Health Committee's report / City of Melbourne.

CITY OF MELBOURNE

REPORT OF THE HEALTH COMMITTEE FOR THE YEAR 1946

MEMBERS OF COMMITTEE

Councillor Boulton (Chairman)
Councillor Coleman
Councillor Holland
Councillor Marks
Councillor E. L. Morton
Councillor Sir Harold Gengoult Smith

The Health Committee submits for the information of the Council a report regarding the work carried out under the direction of the Committee during the year ended 31st December, 1946.

REPORTS OF OFFICERS

A report by the Medical Officer of Health (Dr. John Dale) upon the work of the Health Department during 1946, and upon the health of the inhabitants of the City generally, is attached hereto, together with reports by Dr. Hilda Kincaid upon child welfare work, by Dr. Hilda Bull upon infectious diseases, by Mr. T. G. O. Jordan, the Chief Health Inspector, on the routine work of the Department, by Messrs. Dunn, Son & Stone, City Analysts, by Mr. Reeve, Dental Officer, upon the work of dental centres at Kensington and North Carlton, and by Mr. A. A. Ferris, Senior Bacteriologist of the Bacteriology Department, University of Melbourne. Full details of the various health activities of the Council are contained in these reports.

CHILD WELFARE

The report of Dr. Hilda Kincaid upon the work of the child welfare branch gives details of the year's activities, and statistics for the year include two records, the highest number of births, 2,033, and the lowest infantile mortality rate ever recorded.

The figure for infant mortality for the City, 23.1, is much lower than that for the whole State, 27.1, and is considerably below the average figure for Greater Melbourne, 27.0.

Dr. Kincaid's report includes an interesting discussion on the benefits of kindergartens and the influence of the kindergarten and of the home respectively on the well-being of the child.

The two scholarships offered by the Council to encourage girls to enter the Kindergarten Training College for training as kindergarten teachers to staff City kindergartens, attracted 25 applicants of good personality and ability.

It is gratifying to report that, as from the 14th July, 1946, the State Government increased its rates of subsidy payable in respect of nurses employed in infant welfare centres in the City of Melbourne. The amounts payable to the Council in respect of seven full-time nurses and two part-time nurses employed in infant welfare centres has been increased from £1,155 to £1,500. The Government subsidy was previously paid at the rate of £165 per nurse per annum, but the new scale provides for the payment of £200 per annum for each nurse employed full time and amounts ranging from £20 per annum to £120 per annum for part-time nurses.

The State Government also, as from the 1st January, 1946, increased its subsidy of £4 per annum per child for kindergartens to £6 per annum per child; £4 per annum per child is paid by the Free Kindergarten Union of Victoria to the local Committees of Management, Hopetoun and Lady Huntingfield Free Kindergartens, and the increased subsidy of £2 is paid to the Council by the Free Kindergarten Union of Victoria and is credited to the Council's portion of cost of maintenance.

During the year the Council, on the Committee's recommendation, approved of the establishment of a baby health centre and kindergarten at the Fawkner Park Kiosk which, when alterations, etc., are completed, will eventually be conducted on the lines of the Lady Huntingfield and Hopetoun Free Kindergartens. It is considered that this centre will be a great acquisition and fulfil a long-felt want for the ratepayers of Albert Ward, as the number of births during 1946 in the City of Melbourne constitutes an all time record, as has been pointed out earlier in this report.

In connection with the policy adopted by the Council regarding the extension of kindergartens and creches in the City, the Committee is watching carefully the position of suitable properties with a view to their acquisition in due time when the extreme housing shortage at present being experienced becomes less acute.

The Committee desires to report that the Education Department, in conjunction with the Public Works Department, has under consideration the erection of an adult Educational Centre on the present site of the City Creche, situate the corner of Little Lonsdale Street and Exhibition Street, costing in the vicinity of £100,000, and the Council has been requested to submit plans for incorporation in the master plan being prepared by the Public Works Department of a modern creche providing accommodation for 64 children on the ground floor of such building.

The maintenance grants made by the Council to kindergartens and creches for the year 1946-47 were the same as for the previous year, viz., £1,000 and £500 respectively.

The Committee continued its assistance to parents in indigent circumstances by the supply of milk, the total expenditure being £989/14/8, of which the amount of £363/10/9 was refunded by parents. The number of families needing assistance in the supply of milk and foodstuffs shows a further reduction owing to the improved economic conditions.

The total amount expended by the Council on the conduct and maintenance of the child welfare centres in the City of Melbourne during 1946 was £4,548/3/0, of which £1,327/10/0 was contributed by the State Government.

Since 1927, the Council has spent £98,751/14/0 on the construction, equipment and maintenance of child welfare centres, kindergartens, and creches.

The Committee desires to again record its appreciation of the services of those who have contributed to the carrying out of child welfare work throughout the year, especially by the Committees of Management of the Lady Huntingfield Free Kindergarten and the Hopetoun Free Kindergarten and the voluntary workers in all the other kindergartens, health centres and creches in the City of Melbourne.

INFECTIOUS DISEASES

The accompanying reports of the Medical Officer of Health and Dr. Hilda Bull show the amount of preventative work carried out against infectious diseases.

The outstanding feature of the year was that the incidence of diphtheria in the City was the lowest ever recorded, there being only 34 cases, 16 males and 18 females. This is very gratifying in view of the overcrowding and bad hygiene in many closely populated areas, and it is necessary under the existing conditions to stress the continued need for immunization because, although the figures are improving, they are still below the safety level.

The number of deaths (53) from tuberculosis is again much lower than was the case during last year, which was 72.

INFECTIOUS DISEASES HOSPITAL, FAIRFIELD.

The Council's contribution towards the Queen's Memorial Infectious Diseases Hospital amounted to £9,957/2/2.

The contributions for the past five years were:—

1942	11,501	7	0
1943	12,001	4	0
1944	12,414	11	4
1945	12,325	10	2
1946	9,957	2	2

FOOD SUPPLIES

Systematic inspections of all premises were carried out during the year and a steady improvement was noted in respect of the strict observance of the Regulations. Of the total number of milk samples examined by chemical analysis only 6 or 1.8 per cent were found to be below standard, which is well below the average for the preceding five years. The average composition of the samples was very good, the average percentage of fats being 4.3, which is the highest figure yet obtained.

The usual bacteriological examination of samples was carried out and 236 samples were examined at the Veterinary Research Institute, Melbourne University. They show a slight improvement on last year, but the condition of the milk was not quite up to the standard achieved before the war.

HOUSING

The continued scarcity of building materials and labour prevented much progress being made in bringing existing houses to the standards of the Habitation Regulations, but every effort has been made to maintain houses in the City of Melbourne in a reasonable condition, this being illustrated by the fact that only 14 dwellings were demolished whilst repairs were carried out on 483 premises.

The Committee desires to place on record its appreciation of the services of all officers connected with it during the past year.

G. R. BOULTON,
Chairman.

G. J. DEAN,
Acting Town Clerk.

REPORT OF THE MEDICAL OFFICER OF HEALTH

Health Department,
Town Hall Chambers, Melbourne.
21st April, 1947.

The Chairman and Members,
Health Committee.

Gentlemen,

I beg to present my report for the year 1946.

The health of the community, as judged by the usual standards and statistical data, has again been good. The prevalence of infectious diseases was unusually low and there were no epidemic outbreaks. Reports from overseas indicate that in spite of the continuance of famine or near famine conditions in parts of Europe, there have been no alarming epidemics there or in any other parts of the globe. From the point of view of infectious diseases control, it is indeed to be hoped that peaceable administration will continue to be possible, both in Europe and in other parts of the world. Modern understanding and methods of control of infectious disease have developed to the extent that most infectious diseases are now, to a large extent, controllable provided that peaceful conditions and the co-operation of governments are ensured; though this is probably not yet true of certain infectious agents such as that responsible for the great pandemic influenza of 1918-1919.

Further progress is reported in the development and methods of use of substances such as the sulpha drugs and penicillin, which can already be credited with the saving of innumerable sufferers from various infections.

It is frequently said that the main task now confronting preventive medicine is to combat the diseases of advanced years and of old age, particularly those of the heart and blood vessels and the various forms of cancer. These are main causes of death in ageing people, and it is natural that the death-rates therefrom, calculated per thousand of the living, are steadily rising. An increasing amount of research work is being diverted to these conditions, and no one will question the desirability of extending the period of useful and active life among the older and presumably wiser members of the community.

Of greater importance, however, is the need for more extensive and deliberate efforts to improve what may be called the mental hygiene of the whole community. It is generally agreed that there exists a vast amount of ill-health at all ages, which has a mental rather than a physical basis. It is not mental disease, as ordinarily understood, it is a manifestation of unhappiness—of boredom and frustration, of fears, stresses, anxieties and conflicts in the mind of the individual. These mental states are of great importance in themselves, since obviously no one who is unhappy is well. Undoubtedly, also, they give rise to or are accompanied by disturbances of the physical mechanisms of the body, and the victims are recognised as suffering from physical disorders of many kinds, particularly disturbances of the digestive and circulatory systems, and various forms of rheumatism. The prevention of this vast burden of ill-health is certainly not a task for medicine alone or as such. It lies rather in the fields of psychology and of education, and particularly in that sphere of child welfare where the objectives of health and education are fused or are not to be separated. The problem of western civilisation is indeed that of developing the art of living, and the emphasis must be shifted from the doctor, hospital and research institute to the teacher, the psychologist, the kindergarten and the school. Great improvements in the general health of the community will gradually but certainly follow an honest attempt to make the most, not only of the bodies, but of the minds of all our children. Our schools must be built, staffed and equipped to turn out citizens who look forward happily to exercising their fully developed creative talents in co-operation with their fellows.

VITAL STATISTICS

The figures for the last ten years and of the averages for the five-year period 1931-1935, as supplied by the Government Statist, are shown in Table I.

TABLE I.

Year	Estimated Mean Population	No. of Births	Birth Rate	No. of Deaths	Death Rate	Infantile Mortality Rate per live Births
1931-35 (5 year average)	93,436	1131	12.2	1095	11.8	51.7
1936	92,850	1131	12.5	1147	12.7	53.9
1937	92,850	1176	13.0	1104	12.2	41.7
1938	92,900	1156	12.8	1135	12.6	39.8
1939	93,200	1105	12.2	1208	13.4	36.2
1940	93,650	1257	13.7	1210	13.3	54.1
1941	95,400	1303	14.2	1186	12.9	36.8
1942	95,500	1499	16.1	1283	13.0	44.0
1943	99,393	1804	18.1	1226	12.3	43.8
1944	100,485	1655	16.5	1227	12.2	32.0
1945	101,130	1709	16.9	1225	12.1	26.3
1946	105,300	2033	19.8	1177	11.5	23.1

The number of births recorded in the City (2033) shows a quite astonishing increase, being a record in the experience of the City, and no less than 13 per cent higher than the previous maximum record which was 1804 in 1943. The number of births is actually 84 per cent higher than the recent minimum which was 1105 in 1939. For the State as a whole, the birth-rate has shown a continuous rise over the war years, with a sharp rise from 1942 to 1943, and another from 1945 to 1946, to an all-time high for the State. These two big years, 1943 and 1946, are discernable also in the Melbourne figures. The first peak followed a record number of marriages in 1942, the second peak also follows a high number of marriages, second only to the peak of 1942.

The year was marked also by a new low record for infantile mortality, the figures being for the City 23.1 deaths per thousand births, and for Victoria 27.1. The figure for Greater Melbourne was 27.0, which is only slightly above the record low for Greater Melbourne which was 26.9 last year.

These figures are very gratifying indeed, particularly for the City which is a relatively unfavourable area of Greater Melbourne. As the Government Statist points out, however, figures for the separate municipalities are relatively small and are correspondingly liable to chance fluctuations. It was mentioned in last year's report that infantile mortality, being calculated by dividing the number of deaths of infants under one year by the number of births recorded during the year, tends to be given a slightly favourable bias when the birth rate is rising; but since nearly 75 per cent of the deaths occur in the first month of life the deceptively favourable bias can only be a small one. The encouraging infantile mortality rates achieved in recent years are almost certainly due to two main factors; on the one hand the increasingly scientific care given to young infants through the work of the infant welfare organisations, both official and voluntary, the schools, and the press, whose co-operation in this matter is highly appreciated, and has undoubtedly been of great value; and on the other hand the continuously favourable economic situation of recent years.

The general death-rate for Melbourne City was 11.5 deaths per thousand living, which is lower than any figure recorded in the last 15 years. As was mentioned last year, a rapid increase in the number of children tends to lower the general death-rate, and a favourable year from the point of view of infectious diseases and respiratory infections has the same effect.

CHILD WELFARE

The report by Dr. Hilda E. Kincaid, who is in charge of the Child Welfare Branch, gives details of the year's activities, and includes some interesting comments upon the health and condition of infants and pre-school children in the City. As judged by the course of the death-rates over recent years, their health is improving. Dr. Kincaid believes, also, that the condition of the teeth is improving, though there are no statistics which are adduced in support of this. The department has certain statistical records of the condition of a large sample of the pre-school population, which was prepared 10 years ago and published in the report of 1937, and it is hoped, within the coming year, to make an analysis of recent data for comparison with those of 10 years ago.

In any case, it is manifest that there is still a large amount of preventable disease or defect discoverable among the pre-school children of the City. Unhealthy conditions of the mouth, including dental caries, and of the throat are two examples of very prevalent defects which are, to some extent at least, preventable and remediable. Another example is to be found in the prevalence of "problem children" whose progress and development are greatly hindered by unwise handling or by unfortunate conditions in the home, many of which on investigation prove to be remediable.

It is obvious that these unhealthy conditions, so damaging to the whole future of the individual, can only be dealt with if facilities exist for regular supervision of the children by trained personnel, and it is generally agreed that attendance at satisfactory nursery schools or kindergartens is the best means through which this supervision can be maintained, apart from the other major advantages which the children derive from attendance there. It is just as important that a child should attend a kindergarten as that he should go to school later on. The recognition of this fact has led to further development of the kindergarten movement and of public interest therein, and it is deplorable that the shortage of materials and the prevailing economic and social confusion are delaying the provision of kindergartens. A large population, including many children, inhabits the central area of the metropolis where much of the housing is of poor quality and can only very gradually be improved and replaced by modern housing, and it is obvious that the provision of kindergartens for these children is as urgent a meaure of our housing as is the building of new houses for individual families.

The City of Melbourne is in a relatively fortunate position in that nearly one-third of its pre-school children is accommodated in kindergartens, but it is regrettable that no large extension of accommodation was accomplished during the year. The Roman Catholic Church, however, continued its program of improvements and opened an excellent small kindergarten at Gower Street, Kensington. The Methodist Church further improved its hall in Brougham Street, North Mel-

bourne, where a small kindergarten is conducted. The Council also approved of plans for the remodelling of the Kiosk at Fawkner Park, South Yarra, to serve as a health centre with a small kindergarten attached, and these alterations should be completed during 1947.

The most encouraging event of the year was the decision by the State Government to increase the annual grant per child in approved kindergartens from £4 to £6, together with a further development of the staff and activities of the Division of Maternal and Child Hygiene of the Department of Health, which has been re-housed in new and adequate premises at 538 Swanston Street, Carlton.

Another satisfactory feature of the year's work is that the dental work was recommenced at the dental centres at Kensington and Newry Street, North Carlton, where Mr. E. R. Reeve has been appointed to carry out the work. A preliminary report by Mr. Reeve is attached hereto.

The community, however, suffered an irreparable loss in the death of Dr. Vera Scantlebury Brown, who had been for 20 years in charge of the maternal and child welfare activities in the Department of Health. It is to her vision, enthusiasm and selfless devotion over the years that the community is in great part indebted for the progressive improvements in child care which have been noted in these annual reports.

INFECTIOUS DISEASES

Details of infectious disease and its control are to be found in the report of Dr. Hilda W. Bull. The incidence of infectious disease throughout the year was very low, the number of diphtheria cases being the smallest ever recorded in the City.

Immunisation against diphtheria was carried out as usual, and a total of 1453 persons received a full course of immunisation. Of these, 853 were babies or pre-school children. In view of the increase in the number of births in recent years (2033 in 1946), this number cannot be regarded with satisfaction. The low incidence of diphtheria which prevails at the present time is due, no doubt, in part to the continuous and gradual acceptance of immunisation in the metropolitan area over recent years, but it is probably, in the main, due to fluctuations in the prevalence and virulence of the germ, the cause of which is not understood. It is agreed that, in order to ensure that diphtheria will remain at a low level in a community, it is necessary that at least 75 per cent. of the pre-school children should have been immunised at about the time of the first birthday; and this has not been achieved, although the individuals, comprising nearly 50 per cent. of the toddlers, who have been immunised, are almost completely protected against the disease. It is very unsatisfactory that after 20 years of campaigning on the part of this and other municipalities, the proportion of children immunised has not risen to a level which is sufficient to ensure the virtual absence of the disease, an aim which has long since been achieved in many communities in North America. I believe that the situation can be improved only by a campaign organised by the State Department of Health on a broad basis. This has been urged for some time upon the State authorities, and it is most regrettable that no action has been taken.

The situation regarding tuberculosis has improved as a whole, and the death-rate from the disease in Victoria has fallen below the level achieved before the fall was interrupted by the small rise which took place during the war.

The situation regarding accommodation for sufferers, however, sufficient provision of which serves not only to provide suitable treatment for patients, but also to prevent the spread of infection, has unfortunately shown little or no improvement. It has not been possible to construct new buildings, and staff shortages have prevented the full use of existing accommodation. Cases urgently requiring bed accommodation and isolation are still, therefore, having to wait for many months before accommodation is available.

A definite public demand was made during the year for immunisation against whooping cough, and it was found necessary to hold regular sessions at the various health centres in order to meet this demand.

FOOD SUPPLIES

The attached report of the Chief Health Inspector, Mr. T. G. O. Jordan, gives details regarding the activities of his branch during the year, including those of the inspection of food premises, and the examination of foods.

Systematic inspection of all premises was carried out during the year, and a steady improvement has been noted in respect of the strict observance of the Regulations, as conditions regarding staff and the maintenance of supplies and equipment have become easier. The public demand for meals in cafes and eating houses, however, continues to be very heavy indeed, and proprietors generally have, in my opinion, done a good job in meeting this demand by supplying meals under reasonably good conditions and at reasonable prices.

The usual regular sampling of foodstuffs was carried out, the principal foodstuff examined being milk, of which 344 samples, out of a total of 456, were procured.

Of the total number of milk samples examined by chemical analysis, six, or 1.8 per cent, were found below standard. This figure is well below the average for the preceding five years. The average composition of the samples was again very good, the average percentage of fats being 4.3, which is the highest figure yet obtained.

The usual bacteriological examination of milk samples was also carried out, 236 samples having been examined at the Veterinary Research Institute, to the Director and staff of which we are again much indebted. The detailed results of these examinations are given in Mr. Jordan's report, and show that the slight improvement noted last year has been continued, though the condition of the milk as revealed by these tests is not yet as good as that which had been achieved before the outbreak of war. The standard reached at that time, however, could not be regarded as satisfactory, and it is to be regretted that no action has been taken to implement the recommendations of the Pasteurisation Act of 1943.

HOUSING

It is sad to relate that almost no progress has been made in the task of improving housing conditions in the City. The familiar reasons for this are briefly summarised in Mr. Jordan's report, which shows that fourteen dwellings only were demolished, whilst repairs were carried out under supervision of the department at 483 premises.

It is satisfactory that a group of the Council's officers is now engaged upon a detailed survey of the use to which all the premises in the City are now put, which may be regarded as one essential step preliminary to the preparation of a re-housing plan for the City; and also that with the increased staff of health inspectors it has been possible to institute systematic house-to-house inspections, though this inspection has, up to the present, been confined mainly to the external sanitation of the dwellings, the details being given in Mr. Jordan's report Complete examination of dwellings on a systematic scale can be carried out as soon as there is any prospect of justifying the labour entailed.

When the long desired and urgently necessary re-planning of the residential areas is at length undertaken, one difficulty to be met will be that of securing adequate open spaces for the provision of play grounds and community facilities, including kindergartens, and, it is to be hoped, new schools. Melbourne City itself at present includes a large area of parkland and open space and these extensive parks are commonly regarded as the lungs of the central areas of the metropolis. As such, they do not function at all effectively. Parts of the areas have been developed as gardens of very great beauty and have brought fame to the City. A very large proportion of the open spaces, however, have been merely open spaces, affording cricket and football grounds for many teams at the week-ends, and some grazing for sheep and horses. By no means all of the parkland is either beautiful in itself or suitable for playing space. One cannot look at the map of Melbourne without wishing that some of this parkland, particularly parts of the huge Royal Park, could be moved or transplanted, so to speak, into the more densely populated areas where no open space or playing facilities exist. And this could, indeed, be done! Certain parts of the existing parklands could be eliminated as such and developed as new housing estates, and in exchange, suitable areas in North Melbourne, Carlton and Kensington could be developed as open spaces. "Hands off the parks" is a slogan, the origin and repetition of which is quite comprenensible, but it would be deplorable if any rigid adherence thereto were to prevent rational steps in the real improvement of the amenities of the City.

GENERAL

Full details of the general sanitary work of the City are also included in Mr. Jordan's report. It is encouraging that the development of the use of insecticide D.D.T. should make it possible to reduce the prevalence of flies to negligible proportions, and to make an end of vermin, both of heads and of houses; also that as a result of the war a chemical substance has been discovered which appears to be extremely poisonous to rats and not harmful to human beings or to domestic animals.

I wish once more to express my very high appreciation of the work of the whole of the officers and staff of the Department.

Yours faithfully,

JOHN DALE, O.B.E., M.D., B.Sc. (Public Health)
Medical Officer of Health.

CHILD WELFARE

Health Department,
Town Hall Chambers, Melbourne.
14th March, 1947.

The Medical Officer of Health:

Sir,

I have the honour to report on the child welfare activities for the year 1946.

It has been a busy year for the Sisters, as the number of births was 2,033, the highest ever recorded. Busy Centres, however, are satisfactory when one gets good parent co-operation and can see many babies growing strong from week to week. Unco-operative parents need a great deal of time and attention in order to secure good results. Premature babies, of which there are always a fair percentage, also require a lot of a Sister's time and attention. On the whole, co-operation has been good, and general health and progress very satisfactory. The infant mortality rate, viz. 23.1, was the lowest ever recorded, and is considerably below the average, both for Victoria (27.1) and Greater Melbourne (27.0).

Unfortunately we cannot announce any increase in breast feeding—on the contrary there is a slight decrease. This is very much deplored. But, until the cause is found it appears inevitable, since most civilised communities attest the same. The possible unhappy results of diminution in breast feeding are, however, offset by an ever increasing knowledge and desire of all concerned, to make artificial feeding as good as it can be. As has been stated in earlier reports, with good artificial feeding neither morbidity nor mortality appear to increase.

Infectious diseases were mild in incidence throughout the year. In the early months there was an epidemic of poliomyelitis of only moderate severity. Since epidemiologists had indicated that the disease may gain entrance to the body through injured or raw mucous surfaces, doctors and hospitals decided to postpone any but extremely urgent tonsillectomies until the epidemic had died down. This meant that most of the children for whom tonsillectomy had been recommended were not listed for treatment until near the end of the year.

There were, unfortunately, four child deaths from tuberculosis and two from diphtheria. The two deaths from diphtheria were in children whose parents had not accepted immunization. Of the four children who died from tuberculosis, three had near relatives who were known to be affected, whilst in the fourth child there was a history suggestive of possible contact. Three of the tuberculosis deaths and the two diphtheria deaths were in the 2-6 age group. The other two deaths (making the total number 7) in this age group were due respectively to congenital amyotonia with a terminal bronchopneumonia and to septicaemia with bronchitis.

There was only one child death due to accident. This was in a child aged between one and two years.

The deaths from tuberculosis and diphtheria emphasize again the necessity for care against the spread of respiratory disease. The above are both killing diseases and are therefore dramatic enough to attract the attention of the public to care in their prevention, both by avoiding infection and by building up resistance against them. Other respiratory diseases, though not so dramatic do sometimes kill, and are always public nuisances and the cause of much temporary disability. They would not be communicated nearly as much as they are if individual care against personal communication were taken.

We are pleased to have again the services of a dentist for one session a week at Newry Street and Kensington Health Centres. Our thanks go gratefully to the Dental Hospital for the dental work given to our City children. There is still far too much dental caries in pre-school children, though it is considerably less than it was years ago. Improvement is presumably due to the years of constant supervision and education in the Health Centres, with regard to care of teeth. But caries will be still with us as long as delcterious habits persist, such as, the giving of dummies with malt, honey, etc., and the giving of biscuits, cakes, lollies, ice cream and so on, between meals. Surveys which I have done in the past with City children have shown the striking difference in the condition of the incisors and the molars respectively where these habits did or did not exist.

Skin diseases do not trouble us unduly. Impetigo, tinea or scabies crop up every here and there. Because of their contagious nature, all affected members of a family must be treated at once, otherwise re-infection will occur. The same may be said of worms in the alimentary canal, which is a comparatively common complaint. Transmission of eggs from one member of the family to another, or from playmate to playmate, is easy, and, frequently, no one knows that any member of the family or a playmate is infected until a request is made for a special observation.

Strabismus (squint) is found much more frequently than one would expect. Between 3 and 4 per cent of pre-school children are found to have some degree of squint. Early treatment of this may save eyes otherwise doomed to uselessness.

An astonishing number of children have large unhealthy tonsils and enlarged glands. Some have obvious adenoid enlargement as well. A few of these show slight deafness, which clears up after the tonsils and adenoids are removed. Why unhealthy tonsils are so common, I do not know, but, after many years of observation, I am convinced that they are a potential danger until they are removed.

A minor degree of knock-knees is frequently found, but, in the majority of cases it disappears as the child grows older. Cases of marked degree which do not show signs of improvement with age are always referred for orthopaedic treatment.

There is much talk recently of posture. We do not know enough about normal posture in a pre-school child to be dogmatic as to what is "good" and what is "bad" posture; but what we generally mean by "good" posture is an upright body with all opposing muscles equally toned against each other to keep the body in a firm, pleasantly erect position. When the body is lying prone for repose, the opposing muscles should be equally relaxed so that the body may lie with head, trunk and limbs in good position. Very few children have a "good" posture according to this definition. They do not stand erect. Child after child is found to have head hung forward, shoulders sagging forward, back "swayed," abdomen prominent, knees slightly bent or over-extended, and feet everted. This, we know, to be the posture assumed during fatigue, but for the unfatigued, we do not think it is a "good" posture, and it is certainly not a graceful one; and yet, such a posture, in either minor or major degree, is a very common one in our children. There may be two factors involved in this, viz., first, poor muscle development and second, poor muscle control. About the first—muscle development—I would have this to say, that, in my opinion, there is not enough scope given to babies and young children for good trunk development. Babies are wrapped up too much in cumbersome clothes and shawls and kept too much in prams and cots, in the months say between one and seven. After the first few weeks of life, when a baby is fully established as an independent being, it should be allowed full scope for activity, and, at about four months of age, should be put on the ground for periods each day—on its front as well as on its back, so that muscles of the arms and trunk will be used to push up the shoulders and head and upper trunk. In any position, the muscles of the legs will be used for kicking. Towards the end of the first year, play pens, which are so often used for conveniently limiting the baby's activities, prevent free crawling and the developmental trial and error experiments which every baby wants to make. Play pens not only discourage crawling, but tempt children to stand at an early age for periods beyond the normal. This may possibly increase eversion of the feet and be a potential factor in the production of knock-knees. Of the second point —muscle control—I would say this (though I may be wrong), that good muscle control should be gained not only by climbing, ball games, and all the various play activities which exercise all sorts of muscles, but also by teaching a child consciously to imitate a good posture and to learn the "feel" of it. The assumption of a good posture would quickly become unconscious and automatic, once a child had learned the "feel." Children's habits are formed largely by imitation. Parents and teachers who stand well, sit well, walk well and talk well, will most likely have children who do the same. Good posture during the long hours of rest should always be ensured by firm, non-sagging beds with lightweight, non-tight bedclothes. I read recently about a baby who was kept in a place sufficiently warm to need neither clothes nor pram nor cot from birth. At the time the article was written the baby was a fine, vigorous, ten-monther "going well." It would be interesting to see what its posture was like at four years. Possibly that of a graceful young animal with perfect muscle poise.

We are deeply appreciative of the privilege of sending children to Dr. Johnson's Psychiatric Clinic, through the Maternal & Child Hygiene Branch of the Public Health Department, of which the Clinic is a section. Children have psychiatric problems which are bound up with parent relationships or child-parent relationships, which themselves are frequently affected by social conditions such as, overcrowded houses sheltering incompatible families, and the lack of opportunity for full expression. We are fully conscious of such adverse social conditions, and deplore them.

Kindergartens cannot directly affect parent relationships, but they can give scope for physical, emotional, social and mental development of children. Dr. Johnson has reminded us of cases cited where the apparent or "naked" intelligence quotient rose as much as ten points after kindergarten opportunities had been introduced into dull institutions where conditions were such that the optimum results which the mental equipment of the children would have allowed had not been attained. It is for this reason that we welcome every new kindergarten or play group, however small. In fact, the more we deal with little children the more we feel that many small groups are better than fewer big ones; but, we would like to see enough for all.

We are pleased to report the re-opening of Tandarra as an Infant Welfare Training School. The Centre attached to this training school now supervises, as in pre-war times, the health of the babies in the East Melbourne area.

A large number of families has been housed by the State Accommodation Committee in converted and unconverted huts vacated by the military forces in the Camp Pell area. The nearest Centre to these families was the Abbotsford Street Centre, and new babies born in that area were invited to attend there. It was felt, however, that the large number of children being

brought to live there with their families necessitated a Baby and Pre-school Centre in their midst. Representations to this effect were made to the Acting Director of Infant, Maternal and Pre-School Child Welfare and to the State Accomodation Committee, and a Centre and a Sister have now been established there. The increasing number of toddlers will doubtless make the provision of some pre-school amenities imperative.

The two scholarships offered by the Council, to encourage girls to enter the Kindergarten Training College for training as kindergarten teachers to staff City kindergartens, attracted 25 applicants of good personality and ability. After a detailed personal interview by a small committee, of which I was a member, and the consideration of a general ability test and of an essay on some subject of social significance, a recommendation was made that two of the applicants be appointed. These girls show promise of great future usefulness.

The kindergartens in the City have continued their good work with pre-school children, but there have been no new ones opened during the year, and all have waiting lists. It is anticipated that a small kindergarten and play group will be formed to work with the Health Centre at South Yarra when the remodelling of the Kiosk there is complete.

Training Courses

Sisters doing their Infant Welfare course at the Presbyterian Babies Home attended our Centres for instruction and practice in the Centre work required for their course. Thirteen Sisters atended during the year.

Breast Feeding Records

Records of 1120 babies at six months of age showed 35 per cent to be breast-fed with only the addition of an educational diet, 11 per cent to be partially breast-fed with a complement of some milk mixture and educational diet, 54 per cent to be artificially fed entirely. Comparable figures for 1945 were respectively 36.5 per cent, 9.5 per cent and 54 per cent.

Milk and Accessory Foods

The figures given in brackets in the following records represent comparative figures for 1945. The amount of wet milk supplied through the Centres was 233 pints (378), for a tuberculous patient. The amount of dried milk supplied was 16,245 lbs. (18,628). 78 (60) gallons of an iron and vitamin mixture were distributed. The total number of recipients during 1946 was 455 (429), belonging to 391 (365) families. 75 (87) individuals, belonging to 58 (73) families, received help continuousiy through the whole year.

Lectures in Mothercraft

Lectures were given by Sister Shaw to senior girls in twelve schools (State and Roman Catholic). 344 girls sat for the examination. Of these, 180 gained certificates of merit, 150 passed the examination and 14 failed. Some of the girls who attended the classes did not sit for the examination.

TABLE SHOWING VOLUME OF HEALTH CENTRE WORK.

	Council Centres		Training Centres (V.B.H.C. & Tandarra)		Total	
	1945	1946	1945	1946	1945	1946
No. of new babies	1288	1461	279	281	1567	1742
No. of individual babies under 1 year	1223	1455	149	409	1372	1864
No. of individual babies between 1 and 2 years	1259	1220	67	132	1326	1352
Total No. of individuals under 2 years	2482	2615	216	541	2698	3156
Total attendance of babies under 2 years	29,205	29,510	3455	4224	32,660	33,734
No. of new expectant mothers	124	141	11	20	135	161
No. of individual expectant mothers	161	147	5	13	166	160
Total consultations with expectant mothers	363	374	14	26	377	400
Visits by Nurses to babies and mothers	4790	5340	601	939	5391	6279
No. of times babies referred to Doctor or Hospital	564	538	65	98	629	636
No. of children new to pre-school sessions	584	784	5	17	589	801
No. of individual pre-school children	1399	1633	20	41	1419	1674
Total attendances of pre-school children	5195	5800	92	141	5287	5941
Visits (or consultations apart from sessions) re pre-school children	2347	2725	—	0	2347	2725
No. referred to Dental Hospital	166	215	—	1	166	216
No. of pre-school children examined in their own Kindergartens	—	—	—	—	385	330

Maternal Mortality

We received notifications of two deaths connected with pregancy or labour, viz:—

Septicaemia, following abortion. (Aged 28, married, home duties.)
Post partum haemorrhage. (Aged 38, married, home duties.)

Infant Mortality

The number of births notified during the year was 2,033, which included 14 sets of twins and 1 set of triplets. The number of infant deaths notified was 47 (36 of them being neonatal). The infantile death rate, confirmed by the Government Statist, was therefore 23.1, the neonatal death rate being 17.7 and the death rate of those between one month and one year being 5.4.

INFANTILE DEATH RATES AND NUMBER OF BIRTHS

Year	Neonatal (under one month)	Between one month and one year	Total	No. of Births
1936	24.8	29.2	54.0	1131
1937	28.1	13.6	41.7	1176
1938	26.0	13.8	39.8	1156
1939	26.2	10.0	36.2	1105
1940	42.2	11.9	54.1	1257
1941	24.6	12.3	36.9	1303
1942	25.3	18.7	44.0	1499
1943	28.8	14.9	43.7	1804
1944	19.9	12.1	32.0	1655
1945	19.8	6.4	26.3	1709
1946	17.7	5.4	23.1	2033
Average for 10 years	26.7	14.2	40.9	1379

NEONATAL DEATHS

The causes of the 36 neonatal deaths were:—

Prematurity	12	Icterus gravis	1
Prematurity with atelectasis	4	Bronchopneumonia	4
Prematurity and bronchopneumonia	1	Bronchopneumonia and peritonitis	1
Prematurity and congenital heart and cerebral haemorrhage	1	Bronchopneumonia, cleft palate and mongolism	1
Atelectasis	4	Dextrocardia and malformation of heart	1
Cerebral haemorrhage	3	Suprarenal haemorrhage	1
Insufflation asphyxia	1	Anencephalus	1

Of the 36 babies who died in the neonatal period (i.e. under one month of age) there were 10, of whom no particulars could be obtained. The mothers had apparently lived for only a short time in the City and had moved away before they could be contacted after the infants' deaths. Of the 26 for whom particulars were available, it was found that 24 had had fairly regular antenatal attention. In all cases the fathers were employed. One child was ex-nuptial. Diet appeared to be satisfactory in all but two cases. Three were in twin births and two in triplet births. 13 were born in private hospitals, 7 in the Women's Hospital, 3 in the Queen Victoria Hospital and 3 in their own homes. 18 were in 1st children, 3 in 2nd children and 5 in 3rd, 4th, 5th and 6th children.

DEATHS BETWEEN ONE MONTH AND ONE YEAR OF AGE

The causes of the 11 deaths notified at this age were as follows:—

Prematurity	1	Bronchopneumonia	1
Prematurity, gastroenteritis and bronchopneumonia	1	Influenzal meningitis	2
Gastroenteritis	2	Mastoiditis	2
Gastroenteritis and pulmonary congestion	1	Miliary Tuberculosis	1

Only three of these babies attended the Centres. These three babies had shown satisfactory nutritional progress until the sudden onset of the illnesses which caused their deaths, viz. influenzal meningitis, mastoiditis, (associated with infantile eczema) and miliary tuberculosis. In the tuberculosis case the male parent came back from Sanatorium shortly before the beginning of the baby's illness. One other case (mastoiditis) was known to the Centres and had been home visited, but the baby had never been brought to the Centre. The remaining seven cases were not known to the Centres. The two cases of prematurity were to all intents neonatal deaths. One gastroenteritis case died in the Mental Hospital at Kew, one in the Child Welfare Home, and one had just moved into the City from an adjacent suburb. One of the influenzal meningitis cases was an inmate of a Home for mothers and babies, and the bronchopneumonia case had recently come from Sydney.

DEATHS BETWEEN ONE AND TWO YEARS OF AGE

The cause of the 4 deaths in children of this age were:—

Bronchopneumonia and congenital spastic disease This child attended Centre only occasionally as it was under the supervision of its own private doctor.

Bronchopneumonia and malnutrition This child also attended the Centre only occasionally, as it attended the Children's Hospital out-patient department frequently.

Meningococcal septicaemia Attended Centre only occasionally; many home visits were paid as the mothercraft was known to be unsatisfactory; the child was found dead in bed and an inquest was ordered.

Accidently run over by car Was known to Centre and had been home visited, but had not attended.

DEATHS IN CHILDREN BETWEEN TWO AND SIX YEARS OF AGE

The number of deaths in this age group, containing approximately 6,000 living children, was 7. The causes of these 7 deaths were:—

Diphtheria 2 Cases, each 2 years of age. Both known to the Centres but not co-operative and not immunized.

Bronchopneumonia and congenital amyotonia 2 years. Attended Centre occasionally during infancy, but was a regular patient of the Children's Hospital.

Pulmonary tuberculosis and tubercular meningitis 3 years. Was known to the Centres, but lived a good deal of its life away from the City. Family contacts known.

Tuberculosis and tubercular meningitis 4 years. Not known to the Centres. Family came to live in City when child was transferred from the Orthopaedic Hospital at Frankston to the Children's Hospital.

Tubercular meningitis and miliary tuberculosis, 4 years. Known at the Centres and some supervision maintained. Near relative infected.

Septicaemia and bronchitis 4 years. Had not attended the Centre. Lived in the City as a baby and had only returned thereto from another suburb.

ACKNOWLEDGMENTS

I wish to thank Dr. Bull for her continued supervision of the children at Pigdon Street, and also record appreciation of the excellent work of all the Sisters, and of the assistance so generously given by the voluntary helpers.

HILDA E. KINCAID, D.Sc. M.B., B.S.

INFECTIOUS DISEASES

Health Department,
Town Hall Chambers Melbourne.

The Medical Officer of Health: 22nd April, 1947.
Sir,

I have the honour to submit a report on the incidence and control of infectious diseases in the City of Melbourne for the year 1946.

DIPHTHERIA.

TABLE I.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Fatality per 100,000
1915-24 (average)	373	355	14	3.7	13
* 1925-34 (average)	230	239	6	2.9	7
1935	257	266	7	2.7	7
1936	241	259	5	2.0	5
1937	127	137	2	1.5	2
1938	103	111	1	1.0	1
1939	110	118	2	1.8	2
1940	100	106	2	2.0	2
1941	235	246	9	3.8	9
1942	56	59	1	1.8	1
1943	48	48	3	6.2	3
1944	71	71	3	4.2	3
1945	35	34	1	2.8	1
1946	34	32	2	6.0	2

* Immunization commenced in City.

The incidence of diphtheria is still very low, and except in a few isolated instances where local outbreaks have occured, this is true also for the metropolitan area and the State of Victoria.

Incidence.

The incidence of diphtheria is the lowest ever recorded in the City. There were 34 cases, 16 in males and 18 in females. In view of the overcrowding and bad hygiene in many closely populated areas, this is very gratifying, and it is necessary, under the existing conditions, to stress the continued need for immunisation, particularly in all babies aged from 9 - 12 months. If an epidemic is to be avoided, at least 70 per cent. of these children should be protected, and although the figures are improving they are still below the safety level.

Deaths.

There were two deaths. Both were girls, aged 2 years. One child had been ill only two days when medical aid was sought, and the doctor sent her to hospital immediately, but she died less than a week later from toxic myocarditis. In the case of the other child, there was some doubt about the date of onset, as she was feverish for some days, and the parents attributed this, and the ulcerated condition of the mouth, to teething. She died four days after admission to hospital. Neither child had been immunised. One family had refused, and the other had only recently come to the district.

	1942	1943	1944	1945	1946
Melbourne City	59	48	71	35	32
Nine adjacent municipilaties	101	64	69	85	37
Greater Melbourne	65	50	54	51	23
Whole State	68	67	62	45	24

TABLE II.

AGE INCIDENCE

AGE	MALES	FEMALES			Percentages
0-1 year	—	1			
1 year	2	0			
2 years	1	5	8 males	16	47
3 years	4	2	8 females		
4 years	1	0			
5 years	3	1			
6 years	1	1			
7 years	3	2	7 males	13	38
8 years	0	0	6 females		
9 years	0	2			
10 years	0	0			
11 years	0	1			
12 years	0	0	1 female	1	3
13 years	0	0			
14 years	0	0			
15 years and over	1	3	1 male 3 females	4	12
Totals	16 males	18 females.	34 cases.		

Institutional Cases.

There were 7 institutional cases, 5 in a hospital for children, one in a special hospital and one in a children's institution.

TABLE III.

NUMBER OF INSTITUTIONAL AND GENERAL CASES

Year	Total	Institutional	General
1931-1940 (Average for 10 years)	208	36	172
1941	235	15	220
1942	56	12	44
1943	48	21	27
1944	71	11	60
1945	35	3	32
1946	34	7	27

It will be seen by the above table that the figure of 27 cases in the general population equals the previously low record in 1943.

Diphtheria in Families.

In three instances more than one case occurred in a family. In two families two children were affected, and in another there were three cases, two children and the mother; and in this family the mother's young sister was found to be a "carrier."

Diphtheria in Individuals previously treated.

Two children who were said to have been immunised in South Australia contracted diphtheria. No details were available, and it is not known if either had a full course of treatment. There were no other cases, and no deaths among immunised children.

Swabs in Diphtheria Contacts.

One hundred and sixty-seven swabs were taken from contacts of diphtheria cases, of which 3 were positive.

Immunisation.

Immunisation was carried out in the schools, for children under ten years, and in Health Centres and institutions. In the previous year the schools were omitted, as the majority of children had been immunised in their pre-school years, and the proportion of Schick positive children had been shown, in previous years, to be low. Of the 3895 individuals presenting, 2222 were under six years of age, and 1336 were of school age.

Immunisation in Health Centres.

The figures for immunisation in Health Centres for the last five years are as follows:—

TABLE IV.

Year	Total Individuals	Immunized 1	2	3	Two or three Doses
1942	1139	76	452	47	499
1943	1198	85	638	—	638
1944	1116	79	668	—	668
1945	1224	74	864	—	864
1946	1683	72	853	—	853

Retests.

Of 1582 children presenting in the schools, 630 gave a history of previous immunisation. Of these, 95 per cent. were negative to the Schick test. Of 719 re-tests done in the Health Centres, 96 per cent. were negative to the Shick test, and most of the positive reactions were faint.

Examination of Throat Conditions in School Children.

Advantage was taken of the large number of children presenting in the schools to examine throat conditions. If these were regarded as unsatisfactory, notices were sent to the Head Teachers for distribution to the parents, urging them to seek advice and treatment.

Of 1503 children examined in the schools, 200 were found to have an unhealthy condition of the nose and throat, and 332 had already had their tonsils removed. Thus 35 per cent either need attention or have already been treated. There is a remarkable agreement between the figures year after year, the average figure indicating that roughly a third of the children examined are suffering from or have been treated for unhealthy tonsils.

TABLE V.

	Total Presenting	Schick Negative	Schick Positive	Not immunized	Not recorded	Immunized 1	Immunized 2
HEALTH CENTRES—							
Swanston Street, Carlton	211	76	5	2	7	10	115
Kensington	365	160	2	—	2	12	190
Abbotsford Street, North Melbourne	196	73	6	1	2	5	111
Town Hall, North Melbourne	272	97	3	4	10	25	140
The Oaks, South Yarra	119	50	—	—	4	3	55
Pigdon Street, North Carlton	193	102	7	3	3	6	76
Newry Street, North Carlton	327	131	2	—	9	11	166
Totals	1683	689	25	10	37	72	853
SCHOOLS & KINDERGARTENS—							
Lee Street	199	131	56	7	12	4	45
St. Mary's	69	32	24	5	13	4	16
Pidgon Street	146	112	28	4	6	4	21
St. John's	151	73	69	3	9	22	46
Holy Rosary	76	46	27	—	5	9	20
Boundary Road	49	31	17	—	1	2	15
Rathdown Street	51	29	20	2	2	4	14
Faraday Street	84	58	22	2	4	3	17
St. George's	64	38	19	2	7	1	16
Kensington	179	103	72	4	4	8	60
Flemington	117	76	34	3	7	9	22
St. Brendan's	124	67	51	3	6	11	37
King Street	78	57	18	1	3	4	13
Errol Street	122	86	27	2	9	3	22
St. Michael's	73	43	22	—	8	5	17
Totals	1582	980	506	38	96	93	381
HOSPITALS and INSTITUTIONS—							
Salvation Army Home	36	22	14	1	—	—	13
Children's Welfare Department	257	86	81	7	20	33	78
Royal Melbourne Hospital	160	94	66	6	—	1	59
Alfred Hospital	115	69	46	5	—	—	41
Children's Hospital	62	34	28	1	—	—	27
Totals	630	305	235	20	20	34	218
Grand Totals	3895	1974	766	68	153	199	1452

SCARLET FEVER

The number of cases of scarlet fever shows a small increase; but is still far below the average for the last ten years.

TABLE 1.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Deaths per 100,000
1931—1940 (average for 10 years)	165	176	0.8	0.5	0.8
1941	240	251	—	—	—
1942	152	159	—	—	-
1943	285	287	2	0.7	2
1944	229	228	—	—	—
1945	76	75	1	1.3	1
1946	91	86	—	—	—

Incidence.

There were 91 cases of scarlet fever in the City, 37 in males, and 54 in females. There were no deaths.

AGE INCIDENCE OF SCARLET FEVER.

TABLE 11.

Age	Male	Female			Percentages
0-1 year	—	—			
1 year	2	3	15 males	31	34%
2 years	4	3	16 females		
3 years	5	3			
4 years	4	7			
5 years	5	3			
6 years	4	4	16 males	29	32%
7 years	6	3	13 females		
8 years	1	2			
9 years	0	1			
10 years	1	0			
11 years	0	0	2 males	6	7%
12 years	0	1	4 females		
13 years	1	1			
14 years	0	2			
15 years and over	4	21	4 males 21 females	25	27%
Totals	37 males	54 females — 91 cases.			

The large number of cases among adult females is due in part to the prevalence of the disease among nursing trainees.

Scarlet Fever in Institutions.

Twelve cases of scarlet fever occurred in institutions, 4 in institutions for the care of children, and 8 in public hospitals. This is about the same number as for last year.

Swabs in Scarlet Fever contacts.

Sixty-two swabs were taken from the noses and throats of contacts with scarlet fever, of which twenty-nine showed the presence of haemolytic streptococci of significant groupings.

CEREBRO-SPINAL MENINGITIS

Cerebro-spinal meningitis has now reverted to its usual sporadic form, and the epidemic tendencies shown during the war years have almost disappeared.

There were only five cases notified. Two were in a brother and sister aged respectively 2 years and one month; another was in a baby boy aged one year. and the other two in adult women. There were no deaths, and the recovery of the children who were severely ill may be credited to the new methods of treatment so ably handled by the staff of the Children's Hospital.

TUBERCULOSIS

The figures in the following report have been supplied by Sister Roberts, who is in charge of the work among the sufferers from this disease in the City of Melbourne.

TABLE 1.

Year	Number of Cases
1939	311
1940	311
1941	398
1942	350
1943	393
1944	430
1945	389
1946	423

The total number of patients suffering from tuberculosis, who were under supervision on December 31st, 1946, was 423, an advance of 34 on the figure of 389 for 1945.

Of the 87 new cases, 24 males and 29 females were suffering from the pulmonary form of the disease, in 2 the disease was extra-pulmonary, and 32, 19 males and 13 females, were in sanatorium.

During the year other cases who were looked after either died or left the City, and the following table gives the details for all cases dealt with during the year:—

TABLE Ia

	New		Old		Totals
	Male	Female	Male	Female	
In City on 31/12/1946	26	29	155	157	367
In Sanatorium (including Repatriation)	19	13	14	10	56
Total in City	45	42	169	167	423
Died during year	28	6	11	13	58
Left Melbourne area	3	8	8	12	31
Address now unknown	—	—	5	4	9
Total	76	56	193	196	521

TABLE II.

AGE DISTRIBUTION OF CASES UNDER SUPERVISION AT 31/12/1946

Age	Male	Female	Totals
0-4 years	—	—	—
5-9 years	6	2	8
10-14 years	5	1	6
15-19 years	10	9	19
20-24 years	8	29	37
25-34 years	32	59	91
35-44 years	52	54	106
45-54 years	45	35	80
55-64 years	32	16	48
65 years and over	22	4	26
	2	—	2
	214	209	423

The figures for cases in females from 20—34 years, 88, compared to 40 in males, again illustrate the greater risk in younger women.

Deaths from Tuberculosis.

The number of deaths is again much lower than was the case during the war years. Fifty-three deaths were notified, compared with seventy-two in 1945, and although this figure is not quite complete at the time of writing this report, it appears to indicate that the higher figures of the war years have not been maintained, and that the general downward tendency of deaths from this disease is again in operation.

DEATHS FROM TUBERCULOSIS

TABLE III.

Year	No. of deaths
1925-1929 (average annual number)	84
1930-1934 (average annual number)	66
1935-1939 (average annual number)	57
1940-1944 (average annual number)	77
1945	72
1946	53

Of the 53 deaths, 36 were in males and 17 in females. Of these, 51 (35 in males and 16 in females) were due to pulmonary tuberculosis, and 2 to tuberculous meningitis (1 male. 1 female). 13 died in sanatoria, 29 in hospital and 11 in their own homes.

Fourteen have been known to the department for less than a year before death, ten between one and five years, seven between five and ten years, and twenty-two were not known to be tuberculous until after death.

As an indication of the rate of progress of the fatal cases, nine had been ill for less than a year, eleven between one and five years, twelve between five and ten years, and five for over ten years.

TABLE IV

AGE DISTRIBUTION OF FATAL CASES

Years	Male	Female	Totals
0-4 years	1	1	2
5-9 years	—	1	1
10-14 years	—	—	—
15-19 years	—	1	1
20-24 years	1	2	3
25-34 years	3	4	7
35-44 years	5	3	8
45-54 years	10	3	13
55-64 years	8	1	9
65 and over	6	1	7
Age unknown	2	—	2
Totals	36	17	53

NEW CASES.

Eighty-seven new cases which were notified to the department, forty-five in males and forty-two in females, were still in the Ciy at the end of the year. This is a slight rise from the figure of 68 in 1945; but still well below the previous figures of 144 for 1944, and 151 in 1943. The 22 cases who died before the disease had been diagnosed, and 11 who left the City during the year, make altogether 120 new cases on our list.

Sanatorium Admissions.

There was a rise in the number of cases admitted to sanatoria, but accommodation, particularly for women and young children, is still far below requirements, and new cases often have to be cared for at home for several months before a bed is available. Twenty-three males and twenty-four females, a total of forty-seven, were admitted to sanatoria during the year.

Sputum Tests.

Four hundred and twenty-three specimens of sputum were examined, of which 69 were positive, 42 in males and 27 in females.

Child Contacts.

Sixty-nine children under 14 years of age were living in contact with known cases, and although this is an improvement on the figure of 144 reported in 1945, it is still an alarming and dangerous state of affairs. Twenty-five children lived in fourteen homes in contact with cases known to have positive sputum, and nine of these were under five years of age.

In the previous five years, the figures for child contacts of cases of tuberculosis were as follows:—

Year	Number of Children in contact with notified cases	Number of Children where Positive Sputum
1941	169	48
1942	183	53
1943	196	60
1944	188	68
1945	144	55

TYPHOID FEVER

There were three cases of typhoid fever. One case of typhoid occurred in a male aged 46, and the two cases in females were aged 29 and 18. The case of typhoid fever in the male patient aged 46 occurred in a men's home, and the inquiry into the source of the infection was of considerable interest. He had left the institution seven days previously, and although he had been an inmate and had had most of his meals in the institution for some months previously, he was often allowed out on a leave pass, and his associations were numerous. The task of tracing the source of infection appeared formidable. It was ascertained that eleven inmates of the home had suffered from typhoid at some period in their lives, most from 20 to 50 years previously. It was decided to collect specimens of excreta, and to do Widal tests on these, and on members of the kitchen staff. I then saw Professor Rubbo, who was very interested, and urged that Widals be done on all the inmates, and if any of these proved significant, further investigations could be carried out. With the help of Dr. Ferris and Dr. Gray, of the Bacteriological Department, blood for Widals was taken from 115 inmates. The examination of this material entailed a great deal of work for the department, and we are indebted to them for their co-operation. It was found that one patient, who suffered from spastic paralysis and was unable to give any history of previous illness, had a blood reaction very suggestive of an active carrier condition, and it was arranged that he should be sent to the Royal Melbourne Hospital for further investigation. Examination of excreta, and the passing of a duodenal tube, revealed that he was a florid carrier. It was then ascertained that, about two months previously, he had suffered from an acute jaundice, and that the original patient had attended him during his illness. The last link in the chain was provided by the comparison of the type of organism in the two cases, which proved to be identical. The carrier was admitted to the Royal Melbourne Hospital for removal of the gall bladder, and when last heard of was doing very well. There were no more cases.

The case in the woman aged 18 also presented unusual features in that she was admitted to hospital with meningitis with no history of previous illness or malaise that could have indicated a typhoid infection, and it was only after extensive investigation by Dr. Kelsey of the Queen's Memorial Infectious Diseases Hospital, and Dr. Gardiner, Pathologist to the Royal Melbourne Hospital, that the true nature of the infection became apparent.

Another case of typhoid fever was in a woman of 28. It was apparently very mild, and except for the presence of the bacillus typhosus in the stools, all other tests were negative. Extensive inquiries among home and business contacts failed to reveal any likely source of infection.

Two cases of paratyphoid B infection were reported. One was in a man aged 54, admitted to the Infectious Diseases Hospital with anomalous symptoms; but agglutination tests were positive.

The other case of paratyphoid B was in a male child of nine months of age. This was treated at the Children's Hospital, where several cases of enteritis were proved, on investigation, to be para B infection.

No contact source was traced in either case, although tests were done and investigations made.

TYPHUS FEVER

There was one case of typhus fever in a male aged 55 who was a worker in a factory where tyres, said to have come from America and Japan, were being sorted. However, he had not worked for five weeks prior to his illness, and the possibility of rat infestation was investigated, but no decision was reached on the actual source of the infection.

PUERPERAL FEVER

Two cases of puerperal fever were notified in women, both aged 34 years. There was one death.

POLIOMYELITIS

There was no proved case of poliomyelitis occurring in the City area during 1946, though several cases were notified.

One was in an infant of seven months who was suspected of poliomyelitis, but died later of tuberculous meningitis.

Another case notified was in a discharged airman who had contracted the disease before coming to the City.

Two cases, one in a boy of 15 and another in a woman of 24, came from the country, and were already suffering from the disease when they arrived in the City.

One case, in a boy aged 4 years, appeared to be an abortive attack, and was not confirmed as being a definite case of poliomyelitis.

WHOOPING COUGH

Whooping cough appeared to be fairly prevalent during the year, though, as it is not a notifiable disease, we have no means of assessing the numbers accurately. There were no deaths, so this indicates, on the whole, that the disease was fairly mild.

Immunisation against whooping cough was again offered, and enthusiastically received by mothers. We regard it as urgent, chiefly in very young children, and the plan is to offer protection to children aged from six to twelve months twice during the year, so that all should have an opportunity of attending. Mothers are asked to report any contacts that their immunised children may have had with the disease, and whether they escaped infection, or, if they were infected, whether the disease was mild or severe.

Two hundred and eighty-eight children between six and eighteen months of age presented for treatment, 238 of whom received four doses, and most of the others three. A few children had intercurrent illnesses and were not able to complete the course.

ACKNOWLEDGMENTS

I wish to express my appreciation of the work of Sister Dossetor, my assistant in the infectious diseases section, of the nursing and clerical staffs, and also of the Head Teachers and Infant Mistresses for their sympathetic co-operation in the schools.

HILDA W. BULL, B.Sc., M.B., D.P.H.

REPORT OF CHIEF HEALTH INSPECTOR

Health Department,
Town Hall Chambers, Melbourne.
27th February, 1947.

The Medical Officer of Health:
Sir,

I have the honour to submit a report for the year 1946 upon the varied activities of the Department, which are governed by the provisions of the following Acts and Regulations.

ACTS AND REGULATIONS

Acts:

Health Acts, Slum Reclamation and Housing Acts, Local Government Act, Factories Acts, Police Offences Acts, Melbourne and Geelong Corporation Act, Goods Act, Births Notification Acts, Sale of Horseflesh Act.

Regulations under Health Act:

Registration, Rat Destruction, Hairdressers' Shops, Offensive Trades, Seizure (Claims), Eating House, Camping, General Sanitary, Analysis, Septic Tanks, Cattle Sale Yards, Infectious Diseases, Cleanliness (Food), Food and Drug Standards, Nightsoil, Smoke Abatement, Tobacco Packages, Stream Pollution, Fire Prevention, Building (Tent), Boarding and Lodging House.

Other Regulations:

Housing (Standard of Habitation) Regulations, Regulations under the Goods Act.

By-Laws and Regulations:

By-laws and Regulations of the Council relating to Places of Amusement, Public Buildings, Dancing Saloons, Fowl Yards, etc., are also administered by the Department.

HOUSING

Slum Reclamation and Housing Acts:

The question of sub-standard housing presents an almost insuperable problem, the solution of which would seem to depend entirely upon the speed with which the general shortage of dwellings throughout the country can be overtaken. Until this is done there is little hope of remedying the slum conditions now existing, with all their attendant discomforts and disadvantages. The most we can do, under the circumstances, is to rely upon the palliatives of patching and mending in an endeavour to maintain the properties in some semblance of habitability, and it is to this thankless task that our efforts have been directed through the year. Although there has been some slight improvement in the situation, labour and materials still remain in short supply, and this entails difficulty and delay in securing compliance with notices issued, and involves the staff in numerous inspections to determine progress and ensure that the work is carried out in accordance with the specification.

As agents for the Housing Commission, 728 inspections and re-inspections for work in progress have been carried out. Statutory reports to the Commission, dealing with houses, numbered 18. Of this number, twelve (12) were classified in list "A" for demolition and six (6) in list "B" for repairs to comply with the Regulations. In addition, 163 progress reports were submitted in connection with properties where notices had already been served.

Acting upon reports submitted during the year and in the latter part of 1945, the Commission declared 78 houses as unfit for human habitation, 69 of which were classified for demolition and 9 for repairs in compliance with the Regulatons. Upon receipt of the decisions of the Commission, notices were prepared and served on the owners of these properties. In those instances in which the owners having agreed to carry out urgent repairs, deferments were granted for two years.

An anomolous position has, however, arisen with regard to the system of deferments. Many of the owners fail to apply for this concession, and consequently they are not notified of the urgent repairs necessary. In these cases the demolition notices are not enforced because of the acute housing shortage, yet the owner continues to collect the rent of these worn-out premises without expending anything in effecting the obviously urgent repairs which are set out in our reports to the Commission. This has happened in fourteen instances during the year.

In compliance with notices issued, 6 premises have been demolished, 1 in South Yarra, 2 in Carlton and 3 in North Melbourne, and in one instance a house was completely renovated and repaired in compliance with the Regulations, whilst urgent repairs were completed at 9 premises, and work at 35 premises is in various stages of progress.

The total numbers of houses reported, of notices served and of compliances since the coming into operation of the Housing legislation in 1940 is shown in the following tables:—

TABLE "A"

HOUSES REPORTED

Demolition	529
Repairs	221

TABLE "B"

NOTICES SERVED

Demolition	429
Repairs	182

TABLE "C"

COMPLIANCE WITH NOTICES

Demolition	228
Repairs	58
Urgent repairs (where deferment granted)	104

The total number of demolitions of dwellings within the City during the year, including those demolished voluntarily for factory extensions, of which there were 8, was 14, making a total of 363 demolitions since 1940.

The re-housing of families is not now limited to those likely to be disturbed as a result of notices served on the owners of properties by the Commission, and consequently only a very restricted number of such families have been included. Out of a total number of 23 families, consisting of 46 adults and 54 children, re-housed in 1946, only two, comprising 4 adults and 3 children, came from premises that had been reported within the City area. The total number of families re-housed from Melbourne City since 1940 is 249, consisting of 350 adults and 387 children.

HEALTH ACTS

It is found more expedient to work under the Nuisance sections of the Health Act relative to housing, as it is necessary thereunder to give attention only to specific or more urgent defects, often the subject of a complaint, whereas reports to the Commission entail a detailed inspection of the premises and enumeration of all defects discovered. Notices in these cases are forwarded direct to the owner of the premises, and during the year 478 defects of houses such as leaking roofs, dampness in walls, defective sanitary fittings, drainage, etc., have been dealt with under the Health Act. Notices were served on the owners to effect such urgent repairs as were specified. Repairs and renovations resulting from current notices issued and those carried forward from the previous year have been effected in 474 instances and work was in progress at the other premises at the close of the year.

FOOD AND FOOD PREMISES

Regular attention has been paid by the staff to the important work of inspection of all premises where food is manufactured, prepared, stored or exposed for sale, and in addition to the supervision of food factories, hotels, boarding houses, grocers, greengrocers, butchers, delicatessen, smallgoods and confectionery shops, inspection was made of 494 eating houses and 282 premises where ice cream, cordials, etc. are manufactured, all of which have to be registered annually with the Council. These premises generally were found to be well maintained and in conformance with the Heath Acts.

The difficulty with regard to manpower problems and the employment of inexperienced staff has continued to diminish, and most businesses are regaining more or less their normal conditions.

Milk bars throughout the City have continued to claim our special attention both with regard to the general cleanliness of the premises, utensils and other equipment used in the preparation of drinks and particularly to the condition and cleansing of the glassware and crockery in use.

Samples of "drinking milk" were taken regularly at these premises, for chemical analysis, throughout the year, details of which are reported under the heading of "Food Sampling."

Hotel bars have also been continuously supervised for the cleansing of glasses and the colouring of waste beer, and in this connection a considerable improvement has been effected and maintained.

The position with regard to crockery, glassware and cutlery has shown some improvement, and caterers are finding less difficulty in replenishing their stocks. Every care has been taken during inspections to prevent the use of damaged crockery and glassware, and 217 pieces of crockery and 450 pieces of glassware were seized and destroyed at various establishments throughout the year.

Renovations and repairs were carried out at 95 food premises throughout the year, 52 at eating houses and 43 at other food premises.

FOOD SAMPLING

In conformity with the requirements of the Health Acts, regular and systematic collection of food samples for chemical and bacteriological examinations were made. Four hundred and fifty-six samples of foodstuffs were procured for chemical analysis, comprising butter 15 (12); cheese 12 (—); coffee 6 (2); coffee and chicory 5 (5); cream 6 (—); ice cream 4 (4); ices 1 (—); jam 9 (—); milk 344 (347); pepper 3 (—); sausage meat 39 (45); sauces 6 (6); vinegar 6 (5). The figures in brackets indicate the number of samples submitted in the previous year.

Of the total number of samples submitted, 11, or 2.4 per cent, failed to comply with the standard, whilst 4 samples failed to comply with the labelling requirements of the Food Standards Regulations. The number of samples below standard included six (6) milks, one (1) cream, one (1) jam and three (3) sausage meat. In addition to the samples of sausage meat which did not comply with the standard, one other failed to comply with the requirements of the Food Standards Regulations, the package not being labelled that it contained a preservative. In the sample of cream, a slight amount of oxidising substance was found, whilst one other cream sample failed to comply with the requirements of the Food Standards Regulations in that the package did not include the name and address of the packer. In the case of the jams, one (1) contained artificial colouring, which was not disclosed on the label, and the other contained 5 per cent of apple pulp. The sample of sauce contained artificial colouring and was not labelled in accordance with the Regulations.

The total number of milk samples procured during the year was 344, involving 89 vendors, consisting of 25 dairymen, 7 house trade dairies, and 57 milk bars. 338 samples, or 98.2 per cent of the total from all sources, complied with the standard. Six (6) samples, or 1.8 per cent, did not comply with the standard. The percentage of failures is the lowest recorded since 1939, and only on one other occasion, in 1928, was the percentage under 2 per cent.

Samples taken from milk carts in course of delivery numbered 273 and consisted of 150 from bulk supplies and 123 from "bottled" milk. 59 samples of "drinking" milk were obtained from City milk bars and 12 from house trade dairies.

Of the six (6) samples found below standard, three (3) were from City milk bars and three (3) from delivery carts, consisting of two (2) samples from bulk supplies and one (1) sample from "bottled" milk. One (1) sample from a milk bar proved to be an abnormal sample, but showed no evidence of adulteration. In all instances the deficiency was confined to fatty solids and obviously resulted from the faulty stirring of the milk before sale. In only three (3) instances was it found necessary to apply the Freezing Point Test to determine the presence of added water, and in each case the sample complied with the standard. It is pleasing to record that there has been no adulteration by the addition of added water in the samples this year. Proceedings were instituted in all cases with the exception of the abnormal sample, details of which are recorded in the report under the heading "Prosecutions."

An analysis of the figures shows the average quality of milk sample as follows:—

	Total Solids	Non-Fats	Fats
All Sources	13.39	9.09	4.30
Bulk Supplies	13.40	9.10	4.30
Bottled Samples	13.33	9.11	4.22
Milk Bars	13.32	9.00	4.32
House Trade Dairies	14.20	9.10	5.10

The following comparative table shows the average quality of milk per sample during the past 10 year period and also the percentage of samples which did not comply with the standard.

Year	No. of Samples	Total Solids	Non-Fats	Fats	Percentage of samples below standard
1937	265	13.11	8.90	4.21	2.6%
1938	269	13.11	8.97	4.14	5.2%
1939	275	13.38	9.18	4.20	1.09%
1940	279	13.24	8.98	4.26	3.2%
1941	281	13.27	9.03	4.24	2.8%
1942	274	13.18	9.00	4.18	5.8%
1943	305	13.12	8.92	4.20	6.6%
1944	331	13.15	8.93	4.22	4.6%
1945	347	13.10	8.97	4.13	6.9%
1946	344	13.39	9.09	4.30	1.8%

The following list gives particulars of the number of samples taken from each vendor or source, and the average quality of the milk supplied. It shows that the average quality of the milk is higher than has ever been attained since records have been kept, (as shown in the previous comparative table the average milk fat per sample was 4.30.)

Group "A" represents 15 dairymen (60 per cent of vendors concerned) from whom 7 or more samples were obtained. Group "B" represents 7 dairymen (28 per cent of vendors) whose supplies were sampled from 4 to 6 times during the year. Group "C" represents 3 dairymen (12 per cent of the vendors) from whom 3 or less samples were taken. Group "D" represents "House Trade Dairies" and Group "E" represents milk bars.

CHEMICAL ANALYSIS OF MILK 1946

SUMMARY OF AVERAGES

Delivery Carts

GROUP "A"

(Over six (6) samples)

Fifteen (15) vendors

No.	Average Quality per Sample: No. of Sample	Total Solids	Non-Fats	Fats	Remarks
1.	10	13.8	9.2	4.6	
2.	30	13.5	9.1	4.4	
3.	18	13.4	9.0	4.4	One sample below standard.
4.	12	13.4	9.0	4.4	
5.	22	13.5	9.2	4.3	
6.	16	13.4	9.1	4.3	
7.	14	13.4	9.2	4.2	
8.	20	13.3	9.1	4.2	
9.	8	13.3	9.1	4.2	
10.	8	13.3	9.1	4.2	
11.	10	13.2	9.1	4.1	
12.	27	13.1	9.0	4.1	
13.	9	13.1	9.0	4.1	
14.	10	13.1	9.2	3.9	
15.	16	13.1	9.2	3.9	Two samples below standard.

GROUP "B"

Over three (3) and under seven (7) samples

Seven (7) vendors

No.	Average Quality per Sample: No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1.	4	13.6	9.2	4.4	
2.	6	13.5	9.1	4.4	
3.	5	13.5	9.1	4.4	
4.	5	13.4	9.1	4.3	
5.	6	13.3	9.0	4.3	
6.	5	13.3	9.1	4.2	
7.	6	13.1	9.0	4.1	

GROUP "C"

(Three (3) samples and under)

Three (3) vendors

No.	Average Quality per Sample: No. of Samples	Total Solids	Non-Fats	Fats	Remarks
1.	2	13.4	9.0	4.4	
2.	2	13.6	9.3	4.3	
3.	2	12.9	8.9	4.0	

GROUP "D"

"House Trade Dairies"

Seven (7) vendors

No.	Average Quality per Sample: No. of Samples	Total Solids	Non-Fats	Fats	Remarks
7.	12	14.2	9.1	5.1	

GROUP "E"

57 Milk Bars

"Drinking Milk"

No.	Average Quality per Sample: No. of Samples	Total Solids	Non-Fats	Fats	Remarks
57.	59	13.3	9.0	4.3	Three samples below standard.

BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES

The customary practice of submitting samples of milk for bacteriological examination to the Veterinary Research Institute, Parkville, has again been carried out and 236 samples were examined. This is 27 less than in 1945, owing to the restricted use of gas at the laboratory. Samples were procured from the companies supplying milk under the Council's subsidised scheme and from carts in course of delivery in the City proper. Regular weekly samples were again obtained from a metropolitan hospital.

The results of the examinations show, on the whole, a maintenance of the improvement noted in last year's report, notwithstanding the fact that 83 samples, or 35 per cent of the total, were higher than the standard tentatively accepted as reasonable. Three (3) of these samples were found to be infected with the streptococci of mastitis, which is a decided improvement on the figures of former years relating to this disease, whilst six (6) showed evidence of excessive bacterial contamination.

Of the total samples submitted to the laboratory, 231 were from pasteurised milk supplies, all of which were subjected to the phosphatase test, with the following results, which indicate that careful attention is being given by the vendors to the actual operation of pasteurisation.

Source	No. of samples	Complied with the test	Percentage	Failed to comply	Percentage
All Sources	231	193	83.6%	38	16.4%
Subsidised Milk	77	76	98.7%	1	1.3%
Metropolitan Hospital	40	37	92.5%	3	7.5%
Carts in course of delivery and other sources	114	80	70.2%	34	29.8%

The attached Table "A" gives a comparative summary of the average counts of the different milks, which show a considerable improvement on those of last year.

Table "B" gives a comparative summary of the averages for the periods 1942-1946.

BACTERIOLOGICAL EXAMINATIONS OF MILK SAMPLES — 1946

TABLE "A"

COMPARATIVE SUMMARY OF AVERAGE COUNTS OF DIFFERENT MILKS

The Counts give the number of Germs per cubic centimetre of milk.

Vendor	No. of Samples	Microscopic Count Average (Logarithmic)	Microscopic Count % of samples under 1 million	Agar Plate Count Average (Logarithmic)	Agar Plate Count % of samples under 50,000	E. coli in 1 ml. Percentages	Remarks
All Sources	236	120,000	86.9%	34,000	67.7%	—72.0% +28.0%	83 letters 3 evidence s. mastitis 6 evidence gen. bac. contam.
Vendor "A" Pasteurised	39	85,000	94.9%	24,000	84.7%	—79.4% +20.6%	9 letters 1 evidence s. mastitis
Vendor "B" Pasteurised	38	44,000	97.3%	16,000	92.1%	—97.4% + 2.6%	4 letters 1 evidence gen. bac. contam.
Vendor "C" Pasteurised	40	89,000	90.0%	34,000	65.0%	—94.9% + 5.1%	14 letters 1 evidence s. mastitis
Metropolitan Hospital Milk carts in course of delivery and other sources.	119	250,000	79.8%	48,000	55.4%	—53.4% +46.6%	56 letters 1 evidence s. mastitis 5 evidence gen. bac. contam.

COMPARATIVE SUMMARY OF BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES FOR THE YEARS, 1942, 1943, 1944, 1945 and 1946.

TABLE "B"

	1. Microscopic Count Percentage of samples showing under 1,000,000 per c.c.					2. Living Germs Percentage of samples showing under 50,000 per c.c.					3 Percentage of Samples showing absence of E. coli in 1 ml.				
	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946
A. Milk bottled in City, pasteurised at country depot	95%	98%	97%	97%	95%	82%	67%	59%	79%	85%	74%	81%	86%	93%	79%
B. Milk bottled in City, pasteurised at country depot	83%	91%	86%	97%	97%	62%	73%	58%	75%	92%	64%	41%	63%	90%	97%
C. Milk delivered in bulk, pasteurised on farm	70%	95%	86%	81%	90%	52%	71%	9%	52%	65%	88%	88%	93%	97%	95%
D. Various milk carts	71%	82%	69%	75%	80%	57%	51%	29%	45%	55%	31%	50%	42%	60%	53%

Under present conditions a sample of milk may reasonably be expected to contain less than 1 million germs per cubic centimetre as shown by direct microscopic count (Column 1), less than 50,000 germs per cubic centimetre capable of growing at blood heat (Column 2), and absence of bacillus coli which is derived from filth, in one-hundredth part of a milli-litre (Column 3).

The Table shows what proportion of the samples attained this standard.

SWIMMING BATHS

As in former years, careful attention has been given to the condition of the water in the various swimming pools throughout the City. Twenty (20) samples of water were submitted for bacteriological examination during the warm weather period. The samples were all taken during the afternoon when the pools were in active use by large numbers of bathers. The result of these examinations, together with those for free chlorine in the water, indicate that the purification plants were being maintained generally in a satisfactory condition.

RAT DESTRUCTION

Constant attention has been given to this important work throughout the City proper; food premises, shops and warehouses having been regularly visited, and visits to the outer areas have been made as occasion demanded.

No abnormal conditions were noticed that would indicate any sickness in the rat population, and consequently no specimens were submitted for bacteriological examination.

The following table indicates the extent of the operations of the rat gang, which consists at the present moment of a foreman and four rat-catchers. In addition to the work shown in the table, 90,139 poison baits were prepared by the staff, of which 58, 855 were laid by the rat staff and 31,284 were supplied to ratepayers together with instructions as to how to use them.

Complaints attended to	Notices under Rat Regulations	Premises visited	No. of premises where structural work carried out	Total No. of Rodents destroyed
407	99	2,201	143	Rats 6,636 Mice 494 7,130

The species of rats caught and destroyed during the year is shown in the following table which gives a comparison for the 10 year period, and shows the differentiation between the sub-species of black rats.

Year	M. Rattus	M. Alex.	M. Norveg	Total
1937	892	2409	4816	8117
1938	957	2379	4708	8044
1939	1090	2065	4252	7407
1940	923	1620	3933	6576
1941	924	1510	4172	6606
1942	1034	1648	3298	5980
1943	951	2075	4743	7769
1944	546	1540	5933	8019
1945	499	1515	4975	6989
1946	698	1594	4344	6636

The species of the brown or sewer rat still maintains its predominance in our rat population, there being an excess of 2052 over the combined figures of the other species.

In furtherance of the research commenced last year, relative to the proportion of male and female rodents caught during a given period, the sexing of all rats destroyed has been again carried out and seems to further confound the idea that a majority of male rats fall to the temptation of baits and traps. The following table indicates a preponderance of 512 females over male rats caught.

SEX OF RATS CAUGHT IN THEIR SPECIES

M. Rattus		M. Alex.		M. Norveg.		Total	
M	F	M	F	M	F	M	F
328	370	720	874	2014	2330	3062	3574

REGISTRATIONS

Registrations effected under the Health Act during the year numbered 1658, which shows an increase of 169 in the five year period 1942-1946. Details, including transfers and other particulars, are shown in the following schedule:—

Premises	No. registered	No. not renewed	No. altns. repairs or renovations	No. new registrations	No. of transfers
Boarding Houses	754	10	36	28	87
Eating Houses	495	8	52	19	147
Ice Cream and Aerated Waters, etc.	282	6	16	33	60
Common Lodging Houses	6	—	—	—	—
Cattle Sale Yards	1	—	—	—	—
Premises where Eggs are Chilled	4	—	—	—	—
Offensive Trades	116	—	3	2	3
Totals	1658	24	107	82	297

Under the Council's By-Laws and Regulations, 32 dancing saloons and 4 places of pastime were also registered.

BOARDING HOUSES

Boarding and Lodging House registrations, totalling 760, show an increase of 18 for the year, which indicates the continued demand for accommodation. Regular inspections are made of these premises to ensure that the Regulations generally are being complied with and that there are no breaches with regard to overcrowding. This is done in a considerate way, having regard to the housing shortage and the fact that people must be housed. Notices to effect repairs and renovations were served on the owners of the properties and registered proprietors in 149 instances, and in compliance with these, improvements were effected at 136 premises.

EATING HOUSES

The number of Eating Houses registered indicates an increase of 11 when compared with the previous year. They now number 495.

TRANSFERS

Both with regard to boarding houses and eating houses, there seems to be a certain amount of competition to secure these apparently lucrative businesses, as is reflected in the increased number of transfers effected during the year, the number for boarding houses being 87 and for eating houses 147—numbers in excess of anything previously recorded.

Transfers of registrations call for strict surveillance of the premises in order to ensure both compliance with the Health Act with regard to the form of transfer and the instruction of new proprietors in all other aspects of the Regulations.

GAS APPLIANCES

By arrangement with the Metropolitan Gas Company, all applications for installation of gas cooking appliances in boarding, apartment and dwelling houses are referred to the department for approval before installation is effected. This enables us to control the situation of gas stoves more effectively, and prevents the fitting of appliances under conditions which might be contrary to the Boarding House and Standard of Habitation Regulations. During the year, 52 applications were dealt with, 43 were approved, whilst approval in 9 cases was refused because of unsuitable location.

OFFENSIVE TRADES

Five (5) applications were received under Section 82 of the Health Act 1928 for the consent of Council to the establishment of offensive trades. Consent was granted in four (4) instances, one (1) for flock manufacture and three (3) for fat rendering at butchers' shops. One (1) application for poultry killing, cleaning and dressing was refused. One (1) application to alter and extend at premises used for wool-scouring was consented to.

The administration of the Offensive Trades Regulations and the relevant sections of the Health Act involved 902 visits of inspection to registered premises, the condition of which was generally found to be satisfactory.

The trades associated with the disposal of dead stock and animal offal have shown some improvement, and it is hoped that this will be maintained and continued as normal conditions return.

The number of offensive trades registered for the year was 116, which are shown under the following classification, and which includes two new registrations:—

Bone boiling and milling, 2; Fat extracting or melting, 23; Fellmongery, woolscouring and woolwashing, 14; Flock, shoddy or mungo manufacture, 2; Glue or size factories, 1; Gut cleaning or scraping, 2; Knackers' Yards, 2; Manure Works, 2; Marine Stores, 10; Poultry killing, cleaning and dressing, 11; Rag picking or sorting, 2; Soap Works, 2; Store for skins, hides, hoofs, hair or bones, 46; Boiling down works, 1; Oil Boiling, 1; Fish Curing, 1; Abattoirs, 1; Refuse Destructor, 1; Tip, 1.

HAIRDRESSING SALOONS

Systematic and regular inspections were made of male and female hairdressers' establishments throughout the City areas, and the premises generally were found to be in a good condition and in compliance with the Health Act.

STABLES

Whilst these premises are kept under regular supervision to ensure their general cleanliness, special care is exercised during the summer months to combat the fly menace and ensure the regular removal of manure and the cleansing of manure pits.

A By-law governing the management and control of these premises is now in preparation.

SMOKE NUISANCE

The smoke and soot problem demands the continuous attention of the staff, and from the relatively few complaints received during the year, which numbered only 28, it may be assumed that this problem is fairly well under our control. Particular attention is paid to the regular sweeping of boarding house and cafe chimneys as a means of eliminating the soot and grit nuisance.

SANITARY SERVICES

Temporary sanitary services installed at buildings in course of erection and alteration, and military camps in the City numbered 53, involving approximately 2717 clearances. These figures show a considerable reduction, which is accounted for by the demobilisation of the troops and the reduced number of services involved at military establishments.

INVESTIGATIONS

A feature of departmental work is the service afforded to ratepayers in giving advice on the various phases of public health. This service, together with complaints received, involved approximately 1349 investigations throughout the year. An analysis of these figures shows that 407 dealt with the rat problem, 478 related to various phases of defective housing, 91 to foodstuffs and food premises, 99 to unsatisfactory garbage bins and refuse, 28 to smoke nuisance, 49 to yards and drainage of premises, 12 to vermin in dwellings, and the remainder, 185, are grouped as miscellaneous.

PUBLIC BUILDINGS

Supervision of all registered dancing saloons and places of pastime under the Council's By-laws and Regulations has been maintained, and, in conjunction with officers of the Public Health Department, theatres and other public buildings have been regularly inspected both day and night. As a result of this supervision it can be reported that the premises generally are being conducted in conformity with the By-laws and Regulations.

STAFF RE-ORGANISATION

Re-organisation of the staff was made possible by the appointment of additional inspectors. This was in accordance with the decision of Council to increase the staff by four, together with three replacements caused by retirement and resignations. Three officers, Messrs. H. P. Brown, E. Canterford and L. W. McDonald, were appointed from within the Service and four, Messrs. N. Hawthorn, R. Forrest, G. Little and S. B. Law, from outside the Service, all of whom, after receiving a preliminary training under the guidance of experienced officers, were allotted to specific areas. The City has now been divided into twelve districts, each under the control of an inspector. The areas have been laid out to allow of the regular and frequent supervision of all premises within their boundaries.

HOUSE TO HOUSE INSPECTIONS

With a full compliment of officers now operating it has been possible to institute a systematic house survey, on the block system, in each of these areas. The object of this survey, which will be continuous, is to ensure a regular supervision over the general condition of yards and out-buildings, condition of garbage bins, accumulation of rubbish, litter and foodscraps, condition of fowl yards, and rat infestation.

Since the inception of the survey in the latter months of the year, 2,125 premises have been inspected, defective or irregular garbage bins were found at 436 premises, or 20 per cent of the total; accumulation of rubbish in 57 instances, or 2 per cent; and rat infestation was detected at 87 premises, or 4 per cent of those inspected. Notices were issued in eacn case, and on subsequent inspection it was found that in the majority of instances they had been complied with.

SUMMARY OF ROUTINE WORK CARRIED OUT DURING 1946

No. of complaints received and attended to		1349
Re-inspections for compliance with notices		3644
Fire reports received and attended to		158
Inspections and re-inspections under Slum Reclamation and Housing Acts		728
Reports forwarded to Housing Commission		181
Notices served under Slum Reclamation and Housing Acts		78
Specifications forwarded to owners under Slum Reclamation and Housing Acts		6
Inspections and re-inspections made under Health Act		1013
No. of specifications forwarded to owners and proprietors under Health Act		439
Inspections of boarding and lodging houses		2644
Inspections of hotel bars		898
Inspections of eating houses		6480
Inspections of ice cream and aerated water premises		2341
Inspections of factories (where food is manufactured)		1060
Inspections of other food premises		10828
Seizures of foodstuffs (consisting of Sauerkraut, Jam, Dried Apples, Raisins, Sultanas, Salted Fish, and Corned Beef and Cereal)		7
Inspections of public buildings (day and evening)		708
Inspections of hairdressing saloons		507
Inspections of offensive trades and cattle sale yards		902
Inspections of vacant land		83
Inspections of yards and refuse		18503
Inspections of stables and manure bins		1348
Interviews with property owners, architects, contractors, etc.		6129
Inspections by female staff of premises where females employed		252
Investigations of infectious disease and instructions to householders (scarlet fever 80, diphtheria 32, other infectious diseases 20)		132
Investigation of tuberculosis and domiciliary visits		1410
Visits to Health Centres (78) and midwives (129)		207
Returns of infectious disease furnished to Public Health Department		191
Notifications of infectious disease forwarded to Headmasters		48
Returns of registrations and transfers forwarded to Public Health Department		379
No. of notices received under Births Notification Acts		2033
Plans of new buildings and alterations examined		107
Notices served to secure the abatement of Nuisances:—		
(a) Defective sanitary conveniences	157	
(b) Defective drainage	55	
(c) Dirty premises and yards	50	
(d) Accumulation of refuse and rubbish	78	
(e) Defective and irregular garbage bins	281	
(f) Dirty and defective stables	7	
(g) Other nuisances	204	
		832
Matters referred to other Departments—City Engineer 39; Building Surveyor 36; Dog Inspector 4		79
Premises within the City registered by Factories Dept.—Factories 2739, Shops 3811		6550

NEW LEGISLATION

Amending Food and Drug Standards Regulations 1946 (re spraying of fruit with D.D.T.)
Meat Transport Regulations (Extending date of operation).
Poison Regulations 1946 (Re labelling of D.D.T.)
Amending Food and Drug Standards Regulations 1946 (Re D.D.T.)

PROSECUTIONS

Proceedings were instituted against 37 offenders for contravention of the Health Acts and Regulations made thereunder. In six (6) instances, affecting employees, the cases were withdrawn. The case for failing to colour waste beer, mentioned as pending in the last report, was dismissed with £4/4/0 costs against the Council. In one instance, a licensee, who was prosecuted for failing to colour waste beer and to properly wash glasses, appealed against his conviction at the Court of Petty Sessions. The appeal was unsuccessful, the case being dismissed with £20/11/6 costs against the appellant. In 31 instances the defendants were convicted and fined as follows:—

Nature of Offence	No. of Cases	Fines	Costs
Selling adulterated sausage meat	3	£9 0 0	£7 11 6
Failing to label package of food containing preservative (Sausage Meat)	1	0 10 0	2 19 0
Failing to label package of cream in accordance with Regulations	1	1 0 0	4 4 0
Selling adulterated milk	5	13 0 0	20 6 6
Smoking on food premises	4	10 0 0	1 1 0
Failing to properly wash glasses	2	3 0 0	—
Failing to colour waste beer	3	8 0 0	37 16 0
Failing to keep premises clean	7	18 0 0	15 4 0
Failing to prevent ingress and egress of rats	1	3 0 0	—
Allowing foodstuffs in contact with printed matter	1	3 0 0	—
Failing to display copy of Food Regulations	1	1 0 0	—
Failing to provide proper garbage bins	1	3 0 0	—
Obstructing an officer in the execution of his duty	1	5 0 0	2 2 0
Totals	31	£77 10 0	£91 4 6

GENERAL

Messrs. W. Thomson, who was acting in a temporary capacity, and O. S. Beckwith resigned from the service early in the year.

Notwithstanding the cessation of hostilities, many difficulties are still being experienced in administration. The staff has again demonstrated its capacity and willingness to discharge its duties despite adverse conditions, and have been largely responsible for the fact that the sanitary condition of the City, having regard to all the circumstances, has been generally satisfactory.

I wish to record my sincere appreciation of the loyal co-operation and assistance rendered by all the staff, inspectorial, clerical and out-door, during the year.

THOS. G. O. JORDAN, M.R.S.I.

Chief Health Inspector.

REPORT OF CITY ANALYSTS

Melbourne Analytical Laboratory,
27 William Street, Melbourne,
3rd January, 1947.

The Chairman, Health Committee.

City of Melbourne.

Sir,

We have the honour to report that during the year ended 31st December, 1946, we have received four hundred and fifty-eight (458) samples of foods and drugs. The following is a brief summary of the results obtained from the Analytical Examinations:—

Milk—344 samples	338 complied with the standard. 1 did not comply in its total solids, and fatty solids (milk fats); 1 did not comply in its solids not fat, and Freezing Point (Hortvet); 3 did not comply in their fatty solids (milk fats): 1 did not comply in its solids not fat.
Cheese—12 samples	Complied with the standard.
Butter—17 samples	Complied with the standard.
Coffee—6 samples	Complied with the standard.
Coffee and Chicory—5 samples	Complied with the standard.
Pepper—3 samples	Complied with the standard.
Vinegar—6 samples	Complied with the standard.
Ice Cream—4 samples	Complied with the standard.
Cream—6 samples	4 complied with the standard. No. 4 was found to have a trace of added oxidising substance; and No. 5 not more than a trace of gelatine.
Jam—9 samples	7 complied with the standard. 1 below in its amount of soluble solids, and containing coal-tar colouring. 1 contained artifical (coal-tar) colouring and not less than 5 per cent apple pulp.
Tomato sauce—5 samples	No adulteration was detected.
Sauce—1 sample	Contained artificial (coal-tar) colouring.
Sausage meat—39 samples	5 no sulphur dioxide was detected. 2 contained a trace, others contained respectively 0.4, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.0, 1.0, 1.0, 1.1, 1.2, 1.3, 1.5, 1.6, 1.7, 2.1, 2.1, 2.2, 2.2, 2.2, 2.4, 2.8, 3.0, 3.1, 3.5, 3.5, 3.5, 4.1, 6.8, and 11.8 grains to the pound. No boric acid, saltpetre, nitrite or excess starch was detected in the samples.
Ices—1 sample	No adulteration was detected.

Yours obediently,
(Signed) DUNN, SON AND STONE.
(Analysts to the City of Melbourne)

REPORT OF DENTAL OFFICER

13 McKinley Avenue, Malvern, S.E.4.

17th March, 1947.

The Medical Officer of Health.

Sir,

I beg to submit the report of activities at the Dental Sections of the Kensington Baby Health Centre and the Newry Street Health Centre for the period of six months commencing September 9th, 1946.

	Newry Street Health Centre	Kensington Health Centre
No. of children (1 to 5 years) examined	107	159
No. of separate visits	203	254
Simple treatments: Silver nitrate, solium fluoride applications, teeth cleaning, instructions to mothers	129	135
Fillings	71	44
Extractions	25	28
Referred to Dental Hospital for general anaesthetic	5	2

Some perfect sets of deciduous teeth in the 2 and 3 year age group were seen, but too many mouths are deformed by thumb and finger sucking, and to a lesser extent, the prolonged use of the comforter, were encountered.

The dental service is availed of enthusiastically by the young mothers, and, undoubtedly, the value of very early inspection and treatment of children's mouths is very great. The preventive measures available save untold trouble and loss of tooth structure when instituted early enough.

Emphasis is placed on educating the children not to fear dental treatment, and great pains are taken to make treatment as little distasteful as possible.

I wish to thank Sisters Pannell and Price of Kensington, and Sisters Baglin and Elson of Newry Street, for their helpful co-operation.

E. R. REEVE, B.D.Sc., L.D.S.

REPORT OF BACTERIOLOGICAL EXAMINATIONS

The University of Melbourne,
Bacteriology Department,
Melbourne, N.3.,

24th Feburary, 1947.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory, Melbourne University, for the year 1946.

Diphtheria—A total of 177 swabs from case contacts were examined and from 3 diphtheria organisms were isolated.

Scarlet Fever—A total of 68 swabs were cultured and from 32 haemolytic streptococci were isolated.

Water—25 samples from swimming baths were examined and reported for total count of bacteria and B. Coli content. These tests indicated the efficiency of the chlorination process used.

Gastroenteritis—3 blood samples and 5 faeces specimens were examined from contacts of infantile gastroenteritis due to Salmonella organisms.

(Signed) A. A. FERRIS,
Senior Bacteriologist.