

ANNUAL REPORT

OF

Medical Officer of Health

T. W. MORAN,

LIMERICK :

1934

COUNTY BOROUGH OF LIMERICK.

ANNUAL REPORT

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Medical Officer of Health

FOR THE YEAR 1933.

T. W. MORAN,

School Medical Officer, Tuberculosis Officer,

Acting Medical Superintendent Officer of Health.

LIMERICK :

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1934

Public Health Department,

Atheneum Buildings,

Limerick, July, 1934.

To the Mayor, Aldermen, and Councillors of the
County Borough of Limerick.

A Chairde,

I beg to submit my Annual Report on the health of the population and on the sanitary condition of the city for the year 1933.

The city has passed through an unfavourable year in regard to the general health of the population. The exceptionally dry year, together with unchanged sanitary conditions, have jointly contributed to a higher susceptibility to disease among the population.

I wish to express my thanks to Dr. Roche-Kelly, Medical Officer to the Maternity and Child Welfare Centre, and to Mr. J. J. Dundon, Chief Veterinary Officer, for their respective contributions to this Report; and I would also like to express my appreciation of the services performed by Miss Nolan, Public Health Nurse, and by Miss Peppard, Clerk to the Public Health Department, throughout a busy year.

Mise, le meas,

T. W. MORAN.

OFFICERS OF THE PUBLIC HEALTH DEPARTMENT.

Acting Medical Superintendent Officer of Health:
School Medical Officer: Tuberculosis Officer:

T. W. MORAN, M.B., B.Ch., B.A.O., D.P.H.

Maternity and Child Welfare Officer (part-time):

H. G. ROCHE-KELLY, M.B., B.Ch., B.A.O., D.P.H.

Chief Veterinary Officer:

JOHN J. DUNDON, M.R.C.V.S.

Veterinary Officers:

F. CROWNE, M.R.C.V.S. | P. McDONNELL, M.R.C.V.S.

P. HARTNETT, M.R.C.V.S. | P. F. NOLAN, M.R.C.V.S.

Public Health Nurse:

MISS ANGELA NOLAN.

Inspector of Food and Drugs:

PATRICK J. FORREST, H. C.

Sanitary Inspectors:

SOLOMON FROST. BENJAMIN FITZGIBBON.

Acting Secretary to the Public Health Committee:

M. F. DONNELLAN.

Clerk to the Public Health Department:

MISS NORA PEPPARD.

VITAL STATISTICS.

I. Population—39,448 Census of 1926.)

II. BIRTHS.—There were 1,075 births registered during the year, of which 936 belonged to the city. The latter number is equivalent to a rate of 24.2 per 1,000 of the population, and shows a decline from the birth rate for 1932. It nevertheless approximates the average birth rate for the Twelve Principal Towns, which is 24.7.

BIRTH RATE—10 YEARS ENDING 1933.

1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
27.9	27.5	26.1	26.0	27.1	28.6	27.7	24.9	25.8	24.2

III. DEATHS.—There were 706 deaths during the year compared with 618 during the previous year. The number of deaths is equivalent to 47.9 per 1,000 of the population, and compares unfavourably with the average death rate for the Twelve Principal Towns, which is 15.2.

DEATH RATE—10 YEARS ENDING 1933.

1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
14.7	15.0	18.7	15.5	16.1	16.3	16.1	16.1	15.7	17.9

From the prevalence of Diphtheria during the year it might be inferred that the increase in the death rate is due largely to this disease. The contribution, however, to the general death rate caused by this disease represents 0.9 per 1,000 of the population.

DEATH RATE for the TWELVE PRINCIPAL TOWNS, YEAR 1933

Limerick County Borough	17.9	Average Death
City of Dublin	15.3	Rate for the
Dun Laoghaire Borough	14.5	Twelve
Cork County Borough	14.9	Principal
Waterford County Borough	14.2	Towns,
Galway Urban District	14.8	15.2
Dundalk Urban District	11.1	
Drogheda Urban District	17.2	
Wexford Urban District	14.0	
Sligo Urban District	15.1	
Trillick Urban District	12.2	
Kilkenny Urban District	18.7	

INFANTILE MORTALITY.—The number of deaths of infants under one year of age was 126, which is equivalent to a rate of 132 per 1,000 births. This is a greatly increased rate as compared with the previous year. There was an increased number of deaths caused by Whooping Cough, Diphtheria, and by Diarrhoea and Enteritis in children under two years of age, but since particulars of deaths registered do not reach this Department it is not possible to state definitely the number of deaths among children under one year of age caused by these diseases. The following table shows the infantile mortality rate since 1908 and the subsequent table shows the rate for the present year compared with that of other County Boroughs.

INFANTILE MORTALITY RATE from 1908—1933.

Year	Births	Deaths under per 1,000 Births	Year	Births	Deaths under per 1,000 Births
1908	1071	135	1921	657	102
1909	1010	117	1922	1008	109
1910	1003	125	1923	1052	135
1911	1053	115	1924	1092	98
1912	976	148	1925	1060	97
1913	1046	86	1926	1036	151
1914	1033	121	1927	1032	108
1915	888	100	1928	1071	129
1916	851	95	1929	1131	132
1917	772	101	1930	1096	125
1918	801	91	1931	981	118
1919	940	110	1932	1018	93
1920	647	114	1933	956	126

INFANTILE MORTALITY RATES for the COUNTY BOROUGHS, YEAR 1933.

City of Dublin	83.
Cork County Borough	89.
Limerick County Borough	132.
Waterford County Borough	102.

CANCER.—There has been a reduction in the number of deaths attributed to this disease, the number being 45 as compared with 49 for the year 1932.

PHTHISIS DEATH RATE.—The number of deaths recorded as due to pulmonary tuberculosis was 45 as compared with 32 for the preceding year which is equivalent to a rate of 1.4 and 0.9 respectively per 1,000 of the population. The recent rate compares more closely with the average rate for the Twelve Principal Towns than did the rate for the previous year.

MATERNAL MORTALITY—Deaths from puerperal conditions were 6 as compared with 7 for the previous year. Of the 6 deaths recorded, 4 were certified as due to Puerperal Sepsis, while there were none certified as due to this cause in the previous year.

THE INFECTIOUS DISEASE RATE has increased from 1.2 per 1,000 of the population last year to 2.2 per 1,000 during the present year. There was, fortunately, no death due to Measles and only one death due to Scarlatina, while two deaths due to Typhoid Fever was the same number as during the previous year. There has been an increase in the number of deaths due to Whooping Cough, Diphtheria, and to Diarrhoea and Enteritis in children under two years of age.

The following table is a schedule of the Principal Epidemic diseases showing the number of deaths attributed to these diseases since 1931:—

	Typhoid Fever	Typhus	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Dysentery	Diarrhoea & Enteritis	Children under 2 yrs	Total
1931	1	—	—	24	1	—	7	2	32	32	67
1932	2	—	—	1	5	2	22	—	16	16	48
1933	2	—	—	—	1	15	37	—	32	32	87

There were 33 deaths due to Influenza during the year.

NOTIFICATION OF INFECTIOUS DISEASE.

The incidence of infectious disease in the city was greatly increased by the continuance of the Diphtheria Epidemic, and the following is a table showing the number of notifications of infectious disease received during the year and during the preceding year:—

	1932	1933
Typhoid Fever	3	13
Diphtheria	343	445
Scarlet Fever	233	233
Erysipelas	13	10
Pneumonia, Influenzal	4	12
Pneumonia (other forms)	13	31
Puerperal Sepsis	5	4

DIPHTHERIA—There was an increase of 105 cases notified during the year as compared with the year 1932, and the disease was prevalent in all parts of the city.

The ages at which persons were affected are as follows:—

Age Groups	Males	Females
0—1	1	2
1—5	67	70
5—10	69	108
10—15	31	45
15—20	3	12
20 and over	7	30
Total	178	267

According as notifications were received, the contacts with the disease were excluded from school for a period of fourteen days, and by this means a considerable number of children who were incubating the disease were kept out of the schools. With a view to limiting the spread of infection in the schools, the School Meals were supplied as from May, 1933, in half pint glass bottles which were sterilized each day. It is to be feared, however, that infection may have entered the schools through children discharged from the Fever Hospital returning to school too early. There was no system in existence of reporting the time of discharge of the patients from hospital, nor was there any control exercised over the time at which they might return to school. This was an omission in Public Health routine occasioned by a shortage of staff. It was strongly advised during the year that children should spend a suitable period in a convalescent building separate from the Fever Hospital before being sent to their homes, which, in numerous instances, were situated in overcrowded lanes. In the latter surroundings a child often associates with upwards of thirty or forty children within twenty minutes of his or her release from Hospital. The cost of providing hospital treatment and isolation imposed a heavy strain on the financial resources of the Board of Health and Public Assistance, and with a view to reducing this expenditure an Immunisation Scheme was approved of in July, 1933.

Immunisation was undertaken with the additional assistance of a part-time Medical Officer and a part-time Nurse, there being only one whole-time Public Health Nurse in the employment of the Corporation throughout the year. The routine duties of the School Medical Service and Tuberculosis Schemes were, during this period, as far as possible suspended.

As an immunising agent a serum requiring three doses at intervals of a week was employed, since time or opportunity did not permit of a preliminary susceptibility test being carried out, as is desirable in the case of some of the more active immunising agents.

The number of children who received three inoculations was 1,928 during the six months the Scheme was in operation, and the following table is a classification of the ages at which the children were treated:—

COURSES OF THREE INOCULATIONS:—

	Boys	Girls	Total
0—5 years	314	383	697
5—10 years	360	473	833
10—15 years	156	242	398
	830	1098	1928

In addition, the treatment of the following children remains incomplete at the end of the year:—

	Boys	Girls
Two Inoculations	86	169
One Inoculation	74	91

The best results of immunisation are obtained among children of the 0—5 years age group since they are protected against the heavy incidence of Diphtheria which occurs between the ages of 1 and 10 years. As the development and expansion of the Infant Welfare Centre proceeds it is hoped to come in contact with larger numbers of pre-school children and to induce their parents to have them immunised against Diphtheria.

During the past two years in which the weather has been exceptionally dry there has been, along with the prevalence of Diphtheria, an unusually large number of affections of the throat other than Diphtheritic. A likely reason for this happening is the fact that many of the sewers are of old mason built structure which require a heavy rainfall for their proper cleansing, and further, there are connected with these sewers numerous house drains which are leaking and defective, and which allow irritating sewer gasses to continually permeate the air of the dwellings. The sewers themselves are not ventilated other than by this means and through untrapped street gulleys.

TABLE SHOWING THE NUMBER OF CASES AND THE NUMBER OF DEATHS FROM DIPHTHERIA, YEARS 1919-'33.

	Cases Notified	Deaths	Deaths per 100 Cases
1919	13	5	38.4
1920	52	2	3.8
1921	155	41	26.4
1922	80	3	3.7
1923	53	11	20.7
1924	9	4	44.4
1925	28	7	25.0
1926	47	4	8.5
1927	28	3	34.7
1928	22	2	9.0
1929	28	5	17.8
1930	15	4	26.6
1931	68	7	10.3
1932	342	22	6.4
1933	445	37	8.3

SCHOOL MEDICAL SERVICE.

The Routine Medical Inspection of school children was interrupted at various times during the year, but the School Clinic was maintained throughout the year.

There was a total of 2,072 children examined, and of 1,411 children examined by routine examination 950 were found to be in good health and 461 to suffer from one or more defects.

The following is a summary of the defects found, tabulated according to the Schedule of the Medical Treatment of Children Under:—

NAME	No.	Nutrition	Cleanliness and Condition of	Noise and Throat	External Eye Disease	Vision	Hearing	Speech	Mental Condition	Heart and Circulation	Lungs	Nervous System	Tuberculosis	Rickets	Hernia	Deformities, Spinal Disease, etc.	Infectious or Contagious Disease	Other Disease or Defect
BOYS—Routine Examination	944	34	7	165	111	11	11	11	1	1	1	1	1	1	1	1	1	1
Special Examination	295		9	141	37	28	29	8	1	4	15	2	1	4	5	1	6	4
Girls—Routine Examination	467	37	2	78	47	6	78	8	1	4	6	1	1	6	1	1	1	2
Special Examination	866		14	133	67	50	34	6	8	17	15	8	1	9	1	1	1	17
2072																		

Dental defects were more frequent than are recorded, and the recorded cases are those of dental decay and oral sepsis requiring urgent treatment. There is a necessity for a general anæsthetic in dealing with some of these cases and efforts were made during the year towards securing that a general anæsthetic would be made available under the Scheme.

There has been a marked improvement in the general nutrition of the children, and it is largely attributable to the School Meals Scheme, since many of the children heretofore only consumed a very small quantity of milk used in tea. The milk is supplied in the schools in half pint bottles and is of a high standard of purity and quality (Grade A.) There are still a small number of children whose diet is restricted both as regards quantity and quality of food, and to these children recorded in the foregoing Schedule an allowance of milk from the National Free Milk Grant has been recommended.

The following is a summary of the number of children who received treatment provided by the Scheme:—

External Eye Disease	76
Defective Vision	218
Re-test for Defective Vision	58
Tonsils and Adenoids	112
Dental Treatment	443

The state of cleanliness of the schools remains the same as last year. It is satisfactory in the schools in which there is a definite system of cleansing in operation by which the floors of one or more class-rooms, according to the size of the school, are washed and scrubbed each week. In other schools which rely on sprinkling the floors with moist saw-dust and sweeping, the state of cleanliness leaves much to be desired, and it is a hindrance to the health and welfare of the pupils.

The sanitary accommodation of the schools has undergone very considerable improvement during the year. Defective drains have been remedied at St. Mary's Convent N. S., St. Vincent de Paul's N. S., and at Leamy's National School. New drains have been laid and modern sanitary accommodation has been installed at St. John's Christian Brothers N. S., at St. Mary's Christian Brothers N. S., and at St. Munchin's Christian Brothers N. S., and in addition drinking fountains have been provided. Arrangements have been completed for the erection of entirely new sanitary accommodation at Sexton Street Convent National School.

Overcrowding exists in several of the schools, and provision has been made for building an Infant Boys' School at Sexton St. Convent N. S. The condition of St. John's Boys' N.S. (Back

Clare Street), is one of general disrepair and dilapidation, and there is an urgent need for a new building. The condition of St. Munchin's Infants N. S. is similar. The general structure of St. Michael's Infants N. S. appears to be sound, but it is enclosed by high buildings and has a very small yard in which it is not possible to instal satisfactory sanitary accommodation.

There is a great need for playground accommodation in the city, and the children attending St. John's Boys N. S. (Back Clare Street), and St. Michael's Infants N. S. are without such accommodation either at school or in the neighbourhood of their own dwellings.

TUBERCULOSIS.

The Tuberculosis death rate for the year was 1.4 per 1,000 of the population; the corresponding rate for the Twelve Principal Town Districts in the Saorstát was 1.6 per 1,000 of the population.

The number of notifications received during the year was 59. Notifications during previous years were 4 for 1930; 36 for 1931; 65 for 1932.

The number of attendances at the Dispensary was 849, and of new cases examined was 170, besides a number of persons who came suffering from general medical illnesses not associated with Tuberculosis and who were not recorded. The dislike in the public mind to attending the Tuberculosis Dispensary is growing less, since persons have become aware that such attendance is not necessarily associated with definite symptoms of the disease, and consequently it does not interfere with their position in the general community. The Dispensary would, nevertheless, be more easily availed of by persons in doubt as to their physical condition were the premises and accommodation provided made more acceptable. There are still persons who, although aware of the nature of their illness, defer coming for advice until in their own opinion they think they require institutional treatment; this latter condition often represents a rather advanced stage of the disease. Contacts with the disease, as far as adults are concerned, are examined at the dispensary while the children come for examination to the School Clinic and are only referred to the Dispensary when they are found to require extra nourishment and are then supplied with Extract of Malt and Cod Liver Oil. In this respect there is an advantage in having the Tuberculosis and School Medical Service Schemes carried out by the same staff, since children are examined in this manner whom it would otherwise be difficult to reach.

In the prevention of the disease much importance is attached to the instruction of patients in the use of flasks for the disposal of sputum, and the dangers of allowing the sputum to become dry and of allowing its contents to be discharged into the air are explained. The use of paper handkerchiefs, unless destroyed immediately after use, is discouraged. The number of sputum flasks supplied to patients was 46 during the year.

Four patients remained over in Sanatoria at the beginning of the year, and the following were admitted during the year:—

	Males	Females	Total
Insured	6	7	13
Non-Insured	7	10	17
Total	13	17	30

The following patients were discharged from Sanatoria:—

	Males	Females	Total
Insured	3	5	8
Non-Insured	6	7	13
Total	9	12	21

Thirteen patients remained over in the City Home and Hospital at the beginning of the year, and the following were admitted during the year:—

	Males	Females	Total
Insured	9	3	12
Non-Insured	18	18	36
Total	27	21	48

The following patients either died or were discharged from the City Home and Hospital:—

	Males	Females	Total
Insured	12	3	15
Non-Insured	17	21	38
Total	29	24	53

The number of cases of joint tuberculosis in children requiring hospital treatment has grown less since the cases which accumulated before the introduction of the Scheme have mostly been dealt with. Four cases were undergoing treatment at the beginning of the year in St. Mary's Open-Air Hospital, Cappagh, two were admitted and four cases were discharged during the year.

Minor cases of surgical tuberculosis in children, chiefly tuberculous adenitis, were sent to either St. John's Hospital or to Barrington's Hospital, and also cases of adult surgical tuberculosis. One case remained under treatment at the beginning of the year. 27 cases were admitted and 21 cases discharged during the year. Five of these were tuberculosis of the spine requiring prolonged treatment, and one of them was transferred to the Countess of Wicklow Memorial Hospital, Wicklow. Those cases of tuberculosis of the spine tend to recover more satisfactorily in an open-air hospital than in confined City Hospitals, and it would be an advantage to have facilities for open-air treatment more readily at hand.

During the year 569 visits were paid by the Public Health Nurse to the homes of tuberculous persons. This large number of visits was necessitated owing to the conditions of overcrowding, under which many of the patients live, and it is hoped that with the progress of the new housing schemes it will be possible in the future for each such patient to occupy a separate bed at least, if not a separate room.

MATERNITY AND CHILD WELFARE.

By means of the Notification of Births Acts, 1907 and 1915, there were 1,121 births notified to this Department as having taken place in the city during the year, and of this number 956 were domiciled in the city. Weekly lists of births were forwarded to the Child Welfare Centre for attention.

The Centre is open for two morning sessions in the week and is held in two small rooms at the Bedford Row Hospital. It deals chiefly with sick infants, there being insufficient space available to facilitate the attendance of the healthy infants. Until new premises are acquired it will be necessary to carry out a great deal of Child Welfare work in the city by means of home visiting by the nursing staff. Arrangements were being made at the end of the year to employ a whole-time Public Health Nurse for this purpose in order that the feeding of healthy infants might be supervised and that the infants might be weighed periodically and advised to attend the Centre early should indications for medical attention arise.

The Medical Officer to the Centre has kindly supplied the following report:—

"During the year 64 Clinics were held at Bedford Row Hospital. The work done may be summarised as follows:—

Attendances of Infants and Children under 5 years	1,501
Attendances of Mothers with Children	1,422
Attendances of Expectant Mothers	267

Total Attendances	3,190
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Number of Individual Cases:—

Infants and Children under 5 years	531
Mothers with Children	498
Expectant Mothers	89

Total	1,118
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Number of Ultra-Violet Ray Treatment Cases	95
	19

Satisfactory results continue to attend the work done, especially as regards digestive disorders of infants and the correction of faulty infant feeding, which is a great source of infant mortality.

Since the end of the year a great increase has occurred in the work of the Clinic owing to the activities of the Whole-time Visiting Nurse, who visits all new-born infants and refers them to the Clinic if necessary.

The working of the Scheme is greatly hampered by the lack of proper premises, the space at present available being totally inadequate for the needs of the city.

During the year the Committee made application to the Local Government Ministry for a grant from Sweepstake Funds to provide a suitable centre, but no grant has yet been sanctioned.

The Medical Officer begs to offer his thanks to the Committee and Staff for their unflinching help, and to the Medical Officer of Health and Dispensary Medical Officers for their co-operation during the year."

H. G. ROCHE-KELLY, M.B., D.P.H., M.O.

SUPERVISION OF MIDWIVES.

Thirty-seven Midwives notified their intention to practise and were registered in accordance with the provisions of the Midwives (Ireland) Act, 1918. Thirty-four were inspected during the year, and with rare exceptions, were found conversant with the carrying out of the Rules of the Central Midwives Board. There is, however, some neglect in the sending of notifications of still-births.

There were six cases of Puerperal Sepsis notified during the year and investigations into the circumstances were carried out.

There were 423 births at the Bedford Row Hospital for the year and 270 belonged to the city area. The facilities afforded to the poor by the Hospital are greatly appreciated, and furthermore, the Hospital during the year extended its activities to extern work. Probationer Midwives accompanied by a Certified Midwife from the Hospital undertook cases in the district. This supplied a long standing need in the city since there were only two part-time midwives employed for the entire city in which there is an average of over 1,000 births per annum among the residents.

The following is a list of the Certified Midwives in the city—

Laycock, Mary, 9 Shelbourne Road.
 Barry, Ann Matilda, 11 St. Francis Place.
 Walsh, Mary, 42 Cecil Street.
 McInerney, Margaret, 9 Convent Street.
 Kelly, Margaret, 10 Wolfe Tone Street.
 Burrows, Mary E., 5 Lower Mallon Street.
 Cleary Eily, 27 William Street.
 Frazer, Catherine Thomond Terrace.
 Kennedy, Bridget, 16 Charlotte Quay.
 Sexton, Mary, 8 Rossa Villas.
 Walsh, Kate, Bedford Row Hospital.
 Hazelbeck, Helen M., 77 Wolfe-Tone Street.
 Gallagher, Mary A., 4 Mount Vincent View.
 O'Flynn, Kate, 29 Patrick Street.
 McInerney, Annie, 10 Carey's Road.
 McNamara, Anne, 10 Foley's Cottages, Thomondgate.
 Dunbar-Hennessy, Annie, 7 Shelbourne Terrace.
 O'Halloran, Susan, 10 Little Barrington Street.
 McInerney, Bridget, 76 Henry Street.
 Stewart, Sarah J., 26 St. Joseph Street.
 McMahon, Mary, 48 Thomas Street.
 Kelly, Theresa, 9 Edward Street.
 Chambers, Frances, 9 Clare View Terrace.
 Nolan, Susan, 10 Lr. Hartstonge Street.
 Killington, Annie, 77 Pennywell.
 McCormack, Mary, 3 St. John's Square.

Cullen, Ann Jane, 3 St. John's Square.
 Reddan, Mary, 4 William Street, Upper.
 Burns, Christina, 2 St. Mary's Terrace, Island Road.
 Costelloe, Ellen, 1 South Circular Road.
 Moloney, Mary, 8 Carey's Road.
 Shanahan, Mary P., 27 O'Curry Street.
 Adam, Julia M., 17 Crescent Avenue.
 Peterson, Kathleen, 23 Barrington Street.
 O'Brien, Alice, 5 Alphonsus Avenue.
 Gilligan, Hanora, 17 Island Road.
 Allen, Hanora, 6 Lower Henry Street.

VETERINARY DEPARTMENT.

The time of the Veterinary Staff is largely taken up with the practical work of meat inspection and inspection of the milk supplies. With regard to meat inspection the duties are onerous, because, in addition to three large bacon factories in constant operation, there are 25 slaughter houses in the city. These private slaughter houses, situated as they are, in backward and overcrowded areas in the city, besides being a menace to the health of the inhabitants in their localities, make the inspection of fresh meat supplies very difficult and render necessary the visit of a Veterinary Officer at any odd hour during the day that a proprietor may choose to have a carcass ready for inspection. Into many of these slaughter houses it is not possible to drive a car, and the meat in consequence undergoes an undue amount of handling in the course of its conveyance to the retail shops. A Public Abattoir as a remedy to these conditions is a necessity in the interest of the health of the city.

Notwithstanding the large amount of time taken up with meat inspection, Mr. J. J. Dandon, Chief Veterinary Officer, has secured a milk supply to the city which is of very high standard. The milk supplied under the National Free Milk Grant is of Grade A quality, and a considerable portion of it is of Grade A Tuberculin Tested quality. The milk supplied under the School Meals Scheme is of Grade A quality. An efficient control of these supplies is maintained by the bacteriological examination in the Veterinary Laboratory of samples taken at regular intervals. That milk of this quality is available in the city is due to the energy and enterprise of Mr. J. J. Dandon and his Staff in educating the milk suppliers as to the proper methods of production. Supplies of Grade A and Grade A Tuberculin Tested Milk are available to the citizens in certain shops through the city and its sale is covered by a certificate from the Public Health Department. Citizens purchasing this milk ought take the precaution of inspecting this certificate in order to ensure that the milk is of the quality which they intend to purchase.

The following Report is kindly supplied by Mr. J. J. Dundon,
Chief Veterinary Officer:—

MEAT INSPECTION.

"Regarding the present system of inspection of fresh meat in the private slaughter-houses in the city, I wish again to point out that efficient inspection and control are not possible unless an abattoir is provided. A great many of the present slaughter houses cannot possibly be kept in as clean a condition as they should be, and it is well to remember that cleanliness is a vital necessity in the handling of meat and meat products. Also, it is not possible to control unless with a huge staff, twenty-five or twenty-six private slaughter houses, especially as is the case, when all are working at the same time. It is nothing short of a scandal, that Limerick, the third city in the Saorstát, has not, long ago, an abattoir at its disposal. At the moment, steps are advancing favourably towards achieving this purpose.

Another question deserving attention is the necessity of further bye-laws governing the handling and conveyance of meat. Very few of our butchers pay enough attention to the manner in which meat should be properly conveyed in covered clean cars, and also the bad manner in which fresh meat is hung up outside stalls without any covering whatsoever. Butchers should see the necessity of providing shop windows on their premises, and at least this provision might be expected from the larger type of victualler.

Work performed under the Public Health (Veterinary Inspection) Order, 1929, is as follows:—

I.—PRIVATE SLAUGHTER HOUSES.

Number of beasts inspected	2,237
Number of sheep inspected	2,065
Number of pigs inspected	1,442
Number of calves inspected	53
Number of visits by officers to private slaughter houses	2,207
Number of beasts partially condemned	700
Number of beasts completely condemned	34
Percentage of beasts completely condemned	1.51 per cent.
Number of beasts affected with Tuberculosis	566
Percentage of beasts affected with Tuberculosis	25.3 per cent.
Number of beasts affected with other diseases	174
Number of pigs partially condemned	185
Number of pigs completely condemned	6
Number of Sheep completely condemned	2
Total weight of beef, pork, mutton and offal condemned— 47.216lbs., or 21 tons, 1 cwt., 2 qrs., 8lbs.	
Weight of meat, fish, etc., seized in shops	2,828lbs.

II.—BACON FACTORIES.

Total number of pigs inspected	173,428
Weight at 150lbs. per pig	26,014,200lbs.
Total weight of pork and offal condemned	239,885lbs.
Percentage of total weight condemned	0.92 per cent.
Total number of complete carcases condemned	162
Percentage of complete carcases condemned (about 1 per 1,000 pigs)	0.09 per cent.

MILK CONTROL.

As regards the State Grant for provision of free milk in the city, which now exists for two years, Limerick was early on the field in the provision of milk of special quality. It was insisted that the quality of the milk to be supplied should be of Grade A (T.T.) Tuberculin Tested or Grade A standards. Five contractors provide Grade A milk and two contractors provide Grade A (T.T.)

Grade A milk must not contain more than 200,000 bacteria per c. c. and no coliform bacilli must be present in 1/100 c. c. It must also be produced in a licensed farm, and the cows must be clinically examined by Veterinary Surgeons at regular intervals. Grade A T.T. milk must also reach the same bacterial standards as required for Grade A, and as well must be produced from cows which are Tuberculin Tested every six months and found negative. All reactors must be eliminated from the herd. All the milk is delivered in specially sterilized bottles and it is milk of such quality that is serving the needs of the people entitled to receive State Grant milk. These conditions are prevailing in the city from the commencement of the Grant Milk Scheme. This milk is also supplied to the School Meals Committee. The premises, herds, and methods of milk production of each contractor are examined at regular intervals by the Officer of the Veterinary Department and a bacteriological examination of each supplier's milk is made monthly or more frequently if necessary. In this manner, an efficient control is exercised over each contractor's milk supply, ensuring that the milk supplied is in conformity with the contracted quality and conditions. As stated in table underneath ninety-five samples of milk, the property of contractors, were bacteriologically examined, and it goes to prove the statement that it is not a very hard proposition to produce clean milk, when it is stated that only three samples at different periods were not up to the required standards. Space does not allow the printing of each month's test for all seven contractors, but the following table is the average result of all contractors taken over a period of eight months.

Name of Contractor	Age of Milk at Test	Number of Bacteria in one c.c.	Bacillus Coli Test	Keeping Quality
Contractor A	18 hrs	18,571	Absent on 1/100 c.c. ditto	3 3 4 1
Contractor B	18 hrs	22,742	"	3 12
Contractor C	18 hrs	49,028	"	3 22
Contractor D	16 hrs	7,257	"	2 16
Contractor E	16 hrs	18,528	"	3 5
Contractor F	18 hrs	20,342	"	3 17
Contractor G	14 hrs	16,000	"	

When one remembers that the permissive number of bacteria allowed is 200,000 per c.c., it can be easily appreciated that most of the samples of each contractor was much better than the required standards. Also, it is well to remember that most of the ordinary milk, produced and handled without efficient control or attention even though it be retailed in bottles, does not reach anything approaching the above figures; indeed the average bacterial count would be more in the neighbourhood of a few millions with a very liberal corresponding quota of coliform bacilli thrown in.

As well as providing milk to people entitled to receive it under Grant conditions, this milk is also at the disposal of the general mass of citizens. In this respect it is a long-felt want. It is the duty of every citizen to provide milk of the best quality to the young children under their care, and as the price of this milk, considering its cost of production, compares favourably with the ordinary inferior article offered in many cases, there is no reason why any household should complain of bad milk supplies entering the household. It is well to remember that milk, as well as having a high-fat content, should also have a low bacterial and manurial content, and this is all the more necessary in the feeding of young infants and children. There is one more point I would like to bring out clearly, and that is, that it is not because milk is contained in bottles that it is of a clean quality. In a great many cases it is simply dirty milk bottled up, and, perhaps, this bottling occurs under most unhygienic conditions, into dirty bottles, in dirty dairies, from dirty cows, or, again, it might have been bottled on the street. The different hospitals in the city should see to it that at least the milk supplies entering for consumption by patients should be of the best quality available.

At the moment there is no law governing the sale of milk, as regards its bacterial content, from the point of view of standardization, but the citizens can do their own share by insisting that they receive their milk from suppliers who are in a position to deliver the proper article. Several suppliers of milk to this city are in possession of a certificate from the Public Health Department. The milk vendors receiving this certificate are those who have satisfied the Chief Veterinary Officer that their herds, dairies and equipment are of the required standards, and whose milk on regular monthly tests reaches the required bacteriological conditions laid down for Grade A T.T. or Grade A Milk."

III.—MILK AND DAIRIES INSPECTION.

Number of visits to Dairy Shops	267
Number of visits to Dairy Herds	39
Total number of samples tested bacteriologically	154
Number of samples tested bacteriologically of contractors supplying Grade A Milk to children and School Meals Committee	95
Number of visits to Grade A and Grade A T.T. herds, the property of contractors of milk schemes	24
Visits to Dairies tendering under Free Milk Scheme	35
Visits to Dairies, Schools, Convents, etc., re samples	97

HOUSING.

The sanitary survey of Lady's Lane area was begun in May, 1933, with the assistance of Mr. Lee, S.S.O., Dublin Corporation, who was very kindly lent for the purpose by Dr. M. J. Russell, Medical Officer of Health, Dublin.

The area covers 4.44 acres and is bounded on three sides by main thoroughfares, and is intersected by twelve narrow laneways varying from eight to ten feet wide. The houses, some of which are of the back to back type, consist mostly of one and two storey dwellings. There are 243 families in occupation, comprising of 1,121 inhabitants, giving a population density of 252 persons per acre or 55 families per acre. Each room and premises were inspected and details with regard to each recorded. The following official representation was made to the Corporation in August, 1933.

To His Worship, the Mayor, Aldermen, and Burgesses
of Limerick.

REPRESENTATION.

"In pursuance of Sections 5 and 47 of the Housing (Miscellaneous Provisions) Act, 1931, I beg to report that in my opinion the dwelling houses coloured red on the enclosed map of the area known as 'Lady's Lane Area' are unfit for human habitation, and that the conditions in the areas in which said dwelling houses are situate are such as to constitute areas which should be dealt with as clearance areas under Section 5."

(Signed) T. W. MORAN.

WATER SUPPLY.

The water supply to the city is derived from the River Shannon, from which it is pumped to the mechanical filtration plant at Clareville and thence to the reservoir situated on Newcastle Hill. Owing to the fall in level of the river, occasioned by the diversion of a large volume of water through the E. S. B. Canal, it becomes necessary for several months of the year to derive the water from the Canal through a pipe line which passes under the bed of the river on its way to the pumping station at Clareville. This alternative source of supply provides a never-failing water supply and spares the city the anxiety associated with periods of drought. The citizens should, nevertheless, use discretion in the amount of water which they use, seeing that the costs of pumping and filtration of the water are involved.

The mechanical filtration plant removes matter held in suspension in the water, and, moreover, the colouring matter held in solution which is associated with water derived from peaty localities. Several samples of the water were sent for analysis during the year, all of which were found to be satisfactory.

In the distributive system of the water through the city, there is one condition which requires urgent attention, and that is the unprotected state of the Garryowen reservoir, which is surrounded by a Gipsies' Common, the Fair Green, and Tillage Allotments. In these surroundings, and with the broken-down boundary wall to the reservoir grounds, the danger of harmful trespass is imminent.

FOOD AND DRUGS ACTS.

The following table shows an account of the samples taken by the Food and Drugs Inspector, Mr. P. J. Forrest, and of the results of analysis, and of prosecutions:—

Particulars of Samples taken for analysis in the year ended 31st December, 1933, with convictions obtained:—					
Particulars of	No. of Samples Taken	No. of Samples or in respect of which any offence against the Acts was committed	No. of Prosecutions	No. of Convictions	Amount of Penalties Imposed
New Milk	60	5	3	3	£2 8s. 6d.
Butter	...	...	...	...	...
Buttermilk	...	...	...	...	...
Margarine	...	...	...	...	...

The work of the Sanitary Sub-Officers has been largely taken up with the numerous disinfections of dwellings required during the year. As mentioned in my previous report, there is need for another Sanitary Sub-Officer to undertake drain-testing. Repairs to house drains are carried out in a slipshod and unskilled manner with the result that the drains in the city are becoming increasingly defective; this applies more particularly to the tenement and poorer class of dwellings, in which conditions of overcrowding exist, and for which, very often, high rents are paid. As many years are likely to elapse before the Housing Schemes can supply a sufficient number of new houses, the sanitary condition of these poorer dwellings cannot afford to be neglected.

T. W. MORAN.



The following is a table showing a record of the sanitary work performed during the year and during the three previous years:—

SANITARY DEPARTMENT.

WORK DONE.				YEARS
1933	1932	1931	1930	
1933	1932	1931	1930	
707	652	588	508	Orders or Notices to abate Nuisances, make Connecting Drains or perform other Sanitary work served
4	22	71	25	Prosecutions for Neglect of Orders or Notices
2	22	58	25	Convictions
£0 7 0	£3 18 3	£7 10 6	£8 15 6	Fines imposed by order of Justices
3617	3951	5252	5270	Houses, Yards and Premises inspected by S.S. Officers
99	32	150	149	Houses, Rooms or Premises immediately disinfected
685	520	109	66	Disinfecting Chamber used by persons
—	—	—	—	Articles of Clothing disinfected therein
—	—	—	—	Clothing and Bedding destroyed to value of
425	369	423	395	Orders or Notices complied with
270	318	294	281	Reports sent to Sanitary Authority
13	31	193	255	Reports received from Medical Officers of Health
37	31	35	14	Drains Constructed
65	41	39	23	Water Closets Constructed