences

One new public convenience was constructed and put into service at a motorway intersection in the southern area to cater for the numerous Black bus passengers in that area.

Sewage Disposal

Seven southern townships were brought onto municipal sewer during the year. Twelve soil porosity tests were carried out, of which 11 were found to be suitable for French drains.

Samples of secondary and tertiary treated effluent from the 4 sewage purification works were tested for E. coli count on a weekly basis and samples from the receiving river waters were tested monthly. Samples of activated sludge from the Palmietfontein treatment plants were monitored for biological activity.

The average daily flow of sewage was as follows:

	1973 Ml	1972 Ml
Northern Works	126,0	131,0
Klipspruit	111,6	116,9
Olifantsvlei	120,0	99,6
Palmietfontein	7,9	8,7
TOTAL	<u>365,5</u>	<u>356,2</u>

In the White areas the volume of sewage removed by vacuum tanks was 29 679 Ml (45 724 Ml). The number of pail services rendered per night was 208 (225).

(STATISTICS FOR THIS SECTION ARE
CONTAINED IN APPENDICES U TO X.)

SECTION XI

LABORATORY AND TECHNICAL SERVICES

The activities of this Branch are extremely diversified, providing microbiological and analytic chemistry services to municipal departments as well as laboratory services at 4 sewage purification works for the City Engineer, at 2 power stations for the Electricity Department, and at the Gas Works for the Gas Department. The service provided to the Bantu Beer Laboratory of the Non-European Affairs Department ceased when that Department was taken over by the West Rand Bantu Affairs Administration Board.

Following intensive investigation, the decision has been taken to automate all future analytical procedures where possible. It is also now possible to cost reasonably accurately most of the analyses carried out by this Branch.

Many facets of administration within the Branch have been changed. A management advisory committee has been appointed, consisting of the Chief Scientific Officer, his Deputy and 2 senior divisional heads.

Microbiological Division

The benefits derived from the new laboratory occupied by the microbiological division since June 1972 have become very obvious. Without an increase in staff, the number of samples handled exceeded the total for 1972 by 27,8%, covering some 40 000 individual estimations. These figures exclude cytology slides examined exclusively by the cytotechnician. The increase was in the main due to inclusion of milk products and fruit juices for testing under the Standard Milk By-laws and monitoring of food factories and restaurants under the Food-Handling By-laws for food premises hygiene. Expansion of the services of this division is expected to progress at the rate of approximately 14% per year, most of which will be on behalf of the City Health Department.

Analytical Chemistry Division

Considerable increase in routine work prevented the analytical chemistry division from undertaking special investigations of any magnitude but typical problems being dealt with relate to agar plate count tests for fruit juice, differentiating between

reactivated and residual phosphate in pasteurised milk and cream samples, developing standards for cold meats on sale to the public, continued testing of sealants for use in the construction of reservoirs and sewage installations for biodegradability according to an accelerated test, as well as the development of a mastitis control programme.

The Abattoir and Livestock Market Department submitted 152 samples needing 886 determinations and the Environmental Health Branch submitted 184 samples needing 1 838 determinations. Of particular interest were several tins of powdered milk which were found to contain large concentrations of lead. Subsequent tests on further batches of this product indicated that the high levels were isolated findings.

Special projects included research into dagga and a study of certain compounds, including steroids, carcinogens and alkanes, found in trace amounts in sewage effluents.

Water Pollution Control

Research work in relation to water pollution control has been carried out with the assistance of the Research Co-ordinating Committee. Larger projects recommended for consideration by the Water Research Commission include Johannesburg participation in an investigation by an overseas consultant to determine requirements in South Africa in regard to the control of industrial effluents and optimum siting of regional waste water plants in the Witwatersrand area.

The disposal of industrial sludges has also been shown to be a major problem requiring intensive research, and in this regard proposals have been drawn up for the control and monitoring of seepage from land fill sites.

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Considerable increase in routine work prevented the analytical chemistry division from undertaking special investigations of any magnitude but typical problems being dealt with were agar plate count tests for fruit-juices, effluents, etc.

SECTION XII

AIR POLLUTION CONTROL

Legislation

Air pollution legislation was amended by the introduction of the Atmospheric Pollution Amendment Act, 1973 (Act No 17 of 1973). Regulations may now be made to prohibit the use in dwelling houses of any fuel burning appliance which does not comply with specified requirements.

Penalties have been increased, except under Section 18 which remains unaltered, with regard to all contraventions including excessive smoke from house chimneys and diesel vehicles.

An amendment to Section 37, dealing with the procedures for diesel smoke control, has been a big improvement as the roadside test of smoke density may now be used as a criterion of emission. Approximately 1 500 notices have been issued to drivers of diesel vehicles. Further warning notices have been required by 850, but as yet no prosecutions have been instituted. No action is taken presently in Johannesburg unless the emission measures 80 or more on the Hartridge scale.

Smoke Control

The smoke control zone programme has been speeded up and is expected to be in operation before the end of 1977. The fourth zone which comprises the whole of the area newly incorporated in the southern part of the city became effective on 5 September 1973. The fifth and sixth zones will come into operation in 1974.

The introduction onto the market of gas and electric fire-lighters allows coke or anthracite to be successfully ignited without the smoke that accompanies ignition with paper and wood, so the problem of the slow combustion water heater has to some extent been solved.

A subsidy of R25 introduced by the Non-European Affairs Department for anyone purchasing an approved stove has been very effective to help the 'smokeless' stove to become firmly entrenched.

Because of difficulties with instruments and the processing of data, no reliable information has been obtained in regard to sulphur dioxide, carbon monoxide and oxidant atmospheric levels.

Applications for approval were received by this division for 160 appliances; 312 complaints were handled, 96 plans were scrutinised and given attention and approximately 6 000 major inspections were recorded.

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SECTION XIII

NOISE ABATEMENT

A shortage of staff for the major part of the year and difficulties associated with the need for personnel to work at night and weekends has resulted in an enforced curtailment of services.

To facilitate administration of the division, the city has been divided into a central city zone and 4 peripheral suburban zones.

Legislation

Drafting of legislation is proceeding on several fronts. A Noise Abatement Act is being considered at national level which would, amongst other things, incorporate standards for motor vehicle emissions. Pending promulgation of such legislation, use will be made by the Council of the requirements laid down by the Economic Commission for Europe. The Law Adviser of the Council and the Noise Control Officer have both served on the National Co-ordinating Committee responsible for the drafting of this legislation.

At local authority level efforts are being made to draft by-laws for the control of noise to be included, if found suitable, in the above national legislation.

Comment has been made on the proposed building by-laws being drafted by the South African Bureau of Standards for the C.S.I.R.

A special committee was scheduled to make proposals regarding the control of dogs in particular.

Powers to ticket persons contravening existing by-laws relating to noise abatement have been sought for the staff.

Technical Development

Assistance has been given in making recommendations to improve the acoustics of the City Hall. Structural alterations have been made to prevent the ingress of externally produced noises from the air conditioning plant and the surrounding streets. Acoustic treatment has aimed at reducing the reverberation time at 500 Hz from 3,6 to 1,9 seconds with a general overall noise level of 35 dB (A). Specifications for new chairs had been drawn up so that the acoustics of the Hall would not be greatly altered if the seats were not all occupied.

The first phase of the telemetry programme has been completed and a working group formed to make recommendations for the expansion of the system. The basic objectives of the system are to enable data to be gathered in the field or at the source of complaints and transmitted immediately to a central receiving station for recording and evaluation.

The technical feasibility of constructing a barrier 7 m high between residential sites and industrial areas has been assessed following numerous complaints from residents in a particular township. Calculations have been performed to show the beneficial reduction in noise levels that will take place in the residential sites if this proposal is carried out.

Council departments have become increasingly aware of the need to decrease noise emission of plant used in execution of duties. Limitation of the maximum number of revolutions possible in refuse collection vehicles and the purchase of 'quiet' compressors has been noted, together with increasing cognisance of noise emission in the drafting and adjudication of tenders.

The early measurement of noise emission for stationary plant and the drafting of specifications to cover such emissions will be discussed by a special study group.

The division has been given the task of drawing up specifications for the use of public address systems in parks and stadia.

Publicity

Two further audio-visual lectures suitable for presentation on 35 mm slide projectors became available during the year. The title of these lectures are:

- (a) The Effect of Noise on Man and
- (b) Zoning for Noise.

Conversion of the existing audio-visual lectures to 16 mm film was considered but found to be too costly. Conversion to a video-tape format may however offer possibilities in the future for presentation to schools.

Presentation of audio-visual lectures has taken place on request to interested groups. Consideration has been given to arranging further presentation in the Selborne Hall and Council-owned recreation centres.

A satisfactory level of press publicity has been maintained throughout the year.

Liaison with Council departments

Evaluation of licence applications constitutes the major work load of the division. It provides a means of striking at potential noise problems.

Investigation into noise emissions from creches and consideration of likely adverse effects in establishing private landing strips in industrial areas have proved useful to the City Engineer's Town Planning Branch.

The trial period for city councillors and members of the Noise Abatement Committee to act as noise wardens has been extended for a further period of 3 months.

Complaints

The major source of complaints arises from animal noises as noted in previous years. Successful solution of complaints has decreased from 75,5% in 1972 to 60% in the current year, and emphasises the need for the introduction of adequate legislation.

Study Tour

The Noise Control Officer proceeded on a study tour to Western Germany, Switzerland, France and the United Kingdom during the current year, attended a course on noise and vibration at the University of Southampton and an international conference on noise control engineering in Denmark. During this tour he presented various talks and lectures to selected groups on noise control procedures adopted in Johannesburg.

SECTION XIV

HOUSING

Housing for Whites

Housing for the White population of Johannesburg is controlled and administered by the Housing Branch of the Department.

A total of 3 643 letting units provided by 31 December 1973 included 456 newly built units as well as 165 which replaced previous slum dwellings in the first phase of an urban renewal scheme. Flats, houses and cottages for the aged, built in a garden setting, provide a secluded area safe from traffic hazards. With the exception of 374 units for the aged and the continuation of the urban renewal scheme, no further letting schemes are being planned at present.

Over a period of 20 years 783 dwelling houses have been sold in South Hills to families with low incomes, but this scheme has been discontinued. More efforts are being concentrated on land selling schemes.

The income limit for applicants for economic and sub-economic housing was raised by the National Housing Commission in July. Nevertheless a number of units remain unoccupied. A rent rationalisation scheme is under consideration by the Department of Community Development.

The previous income limit for aged persons applying for accommodation has been abolished, but preference is given to those with low incomes.

A girls' residential hostel, providing full board and lodging for 51 working girls with low incomes, is controlled and administered by the Housing Branch.

Housing for Coloureds and Asians

The control and administration of housing for Coloureds and Asians is the function of the Coloured and Asian Affairs Department.

As at 31 December 1973 the Council had made a total of 7 027 (6 323) housing units available to Coloureds, but the waiting list still reflected 3 534 (3 226) applications for families needing accommodation.

Resettlement of families from slum areas and unsatisfactory living conditions, removal to proclaimed areas as a result of the implementation of the Group Areas Act No 41 of 1950, the employment of more Coloured workers in industry and commerce, the high birth rate, and the already existing backlog have all aggravated the housing problem of the Coloureds.

Negotiations with the Department of Community Development have resulted in the completion of 265 housing units, comprising economic flats and houses in the Eldorado Park/Nancefield area, and 518 economic and sub-economic flats and houses in Westbury Ext No 2 during the year. Seventy houses were constructed for home-ownership purposes.

To alleviate the critical housing shortage, approximately 1 500 to 2 000 units per year will be required for the next 10 years. As land is now available this target may be reached during 1974.

The redevelopment of Western Township is progressing favourably. A total of 747 houses had been demolished by the end of 1973.

During the year a number of families were evicted from premises which constituted a public health hazard. To accommodate these families 36 prefabricated buildings were erected by the Council.

The Department of Community Development has assumed complete responsibility for the housing of Asians. The Council's obligation is limited to the provision of essential services, recreation facilities and the development of parks.

Housing for Blacks

During 1973 the control and administration of housing for Blacks was taken over by the West Rand Bantu Affairs Administration Board.

At the end of the year the total number of houses in Soweto and Eastern Bantu Township was 68 901 (67 701). Of this number, 861 had been made available during the year. However, the shortage of housing continues, with 5 420 (4 428) applications for accommodation on the waiting list at the end of the year.

(HOUSING STATISTICS FOR WHITES ARE
CONTAINED IN APPENDICES Y AND Z)

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SECTION XV

OTHER SERVICES

Disinfecting Service

The disinfecting service is provided for the Department's own services, nursing homes and the public from the new Disinfecting Station completed in 1972.

Automatic steam autoclaving and ethylene oxide sterilising are used for purposes of sterilising and disinfecting.

The activities of the Central Sterile Supply Depot expanded during the year with the result that Soweto ante-natal clinics and midwives were eventually supplied with all delivery and nursing packs required.

Pharmacy Service

Three pharmacists and 14 ancillary workers were kept fully occupied to supply all sections of the Department.

The activities of this division include the storage and issuing of scheduled medicaments, vaccines and material needed at family planning and venereal diseases clinics as well as the manufacturing of certain fluids, ointments and tablets and their dispensing.

Regular visits are made to clinics and the C.M.R. Hospital by the staff for the purpose, inter alia, of stock and drug register checks.

Stocks for the family planning service are replenished by the State Department of Health both from the central medical stores in Pretoria and the store of the Regional Director in Johannesburg.

With regard to the take-over of the curative and midwifery services by the Provincial authorities scheduled for April 1974, a reduction in work to the extent of 61% based on 1973 figures is expected. The tuberculosis and family health services, which will be continued to be carried out by the local authority, accounted for 39% of the work output.

A total of 189 500 (180 380) doses of oral poliomyelitis vaccine was issued during the year to clinics and medical practitioners, and 1 900 000 (6 300 000) INAH tablets were packed for the tuberculosis preventive campaign in the schools and 1 397 000 for garment workers.

There was a shortage of supplies of milk powder for 3 months of the year.

Of the total issue of skimmed milk powder in 1/2 kg packs to the family health service, 83 (364) were issued to Whites, 5 294 (6 751) to Coloureds and Asians, and 223 922 (205 564) to Blacks.

Control of Nursing Homes and Midwives

The work undertaken by the Nursing Homes and Midwives Division includes annual licence inspections of homes for the aged, nursing homes, institutions accommodating the socially inadequate and handicapped, as well as the listing and control of registered midwives employed by the Council and those practising privately or in private maternity homes. Much time is spent discussing plans, sepsis control and the kitchen arrangements with entrepreneurs and their architects. Close collaboration is maintained with members of the Promotive Health Division of the health inspectorate with regard to relevant aspects of the work. Samples for bacteriological tests are taken where indicated.

The 23 (25) licensed nursing homes, including maternity homes, have 2 510 (2 500) beds of which 222 (222) are in the 4 maternity homes. A further 100 beds are available for Blacks at the St John's Ophthalmic Hospital.

An extensive study was carried out with regard to record keeping and channels of communication in the midwifery section in non-White areas. Numerous improvements were made.

In the western Coloured areas the local Provincial hospital is gradually taking over the majority of deliveries, carrying out all post-natal nursing except in 2 areas.

In the southern Coloured complex 15 unauthorised persons continued to undertake deliveries. Better control in this area is urgently required.

Library Service

The specialised library is a branch of the Central Library. It has proved invaluable to personnel in the Department.

Originally the services of a full-time librarian were required but, as the library became established, it was thought that the services provided by a part-time librarian would be sufficient.

(STATISTICS FOR THIS SECTION ARE
CONTAINED IN APPENDICES AA AND BB)

In conclusion, I wish to express my sincere thanks to the Chairmen and members of the Management and Health and Amenities Committees for sympathetic consideration of problems submitted to them, to His Worship the Mayor and Councillors, to the Town Clerk, all heads of other municipal departments, the Secretary for Health, the Regional Director of the State Department of Health, the Director of Hospital Services and his staff, and the personnel of the South African Institute for Medical Research, for courtesy and sympathetic consideration extended to the Department at all times.

Grateful thanks is also expressed to representatives of the Press and the South African Broadcasting Corporation for their interest in public health matters and their co-operation in drawing the attention of the members of the community to health topics of primary importance to the Council and to them.

My special thanks are extended to all members of the Department for their continued loyalty and conscientious performance of duties in the interest of the Council and the community.

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ALEXANDER H SMITH
MB, ChB, DPH, DTM & H, FRSH,
FIPH (LIFE)

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Summary of Notifiable Diseases other than
Tuberculosis Accepted and
HON PROFESSOR, URBAN HEALTH ADMINISTRATION,
UNIVERSITY OF THE WITWATERSRAND.

Attendances at Venereal Diseases Clinics N

Notifications of Cases of Tuberculosis N

Annual Incidence of Tuberculosis and Deaths
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Tuberculosis Clinics P

Home Visits by Tuberculosis Staff P

BCG Inoculations P

Tuberculosis Cases receiving Domestic and
Out-Patient Treatment Q

Attendances at Tuberculosis Clinics R

Curative and Midwifery Services in Areas for
Blacks (including Noordwesig Clinic for Coloureds) S

Dental Services for Blacks S

In appreciation of the interest and support of the members of the Management and Health and Medical Committees for sympathetic consideration of problems submitted to them, the Director of the South African Institute for Medical Research, for courtesy and sympathetic consideration extended to the Department at all times.

Grateful thanks is also expressed to representatives of the Press and the South African Broadcasting Corporation for their interest in public health matters and their co-operation in drawing the attention of the members of the community to the subjects of primary importance to the Council and the Department. My special thanks are extended to all members of the Department for their continued loyalty and co-operation in the interest of the health of the community.

Respectfully,
J. H. VAN DER MERWE
DIRECTOR

UNIVERSITY OF THE WITWATERSRAND
Johannesburg

Continued interest in the health of the community is a primary concern of the Department.

Library

The Department is interested in the health of the community.

Respectfully,
J. H. VAN DER MERWE
DIRECTOR

THE DIRECTOR OF THE WITWATERSRAND
UNIVERSITY

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Summary of Notifiable Diseases other than Tuberculosis Accepted and Confirmed	
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Notifications of Cases of Tuberculosis	+
Annual Incidence of Tuberculosis and Deaths per 100 000 Population	+
Tuberculosis Clinics	+
Home Visits by Tuberculosis Staff	+
HCG Insulations	+
Tuberculosis Cases receiving Domiciliary and Out-Patient Treatment	+
Attendances at Tuberculosis Clinics	+
Curative and Midwifery Services in Areas for Blacks (Including Mooragany Clinic for Coloureds) ..	+
Dental Services for Blacks	+

STAFF ESTABLISHMENT AT 31 DECEMBER 1973

HEALTH AND AMENITIES COMMITTEE : 1973

Councillors	M Sklaar	(Chairman)	1
Assistant Medical Officer of Health	Dr A D Bensusan	(Deputy Chairman and member of the Committee to 28 February 1973)	2
Chief Medical Officers	Brig J T Durrant	(Deputy Chairman from 1 March 1973)	7
Medical Officer	Dr S Browde (Mrs)		1
Medical Officer	A P J de Klerk, J P		52
Senior Dental Officer	O H Fenn	(from 1 March 1973)	1
Dental Officer	R D Janit		6
Chief Scientific Officer	E J Kretzmer		1
Assistant Chief Scientific Officer	C A Long		1
Scientific Officer	I Myers		20
Laboratory Assistant	D J Neppe		15
Noise Control Officer	Dr J S Otto		1
Assistant Noise Control Officer	J A Powell	(passed away 6 October 1973)	1
Inspectors (Noise Control)	+ + + + +		1
Chief Pharmacist			1
Pharmacists			2
MEDICAL OFFICER OF HEALTH:	A H Smith		1
Assistant Chief Health Inspector	MB, ChB, DPH, DTM & H, FRSH, FIPH (LIFE)		4
Divisional Health Inspectors			6
DEPUTY MEDICAL OFFICER OF HEALTH:	B R Richard		14
Health Inspectors	MB, BCh, DPH	(from 1 August 1973)	73
Learner Health Inspectors			21
ASSISTANT MEDICAL OFFICERS OF HEALTH:	T H Stewart		2
Overseers (Pest Control)	MB, BCh, DPH		26
Senior Inspector (Air Pollution Control)	S Johnson		1
Inspectors (Air Pollution Control)	MB, ChB, DPH		10
Inspectors (Water Pollution Control)	G B Miller		6
Chief Public Health Nursing Officer	MB, BCh, DTM & H, DPH	(from 1 November 1973)	1
Senior Public Health Nursing Officers			6
Public Health Nurses	+ + + + +		77

STAFF ESTABLISHMENT AT 31 DECEMBER 1973

Medical Officer of Health	1
Deputy Medical Officer of Health	1
Assistant Medical Officers of Health	3
Chief Medical Officers	5
Medical Superintendent (Infectious Diseases Hospitals)	1
Senior Medical Officers	7
Medical Officer/Senior Medical Officer	1
Medical Officers (White and non-White)	52
Senior Dental Officer	1
Dental Officers (White and non-White)	6
Chief Scientific Officer	1
Assistant Chief Scientific Officer	1
Scientific Officers	20
Laboratory Assistants	15
Noise Control Officer	1
Assistant Noise Control Officer	1
Inspectors (Noise Control)	3
Chief Pharmacist	1
Pharmacists	2
Chief Health Inspector	1
Assistant Chief Health Inspectors	2
Divisional Health Inspectors	6
Senior Health Inspectors	14
Health Inspectors	73
Learner Health Inspectors	21
Inspectors (Pest Control)	3
Overseers (Pest Control)	26
Senior Inspector (Air Pollution Control)	1
Inspectors (Air Pollution Control)	10
Inspectors (Water Pollution Control)	6
Chief Public Health Nursing Officer	1
Senior Public Health Nursing Officers	6
Public Health Nurses	77

APPENDIX B

Learner Public Health Nurses	..	..	..	..	..	..	12
Orthopaedic After-Care Sister	..	..	..	..	..	..	1
Nursing Sisters (Tuberculosis)	..	..	..	..	..	..	5
Nursing Sisters (Immunisation)	..	..	..	..	..	..	9
Nursing Sisters (Medical Examination Centre)	..	..	..	..	..	..	2
Clinic Attendants	..	..	..	..	..	..	8
Senior Radiographer	..	..	..	..	..	..	1
Radiographer	..	..	..	..	..	..	1
Technical Assistants (Radiography)	..	..	..	..	..	..	5
Technician (Laboratory)	..	..	..	..	..	..	1
Technical Assistant (Laboratory)	..	..	..	..	..	..	1
Technician (Health Education)	..	..	..	..	..	..	1
Sampler (Water and Milk)	..	..	..	..	..	..	2
Chief Inspectress of Children's Institutions	..	..	..	..	..	..	1
Inspectresses of Children's Institutions	..	..	..	..	..	..	4
Housing Manager	..	..	..	..	..	..	1
Assistant Housing Manager	..	..	..	..	..	..	1
Chief Housing Supervisor	..	..	..	..	..	..	1
Assistant Chief Housing Supervisor	..	..	..	..	..	..	1
Research and Community Development Officer	..	..	..	..	..	..	1
Supervisors (Maintenance)	..	..	..	..	..	..	2
Senior Housing Supervisors	..	..	..	..	..	..	5
Housing Allocation Officers	..	..	..	..	..	..	2
Housing Assistants	..	..	..	..	..	..	9
Chemical Engineering Students	..	..	..	..	..	..	3
Principal/Chief Housing Assistant	..	..	..	..	..	..	1
Caretakers (Housing Schemes)	..	..	..	..	..	..	23
Caretakers (Flats)	..	..	..	..	..	..	2
Matron (Girls' Hostel)	..	..	..	..	..	..	1
Assistant Matron (Girls' Hostel)	..	..	..	..	..	..	1
Senior Canvasser (Tuberculosis Control)	..	..	..	..	..	..	1
Canvassers (Tuberculosis Control)	..	..	..	..	..	..	7
Superintendent (Transport and Disinfecting)	..	..	..	..	..	..	1
Supervisor (Transport and Disinfecting)	..	..	..	..	..	..	1
Disinfectors	..	..	..	..	..	..	4

Staff Chargehand (Garage)	1
Mechanics	5
Driver	1
Supervisors (Rest Rooms and Public Conveniences) .. .	2
Attendants (Rest Rooms and Public Conveniences) .. .	55
Chief Administrative Officer	1
Administrative Officers	2
Principal Administrative Assistants	4
Senior Administrative Assistants	3
Administrative Assistants	11
Senior Recorders	2
Recorders	3
Records Officer	1
Records Assistants/Senior Records Assistants .. .	3
Woman Assistants (Clerical)	31
Secretaries and Typists	18
Telephonists	2
	637
Supervising Health Inspectors (Black)	2
Health Inspectors (Black)	20
Health Inspectors (Coloured)	4
Health Inspectors (Asian)	2
Public Health Nurses (Black)	38
Learner Public Health Nurses (Black)	6
Public Health Nurses (Asian)	2
Public Health Nurses (Coloured)	10
Matron (Black)	1
Night Superintendent (Black)	1
Senior Sisters (Black)	5
Senior Midwives (Black)	2
Sisters (Coloured/Asian)	2
Sisters (Black)	288
Sisters (Coloured)	21
Sister (Asian)	1

APPENDIX B

Dentist's Assistants (Black)	9
Orderlies (Clinic, Hospital, Medical and X-ray)(Black)	14
Orderlies (Clinic) (Female) (Black).. .. .	2
Clinic Assistants (Black)	61
Clinic Assistants (Coloured)	5
Radiographers (Black)	2
Radiographer/Technical Assistants (Black)	2
Darkroom Assistants (Black)	3
Driver/Darkroom Assistant (Coloured)	1
Assistant Inspectress of Children's Institutions ..	1
Clerks and Recorders (Black)	73
Clerks (Female) (Black)	3
Printing Machine Operator (Black)	1
Clerks (Coloured)	4
Clerk (Female) (Asian)	1
Clerks (Female) (Coloured)	4
Driver/Recorders (Black)	6
Drivers (Tuberculosis) (Black)	2
Driver (Mobile X-ray Unit) (Black)	1
Typist/Clerks (Black)	2
Drivers (Black)	48
Supervisors (Black)	12
Boiler Demonstrators (Black)	6
Cooks (Black)	2
Public Convenience and Rest Room Attendants (Black)	134
Messengers, Nightwatchmen, Labourers, etc. (Black)	341
Labourers (Coloured)	8
Labourer (Asian)	1

1 791

FINANCIAL DETAILS

Health Services

	GROSS EXPENDITURE	INCOME	DEFICIT
	R	R	R
1972/73	4 950 635	2 472 003	2 478 632
1971/72	4 880 940	2 498 519	2 382 421

Housing for Whites

	GROSS EXPENDITURE	INCOME	DEFICIT
	R	R	R
1972/73	1 989 867	1 413 164	576 703
1971/72	1 710 432	1 211 434	498 998

Refunds and Subsidies received from Central and Provincial Governments, included under "Income"

	CENTRAL	PROVINCIAL	TOTAL
	R	R	R
1972/73	1 165 311	1 144 584	2 309 895
1971/72	1 476 908	854 884	2 331 792

APPENDIX D

PRINCIPAL VITAL STATISTICS

	WHITES		COLOURED		ASIANS		BLACKS		ALL RACES	
	1973	1972	1973	1972	1973	1972	1973	1972	1973	1972
Population	445 800	437 100	89 000	84 000	44 000	43 000	569 909	545 140	1 148 709	1 109 240
Notified births, no of	9 191	9 642	2 790	2 611	1 418	1 529	20 840	20 404	34 239	34 186
Birth rate	20,62	22,06	31,35	31,08	32,23	35,56	36,57	37,43	29,81	30,73
Illegitimate births	502	401		800		78		10 811		12 002
Illegitimate birth rate	5,46	4,16		26,85		5,49		53,14		35,39
Deaths, no of	4 099	4 349	989	1 002	277	289	6 322	6 586	11 687	12 226
Death rate	9,19	9,95	11,11	11,93	6,30	6,72	11,09	12,08	10,17	11,02
Infantile deaths, no of	166		170		47		1 131	1 240	1 514	
Infantile mortality rate	18,07		60,93		33,15		54,27	60,77	44,22	
Maternal deaths	2		4		-		27	16	33	
Maternal mortality rate +	0,22		1,58		-		1,33	0,78	0,99	

+ Maternal mortality rate calculated per 1 000 notified births in 1972; per 1 000 confinements in 1973.

+ + + + +

SUMMARY OF DETAILED LIST OF DISEASES
AND INJURIES AND CAUSES OF DEATH

CAUSE OF DEATH						DEATHS	RATE	% OF TOTAL
A Infective and Parasitic Diseases								
	Whites	..	..	..	..	81	0,18	1,98
	Coloureds	..	..	..	..	142	1,60	14,36
	Asians	..	..	..	..	17	0,39	6,14
	Blacks	..	..	..	..	343	0,60	5,43
	All Races	..	..	..	..	583	0,51	4,99
B Neoplasms								
	Whites	..	..	..	..	683	1,53	16,67
	Coloureds	..	..	..	..	84	0,94	8,49
	Asians	..	..	..	..	22	0,50	7,94
	Blacks	..	..	..	..	343	0,60	5,43
	All Races	..	..	..	..	1 132	0,99	9,69
C Endocrine, Nutritional and Metabolic Diseases								
	Whites	..	..	..	..	43	0,10	1,05
	Coloureds	..	..	..	..	29	0,33	2,93
	Asians	..	..	..	..	10	0,23	3,61
	Blacks	..	..	..	..	180	0,32	2,85
	All Races	..	..	..	..	262	0,23	2,24
D Diseases of Blood and Blood-forming Organs								
	Whites	..	..	..	..	10	0,02	0,25
	Coloureds	..	..	..	..	2	0,02	0,20
	Asians	..	..	..	..	1	0,02	0,36
	Blacks	..	..	..	..	1	0,002	0,02
	All Races	..	..	..	..	14	0,01	0,12
E Mental Disorders								
	Whites	..	..	..	..	5	0,01	0,12
	Coloureds	..	..	..	..	2	0,02	0,20
	Asians	..	..	..	..	-	-	-
	Blacks	..	..	..	..	3	0,005	0,05
	All Races	..	..	..	..	10	0,008	0,09
F Diseases of the Nervous System and Sense Organs								
	Whites	..	..	..	..	41	0,09	1,00
	Coloureds	..	..	..	..	14	0,16	1,42
	Asians	..	..	..	..	5	0,11	1,81
	Blacks	..	..	..	..	125	0,22	1,98
	All Races	..	..	..	..	185	0,16	1,58

APPENDIX E

CAUSE OF DEATH						DEATHS	RATE	% OF TOTAL
G	Diseases of the Circulatory System							
	Whites	..	..	..	..	1 880	4,22	45,86
	Coloureds	..	..	..	..	264	2,97	26,69
	Asians	..	..	..	..	111	2,52	40,07
	Blacks	..	..	..	..	1 098	1,93	17,37
	All Races	..	..	..	..	3 353	2,92	28,69
H	Diseases of the Respiratory System							
	Whites	..	..	..	..	494	1,11	12,05
	Coloureds	..	..	..	..	125	1,40	12,64
	Asians	..	..	..	..	42	0,95	15,16
	Blacks	..	..	..	..	570	1,00	9,02
	All Races	..	..	..	..	1 231	1,07	10,53
I	Diseases of the Digestive System							
	Whites	..	..	..	..	171	0,38	4,17
	Coloureds	..	..	..	..	35	0,39	3,54
	Asians	..	..	..	..	9	0,20	3,25
	Blacks	..	..	..	..	433	0,76	6,85
	All Races	..	..	..	..	648	0,56	5,54
J	Diseases of the Genito-urinary System							
	Whites	..	..	..	..	47	0,11	1,15
	Coloureds	..	..	..	..	7	0,08	0,71
	Asians	..	..	..	..	4	0,09	1,44
	Blacks	..	..	..	..	79	0,14	1,25
	All Races	..	..	..	..	137	0,12	1,17
K	Complications of Pregnancy, Childbirth and the Puerperium							
	Whites	..	..	..	..	2	0,004	0,05
	Coloureds	..	..	..	..	4	0,04	0,40
	Asians	..	..	..	..	-	-	-
	Blacks	..	..	..	..	27	0,05	0,43
	All Races	..	..	..	..	33	0,03	0,28
L	Diseases of the Skin and Subcutaneous Tissue							
	Whites	..	..	..	..	1	0,002	0,02
	Coloureds	..	..	..	..	1	0,01	0,10
	Asians	..	..	..	..	-	-	-
	Blacks	..	..	..	..	1	0,002	0,02
	All Races	..	..	..	..	3	0,003	0,03

CAUSE OF DEATH						DEATHS	RATE	% OF TOTAL
M	Diseases of the Musculoskeletal System and Connective Tissue							
	Whites	..	..	..	..	1	0,002	0,02
	Coloureds	..	..	..	..	-	-	-
	Asians	..	..	..	..	-	-	-
	Blacks	..	..	..	..	3	0,005	0,05
	All Races	..	..	..	..	4	0,003	0,03
N	Congenital Anomalies							
	Whites	..	..	..	..	25	0,06	0,61
	Coloureds	..	..	..	..	3	0,03	0,30
	Asians	..	..	..	..	3	0,07	1,08
	Blacks	..	..	..	..	27	0,05	0,43
	All Races	..	..	..	..	58	0,05	0,50
O	Certain Causes of Perinatal Morbidity and Mortality							
	Whites	..	..	..	..	83	0,19	2,02
	Coloureds	..	..	..	..	50	0,56	5,06
	Asians	..	..	..	..	24	0,55	8,66
	Blacks	..	..	..	..	420	0,74	6,64
	All Races	..	..	..	..	577	0,50	4,94
P	Symptoms and Ill-defined Conditions							
	Whites	..	..	..	..	92	0,21	2,24
	Coloureds	..	..	..	..	68	0,76	6,88
	Asians	..	..	..	..	3	0,07	1,08
	Blacks	..	..	..	..	1 520	2,67	24,04
	All Races	..	..	..	..	1 683	1,47	14,40
Q	Accidents, Poisonings and Violence (External Cause)							
	Whites	..	..	..	..	440	0,99	10,73
	Coloureds	..	..	..	..	159	1,88	16,08
	Asians	..	..	..	..	26	0,59	9,39
	Blacks	..	..	..	..	1 149	2,02	18,17
	All Races	..	..	..	..	1 774	1,54	15,18

+ + + + +

APPENDIX F

ATTENDANCES AT CHILD HEALTH CLINICS (MAINLY 0 - 2 YEARS OF AGE)

POPULATION GROUPS	1973	1972
Whites +	90 567	101 253
Coloureds	38 412	37 491
Asians	5 662	5 866
Blacks - in Black areas	104 963)	118 157)
in city	9 629) 114 592	12 640) 130 797
All Groups	249 233	275 407

+ Includes 640 individuals seen at clinics in the southern areas in age groups other than 0 - 2 years.

+ + + + +

MEDICAL EXAMINATIONS AT CHILD HEALTH CLINICS

POPULATION GROUPS	1973	1972
Whites	10 095	10 469
Coloureds	9 629	7 070
Asians	2 192	1 815
Blacks - in Black areas	12 364)	
in city	453) 12 817	12 017
All Groups	34 733	31 376

+ + + + +

MEDICAL EXAMINATION OF CHILDREN IN PRE-SCHOOL INSTITUTIONS

POPULATION GROUPS	1973	1972
Whites	1 452	1 548
Coloureds	200	225
Blacks	3 498	2 408
All Groups	5 150	4 181

+ + + + +

HOME VISITS AND BIRTHS (LIVE AND STILL) INVESTIGATED BY PUBLIC HEALTH NURSES

POPULATION GROUPS	HOME VISITS		BIRTHS INVESTIGATED	
	1973	1972	1973	1972
Whites	40 756	37 476	8 662	9 801
Coloureds	16 797	12 084	3 233	3 220
Asians	1 944	2 064	974	914
Blacks -				
in Black areas	68 877	84 671	15 166	17 193
in city	3 398	4 826	1 420	2 149
	72 275	89 497	16 586	19 342
All Groups	131 772	141 121	29 455	33 277

+ + + + +

APPENDIX H

MEDICAL EXAMINATION OF CHILDREN (AGE 2 - 5 YEARS) IN PRE-SCHOOL INSTITUTIONS

POPULATION GROUPS	VENUES			TOTAL NO OF WEEKLY SESSIONS
	HEALTH CENTRES	SUBSIDIARY CLINICS	MOBILE CLINICS	
Whites	1	34	3	+ 49
Coloureds	2	5	2	16
Asians	1	1	-	3
Blacks	7	1	6	41
All Groups	11	41	11	109

+ More than 1 clinic session may be held at the same venue.

Whites	17 197	87 671	28 877	12 756
Coloureds	17 197	87 671	28 877	12 756
Asians	17 197	87 671	28 877	12 756
Blacks	17 197	87 671	28 877	12 756
All Groups	17 197	87 671	28 877	12 756

IMMUNISATIONS

NO OF COMPLETED COURSES	WHITES		COLOURED		ASIANS		BLACKS	
	1973	1972	1973	1972	1973	1972	1973	1972
Diphtheria, Whooping Cough and Tetanus ..	6 230	6 155	3 309	3 289	1 134	1 120	12 372	13 350
Diphtheria and Tetanus ..	1 299	2 108	916	1 858	108	962	6 640	7 040
Diphtheria only ..	3	1	2	nil	nil	nil	nil	4
Boosters ..	16 460	13 043	3 853	4 833	1 189	2 169	25 030	27 662
Tetanus ..	51	68	28	31	nil	nil	8	11
Measles ..	110	17	2 238	2 218	883	917	11 689	14 360
Rubella ..	2 620	3 128	2 075	959	nil	330	2 926	2 843
Polioyelitis (oral) ..	8 705	11 845	3 435	4 525	1 209	2 254	27 058	33 552
+ Smallpox Vaccinations ..	19 146	16 648	3 861	5 466	1 335	3 266	63 784	70 822
++ B.C.G. of Newborn ..	313	169	2 655	2 553	1 269	1 240	23 893	16 325
Other ..	51	92	nil	7	nil	nil	230	454
NO OF PROCEDURES								
+ Smallpox Vaccinations ..	19 146	16 648	3 861	5 466	1 335	3 266	63 784	70 822
Polioyelitis (no of doses)	24 362	36 430	10 985	15 547	3 593	7 484	110 517	129 450
++ No of Injections (including B.C.G. of newborn and rabies) ..	30 183	44 570	21 703	23 351	4 060	11 318	134 723	134 381

+ Number of vaccinations performed is tabled in both sections, i.e. completed courses and number of procedures.

Number of vaccinations of travellers and Black workseekers not included.

++ B.C.G. (newborn) also shown in Appendix P : B.C.G. Inoculations.

FAMILY PLANNING AND CANCER PREVENTION CLINICS

FAMILY PLANNING	WHITES		COLOURED		ASIANS		BLACKS		ALL GROUPS	
	1973	1972	1973	1972	1973	1972	1973	1972	1973	1972
First Visits	560	651	1 841	3 195	512	960	9 357	7 683	12 270	12 489
Total Visits	2 155	1 729	11 557	8 061	2 846	2 831	39 583	35 101	56 141	47 725
No of individuals -										
attending	1 640	1 405	8 166	7 473	1 921	1 786	31 383	25 091	43 110	35 755
receiving tablets ..	722	635	4 584	4 272	894	843	9 806	7 475	15 996	13 225
receiving injections ..	38	6	959	1 008	98	78	2 584	1 925	3 679	3 017
using intra-uterine devices	407	429	1 857	1 697	721	634	17 429	14 242	20 414	17 002
on other contraceptives	4	10	83	125	25	13	111	78	223	226
No of intra-uterine devices -										
inserted	253	339	862	1 224	262	456	7 008	5 933	8 385	7 952
extruded	8	10	184	173	29	64	2 105	2 144	2 326	2 391
re-inserted	17	4	147	135	23	76	2 079	1 950	2 266	2 165
removed	61	34	174	149	79	85	1 188	1 083	1 502	1 351
CANCER PREVENTION										
No of cervical smears -										
taken	506	408	1 743	975	425	291	2 889	1 821	5 563	3 495
+ positive	1	2	6	3	1	nil	22	8	30	13
suspicious	(0,3%)	(0,5%)	(0,5%)	(0,3%)	(0,2%)		(1,0%)	(0,4%)	(0,6%)	(0,4%)
No of persons referred for medical investigations (other than for cervical smears)	18	14	87	18	17	6	128	82	238	120
	61	26	175	204	56	55	413	468	705	753

+ Percentages calculated on reports received and not on smears taken.

IMMUNISATION FOR INTERNATIONAL TRAVEL
(JANUARY TO SEPTEMBER 1973)

PROCEDURES	JANUARY TO SEPTEMBER +
Smallpox	54 120
Yellow Fever	10 177
Typhoid	486
Cholera	30 427
Cholera/Typhoid	3 827
Other	72
TOTAL	99 109

+ From September 1973 immunisation for purposes of travel reverted to the State Department of Health.

+ + + + +

APPENDIX L

SUMMARY OF NOTIFIABLE DISEASES OTHER THAN TUBERCULOSIS ACCEPTED AND CONFIRMED

	LOCAL CASES						IMPORTED CASES +						GRAND TOTAL		
	W	C	A	B	MB	TOTAL		W	C	A	B	MB	TOTAL		
						1973	1972						1973	1972	
Anthrax	11	12	3	8	1	35	nil	1					nil	36	51
Cerebrospinal meningitis						nil	51	1					1	1	1
Cholera						3	6	1					2	7	8
Diphtheria	80			3		81	86						nil	81	86
Encephalitis	4			1		4	nil						nil	4	nil
Erysipelae						1	nil						nil	1	nil
Insecticide poisoning		1					nil						nil	nil	nil
Lead poisoning						12	9						1	13	10
Leprosy				12		36	nil	12		1	3		28	28	52
Malaria		1		35		1	35						nil	36	35
Ophthalmia neonatorum	1					20	5						nil	1	5
Pemphigus neonatorum				2			20				2		2	4	29
Poliomyelitis							nil						nil	nil	nil
Puerperal fever							19						nil	15	19
Rheumatic fever	3	3	1	8		15	75						nil	61	75
Scarlet fever	59		1	1		61	nil						nil	nil	nil
Smallpox							nil						nil	nil	nil
Tetanus							nil						nil	2	2
Trachoma				2		2	2						1	2	1
Trypanosomosis							nil	1	1						
Typhoid fever	2	1		9		12	31				10		7	22	38
Typhus (murine)						nil	nil						nil	nil	nil
Viral hepatitis	228	30	9	91		358	208	2				2	nil	360	208
TOTAL	388	48	14	172	1	623	547	17	1	1	29	3	51	72	619

W = Whites C = Coloureds A = Asians B = Blacks MB = Mine Blacks

+ "Imported" cases have local addresses, but are thought to have contacted the disease outside municipal boundaries.

ATTENDANCES AT VENEREAL DISEASES CLINICS

POPULATION GROUPS	1973						1972							
	GONORRHOEA		SYPHILIS		OTHER		TOTAL	GONORRHOEA		SYPHILIS		OTHER		TOTAL
	1st Visit	Re-Visit	1st Visit	Re-Visit	1st Visit	Re-Visit	All Visits	1st Visit	Re-Visit	1st Visit	Re-Visit	1st Visit	Re-Visit	All Visits
Whites	262	360	77	170	282	136	1 287	275	365	107	243	141	68	1 199
Coloureds	167	29	98	51	41	9	395	145	51	160	151	1	1	509
Clinics	1 667	1 022	2 659	1 679	384	296	7 707	1 673	1 605	2 122	1 425	570	375	7 770
BRES +	2 013	nil	2 023	2 460	914	nil	7 410	1 703	nil	1 748	1 798	612	nil	5 861
Non-European Hospital Clinic	69	70	627	924	137	91	1 918	55	72	637	1 104	100	77	2 045
Total	3 749	1 092	5 309	5 063	1 435	387	17 035	3 431	1 677	4 507	4 327	1 282	452	15 676
Total All Groups	4 178	1 481	5 484	5 284	1 758	532	18 717	3 851	2 093	4 774	4 721	1 424	521	17 384
GRAND TOTAL VISITS	5 659	10 768	2 290	18 717	5 944	9 495	1 945	17 384						

+ Black Registration Examination Section

APPENDIX N

NOTIFICATIONS OF CASES OF TUBERCULOSIS

POPULATION GROUP	PULMONARY TUBERCULOSIS				OTHER FORMS				ALL FORMS			
	1973		1972		1973		1972		1973		1972	
	LOCAL	IM-PORTED	LOCAL	IM-PORTED	LOCAL	IM-PORTED	LOCAL	IM-PORTED	LOCAL	IM-PORTED	LOCAL	IM-PORTED
Whites	88	3	81	1	4	-	5	-	92	3	86	1
Coloureds	228	-	191	-	2	1	2	-	230	1	193	-
Asians	31	-	25	-	-	-	2	1	31	-	27	1
Black (non-mining)	2 914	70	2 650	74	21	3	39	1	2 935	73	2 689	75
Black (mining)	55	5	29	4	-	-	-	-	55	5	29	4
Total All Groups	3 316	78	2 976	79	27	4	48	2	3 343	82	3 024	81

+ + + + +

ANNUAL INCIDENCE OF TUBERCULOSIS AND
DEATHS PER 100 000 POPULATION

		INCIDENCE				DEATHS			
		NUMBER		RATE		NUMBER		RATE	
		1973	1972	1973	1972	1973	1972	1973	1972
A	PULMONARY								
	Whites	91	82	20	18				
	Coloureds	228	191	256	227				
	Asians	31	25	70	58				
	Blacks (mine)	60	36	729	468	1	6	12	78
	Blacks (other)	2 984	2 724	531	888	128	198	22	36
	All Races	3 394	3 058	295	275				
B	NON-PULMONARY								
	Whites	4	5		1	-			
	Coloureds	3	2		2	-			
	Asians	-	3		6	-			
	Blacks (mine)	-	-	-	-	-	6	-	78
	Blacks (other)	24	40	4	13		89	15	16
	All Races	31	50		4				
C	ALL FORMS								
	Whites	95	87		20				
	Coloureds	231	193		229				
	Asians	31	28		65				
	Blacks (mine)	60	36	729	468		1		13
	Blacks (other)	3 008	2 764	535	901	216	229	38	74
	All Races	3 425	3 108		280				

+ + + + +

TUBERCULOSIS CLINICS

1 for Whites providing 2 sessions weekly

4 for Coloureds providing 4 sessions weekly

1 for Asians providing 1 session weekly

10 for Blacks providing 16 sessions weekly

16 for all population groups providing 23 sessions weekly

+ + + + +

HOME VISITS BY TUBERCULOSIS STAFF

POPULATION GROUPS	PUBLIC HEALTH NURSES		DOMICILIARY SISTERS	
	1973	1972	1973	1972
Whites	432	311	387	750
Coloureds	362	121	5 992	6 881
Asians	88	44	1 515	1 855
Blacks	5 261	5 062	44 524	33 548
All Groups	6 143	5 538	52 418	43 034

+ + + + +

BCG INOCULATIONS

POPULATION GROUPS	1973			1972		
	NEWBORN	OTHER	TOTAL	NEWBORN	OTHER	TOTAL
Whites	313	2 169	2 482	169	973	1 142
Coloureds	2 655	2 882	5 537	2 553	8 747	11 300
Asians	1 269	1 126	2 395	1 240	2 277	3 517
Blacks	23 893	29 995	53 888	16 325	56 143	72 468
All Groups	28 130	36 172	64 302	20 287	68 140	88 427

+ + + + +

TUBERCULOSIS CASES RECEIVING DOMICILIARY AND OUT-PATIENT TREATMENT

POPULATION GROUPS	AT 1.1.73	AT 1.1.72	PUT ON		TAKEN OFF		AT 31.12.73	AT 31.12.72
			1973	1972	1973	1972		
Whites	273	269	102	105	100	101	275	273
Coloureds	919	962	270	231	309	279	880	919
Asians	150	184	35	36	19	66	166	150
Blacks	8 745	9 066	4 150	3 594	4 258	3 916	8 637	8 745
All Groups	10 087	10 481	4 557	3 966	4 686	4 362	9 958	10 087

+ + + + +

HOSPITALISATION OF TUBERCULOSIS CASES

POPULATION GROUPS	AT 1.1.73	AT 1.1.72	ADMITTED		DISCHARGED		AT 31.12.73	AT 31.12.72
			1973	1972	1973	1972		
Whites	6	13	49	33	48	42	7	6
Others	991	767	2 284	2 149	2 073	2 181	1 202	991
All Groups	997	780	2 333	2 182	2 121	2 223	1 209	997

+ + + + +

ATTENDANCES AT TUBERCULOSIS CLINICS

POPULATION GROUPS	CASES		CONTACTS		SUSPECTS		TOTAL		GRAND TOTAL
	1ST VISIT	RE-VISIT	1ST VISIT	RE-VISIT	1ST VISIT	RE-VISIT	1ST VISIT	RE-VISIT	
1973									
Whites	90	1 830	1 560	2 505	1 596	1 359	3 246	5 694	8 940
Coloureds	105	19 319	432	2 510	1 639	491	2 176	22 320	24 496
Asians	31	2 013	68	227	156	123	255	2 363	2 618
Blacks	2 579	119 301	11 200	13 026	5 097	3 721	18 876	136 048	154 924
All Groups	2 805	142 463	13 260	18 268	8 488	5 694	24 553	166 425	190 978
1972									
Whites	112	2 255	1 279	2 805	1 147	1 069	2 538	6 097	8 635
Coloureds	93	19 744	311	3 483	1 919	1 047	2 323	24 274	26 597
Asians	17	2 530	233	67	477	51	727	2 648	3 375
Blacks	2 081	141 269	10 079	20 829	4 577	3 560	16 737	165 658	182 395
All Groups	2 303	165 798	11 902	27 184	8 120	5 727	22 325	198 677	221 002

+ + + + +

CURATIVE AND MIDWIFERY SERVICES IN AREAS FOR
BLACKS (INCLUDING NOORDGESIG CLINIC FOR COLOURED)

SERVICE	1973	1972
Clinic Attendances:		
Medical and Surgical	440 432	461 806
Ante-natal	54 077	57 621
Post-natal	669	802
TOTAL	495 178	520 229
Home Visits:		
Medical and Surgical	39 107	50 405
Ante-natal	16 356	16 650
Post-natal	92 153	101 572
TOTAL	147 616	168 627
Confinements attended:		
Deliveries	4 047	4 806
BBA's	2 188	2 442
TOTAL	6 235	7 248

+ + + + +

DENTAL SERVICE FOR BLACKS

SERVICE	1973	1972
Fillings	4 121	2 593
Scalings	71	63
Extractions	66 955	65 671
Number of patients	56 593	53 478

+ + + + +

APPENDIX T

MEDICAL EXAMINATION OF WHITES

	1973
Prospective municipal employees found eligible for -	
Pension Fund membership	1 702
Special membership of Pension Fund	1 257
Work only	28
Apprentices	52
Found unfit for work	48
TOTAL EXAMINED	3 087
Cases boarded	20
Other examinations	37
ALL EXAMINATIONS - GRAND TOTAL	3 144

+ + + + +

MEDICAL EXAMINATION OF BLACK WORKSEEKERS

	1973	1972
Workseekers examined	158 386	156 835
Medically unfit for employment -		
Temporarily	295	383
Permanently	739	743
Foodhandlers examined	660	391
Number of smallpox vaccinations	131 128	122 486
Cases of gonorrhoea found	2 013	1 703
Cases of syphilis found	2 023	1 748

+ + + + +

INSPECTION BY HEALTH INSPECTORS

	1973	1972
Various premises	230 150	352 077
Nuisances investigated	68 686	102 941
Infectious diseases notified	623	619
Food poisoning investigations	7	4
Complaints investigated	2 581	2 741

+ + + + +

FOODSTUFFS FOR WHOLESALE AND
RETAIL SUPPLIERS CONDEMNED

	1973	1972
	kg	kg
Canned foodstuffs	47 451	24 402
Dressed poultry	1 697	3 070
Fish	2 826	2 985
Processed meat	375	45
Frozen foods	12 075	110
Sundry foodstuffs	1 447	2 380
	65 871	32 992

+ + + + +

INSPECTION OF POULTRY AND GAME AT MUNICIPAL MARKET

	INSPECTED	CONDEMNED
Furred game	1 141	9
Feathered game	596	7
Dressed poultry	nil	nil

+ + + + +

APPENDIX V

MEAT INSPECTION

	1973	1972
Animals slaughtered -		
Cattle	391 000	389 657
Sheep, etc	945 330	1 106 087
Pigs	215 558	222 358
Calves	39 436	54 615
Equines	8 598	7 104
Imported meat (metric tons)	21 900,372	22 920,101
Imported offal (metric tons)	1 943,069	3 140,629
Meat condemned (metric tons)	2 382,508	2 389,713
Imported whale meat (metric tons)	118,731	nil

+ + + + +

DAIRY HERD INSPECTIONS

	1973	1972
Number of herds	1 173	1 323
Number of cattle	111 203	118 155
Bulk samples tested for mastitis	2 357	2 241
Positive mastitis tests	331 (14%)	318 (14,2%)
Bulk samples tested for brucellosis	2 355	2 237
Positive brucella ring tests	1 519 (64,5%)	1 572 (70,3%)
Positive brucella agglutination tests	343 (14,5%)	438 (19,6%)
Bulk samples tested for tuberculosis	2 355	2 237
Positive tuberculosis tests	2 (0,08%)	5 (0,2%)
Samples tested for antibiotics	2 324	2 268
Samples showing inhibitory substances	57 (2,4%)	59 (2,6%)
Samples containing penicillin	46 (1,97%)	48 (2,1%)

+ + + + +

MAIN CAUSES FOR CONDEMNATION OF MEAT

	1973	1972
CATTLE	%	%
Cysticercosis	0,21	0,17
Pleuritis and/or peritonitis	0,17	0,18
Bruising	0,09	0,10
Tuberculosis	0,07	0,14
Pneumonia	0,07	0,06
Gangrene	0,07	0,09
Emaciation	0,04	0,05
Pyæmia	0,04	0,05
Fever	0,03	0,03
Pericarditis	0,03	nil
Other diseases	0,11	nil
SHEEP		
Pneumonia	0,04	0,04
Emaciation	0,03	0,02
Caseous Lymphadenitis	0,01	0,01
Icterus	0,01	0,02
Bruising	0,01	nil
Fever	0,01	0,01
Other diseases	0,02	nil
PIGS		
Cysticercosis	0,39	0,72
Arthritis	0,32	0,30
Gangrene	0,18	0,20
Pneumonia	0,16	nil
Nephritis	0,15	0,20
Scrotal sepsis	0,09	0,10
Fever	0,09	0,10
Pyæmia	0,08	0,10
Bruising	0,08	nil
Tuberculosis	0,06	nil
Other diseases	0,23	0,10
CALVES		
Pneumonia	0,50	0,59
Icterus	0,43	0,48
Emaciation	0,40	1,01
Omphalophlebitis	0,33	0,59
Nephritis	0,30	nil
Salmonellosis	0,23	nil
Other diseases	0,70	0,31
EQUINES		
Melanomata	0,12	0,28
Emaciation	0,06	0,04
Extensive bruising	0,03	nil
Other diseases	0,08	0,04

+ + + + +

APPENDIX X

PEST CONTROL

	BY DISTRICT HEALTH INSPECTORS	BY PEST CONTROL OVERSEERS
Premises inspected for rodent infestation -	3 783	
(a) Routine/complaints		175 180
(b) Demolition		378
(c) Block surveys		4 889
Anti-rodent measures carried out without notice	954	
Rodent proofing notices served	720	
Re-inspections	1 905	
Interviews	385	
No of premises treated including traps		37 911
No of premises gassed -		
(a) Municipal		15 407
(b) Private for demolition purposes (supervision only)		118
Municipal premises treated -		
(a) With T.I.F.A. machine		62
(b) By other means		87
Mosquito control - no of days worked		371
Loose swarms of bees eradicated on municipal premises		162
Specimens sent to S.A.I.M.R. -		
(a) Rodents		1 854
(b) Fleas (batches)		37
(c) Mosquitoes (batches)		87
(d) Snails (batches)		20
Materials used -		
(a) Anti-coagulant poison, cyanogas, poison wheat, zinc phosphide		1 218,2 kg
(b) Diesoline (incinerator), insecticide, larvaecide		13 436,3 l
Carbon monoxide machine -		
(a) Petrol used		1 089 l
(b) Oil used		95,4 l

+ + + + +

RODENTS CAUGHT OR RETRIEVED

Rattus rattus (domestic rats)	9 409
Mastomys (multimammate mouse)	16
Tatera (gerbille)	1 892
Mus musculus (house mouse)	1 866
Rhabdomys (striped mouse)	26
Otomys (vlei rat)	26
Others	nil

+ + + + +

HOUSING UNITS FOR WHITES AT 31 DECEMBER 1973 : ECONOMIC ESTATES

ECONOMIC ESTATES	HOUSES						FLATS						GRAND TOTAL
	2 B/R Detached and Semi	2 B/R Row	3 B/R Detached	3 B/R Row	4 B/R Detached	Total	Bach	1 B/R	2 B/R Conven	3 B/R Conven	3 B/R Duplex	Total	
SOUTH HILLS													
Sold houses	314		417		52	783						-	783
Original (still let)	140		15		1	156						-	156
1956 Extensions	30		150		9	189	27	108	54		56	189	378
Reserves 567, 577, 875, 840				42		42					41	56	98
Lot 139, Klipriviersberg						-			30			71	71
Lots 119/120/121,													
Klipriviersberg		8		11		19		38	38		78	154	173
Stands 281 - 288						-		15	5			20	20
BELLAVISTA													
Proper													
North			14			14			273	1	157	431	445
South Lot 131				15		15					39	39	54
South Lot 132			9	6		6		12	42		26	80	86
CLAREMONT						9		16	46		81	143	152
Stage I			151	23		174						-	174
Stage II			120			120			60		71	131	251
Stage III +			4	24		28			12	12	68	92	120
JEPPE													
Phase I				8	6	14			45		94	139	153
MONTCLARE	63		181			244						-	244
MAX GOODMAN PARK			4		2	6					65	65	71
VREDEPARK													
Stage I (original)				12		12			60		96	156	168
Stage I (ext of contract)			11	9		20					26	26	46
TOTAL	547	8	1 076	150	70	1 851	27	189	660	13	903	1 792	3 645

+ A further 269 economic letting units have still to be concluded in Claremont Stage III.

+ + + + +

HOUSING UNITS FOR WHITES AT 31 DECEMBER 1973 : SUB-ECONOMIC ESTATES

SUB-ECONOMIC ESTATES	HOUSES					FLATS			COTTAGES FOR AGED			GRAND TOTAL
	2 B/R Detached and Semi	3 B/R Detached	3 B/R Row	4 B/R Detached	Total	2 B/R Conven	3 B/R Conven	Total	Sing	Dbl	Total	
Jan Hofmeyr	92	102			194				20	16	36	230
Maurice Freeman	48	59		4	111	36	12	48	16	12	28	187
Pioneer	43	45		8	96	18	6	24			-	120
South Hills Reserves					-			-	30	18	48	48
Vredepark					-			-	42	12	54	54
Bellavista					-			-		16	16	16
Jeppe					-			-		12	12	12
Claremont III +			34		34	30	30	60		14	14	108
TOTAL	183	206	34	12	435	84	48	132	108	100	208	775

+ A further 108 sub-economic letting units have still to be concluded in Claremont Stage III.

+ + + + +

DISINFECTING SERVICE : DISINFECTIONS
AND DISINFESTATIONS

	1973	1972
Persons	1 739	2 019
Premises	2	4
Vehicles	2 344	2 853
Articles and bundles of bedding and clothing	5 743	6 121
Dressing drums and packs	62 180	11 551

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DISPENSARY SERVICE

YEAR	MANUFACTURED		DISPENSED		
	LIQUIDS	OINTMENTS	LIQUIDS	OINTMENTS	TABLETS
	ℓ	kg	units	units	individual
1973	33 124	2 345	563 787	48 568	26 038 500
1972	31 852	2 884	590 949	65 485	27 554 000

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ISSUES OF MILK POWDER

SERVICES	SKIMMED MILK POWDER		FULL CREAM MILK POWDER	
	1973	1972	1973	1972
	1/2 kg packs	1/2 kg packs	1/2 kg packs	1/2 kg packs
Tuberculosis	68 712	91 698	nil	591
All child health	229 299+	212 679+	216 793	193 379

+ These figures include 52 836 (57 868) 1/2 kg packs issued to the African Children's Feeding Scheme and 2 528 (nil) to Witsco for Coloureds.

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CONTROL OF NURSING HOMES AND INSTITUTIONS

	1973	1972
Licensed nursing homes	23	25
Visits to nursing homes	256	253
Miscellaneous visits	36	60
Charitable institutions and homes for the aged	53	46
Visits to homes for the aged	148	159
Homes for the socially inadequate, handicapped and unmarried mothers	22	20
Bacteriological tests (agar plates, solutions and swabs submitted to S.A.I.M.R.)	248	344

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CONTROL OF MIDWIVES

	1973	1972
Midwives listed -		
Whites	94	107
Coloureds	16	17
Asians	12	10
Blacks	198	196
Inspections -		
of bags	158	83
of registers	552	588
Maternal deaths investigated	13	83+
Puerperal sepsis cases notified	nil	nil
Pemphigus neonatorum cases notified	1	5
Ophthalmia neonatorum cases notified	52	35
- of gonococcal origin	4	8

+ Includes deaths following abortions



