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CITY OF WINNIPEG



REPORT
OF THE
CITY HEALTH
Department



FOR THE YEAR ENDING
31st DECEMBER

1 9 2 5



Presented by

The m o t

October 1926.



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CITY OF WINNIPEG

REPORT
of the
CITY HEALTH
Department

FOR THE YEAR ENDING
31st December
1925

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COMMITTEE ON HEALTH

1925

Alderman R. J. Shore, Chairman

Alderman A. H. Pulford

Alderman A. R. Leonard

Alderman F. H. Davidson

Alderman T. Boyd

Alderman J. Simpkin

Alderman W. B. Simpson

Alderman H. Jones

Alderman J. A. Barry

His Worship Mayor R. H. Webb

(ex-officio member)



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STAFF

(December, 1925)

Medical Health Officer

A. J. Douglas, M.D.

Laboratory

Bacteriologist—M. Finkelstein, M.D.
 Assistant—Miss M. Wilson
 Laboratory Boy—H. Robinson

District Physicians

W. Turnbull, M.D.
 O. C. Dorman, M.D.
 E. H. Alexander, M.D.

Sanitary Inspections Division

Chief Inspector—E. W. J. Hague
 Tenement & Supervising Inspector
 —A. Officer
 Inspector—S. J. Scheving
 " —O. S. Oliver
 " —B. C. Brough
 " —J. McHardy
 " —A. Barclay
 " —J. Shepherd

Clerk—G. Duffield
 Smoke & Supervising Inspector—
 P. Pickering
 Supervising Inspector—D. Little
 Inspector—C. W. Chisholm
 " —J. Foggie
 " —R. McQuillan
 " —A. Aitken
 " —F. C. Austin
 Inspectors' Clerk—W. Hanby

Communicable Diseases Division

Chief Inspector—W. J. T. Watt
 Inspector—G. Hanby
 " —A. Paull
 " —C. H. Hargrave
 " —H. H. Marshall
 " —H. G. Triggs

Tuberculosis Nurse—Miss K. Vanetta
 " " —Miss B. M. Gray*
 " " —Miss A. G. Luke
 " " —Miss H. Smyth
 Record Clerk—Miss W. G. Aldham
 Clerk—G. Moore

*(Resigned - August 31st)

Division of Records and Statistics

Secretary—A. G. Lawrence
 Stenographer-Clerk
 —Miss L. Gransden

Stenographer-Clerk
 —Miss M. M. Ryan
 —Miss C. B. Morden

Bureau of Child Hygiene

Attend. Phys'n—R. F. Rorke, M.D.
 " —F. G. Schwalm, M.D.
 Manager—A. G. Lawrence
 Nurse—Miss M. M. Wonnacott
 " —Miss A. J. Attrill
 " —Miss L. Spratt
 " —Miss C. Maddin*
 " —Miss A. Moore
 " —Miss C. Munroe
 " —Miss L. A. Schwalm
 " —Miss E. A. Bennett
 " —Miss M. Harper
 " —Miss M. W. Macrae*

Nurse—Miss M. Wilkins
 " —Miss M. I. Jephson
 (Resigned August 31st)
 " —Miss H. Carter
 " —Miss C. Thom
 " —Mrs. E. Smith (Temporary)
 " —Miss M. Bowles
 " —Miss M. Brothers
 Dietitian—Miss A. Graham
 Assistant—Mrs. J. McDonald
 " —Mrs. H. Twist
 " —Mrs. A. Gibson
 Caretaker—W. G. Cowley

*(Leave of absence)

Dairy Division

Chief Inspector—E. C. Brown
 Creameries Inspector—F. Lutley
 Inspector—F. Hudson
 " —T. J. Booth
 Veterinary Inspector—E. S. Bowman, V.S. (Died April 16th)

Food Division

Chief Inspector—A. Rigby
 Inspector—A. W. Foote
 " —G. R. Mines

Report of the Medical Health Officer

City Health Department,
Winnipeg, Man., April 7th, 1926

Chairman and Members of the
Committee on Health.

Gentleman:

I have the honor to submit for your consideration the report of the Health Department for the year 1925. This includes the reports of the heads of divisions, and a statement of the cost of the year's work.

Statistics

The number of deaths, excluding stillbirths, was 1,619. Assuming the population to be 195,148 (City Assessor's figures), this gives a gross death rate of 8.30. This is very slightly higher than the rate of 1924 which was the lowest rate that we have on record.

The number of deaths in children under one year of age was 315, giving a mortality rate of 68.0 per 1,000 living births. This is .2 higher than last year's rate which was our lowest figure.

As was stated in last year's report the majority of infant deaths now occur, not from gastro-intestinal infections, but from pulmonary diseases, inanition, and congenital defects, and most of them occur during the first week after birth.

Pre-natal care and instruction is still urgently required. Something is being done in this direction by the pre-natal clinics of the Winnipeg General Hospital and the Children's Hospital; by the Victorian Order of Nurses and by the Child Welfare Division of this Department. As this field is developed there should be a steady lowering in the infant mortality rate.

The number of births, excluding stillbirths, was 4,632, giving a birth rate of 23.73 per 1,000 population. In 1924 the rate was 24.44. The birth rate continues to decline from year to year. In looking over the reports of the past ten years a decline of 6.15 points is noticed. Just why this should be is difficult to state, but no doubt many factors are concerned.

Details regarding deaths and births will be found in the report of the Statistician and should be studied to obtain an appreciation of the changes and variations which have taken place during the period of which we have a record.

Financial Statement for the Year 1925
Departmental Expenditures

C-1 Administration and Statistics (Controllable)—

(a) Personal Services	\$ 11,280.00
(b) Outside Services	157.09
(c) Material, Supplies and Repairs	312.72
(d) Equipment, Additions and Replacements	122.05
(f) Unforeseen Expenditures	250.00
	\$ 12,121.86

C-2 Bacteriological Laboratory (Controllable)—

(a) Personal Services	\$ 5,891.82
(b) Outside Services	51.55
(c) Material, Supplies and Repairs	537.03
(d) Equipment, Additions and Replacements	26.89
(e) Fuel, Water, Light and Power	94.45
	\$ 6,601.74

C-3 Treatment and Prevention of Communicable Diseases—

C-3-1 Acute Communicable Diseases (Controllable)—

(a) Personal Services	\$ 13,391.33
(b) Outside Services	159.00
(c) Material, Supplies and Repairs	455.39
(d) Equipment, Additions and Replacements	269.64
	\$ 14,275.36

C-3-2—Tuberculosis (Controllable)—

(a) Personal Services	\$ 4,931.33
(c) Material, Supplies and Repairs	1,357.03
(d) Equipment, Additions and Replacements	92.15
	\$ 6,380.44

C-3-3—Smallpox and Diphtheria Prevention (Controllable)—

(b) Outside Services	\$ 2,342.69
(c) Material, Supplies and Repairs	1,006.78
	\$ 3,349.47

C-3-4 Automobile Services (Controllable)—

(b) Outside Services	\$ 296.15
(c) Material, Supplies and Repairs	510.41
(d) Equipment, Additions and Replacements	458.90
	\$ 1,265.46
Total Controllable	\$ 25,270.73

C-3-5 Fixed Charges on Debenture Debt (Uncontrollable)—

(i) Interest	\$ 600.00
	\$ 600.00

Total Treatment and Prevention of Communicable Diseases ..\$ 25,870.73

C-4 Sanitary Inspection (Controllable)

(a) Personal Services	\$ 31,164.00
(b) Outside Services	38.35
(c) Material, Supplies and Repairs	368.20
(d) Equipment, Additions and Replacements	692.75
	\$ 32,263.30

C-5 Food and Dairy Inspection (Controllable)—**C-5-1 Dairy Inspection—**

(a) Personal Services	\$ 8,625.50
(b) Outside Services	636.04
(c) Material, Supplies and Repairs	257.98
(d) Equipment, Additions and Replacements	194.65
	\$ 9,714.17

C-5-2 Food Inspection—

(a) Personal Services	\$ 6,666.00
(b) Outside Services	36.00
(c) Material, Supplies and Repairs	63.82
(d) Equipment, Additions and Replacements	134.82
	\$ 6,900.64

Total Food and Dairy Inspection

\$ 16,614.81

C-6 Child Welfare (Controllable)—**C-6-1 Babies' Milk Depot—**

(a) Personal Services	\$ 4,104.00
(b) Outside Services	3,917.30
(c) Material, Supplies and Repairs	2,008.65
(d) Equipment, Additions and Replacements	27.60
(e) Fuel, Water, Light and Power	1,110.25
	\$ 11,167.80

C-6-2 Visiting Nurses—

(a) Personal Services	\$ 19,600.82
(c) Material, Supplies and Repairs	140.22
(d) Equipment, Additions and Replacements	552.95
	\$ 20,293.99

Total Child Welfare \$ 31,461.79

C-7 Medical Relief (Controllable)—

C-7-1 District Physicians—

(b) Outside Services	\$ 1,003.50
(c) Material, Supplies and Repairs	318.76
	\$ 1,322.26

C-7-2—Dental Clinic—

(b) Outside Services	\$ 900.00
(c) Material, Supplies and Repairs	3.13
	\$ 903.13

Total Medical Relief \$ 2,225.39

Gross Departmental Expenditure \$127,159.62

Revenue

(Credited to City's Revenue Account)

Police Court Fines and Costs	\$ 252.50
Fees for Fumigation	9.75
Fees for Laboratory Work	261.50
Sale of Infants' Feedings at Milk Depot	1,292.35
	\$ 1,816.10

Net Departmental Expenditure \$ 125,343.52

Cost Per Capita

(Population 195,148)

Gross Departmental Expenditure per Capita 65.2

Net Departmental Expenditure per Capita 64.2

Communicable Diseases

Morbidity and mortality rates from notifiable diseases will be found in the report of the Division of Communicable Diseases.

Typhoid fever was responsible for 42 cases and 6 deaths, against 36 cases and 6 deaths in 1924. Of the 42 cases recorded, 12 were non-residents admitted to our hospitals for treatment; 2 died. Five were institutional cases; no deaths. Nine residents of the City contracted the

disease while travelling. Of this number 2 died. Seven cases occurred within the City of which it was impossible to trace the origin. In this group there were no deaths. Nine cases occurred as the result of an infection of a milk route. Two of these died. Typhoid had existed to some extent in the country district in which the dairy whose milk became infected was situated and one of the persons living at the dairy contracted the disease. Spread took place to a limited extent among the customers of the dairyman. It was evident that only a small portion of the total amount of the milk delivered had become infected. Over 300 people received their supply from this source yet, after carefully canvassing the entire route, only 9 cases were brought to light. The dairy was prohibited from selling milk as soon as the Department became aware of the presence of the disease. Two cases occurred at the dairy after it had been closed.

Forty-one cases of Smallpox were recorded with no deaths. Of this number 28 occurred in January, 9 in February. A group of 14 cases occurred amongst the employees of a large corporation. The original cause was the usual one of an unrecognized case returning to work while in an infective condition. Prompt measures were taken to control the situation. All the employees were carefully gone over as to their vaccination status and 3,048 of these were vaccinated. It is gratifying to be able to report that only 2 secondary cases occurred, showing once more the efficiency of vaccination as a preventive of Smallpox when adequately carried out. A group of 4 cases occurred in an educational institution. All exposed persons were promptly vaccinated and kept under observation, and no further infection took place. A case occurred at a large men's lodging house, the patient occupying a bed in a dormitory with 40 other men. There were approximately 200 men living in the lodging house. The same procedure was carried out and only 2 secondary cases developed.

Taking the 41 cases it is rather interesting to consider the vaccination standing of the various individuals. Five were under 5 years of age, all unvaccinated; 4 from 6 to 10 years of age, all unvaccinated; 13 from 11 to 20 years of age, all unvaccinated; 5 from 21 to 30 years of age, all unvaccinated; 5 from 31 to 40 years, one vaccinated; 41 years and over, 9 cases, 5 vaccinated. No instance took place of a person contracting Smallpox who had been successfully vaccinated within 10 years. The type was uniformly mild throughout the year.

There was a distinct falling off in Chickenpox from 1924, the total number of cases being 662 against 1,120 for that year. A large proportion of these cases reached the Department through the efforts of the nurses connected with the Medical Inspection of Schools. Every case was closely checked up in order that no Smallpox might be overlooked masquerading in this guise. One case of Smallpox was brought to light in this way.

One of the biggest problems we had to deal with during the year was a large outbreak of measles. In 1924 there were 913 cases. These increased to 2,411 in 1925 with 9 deaths, giving a rate per 100,000 population of 4.61 and a death rate per 100 cases of .37. Cases were reported in small numbers during the first four months of the year, but rapid increase took place during May, and from then on to December, with the exception of August and September, prevalence continued extensively. The type was mild. Apparently serious complications were rare. It was remarkable how many of those affected received no medical care and were brought to light through the Department of Medical Inspection of Schools.

One reason for the dimensions of this outbreak was that certain districts where measles had not prevailed for a number of years were invaded and a large non-immune population provided material for the disease. It is impossible to state just how much we were able to accomplish through our efforts at control. We endeavored to have all patients isolated, parents were warned as to the likelihood of children who had been in contact with infected persons developing the disease, but, notwithstanding everything we did, I would hesitate to say how much success attended our efforts.

The situation regarding Diphtheria for the past year has been in the main satisfactory. There is a gratifying decrease in the number of cases as compared with 1924; 515 against 885, and 26 deaths against 22. Deaths rates, 13.3 and 11.2. Our death rate for the year appears in a more favorable light when outsiders are deducted, the corrected rate being 9.7. Regarding these deaths, it is the same old story; delay in the administration of antitoxin through failure to recognize the disease early. In one family alone three children died for this reason. It is difficult to understand why this should continue to happen in the light of present day knowledge. The following facts may prove of interest.

Diphtheria - (City deaths, 19) Age periods; 1-2 years, 4; 3-4 years, 5; 5-6 years, 6; 7-8 years, 3; 14 years, 1. Physician called in, in 4 cases on first day of illness; in 5 cases on second day of illness; in 6 on the third day of illness; in 2 on the fifth and seventh day of illness. A man died of diphtheria who had, a month previous, lost his wife from the same disease. He allowed four days of his illness to elapse before calling a doctor.

A hopeful sign during the year was the decrease in diphtheria carriers, only one hundred being brought to light. Two return cases were recorded and ten unrecognized cases were discovered through other cases developing in the homes.

Antitoxin distributed for the year totalled 2,561,000 units. Money collected where persons were able to pay was \$395.25.

The work of immunizing against diphtheria was carried on during the year and we completed the immunization of the children in the City schools, grade four and under. Two thousand, three hundred and ninety-four children took the treatment. We met with a very satisfactory response from parents and are now able to report a large proportion of our children protected. The manner of carrying on the work was that which has been described in reports of previous years and we are again indebted to the Department of Medical Inspection of Schools for valuable assistance. This year we employed toxoid instead of toxin-antitoxin, with excellent results. It is interesting to note that, up to the present, no child who has received this treatment has come to our notice as having contracted diphtheria, although we have found such children giving positive throat cultures after exposure to a case. In one home when three children who had been immunized remained unaffected, a child who had not been treated died of diphtheria, and the mother was removed to hospital later, having contracted the infection from the child who was ill. Since the introduction of immunization a decided improvement in the diphtheria situation is apparent and as time goes on and this work continues further, betterment will take place.

Scarlet fever shows a slight increase over last year with 645 cases and 8 deaths, against 583 cases and 11 deaths. The infection was as usual, nearly all due to contact, but there was one outbreak which appeared certainly to be milk-borne and another in which the milk supply was very strongly suspected. In the first instance the housekeeper of a dairyman contracted scarlet fever and was removed to hospital. Twenty-eight cases occurred on this man's route; of these thirteen were secondary. Two adults developed the disease. In the second instance a number of cases were reported simultaneously on a milk route. Investigation at the dairy revealed nothing to account for this. The dairyman had augmented his supply by purchasing milk from other dairymen almost daily for two weeks before the cases appeared on his route. We were unable to find anything in connection with the men or premises from whom he purchased, that could be held responsible for the outbreak. The districts affected were widely scattered. The disease appeared in three successive small groups totalling twenty cases in sixteen homes. The probability seemed that improperly sterilized milk bottles, from a home in which there was unrecognized scarlet fever, were to blame, though we were unable to demonstrate this. The type throughout the year was mild. We brought to light fifty-three cases which had escaped recognition, some of these were found in schools in a state of desquamation. In one instance a house to house inspection brought to light three affected families with seven cases in various stages of convalescence. There were forty-seven cases in institutions, and forty admitted to our hospital from outside the city. The Dick treatment for immunization was employed to a small extent during the year.

The Tuberculosis situation has not changed much since last year; our rates continue low. The factors at work in the fight against this disease can only succeed to the extent that public sentiment rises to their assistance. Certain principles are accepted as necessary in most up-to-date communities to-day if they wish to lay claim to being in the class of those who would forestall disease by spreading the gospel of prevention. We have endeavored to adopt these principles with the means at our disposal and during past years we feel that we have attained some results. The work of our chest clinics has increased. During the past three years a two-day clinic each week has been maintained by the Children's Hospital and a daily clinic has been conducted during the same time at the King Edward Memorial Hospital. This in addition to the work conducted at the Winnipeg General Hospital, where a three-day a week clinic is held.

The King Edward Memorial Hospital admitted for treatment, fifty-three cases. These are usually far advanced and the fact that this is often the first report we have of them, suggests that we might examine closer the reason for this delay in such cases reaching us. Ninette Sanatorium reported twenty-two new cases for Winnipeg, which strikes us as low. In 1922 for instance, 53 new cases were notified by Ninette as from the City. We distributed supplies as in former years; milk, refills, handkerchiefs, disinfectants, and other medical supplies. Our nurses made 5,400 visits and attended all clinics held at the Winnipeg General and Children's Hospital. It is with regret that we have to report that the work of the Winnipeg Anti-Tuberculosis Society was discontinued at the end of the year. The ladies who conducted this Society are entitled to a high meed of praise for the unselfish and valuable work they carried on for so many years.

Tables are submitted showing living conditions of patients notified during the year, also ages and nationalities. Cases of tuberculosis of the lungs reported during the year numbered, 183 with 81 deaths. The death rate was 41.5 per 100,000 population. In 1924 there were 183 cases, 87 deaths and a rate of 44.2 per 100,000.

Whooping cough increased in prevalence and fatality; 689 cases and 14 deaths were notified. This represents an increase of one-third in cases and double the number of deaths for 1924. Whooping cough was thus responsible for as many deaths as were caused by measles and scarlet fever combined. This disease is not taken seriously enough by many parents, either from the viewpoint of the safety of their own children or those of others. Frequently the first intimation we have of a case is a report from one of the hospital out-door clinics where the patient is taken for treatment. We often have complaints from citizens of seeing children in a coughing paroxysm in public places. Too often no physician is employed until the case is well advanced. We have for years tried to impress upon the public the dangers attending this disease, but too many people still seem to regard it as a trifling ailment of childhood and take no pre-

caution to prevent spread in their own homes or outside them. The Department, as formerly, distributed pertussis vaccine to physicians. Where we found home conditions not suitable for the care of the patient and the safety of others, we recommended hospitalization.

An unusual feature of the year was an extensive outbreak of mumps; indeed this disease prevailed more largely than we have any previous record of. Four hundred and thirty-six cases were notified against 10 for 1924. The last three months of the year were marked by a great and sudden increase; 365 cases were reported during this period. This disease is not taken seriously by the public and the great majority of the cases have no physician. Notification takes place largely through cases being discovered by the school nurses.

Lethargic encephalitis still exists to a limited extent. There was quite a sharp decline as compared with last year; only 7 cases and 5 deaths were reported. In 1924 we had 11 cases and 10 deaths. The cases were unconnected and could not be traced to any source of infection.

We had an unusually fortunate year with regard to anterior poliomyelitis, only one case and one death being recorded.

There was one case of anthrax. This was in a man who had been employed in a hide house. One of the hands was attacked but the patient recovered. We conducted an intensive search for the manner in which the infection was acquired but with barren results. None of the hides that we examined gave any evidence of anthrax and the hides which the patient had handled at the time he contracted the disease had all been shipped away before the case came to our notice. We were unable to get any particulars of the presence of anthrax at any of the places from which the hides came nor of anthrax occurring at the points of their destination.

Medical Relief

The number of office consultations and outside calls for medical relief, attended by physicians of the Department, was four hundred and sixty-nine. Calls attended to by District Physicians numbered three hundred and forty-three.

We are indebted to the Margaret Scott Nursing Mission for a great deal of help in this work; the nurses rendered assistance in two hundred and ten calls. Care is exercised in handling these calls in order to eliminate as many as possible which should not come under the supervision of the Department.

It is with regret that we report a falling off in the number of vaccinations performed in the schools. This is difficult to account for as we used every effort we could to get as many children as possible to avail themselves of this protection. Seventeen hundred and thirty-one vaccinations were performed in our laboratory. This year we did not find it necessary

to avail ourselves of the services formerly afforded by the Outdoor Department of the Children's Hospital. Total vaccinations for the year, 3,140.

Municipal Hospitals

The following summary submitted by the Municipal Hospital shows numbers of cases of communicable diseases admitted during 1925:

King George Hospital

Disease	Cases	Deaths	Percentage
Diphtheria	370	20	5.41
Diphtheria Carriers	39	.....	.....
Scarlet Fever	474	7	1.48
Measles	370	8	2.17
German Measles	89	.....	.....
Erysipelas	27	1	3.70
Meningitis (Streptococci)	1	1	100.00
Parotitis	10	.....	.....
Pertussis	30	5	16.66
Smallpox	41	.....	.....
Varicella	68	.....	.....
Miscellaneous	234	5	2.14
Totals	1,753	47	2.68
Died within 36 hours .....	.....	14	.....
Corrected rate .....	.....	.....	1.88

King Edward Memorial Hospital

	Cases	Deaths	Percentage
Tuberculosis	152	57	37.5

Report of the Dispensary for Venereal Disease, 705 Boyd Building, Winnipeg

During the year 1925, 1,669 patients were examined. Of these, 1,228 were cases of venereal infection who received treatment, the balance being non-venereal patients who were admitted for examination. Four hundred and forty-one were Syphilis and 787 were Gonorrhoea.

There were 153 new cases of Syphilis and 476 new cases of Gonorrhoea, the remainder having been carried forward from the previous year.

Syphilis—Of the 361 suffering from Syphilis, 213 were men; 141 women; 7 children under twelve years of age. Six hundred and twenty-one blood examinations for Syphilis were made during this time and 4,571 treatments given.

Gonorrhoea—Of the 787 cases of Gonorrhoea, 600 were men; 187 women. Thirteen hundred and sixty-two smears were examined for Gonorrhoeas, and 11,646 treatments given.

Treatments—Gonorrhoea	11,646
Syphilis	4,571
Non-Venereal	1,106
	17,323

Report of Patients Treated in the Provincial Gaol

There were 64 new patients treated for venereal disease during 1925. Of these 37 were Syphilis and 27 Gonorrhoea.

Eight hundred and twenty-five blood examinations were made for Syphilis.

Respectfully submitted,

JAS. PULLAR.

Legislation Enacted

Dominion

No legislation of importance to this Department was enacted during 1925.

Provincial

An amendment to Sec. 500 of the Winnipeg Charter permitting the City to pass By-laws to take action in the case of dangerous buildings or excavations. The Department is sometimes appealed to in the case of excavations containing water which, although not a menace to health, is dangerous on account of the possibility of accidents to citizens - especially to children. An amendment to the Building By-law making use of the powers conferred will be useful, as the Building Inspector could then take prompt action, especially in the case of property owned by non-residents.

An amendment to the Charter permitting the City to pass By-laws re- and control the business of Undertakers or Funeral Directors, and to define certain areas within the City, within which such business may be carried on, and for varying or altering any such areas.

An amendment to the Charter permitting the City to pass By-laws restricting and regulating sub-divisions, and regulating and controlling the number and size of the lots in sub-divisions; also for creating, regulating, or controlling special zones or districts in the City, and the uses to which the property therein may be applied. These powers are also made retro-active, as the section declares that all By-laws heretofore passed by the City of a similar nature are valid and binding. This is a most valuable concession, and it would appear that the City now possesses full powers to go ahead with a comprehensive zoning scheme.

Regulations of the Provincial Board of Health

Regulations for the sanitary condition of lumbering, wood cutting, and timber camps throughout the Province were made and promulgated by the Board in June. The regulations require that every employer of labor in such camps shall contract with a Physician for inspection at least once a month, and oftener if required, of all camps, works, or premises under his control. Each employer may also contract with a physician for the medical and surgical care of his employees, and may deduct a sum not

exceeding one dollar per month from the wages of each employee for this purpose. If he does not so contract, an employer is made responsible for medical and hospital care of his sick employees. Even if an employee takes sick after leaving his employ, the employer is still liable if it can be shown that the origin of such sickness is traceable to the period of employment, or to an accident occurring during such period. In cases where the sick or injured person cannot pay the expenses of the same, the Board has power to determine and adjust such payments. The regulations further deal with the following subjects:

The furnishing of certificates of vaccination, notification of communicable diseases, the provision of hospital buildings or tents, the camp site, air space and ventilation, disposal of refuse, location of stables, the arrangement of cook houses, wash rooms, bunk houses and latrines. Specifications are given for the construction of the camp buildings. Similar regulations are made for mining, threshing, construction, and other labor camps.

These industrial camp regulations are very similar to those in use in Ontario. Although the regulations make the contracting Physicians responsible for carrying out the regulations, it will probably be necessary for the Board to exercise some direct supervision by means of qualified Sanitary Inspectors. These regulations are of value and interest to the City of Winnipeg because so many men whose homes are in Winnipeg work in the camps during the Winter. The standard of labor camps all over this continent is becoming more exacting, as it is recognized that the health of the workers must be protected. The men themselves are also demanding a higher degree of comfort and better diet than was the case in the old-time camps. It is also important to the citizens of Winnipeg that men returning from camps should be clean and healthy.

Regulations of the Provincial Board of Health Respecting Summer Resorts and Camps in the Province of Manitoba

These regulations apply to all summer resorts, and to all camps, whether public or private, (except industrial camps.) Municipal Health Officers are held responsible for enforcing them, and Municipal Councils are required to provide for proper and regular inspection of all camps. The matters dealt with include: pure water supply, proper disposal of all wastes, surface drainage, pure milk supply, etc.

In view of the large number of our citizens constantly coming and going between the various Summer resorts and camps and the City, these regulations are of great importance, and will, we hope, be of much service in the future. It is a regrettable fact that people leaving Cities in search of health and recreation in country places, have, through lack of proper sanitary conditions, contracted Typhoid fever or other disease whilst holidaying. Frequently, such diseases have developed after the return to the City, thus affording opportunity for the infection of others.

Regulations of the Minimum Wage Board of Manitoba Respecting Female Employees in Laundries, Dyeing and Cleaning Establishments in Winnipeg and St. Boniface

These deal with cleanliness, drinking water, lighting both natural and artificial, ventilation, cubic air space, the sanitary conveniences to be provided, temperature, first aid, lunch and rest rooms, hours of labor, wages, and holidays.

The City of Winnipeg

By-law No. 11657 prohibiting the carrying on of the business of an Undertaker or Funeral Director, on certain streets specified. Some 83 streets or portions of streets are named in the schedule, all residential streets.

By-law No. 11697 being an amendment to the License By-law. It requires that Undertakers be licensed, that the Health Officer shall certify the premises as suitable and satisfactory for the purpose intended, and also that no license shall be issued to an Undertaker to carry on business on any street which has been declared to be a residential street.

Building By-law: Revision of this By-law is, we understand, still proceeding. We have not yet heard whether the amendments submitted by us looking towards better housing conditions have been accepted by the Committee in charge of the revision. We can only reiterate that they are much needed.

Zoning: We understand that information is being collected regarding zoning. This is a matter which has an important bearing on health, and should not be delayed. It is a complex subject, and many conflicting interests will have to be reconciled before any scheme is adopted. Better progress might perhaps be made if the assistance of a town planning Committee of representative citizens were invoked.

Rats: We still receive complaints regarding rat infested buildings, and think that there should be enacted some specific legislation giving the Department power to deal with such cases. Charter powers to do this were obtained two or three years ago, but no By-law has yet been enacted.

Installation of Plumbing

A few short lengths of sewers and water mains were constructed, and 65 notices to install plumbing were issued. All new buildings on streets with both sewers and water mains were connected, and plumbing installed. There were 35 brick pit closets removed during the year, but 14 new outside closets were constructed in connection with new houses on streets without sewers, so that the net reduction was only 21.

December 31, 1924		December 31, 1925	
Brick Pits	339	Brick Pits	318
Earth Pits	2	Earth Pits	2
Total	341	Total	320

This is a very small number of outside closets for a City of this size.

Since 1905 the reduction has been as follows:

	Box Closets	Earth Pits	Brick Pits	Total
June 30, 1905	6,153	186	.....	6,339
December 31, 1905	3,182	80	1,020	4,912
June 30, 1906	2,255	747	1,325	4,327
December 31, 1906	1,105	662	1,626	3,393
December 31, 1907	80	201	1,535	1,816
December 31, 1908	25	103	1,492	1,625
December 31, 1909 .....	.....	53	1,432	1,485
December 31, 1910 .....	.....	52	1,300	1,352
December 31, 1911 .....	.....	47	1,171	1,218
December 31, 1912 .....	.....	31	1,014	1,045
December 31, 1913 .....	.....	38	838	877
December 31, 1914 .....	.....	18	648	666
December 31, 1915 .....	.....	14	504	518
December 31, 1916 .....	.....	9	447	456
December 31, 1917 .....	.....	11	442	453
December 31, 1918 .....	.....	5	421	426
December 31, 1919 .....	.....	6	438	444
December 31, 1920 .....	.....	1	402	403
December 31, 1921 .....	.....	1	399	400
December 31, 1922 .....	.....	1	388	389
December 31, 1923 .....	.....	1	351	352
December 31, 1924 .....	.....	2	339	341
December 31, 1925 .....	.....	2	318	320

It may be noted that during the years specified in the above table, the death rate from Typhoid Fever has been reduced as follows:

1905	222.6 per 100,000	1915	2.0 per 100,000
1906	146.5 "	1916	7.5 "
1907	51.0 "	1917	6.0 "
1908	40.6 "	1918	6.5 "
1909	38.4 "	1919	7.4 "
1910	31.6 "	1920 .....	.0 "
1911	7.9 "	1921 .....	.0 "
1912	5.4 "	1922 .....	.0 "
1913	4.3 "	1923 .....	.5 "
1914	3.9 "	1924	1.0 "
		1925	1.0 "

Extension of Sewer and Water Mains

Some progress has been made during the year. On the completion of our annual census of outside closets, the following list was prepared and sent to the Public Improvements Committee.

**List of Streets with Four or More Houses
Requiring Sewers or Water Mains**

Fort Rouge		December 1925		
Street	Block	Houses	Total	Remarks
Beaverbrook St.....	Haskins to Jackson....	13		
Beaverbrook St.....	Jackson to Lennon	8	21	
Lindsay St.....	Haskins to Jackson	2		
Lindsay St.....	Jackson to Lennon	1		
Lindsay St.....	Lennon to Mathers	3	6	
Campbell St.....	Kingsway to Haskins	2		
Campbell St.....	Haskins to Jackson	2	4	Tenders for sewer called November 2, 1925.
Cambridge St.....	Jackson to Lennon	7		
Cambridge St.....	Lennon to Mathers	4	11	
Lorette Ave.....	Harrow to Guelph	2		
Lorette Ave.....	Guelph to Wilton	2		
Lorette Ave.....	Wilton to Thurso	2	6	Sewer advertised Harrow to Rockwood, Jan. 14, 1924. Not proceeded with.
Scotland Ave.....	Harrow to Guelph	2		
Scotland Ave.....	Guelph to Wilton	5		Rockwood to Thurso advertised Jan. 14, 1924.
Scotland Ave.....	Wilton to Rockwood	1		
Scotland Ave.....	Nathaniel to Cambridge	2	10	Sewer advertised Harrow to Rockwood Jan. 14, 1924. Not proceeded with.
Weatherdon Ave.....	Aynsley to Lilac	1		
Weatherdon Ave.....	Stafford to Harrow	1		
Weatherdon Ave.....	Harrow to Guelph ..	2		
Weatherdon Ave.....	Rockwood to Thurso ..	3		
Weatherdon Ave.....	Nathaniel to Beaumont	1		
Weatherdon Ave.....	Beaumont to Cambridge	1	15	
Carter Ave.....	Stafford to Harrow	4		
Carter Ave.....	Harrow to Guelph	4	8	
Hector Ave.....	Wentworth to Stafford ..	3		
Hector Ave.....	Stafford to Harrow	3	6	Sewer but no water (constructed of West line of Lot 36. Blk. 23 in 1922.)
Pembina Highway.....	(Scattered)	10	10	
Ebby Ave.....	C.N.R. tracks to Pembina ..	5		
Ebby Ave.....	Lilac to Wentworth	3		
Ebby Ave.....	Wentworth to Stafford	2	10	

Street	Block	Houses	Total	Remarks
Parker Ave.....	Pembina Rd. to C.N.R.	1		Apart from the question of installing plumbing in these houses, this street and district requires facilities for surface drainage.
Parker Ave.....	C.N.R. tracks to Rockwood	9		
Parker Ave.....	Rockwood to Thurso	3		
Parker Ave.....	Thurso to Nathaniel	5	18	
		Total	119	
Total brought forward			119	
On streets with less than four houses, or where sewers and water mains have recently been constructed			43	
Total			162	

Assiniboine Avenue to Higgins Avenue

Keewatin St.....	Rapelje to St. Mathews..	2		
Keewatin St.....	St. Matthews to Ellice	2		
Keewatin St.....	Sargent to Yarwood	1		
Keewatin St.....	William to Logan	3		
Keewatin St.....	Logan to C.P.R. Main Line	2	10	Water mains, no sewer. Private sewer here owned by Thos. Jackson & Sons. Other owners refuse to connect with this sewer, and apparently cannot be made to do so unless the City takes it over. City sewer to 150' N. of Gallagher Avenue.
Centre St.....	Calder to Ellice	2		
Centre St.....	Ellice to Sargent	3	5	Water main, no sewer
Erin St.....	Richard to Notre Dame	5	5	Water main, laid. No sewer. Sewer ordered Feb. 1922 but cancelled Mar. 27, 1922.
Total			20	
On streets with less than four houses			28	
Total			48	

C.P.R. (Main Line) To Northern City Limits

Atlantic Ave.....	Airlies to McPhillips.....	3		Watermain. No sewer
Atlantic Ave.....	McPhillips to Fife	2	5	

Street	Block	Houses	Total	Remarks
Bannerman Ave.....	C.P.R. (Beach Line)			Watermain. No sewer
	to Airles	2		
Bannerman Ave.....	Airlies to McPhillips	2	4	
Boyd Ave.....	Prince to McPhillips	4	4	
Cathedral Ave.....	Galloway to C.P.R. Beach Line	1		
Cathedral Ave.....	C.P.R. Beach Line to Airlies	2		
Cathedral Ave.....	Airlies to Radford	1	4	
Dalton St.....	Mountain to Machray	4	4	Sewer no water Main
Inkster Ave.....	Parr to Arlington.....	4		
Inkster Ave.....	Arlington to C.P.R. Beach Line	1		
Inkster Ave.....	C.P.R. Beach Line to Sinclair	1		
Inkster Ave.....	Sinclair to Airlies	3	9	(2 incompletd houses.)
Kitchener Ave.....	Near Keewatin St.	4	4	Dairies
Landsdowne Ave.....	Parr to Sinclair	4	4	
Monreith St.....	Mountain to Church	4	4	Sewer no water Main
Mountain Ave.....	Kildarroch to Robertson	1		
Mountain Ave.....	McPhillips to Fife	6	7	Watermain laid. No sewer.
Robertson St.....	Mountain to Church.....	4	4	
	Total		53	
	On streets with less than four houses, or where sewers and water mains have recently been constructed.		24	
	Total		77	

Elmwood

Beach Ave.....	E. City Limits to Keenly- side	3		Pit closets & cellars in very insanitary condition. Sewer no water main. Sewer ordered C.P.R. track to Kent St. (except between Cameron & Green) Jan. 16, 1922. Not constructed.
Beach Ave.....	Keenlyside to Kent	3		
Beach Ave.....	Kent to Foster	1		
Beach Ave.....	Foster to Grey	2	9	

Herbert Ave.....Keenlyside to Kent	4		
Herbert Ave.....Green to Grey	6	10	Water main laid. No sewer.
Nairn Ave.....Kent to Cameron	2		
Nairn Ave.....Grey to Eaton	2	4	Sewer laid. No water main.
Total		23	

On streets with less than four houses, or where sewers and water mains have been recently constructed	9
Total	32

Summary

Fort Rouge	119
Assiniboine River to C.P.R. Main Line	20
C.P.R. Main Line to Northern City Limits	53
Elmwood	23
	<u>215</u>

On streets with less than four houses, or where sewers or water mains have recently been constructed	105
Total outside closets in use December 31, 1925	<u>320</u>

Table Showing Additions and Removals During 1925

Outside closets in use December, 1924	341
New closets built 1925	14
	<u>355</u>
Less closets removed during 1924	35
Remaining	<u>320</u>

Housing

There were 551 new houses built in 1925 and 5 apartment blocks with 97 suites. These were all built by private enterprise. Vacant houses in December numbered 811 as against 868 in 1924. Vacant suites 445 as against 606 in December 1924. We are still, however, at a loss to know what to do with the large number of one-family dwellings occupied as tenements. In some parts of the City, the overcrowding of families in these dwellings appears to be accentuated. A large number of families - even families with children - have only one room. Further details regarding this matter will be found in the report of the Chief Health Inspector, and the Tenement Inspector.

Educational Work

We have not done much this year in the way of lectures to the public. In one sense, however, the educational work of the Department is continuous. I refer to the daily opportunities afforded the members of the Staff in their intercourse with the citizens. For this reason, we have always encouraged the efforts made by our Inspectors and Nurses to keep themselves fully posted in the latest developments of public health, thought, and practice, by means of study and lectures.

The following educational programme was prepared for the Winter season of 1924-5, and the meetings were well attended:

1924

- Dec. 6—Opening Address, Dr. A. J. Douglas, Medical Health Officer, Winnipeg.
 Dec. 13—Scarlet Fever, Dr. M. Finkelstein, City Bacteriologist, Winnipeg.
 Dec. 20—New Dominion Regulations relating to Drugs, E. L. C. Foster, M.A., F.C.I.C.
 Dec. 27—Electrolysis, H. M. Smith, City Electrician's Dept.

1925

- Jan. 3—Visit to Hydro Central Steam Heating Plant, under the direction of John W. Sanger, Chief Engineer, Hydro Electric.
 Jan. 10—Building Construction in relation to Public Health, Adam Sandilands, Building Inspector, Winnipeg.
 Jan. 17—Some Dietetic Values of Sugars, Fats and Starches, J. W. Richardson, Sanitary Inspector, Transcona.
 Jan. 24—Address, Dr. D. H. McCalman, Chairman, Provincial Board of Health, Manitoba.
 Jan. 31—Manitoba Public Health Act., E. W. J. Hague, Chief Health Inspector, Winnipeg.
 Feb. 7—Plumbing in Relation to Public Health, James Smith, Chief Plumbing Inspector, Winnipeg.
 Feb. 14—Infectious Diseases, Dr. Dugald McIntyre, Assistant Medical Superintendent, Municipal Hospitals, Winnipeg.
 Feb. 21—Hospital Ward and Outpatient Service, Dr. Geo. Stephens, Superintendent Winnipeg General Hospital.
 Feb. 28—Infant Mortality, A. G. Lawrence, Secretary Division of Records and Statistics and manager of Bureau of Child Hygiene.
 Mar. 7—Visit to Winnipeg Electric Railway Co.'s Gas Plant, under the direction of Henry Dunderdale, Works Superintendent.
 Mar. 14—Social Evening.

Changes in Staff

During the absence of Dr. Finkelstein in Europe we were fortunate enough to secure the services of Dr. Morley Loughheed as Acting Bacteriologist. Dr. Loughheed rendered excellent service during the period he remained with us.

Early in the year we lost, through death, Dr. E. S. Bowman, City Veterinarian. Dr. Bowman had been a member of the Department for twelve years and always discharged his duties in a faithful and efficient manner. His death was a distinct loss to the Department and the City. Dr. Bowman's place was not filled by the appointment of a Veterinary Surgeon. Inspector Booth was transferred from the Sanitary Division to the Dairy Division shortly after Dr. Bowman died.

In conclusion I desire to express to the members of the staff my very sincere appreciation of the faithful manner in which they have discharged their duties throughout the year.

Respectfully submitted,

A. J. DOUGLAS,

Medical Health Officer.

REPORT OF THE DIVISION OF SANITARY INSPECTIONS AND HOUSING

A. J. Douglas, Esq., M.D.,
Medical Health Officer.

Dear Sir:

I have the honor to submit herewith a report of the work accomplished in this Division of the Health Department as set forth in my own report and in those of the Tenement and Smoke Inspectors, as follows:

Abatement of Nuisances

The table which follows sets forth in a concise manner a summary of the work done by the Inspectors of this division.

The total number of inspections and re-inspections was **42,678**. Complaints numbered **2,759**, or **94** less than last year.

SANITARY INSPECTIONS FOR THE YEAR 1925

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Complaints received in office	118	95	178	201	215	201	178	150	152	111	108	94	1,801
Complaints made to Inspector	77	81	83	77	91	76	75	69	82	87	82	78	958
Total	195	176	261	278	306	277	253	219	234	198	190	172	2,759
Of Above:													
Complaints re non-removal of garbage, etc.	25	29	26	30	38	47	44	34	36	34	46	43	432
Complaints re nuisance, etc	170	147	235	248	268	230	209	185	198	164	144	129	2,327
Total	195	176	261	278	306	277	253	219	234	198	190	172	2,759
Complaints well founded	170	150	233	254	264	239	203	191	197	173	164	139	2,377
Complaints unfounded or rectified previous to receipt of same	25	26	28	24	42	38	50	28	37	25	26	33	382
Total	195	176	261	278	306	277	253	219	234	198	190	172	2,759
Written notices (informal)	295	264	194	252	424	300	384	402	328	303	275	235	3,656
Written notices (statutory)	178	108	135	328	233	206	164	126	155	131	134	97	1,995
Verbal notices or warnings	783	736	844	860	957	903	893	770	838	789	938	753	10,064
Total	1,256	1,108	1,173	1,440	1,614	1,409	1,441	1,298	1,321	1,223	1,347	1,085	15,715
INSPECTIONS MADE													
Dwelling houses	233	163	239	233	250	251	180	184	186	233	196	835	3,183
Tenement and apartment blocks	136	111	105	90	65	83	78	63	92	94	103	505	1,525
Hotels and lodging houses	5	41	60	43	21	15	11	7	11	4	7	6	231
Schools and public buildings	4	4	1	1	3	1	1	1	2	3	7	2	30

SANITARY INSPECTIONS FOR THE YEAR 1925 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Abattoirs	45	53	62	48	59	43	39	33	42	2	1	1	4
Workshops and factories	20	19	12	12	11	11	11	8	15	30	44	49	558
Offices	77	68	70	86	82	69	72	35	64	70	84	59	164
Restaurants and stores	38	39	38	30	40	36	21	20	31	47	32	30	836
Stables, livery, feed and sale	154	150	159	182	297	241	157	149	129	161	194	184	402
Stables, private	67	63	61	126	111	55	35	45	42	52	59	39	2,157
Laundries, hand	4	4	5	4	2	3	4	4	1	4	4	6	755
Laundries, steam	9	10	9	21	22	13	11	12	10	15	18	12	45
Dog kennels	2	6	6	3	2	4	4	4	2	4	3	5	162
Theaters and places of amusement	8	9	9	8	8	11	8	4	9	8	7	3	45
Public bath houses	12	12	15	12	10	15	12	12	13	12	8	10	92
Public bath houses, water samples	20	20	20	20	21	20	20	11	22	20	20	15	143
Comfort stations, public													229
Maternity and Infants' homes							1						1
Hospitals, private	7	5	4	5	2	3	1	1	1		2		18
Common drinking cups and towels	11	16	13	13	14	11	9	4	1	7	3	3	50
Barber shops	37	58	33	116	69	48	16	8	7	13	12	16	143
Second-hand stores and junk yards	29	32	36	57	59	29	16	10	12	22	24	20	465
Pool rooms	500	531	609	802	960	773	943	711	720	21	25	28	373
Yards, sheds, areas, etc	38	65	114	124	120	70	73	52	45	48	52	50	8,387
Vacant lots (nuisances)	343	399	213	167	204	216	161	195	243	244	452	377	851
Street and Lanes (nuisances)													3,214
Infectious diseases (measles releases)													274
Total number of inspections	1,799	1,879	1,894	2,203	2,440	2,026	1,888	1,596	1,718	1,884	2,045	2,965	24,337
Re-inspections	1,386	1,276	1,302	1,673	1,857	1,911	1,668	1,542	1,495	1,675	1,465	1,091	18,341
Total number of inspections and re-inspections	3,185	3,155	3,196	3,876	4,297	3,937	3,556	3,138	3,213	3,559	3,510	4,056	42,678

SANITARY INSPECTIONS FOR THE YEAR 1925 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
DEFECTS AND NUISANCES DISCOVERED AND ABATED:													
Drains, choked or defective	17	20	29	33	27	19	27	21	26	25	20	19	283
Sinks and wash-basins, choked or defective	28	19	29	23	27	25	15	14	36	20	17	13	266
Water closets and fittings, choked or defective	36	53	40	48	53	22	31	23	32	31	27	41	417
Baths and fittings, choked or defective	17	3	3	2	2	1	.....	.....	3	2	1	5	39
Urinals & fittings, choked or defective	3	2	5	5	6	5	2	1	2	4	3	2	40
Soil-pipes, clean-outs, etc., choked or defective	22	18	18	17	18	13	14	16	14	20	13	6	189
Catch-basins and traps, choked or defective	23	13	15	20	22	15	13	17	19	18	12	14	201
W.C. compartments, defective light and ventilation	2	.....	5	4	6	3	2	2	2	2	3	1	32
Plumbing and water pipes, frozen	65	52	38	5	1	.....	.....	.....	.....	3	12	29	205
Vent stacks, frozen	7	1	2	.....	1	.....	.....	.....	.....	.....	.....	.....	11
Sewer connections, frozen	3	1	5	4	2	.....	.....	.....	.....	.....	.....	.....	15
Water service, defective or cut off	31	23	39	33	18	25	21	15	13	20	19	31	288
Plumbing fixtures, insufficient	9	4	7	8	3	1	3	3	7	9	2	4	60
New plumbing notice to instal	2	1	9	3	5	10	3	5	5	9	8	5	65
Total plumbing defects	265	190	244	205	191	139	131	117	159	163	137	170	2,111

SANITARY INSPECTIONS FOR THE YEAR 1925 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Dirty yards, courts, sheds, etc	329	315	284	456	372	297	277	254	296	276	353	344	3,853
Poultry kept in dwelling	10	6	3	5	4	3	2	4	3	3	7	7	57
Pigeons kept in dwelling	1	.....	.....	1	1	1	2	1	2	2	2	2	15
Animals kept in dwelling	2	2	2	3	1	.....	.....	2	.....	.....	.....	.....	12
Poultry kept under insanitary conditions	11	7	9	24	17	17	14	10	31	30	15	6	191
Cows or other cattle kept under insanitary conditions	3	4	3	4	13	22	7	4	2	5	3	8	78
Cows or other cattle kept too close to dwelling .....	.....	.....	1	2	1	2	.....	1	.....	1	.....	.....	8
Hogs, unlawfully keeping	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Horses, insanitary stables .....	.....	.....	4	18	10	7	5	4	1	2	8	6	72
Garbage receptacles	185	141	223	276	451	384	541	562	418	337	240	201	3,959
Refuse receptacles	60	76	75	130	164	134	73	96	82	58	55	71	1,074
Manure bins, defective	48	67	68	76	77	90	53	30	43	56	55	48	711
Ash receptacles	67	46	22	9	8	6	9	3	6	9	23	37	245
Paper receptacles	13	15	10	20	23	19	19	13	8	5	16	14	175
Cellars and basements, defective	30	15	47	56	48	46	30	45	45	44	24	35	465
Dwellings, dilapidated and insanitary	13	10	17	9	19	18	3	12	15	8	13	23	160
Tenements, dilapidated and insanitary .....	.....	.....	1	2	.....	5	1	2	.....	2	.....	9	22
Offices and workshops, dilapidated and insanitary .....	.....	1	1	1	1	.....	.....	2	.....	.....	.....	2	8
Dilapidated and insanitary other buildings.	8	10	7	4	5	9	5	3	10	6	14	8	89
Overcrowding (day inspections)	31	24	25	23	10	10	18	10	7	19	18	18	213

SANITARY INSPECTIONS DIVISION

SANITARY INSPECTIONS FOR THE YEAR 1925 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Overcrowding (night inspections)	4	4	6	5	2	3	6	.....	1	4	.....	1	36
Overcrowding (notices)	1	3	.....	6	4	3	2	9	7	4	4	5	48
Rat-infested buildings .....	.....	1	1	.....	1	1	2	1	4	3	4	1	19
Cockroach infested buildings .....	.....	.....	2	5	3	3	6	12	12	6	2	2	53
Bed-bug infested buildings	5	9	7	4	6	4	2	5	2	6	4	9	63
Chimneys, defective	4	6	26	17	19	18	22	18	14	23	13	4	184
Roofs, defective .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eavestroughs and rain-water leaders defective	2	3	7	23	26	38	17	32	36	26	9	7	226
Gas fittings and piping, defective	2	.....	2	1	1	.....	3	.....	7	1	2	3	22
Furnaces and heating apparatus, defective	21	10	3	1	.....	.....	.....	.....	3	6	4	16	64
Refrigerators, defective .....	.....	.....	.....	.....	1	2	.....	1	1	.....	.....	.....	5
Lighting, defective	10	1	4	4	15	2	2	2	4	1	2	1	48
Ventilation, defective	4	.....	1	5	14	3	1	1	5	4	6	.....	44
Pit closets, concrete or brick, notices	4	1	3	4	6	4	8	13	10	18	5	30	106
Contractors' closets, notices	22	14	24	80	146	91	141	124	92	95	64	39	932
Chemical or patent closets .....	.....	.....	1	1	.....	1	.....	1	1	.....	.....	.....	5
Stagnant water, vacant lots .....	.....	.....	47	37	3	1	1	.....	.....	.....	.....	.....	89
Other nuisances, vacant lots	33	54	52	77	106	61	43	35	43	47	47	40	638
Nuisances on lanes or streets.	335	379	176	140	224	211	137	163	223	211	417	354	2,970
Total number of defects	1,262	1,227	1,164	1,529	1,802	1,516	1,452	1,475	1,434	1,318	1,429	1,351	16,959
Total plumbing defects	265	190	244	205	191	139	131	117	159	163	137	170	2,111
Total defects discovered (including plumbing defects)	1,527	1,417	1,408	1,734	1,993	1,655	1,583	1,592	1,593	1,481	1,566	1,521	19,070

SANITARY INSPECTION FOR THE YEAR 1925—(Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SMOKE NUISANCES													
Chimneys and smoke stacks (observations)	43	37	27	25	8	7	10	18	18	37	48	19	297
Furnaces, boilers, fuels, etc., inspections of	118	65	73	85	32	56	75	32	67	94	136	73	926
Total	161	122	100	110	40	63	85	50	85	131	184	92	1,223
Notices, statutory	2	2	1	.....	.....	.....	.....	2	.....	3	.....	.....	8
Notices, verbal	15	25	17	10	2	5	5	6	13	17	37	27	179
Total	15	27	18	10	2	5	5	8	13	20	37	27	187
MISCELLANEOUS													
Milk samples taken .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Water samples taken .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemical tests (plumbing and drainage) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Positive results .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Negative .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cases reported for prosecution	6	.....	1	2	1	.....	.....	.....	2	.....	.....	.....	12
Time attending court (hours)	1½	1	½	1½	1	.....	.....	.....	1	.....	.....	.....	6½
Undertaking Parlors .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	1	.....	8

Frozen Plumbing and Water Pipes

There were 205 cases of frozen plumbing or water pipes, or 80 less than last year. There must be, during every cold snap, a very large number of cases which do not come to our notice, the occupants of the premises having succeeded in thawing out the pipes themselves. In inspecting cellars and basements, particularly dug-out cellars in the old houses, evidences are to be seen in the blackening of pipes and walls where flame has been applied. The lock-up stores as usual, provided a large quota. Many tenants of such stores are not willing to provide constant heat in winter time.

Other Plumbing Defects

These numbered 1906 or 67 fewer than last year, and included choked or defective drains, sinks, washbasins, water closets, baths, urinals, soil stacks, catch basins, clean-outs, and vent stacks; water closet compartments without light or ventilation; water services defective or cut off for non-payment; insufficient plumbing fixtures, etc. There were 65 notices served upon owners to install plumbing in buildings on streets where new sewers were constructed. Five hundred and fifty-one new houses were built, and 7 new apartment blocks. These, unless built on streets without sewers, were connected and plumbing installed, as well as many new buildings other than dwellings. Only 320 outside closets are now in use in Winnipeg.

Garbage, Manure, or Other Receptacles

A special campaign was conducted for two months during the Summer for new garbage cans, during which 3,959 notices were served to provide new garbage cans, or to provide covers for old cans. Garbage cans do not last as long as they might do. If garbage is put into them unwrapped, the acids eat into the metal; also the scavengers are none too careful in handling them. It is consequently necessary for us to see that cans are replenished. The total number of notices served for cans, receptacles for incombustible refuse, to provide or repair manure bins, paper and ash receptacles, was 6,164.

Nothing gives a City a cleaner appearance than to insist on all garbage, tins, manure, paper, etc., being kept in covered containers. This also keeps down both flies and rats. Some citizens, in order to make their place as tidy as possible, construct wooden bins or cupboards in which to keep their garbage cans out of sight. In such cases, the garbage can covers are frequently left off, and garbage is scattered in the bin. This leads to the cupboards and the ground underneath the same becoming infested with rats which there find security and food. For this reason we think that the garbage cans are best kept in the open.

Scavenging

Following our instructions, we have co-operated with the Street Commissioner's Department in the matter of the keeping of all garbage and other refuse in the manner required by the regulations, and so placed as to be convenient for removal. We received and investigated 432 complaints regarding the non-removal of garbage, etc. If a complaint was found to be justified, it was forwarded to the Street Commissioner with a request for attention. There were no general complaints regarding the scavenging system. Our Inspectors can soon tell if the garbage on any district is being neglected.

The following requests were sent to the Street Commissioner's Department during the year:

To clean contractors' closets	117
To allow rebates re contractors' closets	423
To remove garbage	5
To remove dead animals	8
To remove ashes	56
To clean brick pit closets	15
To remove infected bedding	1
To remove manure from streets or lanes	10
To remove tins and other refuse	6
Totals	<u>641</u>

Contractors' Closets

Permits issued 510 or 224 more than in 1924. Inspections and re-inspections and notices 932 or 252 more than in 1924. We still have a good deal of trouble in getting these closets kept as they should be. Some contractors appear to avoid the necessary cleanings in order to get a refund of the amount deposited by them. A new plan is to be tried this year by which a sum of \$3.75 will be required from each contractor at the time permit is issued. This amount will cover all necessary cleanings, and no refunds are to be given.

Feed and Sale Stables

Permits issued 15, with 3 held over until the premises made to comply with the By-law, and one vacant. Total inspections and re-inspections 402.

Keeping of Animals

Our figures show that the owners of stables are now recognizing that they must be kept in a clean and sanitary condition. A very large number of horses, cows, dogs, poultry, are kept in the City, frequently on very small lots. Over 200 private cow stables are, with three or four exceptions, now up to the standard required by the Dairy By-law. The numbers

given below are, therefore, much lower than in 1924 by 156.

Cows kept in insanitary stables, sheds, etc.	85
Calves kept in insanitary stables, sheds, etc.	2
Horses kept in insanitary stables, sheds, etc.	155
	<u>242</u>

No goats, sheep, or pigs were dealt with.

These animals were distributed amongst 128 stables.

The action taken by the Department resulted as follows:

Stables vacated and placarded	11
Stables vacated but not placarded	18
Stables improved	60
Number of animals reduced in	8
Stables demolished	4
Stable converted into garage	1
Cows with no stable disposed of	5
Pending	21
	<u>128</u>

In addition to the improvement of stables, the following animals were removed:

Horses	40
Cows	26
Calves	2
	<u>68</u>

The total number of inspections and re-inspections of private stables was 2,157.

Poultry—

Poultry kept in dwellings	57 cases
Poultry kept in insanitary sheds	191 cases
Pigeons kept in dwellings.....	15 cases
	<u>263</u>

Other Animals—

Animals kept in dwellings 12 (mostly cats and dogs). A complaint regarding the keeping of 3 foxes and 40 rabbits at a small fox ranch was dealt with.

Licensed Dog Kennels

Permits issued 25 or 3 less than last year. A few complaints were received, mostly regarding noise caused by the barking of dogs.

Nuisances in Yards, Sheds, Lanes, Vacant Lots, Etc.

If it were not for the constant supervision of the Department, one does not like to imagine what condition might obtain.

The notices served were as follows:

Dirty yards, courts, sheds, etc	3,853
Stagnant water on vacant lots	89
Other nuisances on vacant lots	628
Nuisances on streets and lanes	2,970
Total	7,540

A good deal of trouble occurred for a few days in the Spring owing to excess snow and a very rapid thaw. Vacant lots were covered with water which found its way into cellars, and even in some cases, where houses were too close to the ground, over the floors of the houses.

Nuisances Abated Compulsorily and Charged as Taxes

It was not found necessary to do this in any instance this year.

Compulsory Sewer Notices

Only one such notice was served.

Applications for City Installed Plumbing

Only three such applications were approved by Council.

Overcrowding

Day inspections 213. No night inspections were necessary, because nearly all the cases dealt with were not due to the taking in of boarders or roomers, but because families with children were occupying houses or suites with rooms too few or too small. In some cases, it was found that a poor family with only room enough for themselves had taken in another family, not expecting to get rent from them, but to help them. Two examples of large families overcrowding are here given:

A woman with 3 boys aged 18-10-7, and three girls, 17-5-1½ all sleeping in one small bedroom containing 716 cubic feet, whereas, the Public Health Act required that a family this size should have 2,000 cubic feet. This family came into the City for the winter. The children had measles, and the family had no means of support except what little the mother earned when she could get a few days work. The eldest boy a moron. The Social Welfare Commission refused to assist them on the ground that the family had only just come into town from a neighbouring Municipality. It is difficult to know what to do with such cases.

Another instance is of a man, woman, and 6 small children all sleeping in two very small bedrooms 1,593 cubic feet. They required at least 2,000 cubic feet. In this case, a neighbour obliged by lending the family one of his rooms in the same block. As reported last year, however, our trouble is not so much the overcrowding of people in rooms, but the overcrowding of families in dwellings. This will be treated of more fully under the head of Housing.

Housing

There were 511 new houses built this year, and 5 apartment blocks containing 97 suites. This is 74 houses more, and 82 more suites than in 1924. These were all built by private enterprise, as the Housing Commission for the second consecutive year made no loans.

The financial report for the year on houses already built shows that from that angle the scheme has been excellently planned and managed.

It would almost appear that building by the Commission has been stopped, owing to a reluctance to interfere with private enterprise. It might be pointed out that whether houses are built by private enterprise or by the Housing Commission, the money paid out for labor and materials is all spent in Winnipeg. As a matter of fact, the Commission did not do any actual building itself. The houses were built by contractors, and each borrower under the scheme was free to make his own terms with the builder whom he himself selected.

The most important point is that the Commission, in order to protect its own loans, insisted on good houses being built by means of the specifications used, and the supervision exercised. Nor did the supervision, accounting, and legal expenses cost the Commission anything. On the other hand, the borrowers under the scheme, had good value for their money in the shape of warm, well built houses, easy terms of repayment, and no need to worry about their taxes, which were payable monthly as part of the regular instalments.

We wish that the Commission could be induced to again commence construction so as to give other citizens the benefits of this plan.

The annual survey of vacant houses and suites taken in December showed as follows:

Vacant houses 811 (81 of these were new unfinished houses.)

Vacant suites 445

Total vacancies 1256 or 218 fewer than in 1924.

Percentage of all houses vacant 2.5%

Percentage of all suites vacant 5.6%

58.3% of all vacant houses contained 6 rooms or less.

The Dwelling Houses Occupied as Tenements

The tendency, especially in some parts of the City for families to live in one room is still increasing. When these larger one-family houses began to be sub-let as tenements some years ago, the rooms were rented in suites of three or four rooms, then two rooms became common, and now a large number of families occupy one room only.

We also notice that more children are found living in these one-roomed suites or tenements. Several times during the year Social Welfare Investigators, and our own Child Welfare Nurses, have reported families with young children or sick babies living under these conditions, and the inspectors of the Communicable Disease Division have also reported similar cases where some communicable disease has occurred. In such instances, it is of course, out of the question that the patient shall remain in the room. He cannot be isolated from his own family, and other children living in the house are not safe from contagion. The City is thus compelled to incur expense in caring for such patients in the Municipal Hospital.

The work of Child Welfare Nurses is also rendered difficult when they are called upon to care for babies living in such unhealthy surroundings. A few instances are given here:

The double house of 26 rooms referred to in our last report as containing 14 children now has 22 children. Out of 11 families living in the house, 9 have children, one having 5 children, four with 3 children, one with 2 children, and three with one child each, (5-3-3-3-3-2-1-1-1—22). In October last, 6 cases of Diphtheria occurred in two of these families. These 6 cases were cared for at the Municipal Hospitals, and the cost of so doing, according to figures supplied by the Secretary & Business Superintendent, was \$359.31. Each of these two families consisted of man, wife, and three children, and each family occupied one room only. The total occupants of this double house in October, was 56 as against 49 in January last, and although there were 10 rooms vacant in October as against 4 in January, this means 3.5 persons per occupied room. Since October, another child has been born to the family with 5 children. This family occupies two attic rooms, and the family is under the care of the Social Welfare Commission. There is no actual overcrowding, but they should, of course, have a large domicile. Two small attic rooms are not enough for a family of this size.

In a 15 roomed house on Balmoral Street, the number of children living in the house has increased from two children in 1919 to ten children in 1925. Six of the eight families occupying have children, (3-2-2-1-1-1—10). In December, there were 3 cases of Measles and one of Whooping cough reported, and there will probably be more before the quarantine is lifted.

A 9 roomed house on Kennedy Street containing 8 families, (one room is vacant at present or there would have been a family in every room). Five of these families have children. One family has 3, two families 2, and 2 families 1 each, total 9 children and 15 adults. Even a room containing 687 cubic feet only is rented to a man and wife. One baby away in hospital. Nine unvented gas stoves, only one set of plumbing fixtures for all occupants. The lessee pays \$50 per month for the house, and with his wife and child occupies the kitchen only. He draws \$103 per month for the 7 rooms sub-let, (an average of \$14.70 per room) and

clears \$53 per month as well as living rent free. Only one room actually overcrowded. Reported by a Child Welfare Nurse.

The above inspection was made December 2nd, 1925. On re-inspection Jan. 6th, 1926, it was found that the lessee had disposed of the house as a going concern to another man without family, who was living in the cellar, having rented the kitchen occupied by the previous lessee to another family. He had also rented the one room reported vacant in December, so that the rent of two more rooms may be added to the figures given. It looks as if the previous lessee had sold the business for fear of trouble with the Health Department. There have been other changes in tenancy. The one room overcrowded in December is now occupied by a single woman instead of man and wife, and some of the families with children have moved out, although others have moved in. There are now six children as against nine in December. The lessee has been notified to cease living in the cellar, but this is about as much as the Department can do at present, in view of the occupation of an extremely large number of houses in a similar way, without discriminating against the lessee of this particular house in favor of the proprietors of similar houses.

It is clear that by reason of the cramped quarters occupied by many of the families living in such houses, the City is being put to some expense. More hospital accommodation may be required at an earlier date than would be necessary if housing conditions were better - if individual families had more rooms at their disposal and were able to properly isolate and care for cases now sent to hospital.

Why then should this overcrowding of families be permitted to continue unchecked in order that the lessees of such houses may be able to make a living by such means? Surely such houses might be placed under supervision of some sort - perhaps registration of houses let in lodgings might help - and a standard be defined for them as regards the number of families which may be allowed to occupy, and the conditions which should obtain in them as regards sanitation.

The main features we would suggest are as follows:

1. Registration or license of all houses let in lodgings.
2. A certificate from the Health Officer to be required as a precedent to registration or license.
3. Health Officer not to issue any such certificate unless the premises comply with the following conditions:
 - (a) Every room to be adequately lighted.
 - (b) Halls and stairways adequately lighted.
 - (c) Proper ventilation. Windows and storm sashes arranged to open as required by law.
 - (d) The use of unvented gas stoves to be prohibited.

N.B. It is impossible to properly connect a large number of gas stoves to one chimney. Electric stoves should be required in such premises.

- (e) Adequate plumbing fixtures. At least one water closet, one sink, one bath, and one wash basin on each floor for every 20 persons or fraction thereof on such floor. All bath rooms and water closet compartments to be adequately lighted and ventilated. A separate bath and water closet reserved for women. Access to all plumbing fixtures to be obtained by the occupant without passing through any room occupied by another person or family.
- (f) The rooms occupied by each tenant or family to be reached without passing through any room occupied by another family.
- (g) No basement room to be occupied without the permission of the Health Officer.
- (h) No attic room to be occupied without permission of the Health Officer.
- (i) A net cubic air space for each occupant of every room of at least 400 cubic feet for each adult and 200 for each child under 12. (This means that deduction would be from the gross cubic air space for furniture and for the occupants themselves.)
- (j) Each separate family to have at least two rooms, one a kitchen or living room, and one or more bed rooms as may be required according to the size of the family. If this be thought too stringent - although it appears to me a reasonable requirement - then at least those families with children should be required to have not less than two rooms.
- (k) Halls, bath rooms and water closet compartments to be lighted at night.
- (l) Such fire escapes and fire alarms to be provided as are required by the Building By-law.
- (m) A resident caretaker or person in charge.
- (n) The word "family" to mean any group of persons living together, whether related to each other or not, and may consist of one or more persons.

The effect of such a By-law or regulation would be to take all the houses originally built for and occupied by one family only, but now occupied as tenements, out of the classification of apartment blocks or tenements, which they were never intended to be. They are today occupied unlawfully as tenements, and the majority of them could never be made to comply strictly with the requirements of the Tenement By-law.

The By-law we suggest would frankly recognize the fact that these houses are at present so occupied, and that in the absence of a sufficient number of small cottages, they fulfil a demand for cheap and especially warm housing by a large class who have not the means or inclination to rent a whole house, even if small houses could be supplied for them. One of the principal reasons for these people not wishing houses is that the expense and trouble of heating is avoided by living in rooms. A new class of housing would thus be recognized, viz. "Houses let in lodgings" and although the standards of housing in such dwellings would not be equal to that found in apartment blocks proper or in single family dwellings, and that it would even at the best be far below what we should like our citizens to enjoy the condition of such houses would, under proper regulation, including the requirement of more rooms for each family, more sanitary conveniences, and privacy, be a vast improvement on the conditions now obtaining. Some of these families, if required to rent more rooms, might feel more inclined to rent a house for themselves, and the lessees of some of the houses might decide that the business was no longer so profitable, as the rents of rooms would probably fall. If this measure were inaugurated and pressed forward as soon as practicable, there would probably be a demand for more small houses.

In any event, housing conditions would be greatly improved. All the people have not yet got real homes, and if they are left to themselves, will, apparently, never get them. It should only require a recognition of the facts, always keeping in mind the health, comfort, and welfare of our citizens - especially the children - to ensure action to prevent even worse conditions, and to move forward towards a higher standard. Economic difficulties will be met with, but should not longer prevent action. If resolutely faced, these difficulties will not prove insuperable.

Zoning

An important advance was made this year in securing an amendment to the Winnipeg Charter, permitting the City to pass By-laws restricting the number of sub-divisions within any district of the City, regulating or controlling the size of the lots, and for creating, regulating or controlling special zones or districts in the City, **and the uses to which the property therein may be applied.** The amendment further declares that all By-laws heretofore passed which would have the effect of regulating, controlling the use of property in any zones or districts, are, and have always been, valid and binding. Every such By-law hereafter passed is to become effective only upon registration in the Winnipeg Land Titles Office. The first use made of this legislation was to pass a By-law prohibiting the establishment of the business of an undertaker on certain streets. We hope that this will be followed by the preparing and enactment of a zoning By-law which will protect all strictly residence districts from the encroachment of any business establishments which would disturb the amenity of the neighborhood, or adversely affect the values of such residence property.

Gas Stoves and Fittings

Only 22 complaints were dealt with. We are still without any By-law regulating the installation of gas pipes and fixtures, or which would prevent the installation of gas stoves in bedrooms, or other unsuitable places.

Trades, Manufactories, Office Buildings, Etc.

Inspection of workshops and industrial plants 558, office buildings 164. Laundries not included in these figures. We dealt with a few nuisances as follows: Seepage from a hide warehouse into adjoining building, noise, dust, and vibration from a buckwheat mill, odors and seepage of liquids from pickle plants. Red River water supplied to a Railway shop instead of City water, lack of proper sanitary conveniences in workshops, lead dust in battery making, defective plumbing, lack of adequate light and ventilation, etc. Two or three permits for the occupation of basements for businesses of a public character were granted.

Rats

Complaints regarding rats numbered 48 (last year 46). Rat bounty of five cents per tail was continued. 4218 tails were brought in, for which \$210.90 was paid. July and August were the heaviest months. There was an increase in the number of tails of 1362 over 1924. From one abattoir 362 tails were delivered, and 344 from one retail butcher shop. Three stables contributed 602 tails, a cold storage firm applying for rat poison stated that a shipment of walnuts from China was found on opening, to be alive with young rats. There were 1,131 applications for free rat poison, Ward 1 - 193, Ward 2 - 354 and Ward 3 - 584. There were 1,382 boxes distributed.

The premises in which it was intended to use the poison were as follows:

Dwellings	637
Stores and dwellings	32
Stores	144
Apartment buildings and hotels	71
Stables	97
Chicken houses	47
Institutions and public buildings	30
Yards and garages	54
Warehouses	19
Total	1,131

During the year we received several enquiries from points as far West as Regina, asking what action the City is taking in respect of rats. This indicates that the rat is gradually spreading to the West Coast.

We are still without any By-law to enable us to deal more effectively with rats.

Public Baths and Comfort Stations

Inspections of Baths **92**. Comfort Stations **229**. There were 143 samples of water taken from swimming pools and submitted to the City Bacteriologist for examination. Both the baths and comfort stations were kept in a clean and sanitary condition during the year.

Private Hospitals

Five Certificates of the Health Officer were issued in 1925, as against 3 last year. These do not include Maternity Homes which are under the control of the Provincial Board of Health. Nevertheless, some of these private hospitals take in some maternity cases. They claim that they are not liable for Provincial registration as Maternity Homes on the ground that the principal business carried on therein is not the receiving of maternity cases. It would be well if the Provincial Regulations were amended so as to include all places where maternity cases are taken in.

Undertakers' Establishments

A new By-law was passed during the year requiring that all Undertakers be licensed, and also that each applicant for license shall obtain from the Health Officer a certificate that his premises are suitable and satisfactory for the purpose. A further By-law prohibits the establishment of any such business on certain residential streets specified therein. Inspections were made of **9** premises, **8** of which were approved for license, and one not approved because it was situated in a proscribed area.

Common Drinking Cups and Towels

Fifty warnings were given regarding the use of the above during the year.

Chimneys and Furnaces

Defective chimneys to the number of **63**, and defective furnaces and heating apparatus, **64** were dealt with. A great many household furnaces are getting defective. The use of these, especially when soft coal is the fuel, is dangerous to the health of the occupants of the houses.

Billiard Rooms

Seventy permits were issued for pool rooms, or five less than last year, and **373** inspections were made.

Second Hand Dealers and Junk Yards

There were **157** permits for such premises issued, or **15** more than in 1924, and **465** inspections made of such premises.

Barber Shops

One hundred and forty-three inspections of barber shops were made.

Vermin

Notices were served respecting **19** premises where cockroaches were found, and **53** houses infested with bed-bugs.

Theatres and Places of Amusement

Inspections made 45. No complaints were received, and the premises were found to be in fair condition.

Schools and Public Buildings

Inspections numbered 30, mostly of private schools.

Laundries

There were 122 permits issued, or 3 more than in 1924. 755 inspections were made of hand laundries, and 45 of steam laundries. Three applications were made for permission to establish new laundries, only one of which was approved by Council.

Hotels

Permits issued 59. Inspections and re-inspections made 231. The hotels are now in fair condition considering that many of them are very old buildings. Every Spring, before licenses are renewed, considerable repairs and cleaning are required.

Smoke

From the report of the Smoke Inspector Pickering, it will be seen that the campaign of education conducted during the last few years on the proper methods of using coal in such a manner as to prevent smoke, and to obtain the maximum efficiency from coal has been very largely successful. The great variety of coals used in Winnipeg makes it necessary for the Inspector to have a thorough knowledge of the heat producing and smoke producing possibilities of all coals used, if his advice to consumers is to be of value. By the skilful use of this knowledge, our Inspector has been able, in many cases, not only to eliminate smoke, but to effect an economy for the consumers concerned.

Insanitary Buildings

The table given below shows the number and class of premises for which notices were served upon owners and occupiers under section 103 of the Public Health Act, under which section the Health Officer has power to require that premises be put into a proper sanitary condition or else closed up:

Dwelling houses	26
Dwelling houses, unlawful conversion of same to duplex dwellings .....	...
Dwelling houses, unlawful conversion of same to tenements	2
Tenement houses	3
Basement and cellar dwellings	1
Dark rooms (dwellings)	2
Stores occupied as dwellings	2

Factories and workshops	7
Stables	11
	<hr/> 54
Notices served on owners and agents	59
Notices served on occupants	42
	<hr/>
Results:	
Notices complied with (premises put into sanitary condition)	29
Premises closed and placarded	22
Cases still pending	3
	<hr/> 54
Remaining closed on December 31st, 1924	212
Premises repaired or demolished during 1925	33
	<hr/> 179
Premises closed during 1925 (dwellings 9; stables 9; other premises 3)	21
Remaining closed on December 31st, 1925	200

Work Done for Other Divisions or Departments

Our Inspectors attended to 274 cases of Measles for the Communicable Disease Division. As is usual, we made a number of reports on dwellings for the Social Welfare Commission. Reports were made to the Building Inspector regarding certain infractions of the Building By-law, and some investigations were made for the Statistician regarding incorrect reports on births and deaths.

Prosecutions for 1925

Nature of Charges

Nuisances on premises	4
Deposit refuse or manure	2
Neglect to comply with notice of Health Officer	9
Occupy insanitary premises without permission of Health Officer	1
Keep pigeons in dwelling	1
Food prosecutions	4
Dairy prosecutions	7
	<hr/>
Total	28

How Disposed of

Fine	Cases	Fines
Summons not served	1	.....
\$ 3.00	8	.....\$24.00
4.00	2	..... 8.00
5.00	1	..... 5.00
8.00	2	..... 16.00
10.00	4	..... 40.00
13.00	6	..... 78.00
14.50	1	..... 14.50
16.00	1	..... 16.00
23.00	1	..... 23.00
28.00	1	..... 28.00
Total	28	.....\$252.50

This is the lowest number of prosecutions for any year in the history of the Department. In 1924 there were 33 prosecutions.

General

There are now only eleven district Inspectors, Inspector Booth having been transferred to the Dairy Division in January last.

The Inspectors and clerical staff of the division have given me every support during the year.

Yours obediently,

ERNEST W. J. HAGUE,
Chief Health Inspector.

Report of the Tenement Inspector

A. J. Douglas, Esq., M.D.,

Medical Health Officer.

Dear Sir:

I have pleasure in submitting, for your consideration, the following report on tenement inspection and action taken during the year 1925 in housing conditions.

Complaints relating to nuisances in tenements and apartment blocks numbered 77 this year, as against 109 in 1924, 114 in 1923 and 314 in 1922.

It will be seen from the above, that complaints are becoming fewer, and as stated in previous reports, this is accounted for in two ways; first, a better understanding by owners, of our regulations, and second, a strict supervision by our inspectors. As usual, most of the complaints received, referred to improper storage of garbage. We have continued our education campaign in the matter and in this we are having a full measure of co-operation from the caretakers of apartment blocks and others. As a result we are also receiving fewer complaints about rats.

Defective drainage and plumbing accounted for 15 complaints. One of these complaints came from a medical man who was in attendance on a family affected with sore throats. On investigation, we found a serious defect in the drainage system of the block, which was only located and remedied after considerable trouble and expense.

Complaints about defective gas stoves in tenements are becoming fewer; we received only 4 this year. This is doubtless due to a reduction in the number of gas stoves and an increase in electrical apparatus.

There are also fewer complaints relating to bedbugs, etc., and this is no doubt due to the fact that in the past we have been appealed to in vain by tenants who were desirous of breaking their lease on this account. It sometimes happens that tenants bring vermin into their suite with the furniture. For this reason, a number of blocks are constantly being gone over by vermin exterminators.

The problem of the illegal tenement is more acute than ever. We are constantly coming across more of these premises each year, and the shortage of small one-family dwellings prevents our taking drastic action except in cases of flagrant overcrowding or very insanitary conditions. Several instances that were brought to our attention during the year are referred to under.

A dwelling of ten rooms was found occupied by 6 families, also 6 roomers. The total occupants were 9 men, 9 women and 7 children. Two of the families had only one room each and these were in the attic. A corner in one of these attic rooms is surmounted by an ornamental tower. The ceiling at this portion was quite wet, with large droplets of water hanging over its entire area. The window sashes were frozen and could not be opened. Owing to the position of the window, the attic could not be properly lighted. Natural light and ventilation in the other attic room was also deficient and in both rooms there was an unvented gas stove in use. One of these stoves was connected to the gas meter by means of rubber tubing. It is only fair to state that in this case the owner of the premises was unaware of the conditions obtaining, the lessee having sublet the rooms and made the other changes. We had the families removed from the attic and the occupation re-arranged.

Information from the Communicable Diseases Division of the Department brought to our attention deplorable housing conditions in a terrace of dwellings close to the centre of the City. The partition wall between two of the houses was cut on each floor thus making the two houses into one. There were 26 rooms, 4 of which were vacant at the time of inspection. The occupants consisted of 20 separate families or tenants, including 23 adults and 22 children. There was just the usual set of plumbing fixtures in each house; families with little children were housed in the attic rooms and the storm sashes were fixed. We had the number of families reduced and informed the lessee that the occupation of the attic rooms by families was not satisfactory, owing to insufficient natural light, low ceilings, etc.

We dealt with an old frame dwelling in 1916 that had then become occupied as a tenement and we succeeded in getting conditions rectified; later the premises were vacated. This year we found the house had again been leased by the same party and the rooms once more let out for individual family use. The lessee had installed three new wash-basins, and these had apparently been fitted by a handy man, who in addition to using improper material, had caused the waste to discharge into the catch basin, instead of being properly connected in accordance with the Plumbing By-law.

Our attention was directed by one of our Child Welfare Nurses, to bad housing conditions in an old dwelling in the centre of the City. There were 9 rooms occupied by 8 families, consisting of 15 adults and 9 children. The lessee of the premises slept in the cellar and by doing so was able to obtain revenue from every room in the house.

The farmed-out house is a problem that most Cities have to face and it cannot easily be solved. We are aware of scores of premises such as those described above, but the shortage of small houses prevents our doing more than regulating matters. It is also manifestly impossible now to hold

such premises down to occupation by one family. It would help considerably, however, if adjustments could be made so as to permit of our demanding at least a sufficient number of plumbing fixtures, etc. It is extremely hard to check the spread of communicable diseases and much harder to do effective child welfare work under such conditions.

Before the war we had a shortage of small houses, due mostly to the steady stream of immigration, but since then the problem has become more acute. Previous to 1914, however, builders were busy erecting dwellings, but at the close of the war the cost of material was so high that the construction of dwellings came to a stand-still. During the past year or two, a number of new dwellings have been constructed, but not in anything like sufficient numbers. No doubt many of these were bought by people who in turn rented out their old homes if they owned them. This is about all the accommodation that can be obtained by the family that cannot afford a house of their own.

In addition to the general overcrowding, insufficient number of plumbing fixtures, etc., there is always a serious risk of fire where individual cooking is done in the rooms of the illegal tenements. A fire in such premises might have very grave consequences, especially in the case of occupants in attic rooms. For this, as well as other reasons mentioned above, we have taken action in the matter of the occupation of many attic rooms.

Considerable repairs and improvements have been effected during the year in a number of our apartment blocks. On the whole, we can report a good measure of co-operation from the owners and agents of these properties

Respectfully submitted,

ALEX. OFFICER,

Tenement and Supervising Inspector.

Report of Smoke Inspector

A. J. Douglas, Esq., M.D.,

Medical Health Officer.

Dear Sir:

I respectfully submit herewith the following report on smoke nuisances and their abatement for the year 1925.

Smoke Inspections

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Observations—													
Chimneys and Smoke Stacks ..	43	37	27	25	8	7	10	18	18	37	48	19	297
Inspection of Fur- naces, fuel etc.	118	85	73	85	32	56	75	32	67	94	136	73	926
Totals	161	122	100	110	40	63	85	50	85	131	184	92	1,223
Notices—													
Statutory		2	1					2		3			8
Verbal	15	25	17	10	2	5	5	6	13	17	37	27	179
Totals	15	27	18	10	2	5	5	8	13	20	37	27	187

In my opinion, there has, during the past year, been considerable improvement in smoke conditions.

The educative policy which we adopted during the past few years is no doubt responsible and one may also conclude that the economic viewpoint is generally accepted. In practically all instances where notification is necessary, the monetary loss receives far more serious consideration than does the nuisance caused to the general public.

Monetary loss due to high flue temperatures, deposit of carbon on the boiler heating surfaces, incomplete combustion of the coal, careless loosening of the fuel bed and careless firing is considerable, and in some cases must represent a loss of about forty per-cent of the fuel cost.

In many instances the boiler settings are not suitable for economical use of Bituminous or soft coal. A low volatile or semi-bituminous coal is substituted in such cases.

Considerable time is often spent in order to explain why dense smoke from a chimney often shows lack of interest in economical boiler-room supervision and a selfish attitude towards the general public.

A smoke laden sky prevents penetration of the sun's rays and produces an atmosphere positively depressing to most people and according to Medical Science has a direct bearing on diseases of the respiratory organs of the body.

It is necessary, in order to understand the problems which arise in smoke abatement, that the principles of combustion be thoroughly understood.

Eighty per-cent boiler efficiency with a certain coal in one plant does not mean that the same efficiency will be obtained with the same coal in another plant, although to all appearances the boiler heating surface, grate area, air space in grates, setting and draft are the same.

The American standards of coal classification are as follows:- Anthracite, Semi-Anthracite, Semi-Bituminous, Bituminous, Sub-Bituminous, Lignite. Those most commonly in use in this City are:

Semi-Bituminous: This is a low volatile coal and is used on hand-fired power and heating boilers and hot-air furnaces. Example - Pocahontas.

Bituminous: This coal is much higher in volatile content than the Semi-Bituminous grade. Imported examples are: Youghioghenny, Elkhorn, Miller's Creek, Red Star, etc. Canadian are, Greenhill, Hillcrest, Cadomin, Belle Vue, McGillvray Creek, etc.

Sub-Bituminous: This grade we receive exclusively from the Alberta coal fields. It is largely used in domestic furnaces and stoves and is a very suitable fuel.

Lignite: Often called Brown coal. Typical example - Souris. Used in domestic furnaces and heating boilers generally where forced draft is available.

In addition, coke is largely used on domestic furnaces and of course gives no trouble from the smoke viewpoint.

Semi-Bituminous coal such as Pocahontas is practically smokeless if properly fired. In most instances, a fairly dense smoke is emitted for the first minute after firing but clears up practically immediately. Being a low volatile coal, very little soot is deposited on the boiler heating surfaces. The calorific value is approximately fourteen thousand, five hundred B.T.U's per pound.

The Bituminous coals may be divided into free burning and coking coals. Coking coals are generally suitable for the production or manufacture of gas and free burning or non-coking coal for steam generation purposes only. Calorific values range from twelve thousand to fourteen thousand B.T.U's. per pound.

In considering combustion of coal, the elements constituting the combustible portion or the heat-producing content must be considered.

Coal is principally composed of Carbon and Hydrogen. These two elements have an affinity for oxygen.

Hydrogen is seldom found in its free state. It occurs naturally in combination with carbon. There are hundreds of such combinations and those commonly found in coal are Marsh gas and Olefiant gas. These combinations are commonly alluded to as Hydro-Carbons and of course vary in density.

Those Bituminous coals such as Youghioghenny, Red Star, etc., contain the heavier Hydro-carbons and consequently cannot be used on ordinary hand-fired furnaces without the emission of black smoke. Those containing the lighter series vary in results depending on the rate of firing. Generally speaking, however, mechanical stokers are most suitable for their use both from the smoke viewpoint and economic steam generation.

During combustion, Hydrogen combines with Oxygen and forms water vapour. The volume of air necessary for this combination is as follows:

Eight pounds of oxygen is required for the complete combustion of one pound Hydrogen:

$$\frac{\text{atomic weight } \begin{matrix} \text{H}_2 & \text{O} \\ 2 & 16 \end{matrix}}{2 \quad 16} = 8 \text{ pounds of oxygen}$$

One pound of Carbon requires 2-2/3 pounds of oxygen for its complete combustion to $\begin{matrix} \text{C} & \text{O}_2 \\ \text{C} & \text{O}_2 \end{matrix}$

$$\frac{\text{atomic weight } \begin{matrix} \text{C} & \text{O}_2 \\ 12 & 32 \end{matrix}}{12 \quad 32} = 2\text{-}2/3 \text{ pounds of oxygen.}$$

If there is incomplete combustion of the Carbon, Carbonic oxide or Carbon monoxide - $\begin{matrix} \text{C} & \text{O} \\ \text{C} & \text{O} \end{matrix}$ is formed, the weight of oxygen in this case being

$$\frac{\text{atomic weight } \begin{matrix} \text{C} & \text{O} \\ 12 & 16 \end{matrix}}{12 \quad 16} = 1\text{-}1/3 \text{ pounds of oxygen}$$

Now 4.5 pounds of air are required to supply one pound of oxygen, therefore:—

$8 \times 4.5 = 36$ pounds of air necessary for complete combustion of one pound of Hydrogen.

$2\text{-}2/3 \times 4.5 = 12$ pounds of air necessary for complete combustion of one pound of Carbon, but if incomplete combustion occurs, $1\text{-}1/3 \times 4.5 =$ only six pounds of air has been provided.

Therefore, as there are approximately twelve and a half cubic feet in one pound of air, the necessary volume of air for complete combustion of Carbon and Hydrogen is as follows:—

Complete combustion of one pound of Hydrogen - 450 Cu. Ft.

Complete combustion of one pound of Carbon - 150 Cu. Ft.

By the same calculation, if there has been incomplete combustion of the Carbon and CO is formed, only half the required volume of air has been provided.

The heat value liberated during the combining of the above elements is as follows:— Hydrogen - Approximately 62,000 B.T.U's per pound. Carbon - 14,500 B.T.U's. per pound. Incomplete combustion of the Carbon to Carbon-monoxide - 4,400 B.T.U's. per pound.

One may realize from the above that adequate air supply is necessary for economic combustion of coal, therefore, the fireman should be intimate with the principles of combustion in order to render economic service to his employer.

The draft, air spaces in grates, height of setting, cracks in brickwork, cleaning of flues, preventing clinkers by careful use of the slice bar, alternate firing and wastage during and after the clearing of fires, are a few of the things which a fireman ought to be conversant with whether he is firing a low pressure sectional boiler or a power boiler. If he is well versed with these principles he will also know that his air supply must be passed not only through the fuel bed, but over it as well. Using the ash pit doors instead of the breeching damper to check the draft is very common practice and often results in the formation of clinkers and undue burning out of the grate bars.

Considering that thousands of tons of coal of all classes are burned here during the winter months, smoke conditions have been very satisfactory. Very few complaints have been received.

Several complaints were received relative to low chimneys. In such cases whenever possible, an extension of the chimney is requested, but whenever impracticable, a low volatile coal is used.

The use of a sub-bituminous coal for domestic furnaces, although satisfactory from a heating and smoke density viewpoint, gives rise at times to considerable nuisance, especially in the presence of a humid atmosphere.

Referring to my report of 1923 wherein suggestions were made relative to distillation of coal, the extraction of by-products and ultimate use of the coke for domestic purposes. Considerable research work has been done in England during the past year and a system of low carbonization of coal completed. The authorities hope, by this means, to increase the commercial value of the coal by utilizing the by-products and use the coke for power and domestic use. This is expected to permanently solve the question of smoke abatement which has in the past been responsible for serious conditions, both from the viewpoint of health and financial loss, of many cities in England.

Referring also to my report of 1922 relative to our coal resources and suggesting a subsidy by the Government for transportation of coal from the West in order to encourage the use of Canadian coal, this plan has apparently been adopted with advantage to the Eastern consumers. There is no apparent reason why Winnipeg should not have the same concession to the advantage of its citizens.

During the past year two new types of furnaces have been installed, viz. - The Turbine furnace and the Carbo Combustion grate. Both are on the forced draft principle and give excellent results, both in steam generating efficiency and smoke emission.

Smoke nuisances from Locomotives and Roundhouses still continue and in the absence of the necessary legislation we are powerless to insist on improved conditions. A comparison of the smoke from Locomotives and that from buildings within the City shows what effect legislation has. Smoke from the Roundhouse at Fort Rouge is a constant source of annoyance to persons in that vicinity and will apparently continue so until the necessary authority is obtained.

A number of complaints relative to defects in hot-air furnaces were received. In most cases the defects are cracked fire-pots or defective joints to the various sections, which allow the products of combustion to gain access to the hot-air chamber. The effect on the occupants is impairment of health and if allowed to continue would be serious. In all instances, however, repairs were made immediately.

There has been no repetition of complaints relative to the emission of objectionable smoke and gas from the Gladstone Street Gas Works.

In conclusion, I may state that inspection of domestic furnaces, plumbing defects, inspection of Hotels, Public Baths, Comfort Stations, Private Hospitals and Undertakers' Parlors, have been made in addition to smoke abatement duties.

Respectfully submitted,

P. PICKERING,

Smoke and Supervising Inspector.

Report of the Chief Dairy Inspector

A. J. Douglas, Esq., M.D.,

Medical Health Officer.

Dear Sir:

I have the honor to submit herewith a report covering the work of the Dairy Division for the year 1925.

Generally speaking, conditions governing production and marketing of milk and dairy products are much the same as those of the previous year; feed, perhaps a little more plentiful, competition a little more keen, and an abundant supply of fluid milk always in sight. Notwithstanding the fact that our population and our daily consumption of milk stand practically at the same figure as in 1924, yet we have an increase in the number of licensed distributors, and a corresponding increase in the number of delivery wagons. This condition could only result in placing competition on a price basis, and as a consequence, the usual fall increase was sidetracked, and the public continued to receive milk right through the winter at the same price as in the previous summer, said winter price being the lowest we have had in the past ten years.

The saving to the consumer in this regard calculated at one cent per quart amounts to \$600.00 per day, and while this may be looked upon as excellent business by the citizens whose only object is to get as much as possible for the least amount, yet we must not forget that the hard working producer who ships his product to the city pasteurizing plants has been in the habit of looking forward to, and expecting to receive, a little more for his product during the winter months when his expenses are highest, and that when the producer finds that this tangible piece of encouragement has been cut off, it may be very serious for him; and the effect of this disappointment may eventually react to the disadvantage of the consumer.

Licenses

From June 1st, to December 31st., 138 licenses were issued, including 130 dairies and 8 milk depots. One dairy herd was dispersed in the fall, and one milk depot went out of business before the end of the year, while three dairy licenses were transferred. The number of licenses in active operation at the end of the year was 136 as against 125 for 1924.

Licenses may be classified as follows:-
showing comparative figures for the past four years.

	1922	1923	1924	1925
Dairy Farms, Raw Milk	104	114	119	129
Small Depots, Raw Milk	2	2	2	1
Small Depots, Pasteurized Milk	2	2	2	4
Large Depots, Pasteurized Milk	2	2	2	2
	110	120	125	136

A total of 337 wagon plates were issued in connection with the above mentioned licenses but 7 of these were returned on the holders relinquishing business, so that the balance of 330 indicates the number of delivery wagons employed as against 315 for 1924. This increase of 15 wagons, however, merely represents the increased number of licenses issued, and does not indicate any increased consumption, but is more probably a sign of strong competition and smaller loads.

Revenue derived from license fees, inspection fees, etc., amounted to \$3,003.50, based on the following particulars:

1,293 Dairy Cows at \$1.00 per head	\$1,293.00
2,453 Dairy Cows at 50 cents per head	1,226.50
164 Wagons at \$2.00 each	328.00
13 Wagons at \$10.00 each	130.00
38 Inspection Fees at 50 cents	19.00
3 Transfer Fees at \$2.00 - \$3.00 each	7.00
	<u>\$3,003.50</u>

The Licensed Dairies

The 129 licensed dairies are all practically located in the Winnipeg district, and they all have tuberculin tested herds, with an average of 28 to 30 milk cows each. These dairies produce from 44 to 46% of our milk supply, and with the two certified milk farms excepted, they all distribute their own product.

The milk from these dairies is all sold in the raw state, approximately 20% being bottled, the balance being handled in bulk from cans; they also handle a small portion of cream, amounting to approximately, 7% of the general supply.

A number of these dairies are kept and operated in an excellent manner, while the majority may be considered very fair as compared with conditions of a few years ago, but it is to be regretted that we have some who are still careless and indifferent and need constant supervision.

Again, we have those who comply with the regulations sufficiently so as to obtain a license, but show an utter disregard of the spirit of said regulations immediately the license is issued. Their methods are crude and careless, and any interest shown is with a desire to get the most out of the business with the least exertion, apparently giving no consideration for

the welfare of the consumer. This is a very dangerous attitude, and dairymen of this class who are not above suspicion should be eliminated, as they constitute a perpetual menace, not only to the consumer, but to those better class dairymen who are making an honest attempt to do the right thing. In this connection, the Winnipeg Dairymens' Association has attempted to bring about improvement, realizing that the black sheep of the flock are always the more liable to attract attention and prejudice opinion against the dairymen as a whole.

Milk Depots

It will be noted that this year we have an increase in the number of milk Depots operated. During recent years, there has been a tendency for employees of the large milk plants to imagine that they sufficiently understand the milk business to launch out for themselves, and that all they have to do is to get a delivery truck, purchase milk and retail same for a sure profit. The milk Depot regulations embodied in our By-law and the Manitoba Health Act depend upon milk and cream being prepared for distribution, but do not state what constitutes preparation, while pasteurization of the product is not obligatory.

These regulations were inaugurated 15 years ago, when it was found necessary to deal with an existing condition. At that time, several city and suburban persons held dairy licenses, although not owning or controlling a single cow and they merely purchased milk from farmers and retailed same; in most cases, the dwelling or wood shed, or some other outhouse being the sole place of business.

Even today we have trouble with some of our small depots, and our experience teaches us that where milk is concerned, it is difficult for the small man to enter, because he cannot afford to employ the same measures as are employed in a large plant, such as laboratory and thermostat control of all pasteurizing operations.

At the present time, 54% of our milk is pasteurized. The two large plants handle 50% of our total supply, all pasteurized, the remaining 4% of pasteurized milk being handled by four small depots running from one to three vehicles each.

One small depot handles raw milk purchased locally, while another handles pasteurized milk purchased locally. The remaining three small depots and the two large plants are fitted with suitable pasteurizing equipment.

The Tuberculin Test

The continuation of the tuberculin test by the Federal authorities is undoubtedly of great value to the local dairymen. The cleaning up of these herds has been an expensive process, but there is no reason why the cost of upkeep should not be held at a reasonable level, provided each and

every herd owner does his bit and co-operates with the Department.

The greatest trouble appears to be with the additions, which provide by far the largest number of reactors. A number of herds appear to be practically clear all the time, but occasional ones suffer a reversion. Whenever these sporadic outbreaks occur, there must be a cause, and it is our opinion that in far too many cases the dairyman himself is at fault.

Early in the year, the Veterinary Inspectors started a campaign against open manure piles, (which in many cases surrounded the dairies) on the assumption that manure from diseased herds was liable to spread disease to healthy animals grazing in the vicinity; in fact, it was notorious that some of the worst outbreaks occurred in those districts where the open prairie was rapidly being converted into a nuisance ground.

Our Department co-operated in this work, first by means of circulars then by special visits or personal letters, until finally by fall, the majority had complied and had removed or destroyed the objectional manure, or were placing it inside a fenced enclosure to which cattle could not gain access.

In this connection, it was found necessary to suspend the licenses of two dairymen who persistently neglected or refused to clean up. This proved a salutary lesson, and there has been little trouble since.

Improper isolation of additions has been another cause of complaint, and it is possible that in the future, each herd owner may be required to provide a separate isolation stable.

For the year ending March 31st, 1925, a total of 7,656 cattle were subjected to the tuberculin test, involving 123 dairy herds, while 8,574 re-tests were made, giving a total of 16,230 tests for the year.

Cattle in main herds submitted to test	5,197
Additions to herds submitted to test	2,459
Total cattle tested	7,656
Re-tests conducted	8,574
Total tests conducted	16,230
Reactors in main herds	334 6.42%
Reactors in additions	618 25.13%

At the last general test in this period, 95 herds had a clean test, while 24 herds were found to contain reactors.

The outstanding feature in regard to the above figures concerns the very large number of animals which have to be brought in annually in order to keep the herds up to strength, and in order that no erroneous opinion may be expressed by these facts, it may be as well to explain that it is not on account of the losses that these figures are so high, as only 334 reactors were found in the main herds during the whole twelve month period; and allowing for the 25% loss among these additions, it would

require less than 500 head to make ample replacement. The fact is that dairymen are out to produce milk, and in most cases, are acquiring new stock which are likely to be good producers. They are looking for cows at their second or third calving, and after milking them for a few years, let them go as soon as they fall off. Thus, for various reasons it is possible that 1500 head are culled out of the herds annually, and this means that 2,000 additions, allowing for a 25% loss, would be required to cover, bringing the total of additions to be tested to approximately, 2,500 per annum.

Progress of Pasteurization

Approximately 25 years ago, pasteurization commenced to find its place in milk plants on the American continent as an advantageous treatment for fluid milk previous to bottling and delivery to the consumer. About the first 10 years were required to bring the process to an advanced and accurate stage where Health authorities were prepared to recognize it as the final safeguard to apply to milk after all other precautions pertaining to production and handling had been taken.

Scientific pasteurization is now established on a firm and permanent base, and in all these years, no substitute or alternative process has been seriously attempted or discovered.

Practically every City of 100,000 or more population in the United States now has from 90% to 100% of its milk supply pasteurized, while the small quantity of unpasteurized milk consists of that known as "certified." In some cases, this result has been brought about by an ordinary process of evolution moulded by public opinion, and without the assistance of any compulsory legislation; but in the majority of cases, the necessary legislation has been passed as a measure of safety in order that the consumer may receive adequate protection, and that the possibility of suffering from milk borne outbreaks may be avoided.

In Canada, Toronto has enjoyed the benefits of compulsory pasteurization for the past ten years, and during that period has not had a single milk borne outbreak. Montreal, we are informed, has passed an ordinance which comes into effect in 1926. A glance at the following tabulated statement shows that many cities which have the Federal tuberculin test the same as Winnipeg, have an additional safeguard in 90 to 100% pasteurization. Thus we find Ottawa 97%; Calgary 91.48%; Saskatoon 100%.

Pasteurization in 15 Cities of Canada

(Report by the Canadian Public Health Association 1925)

	Not Pasteurized	Pasteurized	Certified
Windsor		100%	
Saskatoon		100	
St. John		99.6	.4 %
Toronto		99.46	.54
Hamilton	2 %	98	
Ottawa	3	97	
Calgary	8.52	91.48	
Kitchener	9	91	
Vancouver	10.5	89.5	
Brantford	14.16	85.84	
Three Rivers	28	72	
London	30	70	
Montreal	32.97	66.94	.09
Regina	35	65	
Winnipeg*	44	54	2

*Revised to date.

In the above grouping, the first four are in a class to themselves, being all practically 100% pasteurization, with a fraction of certified milk. These cities have all invoked the aid of suitable legislation in order to obtain this position.

The next four in order have each attained a mark of over 90% without the aid of special legislation.

The intention of Montreal, if carried out, will place her in the first group where she belongs, and undoubtedly, Winnipeg should be alongside Montreal and Toronto.

The progress of pasteurization in the City of Winnipeg during its 20 odd years existence, has been along unique lines, and it appears as if during those periods of rapid growth when the high mark of population was reached, that the consumption of pasteurized milk reached its highest proportion. Thus in 1913 and again in 1920 it stood at 66%, while during periods of depression, raw milk gained headway, due to the fact that the consumer was looking for a cheaper article, while more producers were endeavouring to distribute their own product in order that they would secure the distribution profit in addition to any profit pertaining to the producer.

The following table shows the fluctuations in the percentage of pasteurized milk in the past 20 years:

1906	3%	1916	50%
1907	6	1917	50
1908	12	1918	50
1909	25	1919	55
1910	33	1920	66
1911	40	1921	62
1912	50	1922	60
1913	66	1923	58
1914	60	1924	54
1915	50	1925	54

It would be possible to comment from many angles as to the causes of the above fluctuations, but it appears that we have now reached a dead centre of 54% for the past two years, and under present conditions, we do not expect to see much deviation from this mark.

The steady rise from 1906 to 1913 is readily understood, this being the experience of many lines of business during that period, while the falling off during the war can also be accounted for, followed by a rise during the immediate post war years, and finally, the present falling off, to which the introduction of the tuberculin test, and improved conditions on the raw milk dairies no doubt contributed.

The above facts have a definite bearing on the future of our City. We cannot do without pasteurization if we expect to maintain or improve our position as the third largest city in Canada.

Milk Consumption

The amount of milk consumed in the City of Winnipeg is approximately, 15,250 gallons per day. We have checked over these figures very carefully this year, but cannot find any increase over the previous year, although we were expecting to find a slight increase, due to the low price pertaining to milk throughout the Winter. The daily per capita consumption based on whole milk only, is 0.625 pints.

Authorities in different localities appear to have various methods of calculating per capita consumption, so that in making comparisons, we must ensure that such are on an equitable basis. In some cases, the amount of milk received is taken as a factor, and thus all surplus is credited to the consumer, while in other cases, the amount pasteurized or bottled is accepted without allowing for the fact that a large plant bottles much more milk than is actually sold, allowing for returns which may run 5% on retail delivery, or even over 10% on store trade.

Again pasteurized milk may be sold for consumption outside the Municipal area, as for example, our large plants supply about 1,500 gallons per day to adjoining municipalities, and smaller quantities to the Railroad Dining Car service. Even in checking up our smaller dairies, we find that they distribute approximately, 550 gallons in outside municipalities, this in most cases representing trade which the dairyman has picked up while on his way to the City.

The amount of cream consumed is 1,250 gallons per day, which is equivalent to 20,000 half pints. In many quarters, it has become customary to calculate each half-pint of cream as a quart of milk, and in our case, this would add 33% to our daily per capita consumption, bringing it to 0.83 pints, and should we desire to go a step further and change from Imperial to wine measure, which is used in the United States, we require a further 25% addition, bringing the total to 1.03 pints.

The following table shows the per capita and total daily consumption during the past seven years, and the variation in number of vehicles required for distribution.

Consumption and Distribution

	Pints per Capita	Gallons per day	Vehicles
1919	0.52	13,000	230
1920	0.54	13,000	220
1921	0.55	13,500	240
1922	0.58	14,500	275
1923	0.60	15,000	300
1924	0.625	15,250	315
1925	0.625	15,250	330

The fact that we show no increase in consumption for the past year possibly indicates that we have reached saturation point, but the increase in vehicles indicates smaller loads, lower priced milk, and more competition.

There are now 100 more vehicles delivering milk than we had six years ago, yet they are only covering the same ground, and only delivering an additional 2,000 gallons of milk, an average of 20 gallons each, or if no additional wagons had been put on since 1919, it only meant for each of the 230 then engaged to carry 10 gallons additional. It is just possible that the public pays for all this overlapping, and as pointed out in previous reports advancement along these lines is deplorable and cannot have any lasting benefit. We understand that the local Ice Companies are getting together with a view to inaugurating an unified delivery service, and it is our opinion that such a system might well be applied to milk.

Daily Per Capita Consumption

Milk, fluid milk only, Imperial measure	0.625 pints
Milk and cream basis, Imperial measure	0.83 pints
Milk and cream basis, American measure	1.03 pints

The average daily milk consumption of 354 United States Cities in 1924 involving a total population of 35,303,398 was 0.951 pints per capita calculated on a milk and cream basis American measure.

Classification of Daily Supply

Pasteurized	8,250 gallons	54%
Raw	6,700 gallons	44%
Certified	300 gallons	2%
Total milk	<u>15,250</u> gallons	
Cream raw	1,440 half pints	
Pasteurized	8,160 half pints	
Total in bottles	<u>9,600</u> half pints	600 gallons
Cream in bulk	<u>10,400</u> half pints	650 gallons
Total cream	<u>20,000</u> half pints	1,250 gallons

Quality of Milk

The average quality of milk and cream as supplied to the consumer has been maintained at a fair standard throughout the year. Of course, occasional lapses to the border line have occurred, and warnings have been issued with a view to ensuring better care, which in most cases, were found sufficient to effect the desired improvement.

This is a class of work which should not be eased up even though nothing wrong be found. Prevention of untoward happenings is what we strive for, and there is no profit in harsh measures if a sympathetic manner will give us the remedy. A total of 2,823 tests on various samples gives some idea of the scope of this work. This included 1,292 tests for butter fat, 367 bacteriological examinations, 334 chemical tests for possible adulterants, etc., and 830 sediment tests.

The bulk of the sediment tests are performed on the street, so that the dairyman has an immediate glance at the result, and we find that this method does wonders in improving the quality of milk from a standpoint of cleanliness; as whenever we find abnormal dirt, the individual is warned, and succeeding tests are made rapidly in order to see that the milk is not only clean, but continues to be clean, so that the value of the lesson is not lost immediately.

Bacteria in Milk

A great improvement has evidently been effected during recent years in regard to the number of bacteria in milk.

It is not so many years ago that we considered it almost impossible to get counts of 5,000 or even 10,000 in milk as delivered to the consumer; in fact, our only experience of such low counts was with pasteurized milk immediately after the process, or with raw milk direct from the cow to the laboratory in as careful a manner as possible.

We believe that our ability to find samples at the point of delivery showing these low counts is due largely to the improved knowledge of bacteria and their habits, gained by the milk handler.

The highest grade of raw milk is produced by the two Certified Milk Farms, and the special precautions taken on these farms in order to preserve a low bacteria count, cannot fail to impress the employees and others who witness or take part in such precautions.

The milk plant laboratory has also taken a leading part in this dissemination of knowledge, so that the producer or milk handler who has not learnt something practical about the action of bacteria, is the exception rather than the rule.

The amount of work we can do along these lines is practically limited, and for this reason, we do not waste time on those cases where we would not expect any beneficial result. However, it is gratifying to note that out of 367 samples examined, 139 had a count of 10,000 or less, classified as follows:

42 samples had a count under 5,000
29 samples had a count of 5,000
33 samples were over 5,000 but under 10,000
35 samples had a count of 10,000
<u>139</u> out of 367 with a count of 10,000 or less.

These 139 low count samples showed a sediment disc as follows:- 70 No. 1; 58 No. 2; 9 No. 3; 1 No. 4; 1 No. 5: This indicates that in addition to having a low count, the milk in over 90% of cases was practically clean.

The Milk Bottle Problem

The vexed question of milk bottle losses and abuses is still with us, but appears to be nearer solution.

It has been customary for milk companies to speak in tens of thousands regarding milk bottle losses, blaming the consumer for not returning same, and his smaller competitor for picking them up; and then to insinuate that this was a large factor influencing the apparent high cost of distribution.

To a certain extent, these contentions were quite true, but our opinion always was that the majority of milk bottles went astray because they were given ample opportunity to do so, and that until the owners of same took ample steps to protect and retrieve their own property, that they could not expect much sympathy or assistance from the municipal or civil authorities.

We are aware that in the course of legitimate business, bottles from almost every other firm will eventually come into the hands of each small dairyman who may only bottle a very small quantity of milk; and that unless agreements are made and machinery evolved for returning these to the original owner, conditions very soon become more chaotic. Even the small dairyman who purchases a few dozen stock bottles complains that

they are soon all astray, and with no charge against the bottle, there is nothing to induce the householder to care for, and return same. At one time, things were getting so bad in this City with milk bottles laid about on streets, lanes, vacant lots, sidewalks, and boulevards, that motorists were kept busy avoiding broken glass, and children playing on the sidewalk were liable to have hands or feet cut or injured.

Early in Spring, one milk company put on a drivers campaign for increased returns, with a result in two weeks of 16,880 more bottles being returned than were put out. This was followed by any appeal to school boys to search around alleys, vacant ground, and by-ways, and to bring all the Company's bottles they could find to certain definite points one Saturday afternoon, the company paying the boys one cent per bottle.

The result of this one day drive was an additional 37,380 bottles, bringing the number of lost bottles retrieved to the enormous total of 54,260.

It is evident that if one company holding about 50% of the bottled milk business found 54,260 of its bottles laid around, then the total recoverable stray bottles at that time must have been well over 100,000.

Approximately, 50% of the smaller dairies use milk bottles, some only filling two or three bottles daily for some individual customer, while about 8 or 10 bottle their entire supply. During the summer we noted that in spite of several warnings issued some dairymen were making an increased use of bottles belonging to city milk companies. A general check-up showed that out of 64 dairies with milk bottles on the wagons in greater or less quantities, that 24 were extensively using other firms' bottles in quantities running from 20 to 100 per cent.

The worst offender was prosecuted in Police Court and a conviction obtained; following which the others were notified of said conviction and warned to immediately discontinue the practice.

Later in the year, the larger concerns adopted the policy of fixing a charge on all bottles, holding the salesman or driver responsible, and this has certainly been a good move, as is evidenced by the absence of stray bottles in those places where they were formerly so conspicuous.

Sickness and Milk Borne Outbreaks

During the year we investigated 31 cases of sickness on licensed dairies, some of which were reported by the dairymen themselves, others came to our notice indirectly, and in at least one case of this kind, a deliberate attempt to mislead us was made. In connection with the handling of these cases, we have always attempted to protect the interests of the dairyman, so long as this does not conflict with our desire to protect the consumers, and where everything is above board, this attitude is easier to adopt. Out of 31 cases, 12 were of a communicable nature, and in very few cases was it found necessary to put the dairyman to any in-

convenience other than those pertaining to isolation and disinfection, while in two cases where the milk route was being affected, pasteurization of the milk over the danger period was advised and carried out.

Unfortunately, during the year we have apparently had three milk-borne outbreaks of sickness confined to individual milk routes. Two of these were typical and were traced definitely as originating from the farm, while the third was not definitely established as originating on the farm, but persisted intermittently on the milk route for several months, and giving us two to five cases in groups at intervals of 10 to 14 days until we finally had around a score of cases, clearly indicating that something was wrong. It is interesting to note that this outbreak was only finally controlled after a drastic system of disinfection and sterilization had been applied to all milk utensils, bottles and containers which clearly indicates that while the dairyman may not have been responsible as to the original source, he was very possibly responsible for the propagation, spread and continuation of the sickness once it was on the road, thus furnishing us with a typical example of what may happen when unreliable parties are allowed to bottle milk.

Dairy Inspection

The following is a list of places which under a normal system, require inspection. We do not claim to inspect all these places, for in connection with some groups, we merely scratch the surface. Of necessity, we must concentrate where we can do the most good at the least expense.

A regular inspection of city plants is easy, and it is only in other directions that we meet difficulties. Road and weather conditions mitigate against regular and continuous inspection in the country, while the city distribution provides an ever moving system of 330 wagons which cannot be found in the same place day by day, and when on the move, whether it be horse, team, or auto truck, gives an Inspector on foot very little opportunity of overtaking or intercepting same.

Places Requiring Inspection

Licensed Dairies, Country	122
Licensed Dairies, City	8
Milk Shippers, Country	724
Cream Shippers, Country	336
Pasteurizing Plants, City	2
Pasteurizing Plants, Country	3
Milk Depots, City	2
Ice Cream Plants, City	2
Creameries, City	8
Milk Stations, Country	7
Delivery wagons, City	330
Cow Keepers, City	200
Cow Dealers, City	6
Total	<u>1,750</u>

Country Inspection

Dairy Inspectors travelled 7,745 miles in the country during 1925, and paid 2,024 visits to dairies and farms, etc., as against 11,901 miles and 2,965 visits in 1924.

This large decrease in country work is primarily due to the decrease in appropriation and other facilities, formerly available. In order that we may have a properly controlled milk supply, we cannot dispense with inspection at the point of production, and it is very easy to cut this service below the margin of safety. The experiences of 1925 in attempting to check and control three different milk-borne outbreaks will long be remembered, and we cannot help but wonder if all possible measures, with a view of preventing a repetition of such happenings, have been applied.

I have the honor to be,

Sir,

Your obedient servant,

E. C. BROWN.

Chief Dairy Inspector.

DAIRY INSPECTIONS, 1925

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
CITY INSPECTIONS—													
Cow Keepers	62	78	76	49	21	36	6	2	11	23	154	194	712
Cow Dealers	4	4	4	4	6	5	.....	5	7	7	7	.....	53
Pasteurizers	34	14	20	30	25	29	12	34	35	28	27	25	313
Milk Depots	6	14	34	9	4	8	3	5	8	6	5	4	106
Creameries	54	12	2	42	46	47	38	38	52	49	52	52	484
Milk Stores	12	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
Vehicles	143	209	304	318	329	346	270	205	300	334	272	272	3,302
Special	48	36	11	15	9	13	7	4	23	18	20	8	212
Total	363	374	451	467	440	484	336	293	436	465	537	555	5,201
NOTICES—													
General .....	.....	.....	.....	.....	120	.....	.....	.....	.....	127	.....	.....	247
Special	5	2	6	8	12	18	8	2	33	13	7	14	128
Formal	1	.....	3	1	38	1	2	1	2	1	1	.....	51
Verbal	10	19	48	64	66	53	75	45	68	63	57	52	620
Summons	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4
Total	18	22	57	73	236	72	85	48	104	204	65	66	1,050

DAIRY INSPECTION, 1925—Continued

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
COUNTRY INSPECTIONS—													
Licensed Dairies	75	86	116	139	172	119	199	127	152	115	132	163	1,595
Milk Shippers	1	4	6	9	27	31	43	26	23	12	7	13	202
Cream Shippers .....	.....	.....	.....	.....	.....	4	.....	13	.....	.....	.....	.....	17
Milk Stations .....	.....	.....	.....	.....	3	1	2	.....	.....	.....	1	.....	7
Cream Stations .....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
Creameries .....	.....	.....	2	2	.....	1	.....	.....	1	1	.....	.....	7
Milk Depots	4	2	6	5	3	5	3	1	4	5	5	4	47
Special	12	4	6	4	5	8	14	18	19	6	26	26	148
Total	92	96	136	159	210	170	261	185	199	139	171	206	2,024
MILAGE: COUNTRY—													
Inspector A	260	170	270	300	580	565	640	600	550	350	490	490	5,265
Inspector B	75	105	155	205	215	170	290	115	185	145	140	195	1,995
Inspector C .....	.....	.....	.....	.....	.....	.....	.....	130	70	80	100	105	485
Total	335	275	425	505	795	735	930	845	805	575	730	790	7,745

DAIRY INSPECTION, 1925—Continued

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SAMPLES—													
Milk Tested	57	70	88	136	118	112	70	133	92	115	115	75	1,181
Cream Tested	9	9	8	12	4	8	12	8	12	9	12	8	111
Bacterial Count	23	26	32	40	32	24	32	32	39	31	32	24	367
Sediment Tests	1	14	60	117	93	71	50	56	131	71	79	87	830
Chemical Tests .....	.....	14	32	42	32	24	32	32	39	31	32	24	334
Total	90	133	220	347	279	239	196	261	313	257	270	218	2,823
CONDEMNATIONS—													
Milk lbs.	480	.....	720	990	480	1,680	630	480	2,030	610	.....	320	8,420
Cream lbs. ....	.....	43	.....	.....	130	90	311	200	300	150	100	50	1,374
Total	480	43	720	990	610	1,770	941	680	2,330	760	100	370	9,794
SICKNESS INVESTIGATED													
Communicable	3	1	.....	.....	.....	.....	.....	.....	3	.....	2	3	12
All other Cases .....	.....	2	.....	.....	.....	3	1	2	1	.....	6	4	19
Total	3	3	.....	.....	.....	3	1	2	4	.....	8	7	31

Report of Chief Food Inspector

A. J. Douglas, Esq., M.D.,

Medical Health Officer.

Dear Sir:-

I herewith beg to report on the activities of the Food Division for the year 1925.

The business depression was not alleviated to any great extent the past year, and the number of places under inspection slightly decreased.

The year was remarkably free from any complaints of illness due to the ingestion of foods, and, as in all Public Health work, the cases which are prevented never make an interesting report.

We had one case which was apparently, due to metallic poisoning. The circumstances were that the remains of a turkey which had been partaken of the previous day without ill effect by five persons, was hashed in a frying pan which had been mended with copper rivets. In a few hours, two persons who had partaken of the hash were ill with the symptoms generally accompanying metallic poisoning. Authorities claim that when fatty or acid matter is heated in contact with copper, that the metal is rapidly oxidized at the point of contact with the air.

While acute copper poisoning is uncommon, chronic copper poisoning is a more common disease than has been thought, according to Dr. Mallory of the Boston City Hospital, for 3.4 per cent of a large group of post-mortems, he found evidence of its presence. According to Dr. Mallory, chronic copper poisoning from ingesting copper salts in colored foods or liquor which acquires it from the worm of the still, results in hardening of the liver.

Owing to the exceptional early frost in the fall and subsequent early sleighing, followed by a mild winter, we had a plethora of complaints of frozen potatoes, storage eggs sold for fresh eggs, and Tubercular fowl. The number of complaints was occasioned by the mild weather, and yet snow enough for sleighing, which permitted peddlers to operate with sleighs.

While we insist on peddlers having their names in legible characters on their vehicles, before they got their licences in summer, we do not see their sleighs, consequently, many were going about without license plates or name, and it was difficult to indentify them, as the windows of houses are clouded with frost, so that the householders only sees the muffled up figure, and does not see the vehicle or horse by which we might indentify the seller.

We had several complaints of odors and prospective odors from business places starting up, which points to the necessity of some zoning regulations where persons in one district might be protected from any nuisance arising from the odors due to the activities of factories, and again, other districts where businesses might be conducted without incurring the annoyance of complaints and the ill-will of the residents.

In the majority of these cases, the odor complained of is the odor of cooking, and while we agree that perhaps the smell of cooking fish and vegetables is not pleasant in a business office, it is impossible to say it is harmful to health when thousands are making their living working in a similar atmosphere. We, however, do everything possible, by means of vents, fans, etc., to carry off any obnoxious odors which may arise from frying or burning fats, etc. In such cases where the vent has to be carried to the roof of the building, we notify the City Electrician, so that he can inspect the work, in order to abviate any dangers which may arise from contact between live wires and the stack.

Abattoirs

One of the abattoirs removed the site of their operations to a new modern plant outside of the City. Unfortunately, their new fertilizer drying plant broke down, and they began shipping offal back to the old plant to be dried. As they had dismantled the condenser and deodoriser, the result can be better imagined than described. The neighborhood was up in arms, but by stopping operations and making them remove the car-loads of offal on the track, we managed to once more regain normal conditions.

Hardly had we got this settled when a company started killing horses in this plant. As neither the Dominion, Provincial or Municipal Government had made provision for such a plant or inspection of the flesh when used for food, it looked as if we would require some legislation covering it. However, we received a letter from the company stating that the flesh was to be used for fox food only, and consequently, it came under the definition of offensive trades which we have ample legislation to deal with.

Bakeries

There are quite a number of changes among the small bakeries, some going out of business and others starting up, leaving a net increase of two. The tendency is towards the establishment of what are called "Home" Bakeries. As far as pastry is concerned, these are generally situated in the rear of some store.

Bottling Plants

These plants decreased by two, and the activities of the larger plants were considerably curtailed, as regards "Soft" drinks. One plant which has been empty for a year is now being remodelled and fitted up for a modern brewery.

Bacteria counts taken last summer indicated that adequate facilities for sterilizing bottles, were in vogue.

We were called to give evidence on one Court case where the bottling company was suing a firm for supplying a product which apparently produced a cloudy growth. The firm selling the original product claimed it was due to a vegetable growth from poorly washed bottles. However, we were able to prove that low counts were found in our examination, and it was eventually proved that the cloudiness was due to the use of caramel coloring, made from glucose.

Butcher Shops

We had a few more butcher shops equipped with partitions in front of the counters, in order to prevent indiscriminate handling of the meats by customers. Those who have this improvement installed are enthusiastic about it, in fact, a small deputation approached the Health Committee with a view to making it compulsory, however, there is hardly enough unanimity among those affected, and more educational work is necessary before it is advisable to make it compulsory.

The matter of protecting foodstuffs, like bread, pastry, candy, fruit, which are eaten without further cooking, from contamination by coughing, sneezing, etc., while exposed for sale on counters, is a matter of greater importance, and we were able to have adequate protection afforded in many of the larger stores by suitable glass fronts on the counters.

Condemnations

The condemnations increased, owing to the amount of vegetables and fruit destroyed. A carload of bananas which arrived in bad condition, and a 3,000 lb. lot of onions which had been stored in a too warm location, were responsible for the increase.

Due to the exceptional hot weather, the amount of veal condemned increased. Altogether, the total amount coming in was much less than in former years, and generally speaking, the carcasses were much better dressed and in good condition, due largely to the activities of the Provincial Board of Health, which requires that from March 1st to December 31st, all animals shall be killed at a licensed slaughterhouse.

The number of Tubercular fowl, while not excessive, denotes the necessity of careful supervision. The contagious nature of the disease was exemplified in the fact that it was not uncommon to get several affected birds in one shipment.

We supplied quite a number of affected birds to the Medical College, where experimental work was being carried on in attempting to grow the organism under artificial conditions.

As pointed out before, the fact that the birds are eviscerated by unsuspecting housewives, makes the subject of the pathogenicity of the avian organism to human beings, important. Reference is made in Medical Journals to cases of Tuberculosis said to have resulted from eating raw fresh eggs from Tubercular fowls. As fresh eggs are a rather common food of convalescent persons, the matter seems worthy of consideration.

Flies

In spite of a summer of unusual heat and excessive moisture, the fly nuisance was not very noticeable, while the advent of motors and elimination of horses and the accompanying debris, is partly responsible, the fact that last March 200 flies were caught in four days on one piece of fly paper in a bakery, shows that the nuclei for fly nuisances are only held at bay by unrelaxing vigilance.

Fruit and Vegetables

While the situation as regards frozen oranges was satisfactory, none having been imported so far as we are aware, the early frost in Ontario resulted in quite a quantity of apples and pears being condemned.

The celery continues to come in good shape, although the United States Government reports of whole fields being condemned in California for excessive arsenical spray, indicate the necessity of maintaining a policy of watchful waiting.

Packing Houses

There are now three packing houses in addition to the abattoirs. One of these packs pork products, and the other Inspected Kosher meats. The latest addition cans chicken and chicken soups. They put out a very high class product under Federal Inspection, and already have contracts for all they can produce.

This is the first canning factory for meat products in Winnipeg. One can hardly stress too strongly the benefits to be derived by the community in having our very plentiful supply of raw products preserved locally, under Federal Inspection.

Preservatives and Coloring Matter in Foods

The wide spread use of chemical preservatives has resulted in action being taken by several Governments. In Great Britain, regulations are being promulgated prohibiting the use of preservatives in certain foods, and prescribing the limits of amounts in other foods.

The Regulation most affecting Canada is the prohibition of Borax for preserving bacon. This was formerly widely used, and the methods of handling bacon for export will have to be revised.

The Regulations, under the Food & Drug Act of the Dominion of Canada, enacted April 1924, after a lapse of time to enable the trade to become familiar with its provisions, are now being enforced.

The most noticeable of these is the prohibition of copper or its compounds in greening fruit or vegetables, and forbidding the use of coloring matter or preservatives in meat and meat products other than those mentioned in Class I of the Regulations. Anyone who is conversant with the wide spread use of preservatives which also preserve the color of meat in Hamburger steak and sausage, can appreciate the consternation which this occasioned among some of the trade. We have no Municipal By-laws governing this practice, as it is a matter affecting inter-provincial trade. However, we co-operate with the Dominion Government Officials in their enforcement.

The firms engaged in the business of exporting bacon express the opinion that the Regulations will have a beneficial effect as it will stop speculators holding the bacon until it has lost its fresh flavor, and acquired a flat taste, consequently, hurting the reputation of Canadian bacon.

Prosecutions

Prosecutions were the lowest on record, there being only four, one for selling bad fish, one for exposing food to contamination by dogs, and two for neglecting to keep their premises in a satisfactory condition.

This small amount has not been kept down without a considerable exercise of forbearance, and only when all other avenues of improvement were unavailing, or conditions such as constituted a total disregard for Public Health, did we take drastic measures.

Restaurants

The restaurants have had another trying year. The absence of employment has resulted in a number of single men leaving for other parts, and as these, especially those who were not living with their parents, constituted a large portion of the clientele of the restaurants, business suffered accordingly.

A deputation of the restaurant keepers approached the Health Committee with a view to restricting Drug Stores from competing with their line of business, but as no concrete suggestion was offered, and the modern tendency seems to be toward a "quick lunch" idea, no steps were taken.

I wish to acknowledge the willing services of Inspectors Foote and Mines in the extra amount of work involved by a 50 per cent increase in the number of food places during the last few years.

I also beg to express my appreciation of the co-operation of Dr. F. Cadham, Provincial Bacteriologist in Research Work in Avian Tuberculosis, and Mr. A Blackie, City Chemist, in investigations in cases of metallic poisoning.

Respectfully submitted,
ARTHUR RIGBY,
Chief Food Inspector.

PREMISES AND IMPROVEMENTS

DESCRIPTION	Number under Inspection	New		Cement Floors	Renovated	New		Remodelled
		Modern				Plumbing		
Abattoirs	4	.....	.....	.....	.....	.....	.....	.....
Auction Rooms	2	.....	.....	.....	.....	.....	.....	.....
Bakeries	63	3	.....	.....	34	1	.....	7
Bars	7	.....	.....	.....	2	.....	.....	.....
Biscuit & Cereal Factories	3	.....	.....	.....	.....	.....	.....	.....
Bottling Plants	13	1	.....	.....	6	.....	.....	.....
Breweries	4	.....	.....	.....	1	.....	.....	.....
Butcher Shops	227	10	.....	.....	53	1	.....	5
Butter Rooms	4	.....	.....	.....	1	.....	.....	.....
Candy Factories	20	4	.....	1	10	.....	.....	2
Canning Factories	1	.....	.....	.....	.....	.....	.....	.....
Cold Storage Plants	5	.....	.....	.....	3	.....	.....	.....
Commission & Produce Houses	40	7	.....	.....	3	.....	.....	2
Confectionery & Ice Cream Parlors	352	28	.....	.....	75	6	.....	11
Fish Stores	14	.....	.....	.....	5	.....	.....	.....
Fruit Houses (Wholesale)	50	4	.....	.....	9	.....	.....	1
General Stores	416	18	.....	.....	38	.....	.....	5
Grocers (Retail)	235	8	.....	1	56	1	.....	6
Grocers (Wholesale)	32	1	.....	.....	2	.....	.....	.....
Hawkers Vehicles	93	.....	.....	.....	65	.....	.....	.....
Hotel Kitchens	41	.....	.....	.....	15	.....	.....	2
Jam & Pickle Factories	9	.....	.....	.....	.....	.....	.....	.....
Markets	1	.....	.....	.....	.....	.....	.....	.....
Packing Houses	3	.....	.....	.....	1	.....	.....	.....
Pea-nut Butter Factories	1	.....	.....	.....	.....	.....	.....	.....
Pop-corn Factories	2	.....	.....	.....	.....	.....	.....	.....
Poultry Slaughter Houses	7	.....	.....	.....	6	.....	.....	.....
Restaurants	252	25	.....	.....	151	.....	.....	21
Railroad & Express Co.	3	.....	.....	.....	.....	.....	.....	.....
Sausage Factories	17	2	.....	.....	5	.....	.....	.....
Tea, Coffee, & Spice Houses	7	.....	.....	.....	.....	.....	.....	.....
Yeast Factories	1	.....	.....	.....	.....	.....	.....	.....
Total	1929	111	.....	2	541	9	.....	62

FOOD CONDEMNATIONS
1925

Description	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Veal	.....	.....	971	1,186	1,344	2,334	1,670	386	386	245	.....	98	8,620
Pork	212	.....	.....	.....	.....	104	.....	.....	.....	.....	.....	.....	212
Mutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104
Poultry	131½	116	104	48½	33	.....	.....	303	15	487½	1,461	3,614	6,313½
Fish	.....	.....	135	200	.....	266	1,040	.....	.....	1,000	230	.....	2,871
Fresh Fruit	.....	.....	.....	300	.....	.....	.....	100	.....	.....	21,275	.....	21,675
Jam	.....	.....	.....	.....	.....	.....	.....	.....	.....	65	40	.....	105
Vegetables	.....	8,400	.....	1,100	5,450	.....	1,200	23,600	.....	.....	1,150	30,000	70,900
Eggs	159	18	.....	.....	.....	.....	421	159	144	.....	.....	.....	901
Candy	200	.....	.....	20	.....	500	.....	.....	.....	150	30	.....	900
Biscuits	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
Canned Goods	.....	650	120	50	.....	40	60	.....	270	340	.....	.....	1,530
Nuts	140	.....	100	.....	.....	.....	.....	.....	.....	3,520	.....	.....	3,760
Cheese	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	160	.....	160
Tea	100	100	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	220
Miscellaneous (Extracts)	.....	75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Sugar	1,100	.....	265	.....	50	210	.....	200	.....	100	.....	.....	1,925
Totals	2,042½	9,359	1,795	2,904½	6,877	3,454	4,391	24,748	815	5,927½	24,346	33,712	120,371½

FOOD INSPECTIONS

PREMISES	FOOD INSPECTIONS												Totals
	January	February	March	April	May	June	July	August	September	October	November	December	
Abattoirs & Packers	12	12	13	15	10	16	12	15	12	9	14	14	154
Bakeries	84	79	79	82	66	76	88	81	86	86	76	77	960
Bakery Vehicles	62	43	44	56	60	56	61	49	55	36	47	38	607
Biscuit & Cereal Factories	11	12	8	8	10	10	8	4	7	8	9	10	105
Breweries	25	9	21	19	25	24	27	22	20	16	13	9	230
Butcher Shops	197	197	195	191	169	178	207	171	207	179	190	192	2,273
Butter & Cheese	12	15	13	15	11	10	9	8	4	8	12	7	124
Candy Factories	40	39	33	36	24	26	28	29	29	33	29	34	380
Cold Storage Plants	16	14	33	15	18	10	11	9	9	6	10	8	159
Cone Factories .....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Fish Stores	32	36	36	25	24	33	28	21	28	33	25	27	348
Fruit Stores	74	74	75	85	78	84	117	85	86	83	78	80	999
General Stores	409	396	415	370	396	284	386	305	398	418	402	392	4,571
Grocers	183	152	156	133	107	151	162	159	166	155	141	153	1,818
Hawker's Vehicles	99	119	87	83	100	150	160	140	177	149	126	114	1,504
Hotel Kitchens	47	48	34	45	26	23	35	28	31	40	33	30	420
Ice Cream Parlors & Confectioners	201	211	219	247	226	194	288	220	262	258	226	225	2,777
Jam, Pickle & Spice Factories	6	11	8	9	11	7	8	9	9	12	9	13	112
Markets & Auction Rooms	5	6	8	5	8	9	8	12	12	5	10	4	92
Poultry Slaughter Houses	5	2	3	3	2	2	3	.....	4	12	9	5	50
Produce & Commission & Eggs	61	63	84	66	68	64	72	64	63	77	78	71	831
Railway Cars	8	.....	2	.....	6	.....	4	6	1	.....	3	.....	30
Railway Express	3	4	2	2	2	2	4	1	2	6	5	1	34

Bacteriologist's Report

A. J. Douglas, Esq., M.D., C.M., B.A.,

Medical Health Officer.

Dear Sir:

I have the honor to submit herewith full report on the work performed in the Bacteriological Laboratory for the year ending December 31st, 1925.

The total number of examinations made was 13,782, which were distributed as follows:

Swabs for Diphtheria B	8,714
Sputa for Tubercle B	501
Sera tests for Typhoid B	32
Smears for Gonococci	317
Urinalyses	339
Water Analyses	536
Milk Examinations	1,472
Miscellaneous	140
Vaccinations	1,731
Total	<u>13,782</u>

Water

During the year 536 samples of water were tested bacteriologically for any evidence of pollution or contamination. Enumeration of colonies of micro-organisms on plain agar was done on each specimen as well as inoculating broth cultures for the detection of gas-formers. The samples were drawn from the following sources:

1. Domestic supply. Tap water from this laboratory was tested daily. The bacterial counts were comparatively low, and there was no evidence of any gas-formers. Algae and vegetable matter were not troublesome.

2. Shoal lake and various points along the aqueduct, including St. Boniface. These samples were brought in by the Consulting City Chemist, Mr. Blackie.

3. The Public Swimming Baths, Fritchard Avenue and Cornish Ave., were tested once every week. The Y.M.C.A. tank was tested about once every month.

4. Samples brought in by private individuals from residences, warehouses, hotels, and wells outside of the City.

Milk and Cream

The number of specimens brought in for analyses totalled 1,472. This includes milk and cream samples examined for butter fat percentage and bacterial count.

Distribution and results follow:

1. Samples of milk and cream taken officially by Dairy Inspectors numbered 1,300; of these 1,188 were milk and 112 cream. Fifteen samples were below standard, a percentage of 1.15%. Three hundred and eighty-four bacterial counts were made which ranged from 3,000 to innumerable colonies per c.c.
2. The Bureau of Child Hygiene had a weekly examination of whole milk, skimmed milk and cream samples sent over from the Babies Milk Depot.
3. For private individuals 24 samples of milk, 15 samples of cream, and 8 samples of ice cream were examined.

Diphtheria

Throat, nose and ear swabs examined for diphtheria bacilli totalled 8,714, out of which number only 378 were positive. This includes swabs brought in for diagnosis and release from quarantine by Doctors, Nurses, Health Inspectors, School Nurses, Margaret Scott Nursing Mission, Nurses, Local Institutions, and summer outing camps.

Differential examinations were made on swabs from healthy school children which were persistently positive. Those found harboring the non-pathogenic Xerosis or Hoffman bacilli were allowed to resume school, and carefully instructed as to proper hygienic care.

It is extremely gratifying to again note the decrease in swabs for diagnosis due to the prophylactic measure of immunizing the school children with toxin-antitoxin.

The total number of swabs in 1923 before the institution of toxin-antitoxin prophylaxis in school children was 18,126 with 2,252 positives a percentage of 12.42; in 1924 after immunization was commenced there was a remarkable decrease to 13,737 swabs with 1,393 positives, a percentage of 10.14; and in 1925 a further diminution was evident the total number of suspicious swabs falling to 8,714, out of which only 378 were positive or a percentage of 4.33.

This clearly shows the wonderful prophylactic effect of immunization with toxin-antitoxin and marks another great step forward in the progress of public health. At this rate we hope to stamp out diphtheria entirely.

The swabbing of all children going to summer outing camps was carried on as in previous years. This practice aids materially in stamping diphtheria out of these camps.

Widal Tests for Typhoid Fever

Blood serum examinations for agglutination of typhoid bacilli have again been reduced, this year to a total of 32 requests; out of which 4 were positive.

Urethral Pus Smears

This includes all smears from the urethra, vagina and cervix examined for the presence of gonococci. For the year 1925 there were 317 examinations made, 68 of which were positive for neisserian infection. All smears were stained with methylene blue and the suspicious or positive ones were confirmed by Gram's stain.

Urinalyses

Three hundred and thirty-nine urinalyses were made. These included chemical, microscopical, sugar estimations, cultured and examination of sediments for tubercle bacilli. Tests were made for Doctors, Nurses, Bureau of Child Hygiene, Insurance Companies, and private individuals. A small charge was made to those who could afford to pay for same. This department earned \$261.50 for the year.

Miscellaneous Tests

Under this heading 140 examinations are recorded. This includes such examinations as Mothers' milk, gastric contents, hairs for parasites, blood counts, blood chemistry, preparation of vaccines, and the examination of food and dairy specimens brought in by the Inspectors.

Immediately following is a table of the work for the past year, showing its monthly distribution:

1925	Swabs for Diphtheria	Sputa for T.B.	Urethral Smears	Typhoid	Water	Milk and Cream	Urinalyses	Miscellaneous	Vaccinations	Total Examina- tions per Month
	Pos.	Pos.	Pos.	Pos.						
January.....	568—58	43—7	32—3	3—0	43	97	39	24	357	1206
February.....	760—52	52—5	12—1	1—0	40	91	23	26	160	1165
March.....	614—25	33—5	23—4	2—0	47	102	25	15	33	894
April.....	407—20	44—2	23—5	0—0	43	157	36	10	34	754
May.....	445—17	59—5	17—4	1—0	41	129	24	4	794	1514
June.....	981—14	29—5	27—4	3—1	44	127	26	5	109	1351
July.....	1541—13	55—2	32—5	1—0	44	102	30	4	5	1814
August.....	952—12	22—2	49—14	6—0	45	157	24	14	6	1275
September.....	455—17	34—2	26—8	4—1	48	144	17	6	30	764
October.....	858—57	59—6	34—8	3—0	51	132	38	13	52	1240
November.....	583—51	29—4	22—8	5—1	46	133	33	10	8	869
December.....	550—42	42—5	20—4	3—1	44	101	24	9	143	936
Totals.....	8714—378	501—50	317—68	32—4	536	1472	339	140	1731	13782

Free vaccinations were again increased this year. There were 1,731 vaccinations for the immunization of Smallpox.

Examination of school children for a clear bill of health after recovery from any communicable disease was carried on as in previous years.

Antitoxin and toxin-antitoxin injections were given in a few cases as a prophylactic measure for the prevention of diphtheria.

This department was frequently called upon to do free dispensary work. The more serious cases were referred to the Outdoor Clinic of the Winnipeg General Hospital, where they were kindly looked after by Miss Polexfin of the Social Service Department, Winnipeg General Hospital.

During my absence in Europe, from June to October, the position of Bacteriologist was ably filled by Dr. Morley Lougheed, to whom I wish to express my sincere gratitude.

To Miss Wilson, my assistant, and Mr. Robinson, laboratory attendant, I wish to record my appreciation for the faithful and satisfactory manner in which they have discharged their respective duties in the past year.

I am, Sir,

Yours obediently,

MANLY FINKELSTEIN, M.D..

City Bacteriologist.

Report of Division of Communicable Diseases

A. J. Douglas Esq., M.D.,
Medical Health Officer.

Dear Sir:-

I have the honor to submit herewith, report for the year ending December 31st, 1925.

The total number of cases of acute Communicable Diseases reported throughout the year was Five Thousand Eight Hundred and Thirty-two, with One Hundred and Ninety-five resultant deaths.

These figures compare very favorably with these of the preceding year, in which Four Thousand Eight Hundred and Fifty-one cases with One Hundred and Ninety-seven deaths were recorded. Whilst there was an increase of One Thousand cases during 1925; deaths show a decrease of two.

The diseases showing most noticeable increase were Measles, Whooping Cough, and Mumps, while Smallpox, Diphtheria, Diphtheria Carriers, and Chickenpox, are well below the figures for 1924.

A slight increase in the number of Scarlet Fever and Typhoid Fever was shown.

The work of this Division has proceeded along the lines formerly adopted. We endeavor to bring under control, without delay, every outbreak of infectious disease. In the case of the minor infections this year we do not appear to have accomplished much. We believe that this is due, not to lax measures, but to the apathy of certain members of the community in dealing with the early and infectious period of attack of disease in their children. It is difficult to control the spread of infection when children developing disease are exposed to the public.

This is particularly the case when there is no death resulting, or even when the type is mild.

The division had to contend with some more serious situations during the year. Smallpox appeared in several large institutions, and yet as compared with 1924, we are in a much more favorable position. Scarlet Fever appeared on two occasions in the form of milk-borne infection. Typhoid Fever also appeared in small numbers on a milk route.

Summaries of the work of this division are attached to this report.

The object of these is to show, in concise form, work which has been done during this year. Some of the tables are more interesting than others. Nevertheless, we try to present in this report figures which may be useful in drawing comparisons. They also serve as an aid in the conduct of our work.

The work of the Office Staff, viz., issuing school notices, filing reports, attending medical relief, issuing tuberculosis supplies, receiving telephone calls and notifications of disease, distributing vaccine and anti-toxin supplies, giving school certificates and attending to many other clerical duties, has been carried on satisfactorily.

Inspectors and Nurses have applied themselves energetically in the conduct of their work, as a review of the summaries of their reports show.

Inspectors visits totalled Eight Thousand Seven Hundred; they investigated and reported on Four Thousand Six Hundred and Forty-three cases and made One Thousand Seven Hundred and Twenty-six quarantine inspections; Superintended the disinfection of bed linen etc., in One Thousand and Fifty-two homes; and sprayed Four houses and Fifty-eight Rooms. Seven Houses and Fifty-three rooms were fumigated by request of owners or tenants.

In the conduct of his work the inspector has calls for which there is no specific heading; these are grouped and termed other calls. Fifteen Hundred and Eight-two such visits were made.

The Department of Medical Inspection of Schools, gave us their closest co-operation, many calls were received from the nurses.

Tuberculosis Visiting Nurses

The total number of cases of Tuberculosis of the Lungs recorded for the year was One Hundred and Eighty-three; Deaths Eighty-one, representing a very slight change over the figures for 1924, when One Hundred and Eighty-three cases were reported with Eighty-seven deaths. The difficulties met with in the conduct of this branch of our work have been presented in former reports and show no feature not known and fully understood.

The disease is not fully reported and progress along this line is slow. However, the work of the clinics held at the Winnipeg General Hospital, King Edward Memorial Hospital, and Childrens Hospital, show that interest is not lacking. The total attendance at all clinics combined was One Thousand Five Hundred and Thirteen.

The figures of the Chest Clinic held at the King Edward Memorial Hospital, viz., Four Hundred and Fifty-four, are submitted independent of the work conducted at the General and Childrens Hospital, this clinic being attended to by the Staff of that institution.

Five Thousand Four Hundred visits were made to homes of patients during the year, of this number One Hundred and Thirty, "first visits," were made to new patients.

The following summaries show the distribution of cases and deaths in districts and wards.

Tuberculosis

SUMMARY OF WORK AS IT APPEARS IN EACH DISTRICT.

District	1	2	3	4	Total
New Cases	64	46	34	33	177
Positive	53	20	15	21	109
Clinically Positive	11	26	19	12	68
Deaths	25	16	11	16	68
					Outside 13

CASES AND DEATHS BY WARDS.

Ward	1	2	3	Outside
Cases	34	70	64	14
Deaths	11	23	34	13

POPULATION BY WARDS.

57,759 65,569 71,820

AGE INCIDENCE NEW CASES AND DEATHS.

Years	Years	Cases	Deaths
0	10	9	2
11	20	37	12
21	30	58	25
31	40	34	20
41	50	21	8
51	60	14	11
61	70 and over	4	3
Totals		177	81

VISITING LIST IN DISTRICTS.

District	Patients	Positive	Suspects	Contracts
1	104	85	7	12
2	68	43	10	15
3	114	67	14	33
4	92	55	18	19

Patients on the free milk list totalled Fifty-six; quarts supplied 12,027.

Patients in King Edward Memorial Hospital and Ninette Sanitorium at the end of the year.

District	King Edward Memorial Hospital	Ninette Sanitorium
1	18	46
2	28	10
3	25	7
4	6	14

Length of time cases which terminated in death, were known to the Department:-

Death Registration		16
Less than	1 Month	6
" "	1 to 2 "	1
" "	2 to 3 "	3
" "	3 to 4 "	3
" "	4 to 5 "	6
" "	5 to 6 " and over	33
Non Resident Deaths		13
Total		<u>81</u>

By the above it will be seen that too many cases are in the advanced stages of the disease before they are notified.

The following table shows nationality of cases recorded during the year.

Nationality	
Canadian	55
English	23
Scotch	8
Irish	7
Icelandic	9
Swedish	3
Norwegian	1
German	13
Polish	6
Ruthenian	5
Austrian	1
Russian	6
Jewish	14
Chinese	6
U.S.A.	3
Greek	1
Ukranian	12
Danish	3
Negro	1
Total	<u>177</u>

In concluding this report we have pleasure again in recording our thanks to all organizations assisting in the work of this Division.

Yours obediently,

WM. J. T. WATT,
Chief, Division of Communicable Diseases.

COMMUNICABLE DISEASES—1925

DISEASES	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Totals 1925		Totals 1924	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Typhoid Fever.....	1	1	1	1	9	3	1	1	2	1	7	1	1	1	1	1	8	1	42	6	36	6	42	6	36	6	36	6
Smallpox.....	28	9	9	9	42	13	1	1	13	31	31	75	3	3	3	3	3	41	41	126	3	41	41	126	3	126	3	
Chickenpox.....	79	53	53	53	110	94	30	30	81	73	284	3	72	72	72	72	72	662	662	1,120	65	65	662	65	1,120	65	1,120	65
Measles.....	18	17	17	17	41	263	202	202	81	73	284	3	595	595	595	595	595	2,411	2,411	913	733	733	733	2,411	913	913	733	4
Scarlet Fever.....	115	1	99	84	41	44	26	26	24	30	33	33	41	41	41	41	41	60	60	583	60	60	60	60	583	60	583	11
Whooping Cough.....	87	58	58	35	66	71	61	61	64	4	60	4	70	70	70	70	70	35	35	430	35	35	35	35	430	70	430	7
Mumps.....	6	14	14	10	5	4	6	6	5	9	66	66	138	138	138	138	138	161	161	10	161	161	161	10	10	10	10	10
Diphtheria.....	54	3	44	3	43	30	23	23	19	1	40	3	53	53	53	53	53	56	56	885	56	56	56	56	885	22	885	22
Diphtheria Carriers.....	8	16	16	8	10	2	11	11	1	5	12	12	10	10	10	10	10	13	13	429	13	13	13	13	429	10	429	10
Erysipelas.....	5	6	6	3	2	1	3	3	1	3	5	5	7	7	7	7	7	15	15	68	15	15	15	15	68	7	68	7
Tuberculosis, Pul.....	14	7	20	3	13	19	4	11	8	7	23	9	11	11	11	11	11	11	183	11	183	11	11	11	183	87	183	87
Poliomyelitis, Ant.....																				1	1	1	1	1	1	1	1	1
Meningitis Cerebro S.....																												
Influenza.....	3	2	2	2	4	2	2	2	3	3	2	2	1	1	1	1	1	1	33	33	26	33	33	33	26	26	26	25
Encephalitis, Leth.....	1				2	2	2	2			1	1	2	2	2	2	2	2	7	7	11	7	7	7	11	11	11	10
Puerperal Septicemia.....						2	2	2			1	1	2	2	2	2	2	2	8	8	10	8	8	8	10	10	10	8
Totals.....	419	13	340	13	307	536	17	374	8	221	17	281	17	587	12	1,010	18	1,165	5,832	195	4,851	195	1,165	14	5,832	195	4,851	197

COMMUNICABLE DISEASE RATES

	1925				1924				1923				1922			
	Cases	Deaths	Rate per 100,000	Rate per 100 cases	Cases	Deaths	Rate per 100,000	Rate per 100 cases	Cases	Deaths	Rate per 100,000	Rate per 100 cases	Cases	Deaths	Rate per 100,000	Rate per 100 cases
Diphtheria.....	515	26	13.3	5.04	885	22	11.2	2.4	1,285	34	17.	2.6	1,395	45	22.6	3.2
Scarlet Fever.....	645	8	4.09	1.2	583	11	5.6	1.8	676	12	6.	1.7	884	11	5.5	1.24
Measles.....	2,411	9	4.6	.37	913	4	2.	.4	4,693	8	4.	.17	763	3	1.5	.39
Whooping Cough.....	689	14	7.17	2.03	430	7	3.5	1.6	415	16	8.	3.8	476	12	6.	2.52
Typhoid Fever.....	42	6	3.07	14.3	36	6	3.	16.6	26	5	2.5	19.2	40	3	1.5	7.5
Typhoid Fever, Corrected.....	.....	2	1.	.....	.....	1	1.02	.....	.....	1	.....	.....	.....	.....	.....	.....
Tuberculosis of Lungs.....	183	81	41.5	44.2	183	87	44.6	47.5	204	96	48.2	47.	221	105	52.7	47.5
Tuberculosis, all forms.....	.....	104	53.2	.....	.....	120	61.5	.....	.....	128	63.7	.....	.....	127	63.7	.....
Influenza.....	33	31	15.8	.....	26	25	12.8	.....	38	38	.....	.....	88	43	44.1	48.8
Erysipelas.....	57	5	.....	.....	68	7	.....	.....	49	6	.....	.....	88	3	.....	.....
Smallpox.....	40	.....	.....	.....	126	.....	.....	.....	121	.....	.....	.....	75	.....	.....	.....
Puerperal Fever.....	8	8	.....	.....	10	8	.....	.....	3	3	.....	.....	3	3	.....	.....
Cerebro Spinal Meningitis.....	1	1	.....	.....	8	7	.....	.....	5	5	.....	.....	6	5	.....	.....
Anterior Poliomyelitis.....	1	1	.....	.....	13	3	.....	.....	1	.....	.....	.....	1	1	.....	.....
Lethargic Encephalitis.....	7	5	.....	.....	11	10	5.1	90.9	128	36	20.4	28.3	7	5	3.5	71.4
Diphtheria Carriers.....	101	.....	.....	.....	429	.....	.....	.....	705	.....	.....	.....	437	.....	.....	.....
Mumps.....	436	.....	.....	.....	10	.....	.....	.....	55	.....	.....	.....	98	.....	.....	.....
Chickenpox.....	662	.....	.....	.....	1,120	.....	.....	.....	979	.....	.....	.....	893	.....	.....	.....

DIPHTHERIA—1925

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	1924 Totals
Diphtheria Cases.....	54	44	55	50	43	30	23	19	40	48	63	56	515	885
Diphtheria Carriers.....	8	16	8	4	10	2	11	1	5	12	10	13	100	430
Secondary Cases.....	6	4	9	3	7	.....	1	1	5	8	5	5	53	88
Return Cases.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1
Unrecognized Cases.....	.....	2	.....	1	1	.....	.....	1	.....	3	1	1	10	34
Outside Cases.....	3	7	4	1	4	8	5	4	12	9	10	9	76	107
Institutional Cases.....	4	2	6	2	3	1	2	2	3	6	.....	6	37	61
Institutional Carriers.....	1	.....	.....	.....	8	.....	.....	1	1	5	.....	.....	16	99

SCARLET FEVER—1925

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	1924 Totals
Scarlet Fever Cases.....	115	99	84	41	48	44	26	24	30	33	41	60	645	583
Secondary Cases.....	17	11	15	1	5	8	1	7	6	6	3	3	83	88
Return Cases.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	4	11
Missed Cases.....	12	6	6	1	1	4	.....	3	10	5	.....	5	53	24
Institutional Cases.....	7	5	12	7	11	2	2	.....	.....	.....	1	.....	47	21
Outside Cases.....	7	9	3	1	3	3	3	1	4	3	3	.....	40	48
School Children.....	43	42	26	17	17	21	8	8	14	19	24	25	264	261
Sec'y to School Children.....	14	5	9	1	3	6	.....	1	5	5	3	3	55	59
Under School Age.....	22	15	16	9	12	10	10	6	6	2	6	13	127	124
Sec'y to Under School Age.....	2	4	2	.....	2	2	1	6	1	3	1	3	27	28
Adults.....	21	21	13	7	3	.....	2	1	.....	3	6	8	85	51
Secondary to Adults.....	1	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	5	1

DEATHS IN WARDS—1925

DISEASES	Ward 1	Ward 2	Ward 3	Outside	Totals
Scarlet Fever.....	3	1	1	3	8
Diphtheria.....	4	9	6	7	26
Measles.....	2	.....	2	5	9
Whooping Cough.....	2	5	2	5	14
Tuberculosis.....	11	23	34	13	81
Population.....	57,759	65,569	71,820		

COMMUNICABLE DISEASES INSPECTORS' REPORT, 1925

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals	
													1925	1924
No. of Visits.....	919	828	441	425	596	753	686	325	482	772	1,236	1,237	8,700	9,466
Houses Quarantined.....	256	224	202	167	254	373	273	163	207	398	677	781	3,975	3,674
Quarantines Raised.....	53	62	56	56	77	161	158	67	55	81	355	236	1,417	1,099
Quarantines Inspected.....	497	383	114	89	113	89	68	29	60	79	104	101	1,726	2,718
Other Calls.....	113	159	69	113	152	130	187	66	160	214	100	119	1,582	1,975
New Cases Investigated.....	352	264	212	160	292	423	303	187	244	470	794	942	4,643	3,905
Rooms Fumigated.....	25	7	3	3	7	2	2	.....	1	.....	2	1	53	116
Houses Fumigated.....	2	1	.....	2	.....	.....	.....	.....	1	1	.....	.....	7	7
Special Reports.....	6	6	3	5	3	.....	1	1	1	7	2	.....	35	69
Sanitary Defects Reported.....	1	3	2	2	.....	4	2	2	1	3	2	4	26	35
Linen Disinfected.....	144	121	117	94	99	71	59	35	55	77	79	101	1,052	1,405
Rooms Sprayed.....	3	4	9	8	2	10	11	1	3	7	.....	.....	58	64
Houses Sprayed.....	.....	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	4	7

TOXIN-ANTITOXIN & TOXOID

SCHOOLS	DOSES			Positive Not Treated	Not Read	SCHICKS		Negative Percentage
	3	2	1			Negative	Total	
District 1—								
Fort Rouge.....	36	4	1	1	...	4	46	8
Gladstone.....	46	10	2	1	...	16	75	21
Lord Roberts.....	140	8	...	4	...	56	208	26
Riverview.....	79	7	10	1	5	22	124	17
Grosvenor.....	Toxoid	44	10	...	...	17	71	23
Sir John Franklin.....	"	14	5	...	...	13	32	46
River Heights.....	"	39	4	...	...	20	63	31
La Verendrye.....	"	65	12	2	...	32	111	28
Earl Gray.....	"	72	9	...	...	50	131	38
St. Ignatius.....	...	33	10	1	...	7	51	13
District 2—								
Carlton.....	92	9	7	4	4	39	155	25
District 3—								
Mulvey.....	60	8	4	4	...	37	113	32
John M. King.....	Toxoid	92	5	1	...	74	172	43
Laura Secord.....	"	116	1	3	...	31	152	26
General Wolfe.....	"	82	12	5	...	62	161	38
Isaac Brock.....	83	15	...	3	...	28	129	21
Pr. Sparling.....	94	9	1	...	6	49	159	30
Wellington.....	66	10	3	...	...	56	135	41
Greenway.....	81	19	14	2	...	33	149	22
Wolseley.....	42	2	1	7	...	30	82	36

TOXIN-ANTITOXIN & TOXOID (Continued)

SCHOOLS	DOSES			Positive Not Treated	Not Read	SCHICKS		
	3	2	1			Negative	Total	Percentage Negative
District 4—								
Argyle.....	41	6	1	...	1	32	81	39
Albert.....	75	5	3	2	...	43	128	33
Montcalm.....	58	10	3	1	1	25	98	25
Somerset.....	73	6	...	...	1	42	122	34
Victoria.....	39	2	1	...	1	30	73	41
Cecil Rhodes.....	112	24	11	...	2	49	198	24
District 5—								
Florence Nightingale.....	47	3	2	...	...	21	73	28
District 6—								
Luxton.....	64	7	4	3	...	81	159	50
Faraday.....	73	18	4	6	...	91	192	47
Lord Nelson.....	53	10	2	...	...	93	158	58
Margaret Scott.....	115	26	2	...	11	104	258	40
District 7—								
Lord Selkirk.....	116	17	8	...	...	61	202	30
Anna Gibson.....	24	3	...	...	...	8	35	22
Elmwood.....	45	8	...	...	...	40	93	43
George V.....	41	7	...	2	...	37	87	42
Sir Sam Steele.....	32	10	1	2	...	28	73	38

TUBERCULOSIS
NURSES' REPORT
1925

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals 1925	Totals 1924
Number of Visits.....	485	606	538	546	545	527	373	382	262	326	423	387	5,400	5,403
To Old Cases.....	435	581	504	528	503	510	344	373	235	303	410	378	5,104	4,994
To New Cases "First Visit".....	10	17	17	11	11	11	19	8	21	2	5	8	130	116
On Behalf of Patients.....	7	5	17	7	23	3	15	1	6	19	6	1	110	111
Other Calls.....	33	3	.....	.....	8	3	5	.....	.....	2	2	.....	56	182
Patients sent to King Edward Hospital.....	4	10	6	8	3	2	.....	3	.....	2	.....	3	41	15
Patients sent to Ninette Sanatorium.....	1	1	2	4	.....	1	.....	.....	.....	.....	.....	.....	9	18
Suspects.....	7	2	3	2	8	2	.....	2	2	1	2	7	38	32
Relief Given.....	3	1	5	4	.....	.....	.....	.....	2	.....	.....	.....	15	42

WINNIPEG GENERAL HOSPITAL TUBERCULOSIS CLINIC, 1925

	Jan.		Febr.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Totals			
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	1925		1924	
Cases.....	67	17	77	13	63	9	44	16	31	19	38	18	55	21	45	3	60	15	49	18	43	11	49	9	621	169	650	156
Old Cases.....	48	12	51	9	47	7	27	9	27	12	27	11	45	7	30	.....	42	7	35	12	32	8	37	4	448	98	432	93
New Cases.....	19	5	26	4	16	2	17	7	4	7	11	7	10	14	15	.....	18	8	14	6	11	3	12	5	173	71	218	63
Men.....	34	7	30	2	32	4	19	6	13	4	27	7	26	9	18	2	17	7	16	9	11	8	21	6	264	70	229	55
Women.....	19	8	36	11	30	5	19	9	18	10	11	12	25	8	27	1	28	8	29	9	21	3	21	3	284	88	278	85
Children.....	14	2	11	.....	1	.....	6	1	.....	5	.....	1	4	2	.....	.....	15	.....	4	.....	11	.....	7	.....	73	11	143	16
Examinations.....	39	12	39	6	22	8	29	12	19	18	17	13	32	17	20	32	36	11	30	13	22	11	24	6	317	130	341	106
X-ray Examinations.....	25	5	23	4	21	4	8	6	4	5	8	5	14	5	17	17	17	5	9	6	9	5	7	2	158	54	220	55

CHILDREN'S HOSPITAL TUBERCULOSIS CLINIC
1925

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total 1925	Total 1924	Total 1923
Cases.....	21	17	25	31	27	28	23	17	28	12	20	20	269	266	94
Old Cases.....	12	6	11	16	8	18	8	11	13	10	11	8	132	144	26
New Cases.....	9	11	14	15	19	10	15	6	15	2	9	12	137	122	68
Examinations.....	14	16	20	18	23	21	16	12	21	6	13	16	196	175	87
X-ray Examinations.....	6	6	14	8	14	16	8	5	12	5	8	7	109	83	28

TUBERCULOSIS

CONTACTS

PATIENTS

PATIENTS		With Room to Self	With Bed But Not Room to Self	With Neither Bed Nor Room to Self	Totals	Sleeping in Same Bed as Patient	Sleeping in Same Room But Separate Bed	Totals
Rooms Occupied By One Family								
1 Room.....	1	.....	3	4	3	1	4
2 Rooms.....	3	1	3	7	3	3	6	
3 Rooms.....	4	1	3	8	2	3	5	
4 Rooms and Over.....	57	21	17	95	18	18	36	
Institutional.....	.....	.....	.....	10	.....	.....	.....
Non-visiting.....	.....	.....	.....	45	.....	.....	.....
Outside Cases.....	.....	.....	.....	14	.....	.....	.....
				183				

Bureau of Child Hygiene

A. J. Douglas, Esq., M.D.,

Medical Health Officer.

Dear Sir:

I have the honor to submit herewith the report of the Bureau of Child Hygiene for 1925:

During the year there were 4,632 live births and 315 deaths of infants under one year of age, as compared with 4,762 live births and 323 infant deaths during 1924.

The 1925 figures again give a satisfactory rate as compared with our early records, being 68.0, or .2 higher than our lowest rate of 67.8 for 1924. Both these rates are over 138 points lower than our worst rate, 206.6 of 1912.

What do these rates mean in the saving of baby lives?

In 1910-11-12, the three years prior to the inauguration of intensive infant welfare work, the average number of babies under one year of age who died per 1,000 living births was 181.

From 1913 to 1925, there were 71,930 live births, and if the 1910-11-12 average infant death rate of 181 had continued during these 13 years, there would have occurred 13,019 deaths of infants under one year of age. Instead, there were 7,268 infant deaths, or a saving of 5,751 baby lives in 13 years. The saving for 1925 alone was 523 baby lives.

Reduction in Child Deaths

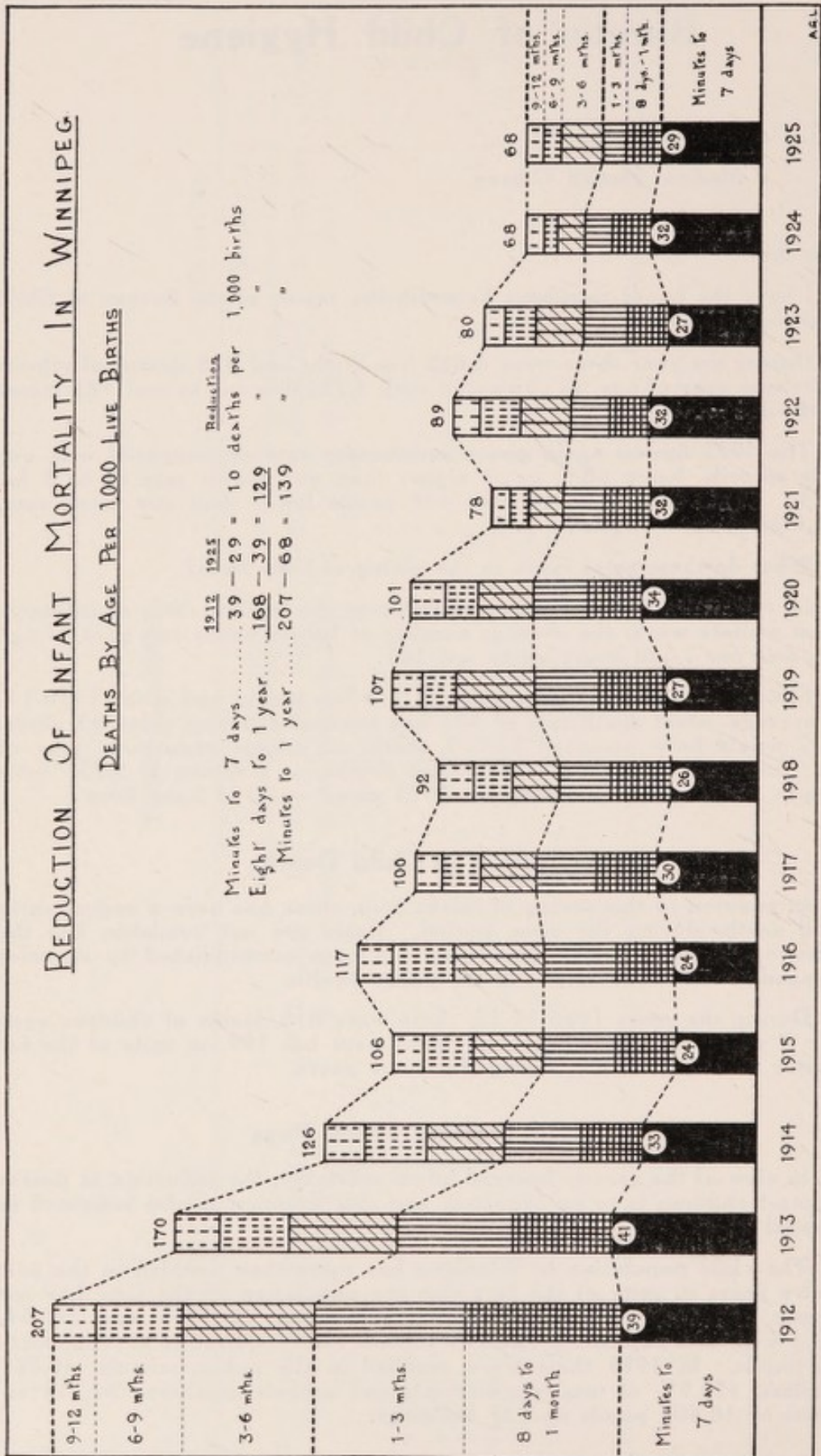
In addition to this saving of infant lives, there has been a reduction in child deaths during the same period. Rates are not available, but the following comparison will show what has been accomplished by agencies engaged in the improvement of the public health.

During the years 1910-11-12, there were 810 deaths of children aged 1 to 4 years; during 1923-24-25, there were but 309, in spite of the far greater child population during the latter years.

Child Welfare Work Pays

In view of the greatly lowered infant mortality, the reduction in deaths amongst children is to be expected, and this situation is also indicated in hospital reports.

The child population in Winnipeg has more than doubled in the past twelve years in spite of the fact that the population of the City has not greatly increased. The public school enrollment in 1913 was 22,364, (12.1% of total population), and 40 schools were required to accommodate the pupils. In 1925 there were enrolled in the public schools, 40,767 scholars, (20.9% of total population), and schools numbered 67, an increase of 18,400 pupils and 27 buildings.



If sickness amongst children had continued at the 1910-11-12 rates, hospital accommodation would have had to be increased in similar proportion, a condition rendered unnecessary through the campaign that is being carried on for the prevention of sickness, it being recognized that prevention is cheaper than cure. This axiom is bringing about the development of public health activities in all civilized countries on a hitherto undreamed of scale.

Twenty-seven additional public schools were required in twelve years to accommodate Winnipeg's increased number of school children, yet the hospital accommodation assigned to children has increased by but a small percentage and no new buildings were required. This release of capital for the development of our resources, rather than for the construction of costly hospitals, is a factor in the City's economic life which sometimes appears to be overlooked.

Stillbirths and Early Infancy Deaths

Although there has been a notable decrease in infant deaths, the bulk of the reduction has taken place in infants aged 8 days to 1 year, the mortality during the first week of life still remaining too high. The following figures illustrate the uneven reduction in infant mortality.

	Infant Deaths	1 to 7 Days	8 days to 1 Yr.
1912	1,006	189	817
1925	315	133	182
Reductions	691	56	635

(There were 238 more live births in 1912 than in 1925.)

In infants aged 1 to 7 days, the reduction is 56 deaths; in infants aged 8 days to one year, the reduction is 635 deaths. If we can judge by the experience of other cities, from 60 to 80 infant lives can be saved annually, besides 10 to 12 mothers, through the establishment of pre-natal clinics.

The stillbirth rate for 1925 is 40.6 per 1,000 live births, an average rate, and a reduction of 6.2 points as compared with 1924, which gave the highest stillbirth rate recorded, 46.8.

Puerperal Deaths

There were 25 deaths ascribed to childbirth in 1925, and 26 in 1924, giving rates per 1,000 live births of 5.4 for each year, which is the average for the past six years.

Necessity for Pre-natal Care

These three factors, the continued high puerperal mortality rate, the unchanged stillbirth rate, and the comparatively small reduction in deaths of infants during the first week of life, emphasize the necessity for a vigorous awakening of the public to the fact that the great distress, financial loss, and death caused by these unsatisfactory features of public health can be, and have been in many communities, largely reduced through pre-natal instruction and care.

In 1925, there were:-

Deaths of infants aged 1 to 7 days.....	133
Stillbirths	188
	<u>321</u>
Maternal deaths	25
	<u>346</u>

If \$200 be allowed for each of the births and deaths as an average cost of medical and nursing attendance, hospital bill, drugs, medical supplies, infant's clothing, undertaker's fees, etc., the total expenditure would be over \$64,000. For this large sum of money the families concerned and the city itself gained nothing, as the infants died prior to or soon after birth, whereas had two-thirds or even half of them lived, both the family and the city would have been the gainer, as every healthy child is an asset to the community.

Early Infancy Deaths Can Be Reduced

Every community which has concentrated on pre-natal problems has shown greatly reduced rates for stillbirths, early infancy and maternal deaths, and we see no reason why Winnipeg cannot do the same. All the stillbirths, early infancy, and maternal deaths cannot be prevented, but the experience of the Winnipeg General Hospital's pre-natal clinic shows that such deaths and resulting economic loss to the community, can be largely reduced. As pointed out in my last report, this Clinic has an early infancy death rate but one-third of the City's and a maternal death rate which is also much lower.

Early Consultation With Physician Necessary

The nurses endeavor to get in touch with young expectant mothers as early as possible to urge them to place themselves under their physician's care, and undergo examination in accordance with present day methods of preventing maternal mortality and early infancy deaths. The nurses co-operate by having the necessary samples examined at stated intervals and by reporting to the family physician should untoward signs appear.

The necessity for educating expectant mothers to consult their physician early is shown by the fact that in 1925, out of 131 infant decedents aged minutes to seven days, 69 or more than half, were first children, and of 185 stillbirths, 67 were first children. The difficulty is to get acquainted with these mothers sufficiently early to advise them of the benefits which accrue from pre-natal examination and care.

Midwives

In 1917, there were 1,005 births attended by midwives, or 17.8% of the total births.

In 1925, there were but 250 such births, or 5.5% of the total.

The figures show a large decrease in the number of births attended by midwives, so that this phase of the Bureau's problems seems to be gradually disappearing.

Causes of Infant Deaths

Of the 315 infant deaths, 149 were classified as due to diseases of early infancy; 54 to diseases of the respiratory system; 49 to diseases of the digestive system and 63 to all other diseases.

These figures give rates per 1,000 live births as follows; the 1924 rates being given for comparison:

	1925	1924
Diseases of early infancy	32.2	37.4
Diseases of respiratory system	11.6	11.1
Diseases of digestive system	10.6	6.1
All other diseases	13.6	13.2
	<u>68.0</u>	<u>67.8</u>

The rate for diseases of early infancy, 32.2 per 1,000 births, is the lowest yet recorded, and the rate for diseases of the digestive system, 10.6, is the second lowest, the unusually low 1924 rate, 6.1, being the lowest.

Infant Mortality According to Sections of City

			Rates per 1,000 Live Births		
			1925		1924
			Under 1 Year	Under 1 Month	Under 1 Month
I	West	Fort Rouge, west of Pembina	63	37	59
I	East	Fort Rouge, east of Pembina	64	38	36
II		Red River to Spence St.	72	39	46
III	South	Assiniboine River to Ellice Ave.	53	31	41
III	North	Ellice Ave. to Notre Dame Ave.	42	26	41
IV	West	Notre Dame Ave. to C.P.R. Tracks	42	16	65
IV	Centre	Sherbrook St. to Main St.	90	47	49
IV	East	Point Douglas, south of C.P.R.	101	76	97
V	East	Point Douglas, north of C.P.R.	73	53	79
V	South	C.P.R. Tracks to Selkirk Ave.	75	39	42
V	North	Pritchard Ave. to Burrows Ave.	53	16	29
VI	West	Burrows to Limits, west of No. 500	57	21	46
VI	East	Burrows to Limits, east of No. 499	74	59	25
VII		Elmwood	92	64	43
City			64	38	32
Non-Residents			80	44	43
Gross Rate			68	39	43

The rate for mortality of infants under one month of age shows a reduction to correspond with the fewer deaths from diseases of early infancy and from the above table it is apparent that the Canadian and British sections of the City have shared in the decrease, although their rates are still too high.

Infant Mortality According to Nationality of Mother

The rates by nationality are of unusual interest this year, the Canadian rate of 58, and the Southern and Central European rate of 65, being the lowest recorded for their respective groups. The latter rate is below that of the British, the first year that this has happened. The Scandinavian rate has again turned upward, but the increase is slight.

Infant Deaths per 1,000 Live Births

	1925	1924	1923	1922	1921	1920	1913
Canadian	58	62	74	103	68	89	118
British	72	63	76	70	79	92	125
Scandinavian	70	66	81	135	102	98	116
Southern and Central European	65	78	87	94	90	142	372

Babies' Clinic

There were 457 new cases recorded, against 533 for 1924, a reduction in keeping with the low infant mortality rate at present prevailing. The majority of the new patients enter the clinic by their own accord, less than one-third being referred to the clinic by the visiting nurses. By sections the cases are classified as follows:-

District	I	II	III	IV	V	VI	VII	City	Non	Total							
Section	W. E.		S. N.	W. C. E.	E. S. N.	W. E.		Res.									
1925.....	17	14	26	33	36	29	50	14	31	54	38	36	70	35	483	4	487
1924.....	15	19	31	43	32	37	55	12	39	48	47	51	68	31	528	5	533

Attendance at the clinic totalled 4,853, against 5,558 for 1924. By months, the attendance was:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1925	385	358	390	412	390	362	483	468	440	414	376	375	4,853
1924	326	432	494	468	458	419	496	524	519	591	439	392	5,558

Doctors R. F. Rorke and F. G. Schwalm continued to attend the clinic on alternate mornings, the attendance of patients totalling 4,853. The clinic is for feeding cases only and patients who can afford to pay a private physician are not encouraged to attend, the policy of the Bureau being to refer sick babies to the family physician on all occasions.

Milk Dispensary

The total feedings prepared again show a reduction in number, but the number of free feedings were increased. Total feedings numbered 24,446 against 29,692 for 1924; free feedings, 9,679 against 9,575; and Children's Hospital feedings, 7,683 against 7,879. Cash collected amounted to \$2,753.04, \$1,400.24 of which was for Children's Hospital feedings.

The operating cost of the Depot again shows a reduction, being \$11,167 against \$12,672 for 1924. In 1920, the operating cost was \$20,914, so that a substantial reduction has been made since I was appointed Manager.

Child Welfare Nurses

Miss L. Spratt continued in charge of the Clinic, and Miss H. Carter again took charge of the milk dispensary on alternate Sundays and Fridays to relieve Miss Graham, the dietitian.

The nurses made 41,928 visits to babies in their homes, a total of 3,278 new births being visited, or 88 per cent, of the total live births to resident mothers. This exceeds the 1924 percentage, the previous highest by four per cent. The births to Winnipeg mothers, which took place and were registered in St. Boniface, were again listed through the courtesy of the St. Boniface registrar and visited by our nurses. This service has eliminated complaints of the nurse not visiting them, by mothers who failed to realize that births in St. Boniface Hospital were registered in that City instead of Winnipeg.

Day nurseries and infants were given the usual routine inspections and reports made to the Provincial Board of Health of any infractinn of the regulations.

The educational program of lectures to mothers and senior girls has been continued and broadened out, but the division is handicapped through lack of sufficient funds to purchase exhibit material, slides and other publicity matter. The monthly lectures which are a feature of the work in certain districts are much appreciated and have attracted increased attendances.

Further particluars of the nursing activities are given on page 107.

Miss M. I. Jephson resigned on August 31st to be married and was replaced by Mrs. E. Smith, who was on our staff previous to her marriage some years ago.

It gives me much pleasure to place on record my appreciation of the work of the Bureau's staff. Each member worked faithfully and efficiently with but one object in view—the prevetion of sickness amongst Winnipeg's babies.

Respectfully submitted,

A. G. LAWRENCE
Manager, Bureau of Child Hygiene

BABIES' MILK DEPOT REPORT FOR YEAR 1925

	NUMBER OF CASES AND FEEDINGS											Cash Collected for Children's Hospital Feedings	Cash Collected for Dispensary Feedings		
	Total Attendance at Clinic	Cases Attending for First Time	Cases on Dispensary List at Ist of month, (including Children's Hospital)	New Cases Dispensed for First Time	Total Cases Added during Month	Total Cases Discontinued	Children's Hospital Feedings	MILK DEPOT						Grand Total Feedings (including Children's Hospital)	
								Paid Feedings	Free Feedings	Total Feedings, (excluding Children's Hospital)	Total Feedings (including Children's Hospital)				
1925															
January.....	385	28	74	18	26	31	689	762	862	1,624	2,313	\$ 126.28	\$ 229.70		
February.....	358	32	78	15	19	21	746	595	814	1,409	2,155	147.69	101.35		
March.....	390	37	78	8	10	20	944	516	834	1,350	2,294	162.88	113.60		
April.....	412	51	67	23	23	17	436	524	820	1,344	1,780	76.82	71.80		
May.....	390	42	57	10	11	22	729	472	685	1,157	1,886	148.17	96.55		
June.....	362	42	60	16	19	10	699	457	721	1,178	1,877	152.48	63.85		
July.....	483	42	63	21	26	29	760	494	874	1,368	2,128	139.15	60.40		
August.....	468	48	70	29	34	29	793	607	849	1,456	2,249	136.30	105.35		
September.....	440	30	79	34	25	30	608	746	893	1,639	2,247	108.32	80.75		
October.....	414	39	68	17	24	28	492	730	891	1,621	2,113	76.82	160.20		
November.....	376	36	64	15	16	19	367	594	710	1,304	1,671	60.45	183.30		
December.....	375	30	54	13	15	6	420	587	726	1,313	1,733	64.88	85.95		
Totals.....	4,853	457		219	248	262	7,683	7,084	9,679	16,763	24,446	\$1,400.24	\$1,352.80		

BUREAU OF CHILD HYGIENE REPORT FOR 1925

1925	No. of days on duty	No. of visits to Babies	Visits to Babies for first time	Deaths of Infants visited more than once	No. of visits to Infants' Homes	No. of Calls to Sick Babies	Requested calls	Cases referred to Physicians	Cases referred to Milk Depot	Cases referred to M.S.N.M.	Cases referred to Social Welfare Commission	Treatments given	Pre-natal advice given
January.....	281	3,311	277	6	6	212	200	23	15	1	.....	227	53
February.....	278	3,470	263	4	10	300	218	23	14	1	.....	237	55
March.....	296	3,792	275	12	9	370	196	48	17	8	1	182	63
April.....	294½	3,598	264	7	5	165	113	36	10	4	1	155	46
May.....	282	3,784	279	3	13	102	113	27	21	2	.....	142	71
June.....	236½	2,855	271	4	9	73	90	17	20	2	1	126	46
July.....	269½	3,738	281	4	7	115	147	33	11	3	.....	148	58
August.....	240½	3,019	235	2	5	131	113	33	15	2	1	97	21
September.....	250½	3,469	264	1	8	170	124	14	17	2	1	110	35
October.....	302	3,795	302	1	11	121	123	36	14	2	.....	164	46
November.....	271½	3,663	209	5	10	145	95	25	16	4	4	143	45
December.....	301½	3,434	214	1	14	212	133	36	15	2	4	127	43
Totals.....	3,303½	41,928	3,134*	50	107	2,116	1,665	351	185	33	13	1,858	582

*In addition to this total, 144 Winnipeg births took place in St. Boniface Hospital, and were visited by our Nurses.

Statiticians Report

A. J. Douglas, Esq., M.D.,
Medical Health Officer.

Dear Sir:

I have the honor to submit herewith the report on Vital Statistics for the year 1925.

Copies of the birth and death registrations have been furnished the Department by courtesy of the Registrar, Mr. C. J. Brown, as in previous years.

Respectfully submitted,

A. G. LAWRENCE,
Secretary.

Summary of Statistics

	1925	1924
Area of City-Land, 14,865 acres; water, 622 acres; Total, 15,287 acres (23.9 square miles).		
Population (City Assessor's figures)	195,148	194,850
Persons per acre of land	13.13	13.11
Natural increase, excess of births over deaths	3,013	3,202
Rate per 1,000 population	15.44	16.43
Stillbirths	188	223
Rate per 1,000 live births	40.6	46.8
Births, excluding stillbirths	4,632	4,762
Rate per 1,000 population	23.73	24.44
Deaths, excluding stillbirths	1,619	1,544
Rate per 1,000 population	8.30	7.78
Deaths of infants under 1 year	315	323
Infantile mortality rate per 1,000 living births	68.0	67.8
Marriages	2,237	2,257
Rate per 1,000 population	11.46	11.58

GROSS TYPHOID FEVER DEATH RATES PER 100,000 POPULATION

Year	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
	118.4	95.0	84.6	248.3	222.6	146.5	51.0	40.6	38.4	31.6	17.1	10.8	9.7	7.9	3.5	9.5	8.2	7.6	10.3	5.7	5.1	1.5	2.5	3.1	3.1
Corrected Rate for City.....																									
							7.9	5.4	4.3	3.9	2.0	7.5	6.0	6.5	7.4	.0	.0	.0	.0	.0	.0	.0	.5	1.0	1.0

CRUDE DEATH RATES PER 100,000 POPULATION

Year	Population	Tuberculosis of Lungs (31)	Tuberculosis other forms (32-37)	Cancer all forms (43-49)	Meningitis (71)	Cerebral Haemorrhage (74)	Diseases of the Heart (87-90)	Diseases of the Arteries (91)	Acute and Chronic Bronchitis (99)	Pneumonia all forms (100-101)	Appendicitis and Typhlitis (117)	Hernia, Intestinal Obstruction (118)	Acute and Chronic Nephritis (128-129)	Puerperal Deaths (143-150)	External Causes (163-203)
1925	195,148	41.5	11.8	94.8	7.2	41.5	84.0	9.7	7.2	68.1	20.0	9.2	33.8	12.8	57.9
1924	194,850	44.6	16.9	88.8	8.7	42.6	96.5	11.3	7.7	80.6	13.8	6.7	20.5	13.3	43.6
1923	199,300	48.2	16.0	82.3	6.0	28.6	87.8	13.5	5.5	77.3	9.5	9.5	28.6	13.0	52.2
1922	199,129	52.7	11.0	93.4	6.0	45.2	87.4	15.0	5.0	87.4	19.1	9.5	29.1	12.5	40.7
1921	196,947	50.8	26.4	87.3	8.1	32.0	91.9	15.7	4.6	84.8	14.2	4.6	18.3	10.7	46.7
1920	192,571	71.7	20.8	79.4	13.0	45.7	68.6	11.9	13.5	132.9	14.0	9.9	25.3	28.0	47.3
1919	183,378	72.0	24.5	73.1	10.9	30.5	72.0	9.8	18.0	105.2	17.4	13.6	33.3	15.3	57.2
1918	183,595	86.6	26.7	80.6	7.6	32.1	78.5	9.3	10.9	117.6	19.1	10.9	38.7	19.1	49.0
1917	182,848	74.4	24.1	62.4	14.2	24.6	72.2	19.7	13.7	114.8	14.2	4.9	31.2	19.7	41.0
1916	200,090	79.5	24.4	63.5	20.5	25.0	71.5	17.5	21.0	129.4	12.5	9.0	29.0	20.5	41.5
1915	201,981	79.2	16.8	48.5	17.3	20.8	59.9	15.3	21.8	91.1	13.4	11.4	28.2	12.9	52.9
1914	203,255	72.8	19.7	44.3	12.8	19.2	53.1	10.3	22.1	93.0	6.4	6.4	28.0	26.1	60.5
1913	184,730	71.4	26.0	51.4	21.6	21.6	68.2	11.9	13.0	109.9	10.3	8.7	35.7	21.1	68.2
1912	166,553	64.8	29.4	49.2	22.8	30.6	78.1	4.8	21.0	168.1	8.4	6.6	39.0	21.0	74.5
1911	151,958	71.0	27.7	46.7	18.4	19.1	65.2	4.6	13.8	138.2	9.2	9.9	36.8	13.8	62.5

1925		STILLBIRTHS				LIVE BIRTHS				DEATHS				
Month	1925 Totals	1924 Totals	Male	Female	1925 Totals	1924 Totals	Male	Female	1925 Totals	1924 Totals	Male	Female	1925 Totals	1924 Totals
January.....	17	18	9	8	217	217	179	396	64	79	143	164	143	164
February.....	15	20	7	8	181	181	179	360	76	59	135	137	135	137
March.....	10	12	10	..	213	213	202	415	90	79	169	138	169	138
April.....	28	21	13	15	226	226	193	419	69	80	149	150	149	150
May.....	17	20	7	10	250	250	183	433	84	79	163	156	163	156
June.....	21	13	10	11	213	213	202	415	80	67	147	107	147	107
July.....	13	28	7	6	203	203	205	408	57	53	110	95	110	95
August.....	16	26	9	7	182	182	180	362	69	61	130	102	130	102
September.....	16	16	13	3	191	191	184	375	60	51	111	115	111	115
October.....	20	13	15	5	193	193	179	372	66	69	135	125	135	125
November.....	9	17	3	6	159	159	175	334	64	36	100	111	100	111
December.....	6	19	4	2	178	178	165	343	69	58	127	144	127	144
Totals	188	223	107	81	2,406	2,406	2,226	4,632	848	771	1,619	1,544	1,619	1,544
Year	Population	Total Stillbirths	Rate per 1M Live Births	Total Live Births	Rate per 1M Population	Total Deaths	Rate per 1M Population							
1925	195,148	188	40.6	4,632	23.73	1,619	8.30							
1924	194,850	223	46.8	4,762	24.44	1,544	7.78							
1923	199,300	211	40.5	5,214	26.16	1,698	8.52							
1922	199,129	252	44.8	5,629	28.27	1,801	9.04							
1921	196,947	238	39.5	6,029	30.61	1,721	8.74							
1920	192,571	251	40.6	6,174	32.06	2,270	11.79							
1919	183,378	206	39.2	5,254	28.65	2,108	11.49							
1918	183,595	245	43.6	5,621	30.61	2,706	14.74							
1917	182,848	192	35.2	5,446	29.79	1,728	9.45							
1916	200,090	254	42.5	5,980	29.88	2,072	10.35							
1915	201,981	225	38.6	5,823	28.82	1,763	8.73							
1914	203,255	257	44.4	5,789	28.48	1,955	9.62							
1913	184,730	240	43.0	5,577	30.2	2,204	11.9							

Nativity of Decedents, 1925

Winnipeg	459	Ukraine	5
Manitoba (rest of)	118	Belgium	3
Alberta	3	Denmark	2
British Columbia	1	Finland	2
New Brunswick	12	France	3
Nova Scotia	17	Germany	11
Ontario	238	Greece	1
Prince Edward Island	7	Holland	7
Quebec	21	Iceland	26
Saskatchewan	14	Italy	4
Canada	16	Norway	6
Newfoundland	1	Roumania	9
England and Wales	211	Russia	89
Ireland	41	Sweden	10
Scotland	111	Switzerland	1
Australia	2	China	6
Austria	44	United States	53
Galicia	27	South America	1
Hungary	3	Unknown	13
Lithuania	1	Total	<u>1,619</u>
Poland	20		

Summary

	Deaths		Per Cent. of Total	
	1925	1924	1925	1924
Canada	907	875	56.0	56.7
British Isles	363	379	22.4	24.5
Europe (excluding British Isles)	274	235	16.9	15.2
United States	53	43	3.3	2.8
Asia	6	5	.4	.3
Other Countries	3	1	.2	.1
Unknown	13	6	.8	.4
Totals	<u>1,619</u>	<u>1,544</u>	<u>100.0</u>	<u>100.0</u>

Social Status of Decedents, 1925

	Male	Female	Total	Per cent
				of Total
Single, under 16 years	279	229	508	31.4
Single, 16 years and over	129	83	212	13.1
Total: Single	408	312	720	44.5
Married	363	307	670	41.4
Widowed	73	152	225	13.9
Divorced .....	.....	.....	.....	.....
Unknown	4	.....	4	.2
	<u>848</u>	<u>771</u>	<u>1,619</u>	<u>100.0</u>

DEATHS BY MONTHS, SEX AND AGE PERIOD, 1925

	Under 1		1 to 2		3 to 4		5 to 9		10 to 19		20 to 29		30 to 39		40 to 49		50 to 59		60 to 69		70 to 79		80 to 89		90 to 99		100 to 109		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January.....	14	11	3	2	2	1	4	6	1	4	10	7	11	9	14	9	16	6	4	2	2	4	2	2	4	8	64	79		
February.....	11	12	4	1	1	4	1	4	4	7	5	3	8	4	5	11	9	11	10	4	1	8	1	1	1	76	59			
March.....	19	21	4	6	1	2	4	1	4	7	7	4	14	5	13	12	8	9	10	1	3	1	2	2	2	90	79			
April.....	13	14	3	1	3	1	4	3	7	4	8	7	7	11	7	9	13	7	9	1	2	1	2	1	1	69	80			
May.....	25	21	5	2	1	5	2	8	4	7	7	5	5	7	9	6	6	10	10	4	5	1	1	1	1	84	79			
June.....	13	7	3	4	1	3	2	1	10	2	3	3	5	5	10	15	11	12	8	1	1	1	1	1	1	80	67			
July.....	8	16	2	.....	.....	2	1	4	4	3	9	9	3	7	4	6	9	10	2	3	3	3	3	3	3	57	53	
August.....	14	10	7	2	1	6	2	4	5	4	6	6	6	4	3	8	7	10	8	7	3	3	3	3	3	69	61			
September.....	14	13	.....	1	.....	4	1	2	5	2	3	8	7	6	4	5	10	2	6	3	3	1	1	1	1	60	51	
October.....	10	12	3	6	.....	1	2	1	.....	2	3	5	9	5	9	7	15	9	7	13	4	3	1	1	1	66	69	
November.....	13	2	4	5	.....	1	1	.....	2	3	2	5	1	5	13	4	7	5	11	2	6	4	3	1	1	64	36	
December.....	17	5	1	2	.....	1	1	2	2	3	4	5	3	6	7	10	12	11	9	6	7	4	.....	2	2	69	58	
Totals.....	177	144	39	31	8	17	28	18	43	39	41	68	79	56	94	76	90	91	122	104	98	87	28	32	6	8	1	848	771	
Combined	Totals.....		70	70	25	29	46	59	82	64	109	93	135	147	170	158	181	176	226	202	185	155	60	57	14	11	1	1,619	1,544	
Percentages of	Totals.....		4.32	4.54	1.54	1.88	2.84	3.82	5.06	4.15	6.73	6.02	8.34	9.52	10.50	10.23	11.18	11.40	13.96	13.08	11.43	10.04	3.71	3.69	.87	.71	.06	100.0	100.0	

Ratio of Males to 100 Females

	1925	1924	1923	1922	1921	1920	1919	1918
Stillbirths	132	137	134	105	138	153	125	145
Live Births	108	100	106	103	107	106	106	107
Deaths	110	113	118	115	110	115	113	117
Twin Births	48	57	58	74	89	88	77	70
Triple Births ....	....	....	....	1	....	....	....	....

Attendant at Birth

(Excluding Stillbirths - 1922-25)

	1925	1924	1922	1920	1918
Physicians	4,379	94.5%	94.0%	90.5%	89.0%
Midwives	250	5.5%	6.0%	9.5%	11.0%
Unattended	3				
Unknown .....	....					19.8%

Illegitimacy (Including Stillbirths)

	1925	1924	1923	1922	1921	1920	1919	1918
Illegitimate births	279	284	280	299	317	262	270	306
Per cent. of total births	5.8	5.7	5.4	5.3	5.0	4.1	4.9	5.2

Stillbirths According to Nationality of Mothers

Rates per 1,000 Live Births

	1925	1924	1923	1922	1921	1920	1919	1918
Canadian	34	46	40	37	48	45	34	38
British	45	49	45	42	33	44	41	52
Southern and Central European	45	49	32	51	34	32	36	39

Comparative Infant Mortality Table

	No. Births	No. Deaths	Rate per live 1,000 Births
1925	4,632	315	68.0
1924	4,762	323	67.8
1923	5,214	416	79.8
1922	5,629	500	88.8
1921	6,029	471	78.1
1920	6,174	625	101.2
1919	5,254	562	106.9
1918	5,621	516	91.8
1917	5,446	545	100.1
1916	5,980	700	117.0
1915	5,823	619	106.3
1914	5,789	729	125.9
1913	5,577	947	169.8
1912	4,870	1,006	206.6
1911	4,469	762	170.5
1910	3,772	628	166.5

Infant Mortality According to Nationality of Mothers
(Excluding Stillbirths)

Nationality	1925		Rates per 1,000 Live Births				
	Live Births	Deaths	1925	1924	1923	1922	1921
Canadian	1,736	102	59	62	74	103	68
English and Welsh	800	56	70	65	81	65	83
Irish	183	10	54	86	40	61	75
Scottish	459	38	82	48	77	85	72
American (U.S.A.)	223	9	40	41	70	78	52
Scandinavian	99	7	70	66	81	135	102
Southern and Central European	1,101	72	65	78	87	94	90
All Others	31	21	....	....	....	....	....

Infant Mortality - Cause of Death

Number of Deaths

	1925	1924	1912
Acute communicable diseases	12	13	28
Other general diseases	20	27	80
Of nervous system and of organs of special sense	14	9	78
Of respiratory system	54	53	147
Of digestive system	49	29	399
Malformations and diseases of early infancy	149	178	251
All other diseases	17	14	23
Totals	315	323	1,006

Rate per 1,000 Births

	1925	1924	1912
Acute communicable diseases	2.6	2.7	5.8
Other general diseases	4.3	5.7	16.4
Of nervous system and of organs of special sense ..	3.0	1.9	16.0
Of respiratory system	11.6	11.1	30.2
Of digestive system	10.6	6.1	81.9
Malformations and diseases of early infancy	32.2	37.4	51.6
All other diseases	3.7	2.9	4.7
Totals	68.0	67.8	206.6

Per Cent. of Total

	1925	1924	1912
Acute communicable diseases	3.8	4.0	2.8
Other general diseases	6.3	8.4	7.9
Of nervous system and of organs of special sense	4.5	2.8	7.8
Of respiratory system	17.1	16.4	14.6
Of digestive system	15.6	9.0	39.6
Malformations and diseases of early infancy	47.3	55.1	25.0
All other diseases	5.4	4.3	2.3
Totals	100.0	100.0	100.0

Classification of Ages of Decedents Under One Year of Age

1925

	No. of Deaths	Rate Per 1,000 Births	Per Cent. of Total
Minutes to 1 week	133	28.7	42.2
Over 1 to 2 weeks	20	4.3	6.3
Over 2 to 3 weeks	15	3.2	4.8
Over 3 weeks to 1 month	13	2.8	4.1
<hr/>			
Minutes to 1 month	181	39.0	57.4
Over 1 to 2 months	17	3.7	5.4
Over 2 to 3 months	15	3.2	4.8
<hr/>			
Minutes to 3 months	213	45.9	67.6
Over 3 to 6 months	54	11.7	17.1
Over 6 to 9 months	26	5.6	8.3
Over 9 and under 12 months	22	4.8	7.0
	<hr/>	<hr/>	<hr/>
	315	68.0	100.0

For comparison with the above, the final figures for the years 1924 and 1912 are given below:

1924

	No. of Deaths	Rate Per 1,000 Births	Per Cent. of Total
Minutes to 3 months	243	51.0	75.2
Over 3 to 6 months	36	7.6	11.2
Over 6 to 9 months	20	4.2	6.2
Over 9 and under 12 months	24	5.0	7.4
	<hr/>	<hr/>	<hr/>
	323	67.8	100.0

1912

	No. of Deaths	Rate Per 1,000 Births	Per Cent. of Total
Minutes to 3 months	630	129.4	62.6
Over 3 to 6 months	189	38.8	18.8
Over 6 to 9 months	125	25.7	12.4
Over 9 and under 12 months	62	12.7	6.2
	<hr/>	<hr/>	<hr/>
	1,006	206.6	100.0

Infant Mortality Statistics

For further particulars regarding infantile mortality, see report of the Manager, Bureau of Child Hygiene, Pages 99 to 107.

1925
CAUSE OF DEATH
(By Sex and Age)

	SEX		AGE IN YEARS												Totals		
	Male	Female	Under 1	1 to 2	3 to 4	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89		90 to 99	
	I.—Epidemic, Endemic, and Infectious Diseases																
1	Typhoid and paratyphoid fever:																
	(a) Typhoid fever.....																
7	5	1					2	3	1								6
8	2	7		7	1	1											9
9	4	4		3	2		1	1	1								8
10	9	5		6													14
11	16	10		4	7	9	4		1								26
	(a) With pulmonary complications specified.....																
	(b) Without pulmonary complications specified.....																
6	6	9		2				1			1	3	1	3	1	1	15
15	8	10		1							3	2	7	2	3		18
16	50	46		12	10	10	7	5	3	4	5	8	5	4	1		96
	Totals, Nos. 1 to 11.....																
16	Dysentery:																
	(c) Unspecified or due to other causes.....																
21	1	4		2				1									1
22	1	1					1						1				5
23	3	2		1				1	1	2	1						11
25	Other epidemic and endemic diseases:																
	*(b) German measles.....																
	*(c) Others under this title.....																
27	1	1		1													1
31	1	1															1
31	41	40		1	1		8	26	15	16	11	3					81
32	5	5		2	1	3	4										10
33	3	3		1	1		1	1	2	1							6
34		2				1											2
36	1	1							1	1							2
	(d) Tuberculosis of the genitourinary system.....																

Totals, Class III.....		66	81	14	4	1	6	8	6	13	11	21	23	31	8	1	147
IV.—Diseases of the Circulatory System																	
87	Pericarditis.....	1								1							1
88	Endocarditis and myocarditis (acute).....	13	10	1	1	1	3	2	4	4	5	3	4				23
89	Angina pectoris.....	11	6							2	2	10	3	2			17
90	Other diseases of the heart.....	55	68			1	4	7	4	7	17	37	32	12	2		123
91	Diseases of the arteries:																
	(a) Aneurysm.....	1	3								1	2		1			4
	(b) Arteriosclerosis.....	6	5										1	8	1	1	11
	(c) Other diseases of the arteries.....	2	2									1	2	1			4
92	Embolism and thrombosis (not cerebral).....	13	4						1	3	5	6	2				17
93	Diseases of veins (varices, hemorrhoids, phlebitis, etc.).....	2	3						2	1	2						5
94	Diseases of the lymphatic system (lymphangitis, etc.).....	1										1					1
Totals, Class IV.....		105	101	1	1	1	7	9	12	19	31	60	47	15	3		206
V.—Diseases of the Respiratory System																	
97	Diseases of the nasal fossae and their annexa:																
	* (a) Diseases of the nasal fossae.....	1							1								1
	* (b) Others under this title.....	1	3			1			1	1							4
98	Diseases of the larynx.....	1										1					1
99	Bronchitis:																
	(a) Acute.....	5	4	5	3										1		9
	(b) Chronic.....	3	1		1								1	1			4
	(d) Unspecified (5 years and over).....		1														1
100	Bronchopneumonia:																
	* (a) Bronchopneumonia.....	29	26	30	5	3		1		2	1	3	7	2			55
	* (b) Capillary bronchitis.....	1											1				1
101	Pneumonia:																
	(a) Lobar.....	41	32	16	9	1		2	4	9	5	10	9	4	4		73
	(b) Unspecified.....	3	1	1	2					1							4

CAUSE OF DEATH (By Sex and Age)	SEX		AGE IN YEARS												Totals	
	Male	Female	Under 1	1 to 2	3 to 4	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89		90 to 99
			4	1	1	1	1	1	1	1	1	1	1	1		1
102 Pleurisy.....	4	1	1					1	1		1	1				5
103 Congestion and hemorrhagic infarct of the lung.....	6	0	2								1	1	4	3	1	12
105 Asthma.....		1									1	1				1
107 Other diseases of the respiratory system (T.B. excepted): (c) Others under this title.....	4	1					1		1	1	1	1				5
Totals, Class V.....	99	77	55	20	4	4	1	4	7	15	9	17	17	11	1	176
VI.—Diseases of the Digestive System																
109 Diseases of the pharynx and tonsils (including adenoid vegetations): *(b) Others under this title.....*	3	1		1				1	2							4
110 Diseases of the esophagus.....	1								1							1
111 Ulcer of the stomach and duodenum: (a) Ulcer of the stomach.....	2	1								1		1				3
(b) Ulcer of the duodenum.....	7	3							2	1	2	4	1			10
Other diseases of the stomach (cancer excepted).....	2	4	2						1	1	1	1	1			6
113 Diarrhea and enteritis (under 2 years of age).....	28	18	44	2												46
114 Diarrhea and enteritis (2 years and over).....	2	4		1	1				1					3		6
117 Appendicitis and typhlitis.....	20	19		2	2	14	2	4	8	4	3					39
118 Hernia, intestinal obstruction: (a) Hernia.....	4	1							1	3						5
(b) Intestinal obstruction.....	4	9	1					3	2	1	2			1		13
Other diseases of the intestines.....	2	1		1				1		1	1					3
120 Acute yellow atrophy of the liver.....	2	2		2						1	1					4

CAUSE OF DEATH (By Sex and Age)	SEX		AGE IN YEARS												Totals		
	Male	Female	Under 1	1 to 2	3 to 4	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89		90 to 99	100 to 105
175 Poisoning by food.....	1			1													1
177 Other acute accidental poisonings (gas excepted).....	2	1							1		2						3
178 Conflagration.....	1	2				2	1										3
179 Accidental burns (conflagration excepted).....	7	3		1		1	2		2		1	3					10
180 Accidental mechanical suffocation.....	3	2	2					2	1								5
181 Accidental absorption of irrespirable, irritating, or poisonous gas.....	1	1						1		1							2
182 Accidental drowning.....	9					2	5			1			1				9
183 Accidental traumatism by firearms (wounds of war excepted).....	1							1					1				1
185 Accidental traumatism by fall.....	8	8					1	1		1	1	2	5	1	3	1	16
187 Accidental traumatism by machines.....	4								2	1	1						4
188 Accidental traumatism by other crushing (vehicles, railways, landslides, etc.):																	
*(a) Railroad accidents.....	5	1						3							1		6
*(b) Street-car accidents.....	2	2											2				2
*(c) Automobile accidents.....	9	1		1		2	2			2		2		1			10
*(g) Landslides, other crushing.....	1								1								1
189 Injuries by animals (not poisoning).....	1	1								1							2
193 Excessive cold.....	3						1			1			1				3
196 Other accidental electric shocks.....	1						1										1
197 Homicide by firearms.....	1																1
199 Homicide by other means.....	2	1	2							1							3
200 Infanticide (murder of infants less than 1 year of age).....	1	1	2														2
201 Fracture (cause not specified).....	1	1											1				1
202 Other external violence.....	1	2	1				1	1									3
Totals, Class XIV.....	80	33	7	3		10	15	12	14	17	6	12	10	3	3	1	113

XV.—Ill-defined Diseases
 205 Cause of death not specified or ill-defined:
 *(b) Not specified or unknown.....

2	1	3																			3
2	1	3																			3
846,773	315	70	25	46	82	109	135	170	181	226	185	60	14	1	1,619						

Totals, Class XV.....

Grand Totals.....

1925 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
I.—Epidemic, Endemic, and Infectious Diseases														
1	Typhoid and paratyphoid fever:													
	(a) Typhoid fever.....		1	1			2	1	1	1	3	1	1	6
7	Measles.....				2	2	3		1			1	1	9
8	Scarlet fever.....	1		1										8
9	Whooping-cough.....		2	1			1	1	4	4		1		14
10	Diphtheria.....	3	3	4	4	1	2		1	3	1	1	3	26
11	Influenza:													
	(a) With pulmonary complications specified.....		1	10	3	1								15
	(b) Without pulmonary complications specified.....	2	1	1	2	3	2		3		2	1	1	18
	Totals, Nos. 1 to 11.....	6	8	17	11	7	10	2	10	8	6	5	6	96
16	Dysentery:													
	(c) Unspecified or due to other causes.....		1											1
21	Erysipelas.....		1		1	1						1	1	5
22	Acute anterior poliomyelitis.....						1							1
23	Lethargic encephalitis.....			1	2							1	1	5
25	Other epidemic and endemic diseases:													
	* (b) German measles.....		1											1
	* (c) Others under this title.....					1								1
27	Anthrax.....		1											1
31	Tuberculosis of the respiratory system.....	7	2	6	9	14	4	6	7	9	5	9	3	81
32	Tuberculosis of the meninges and central nervous system.....			1	1	4			1	3				10
33	Tuberculosis of the intestines and peritoneum.....	1	1		1	1				2				6
34	Tuberculosis of the vertebral column.....				1		1							2
36	Tuberculosis of other organs:													
	(d) Tuberculosis of the genitourinary system.....	1								1				2

37	Disseminated tuberculosis: (a) Acute.....	3
	Totals, Nos. 31 to 37.....	9	3	7	12	20	5	8	15	5	9	3	104												
38	Syphilis.....	...	...	...	...	...	...	...	...	...	...	...	12	
41	Purulent infection, septicemia.....	2	...	1	...	...	1	2	2	1	3	14											
	Totals, Class I.....	17	15	28	26	32	19	14	25	12	19	13	241												
	II.—General Diseases Not Included in Class I																								
43	Cancer and other malignant tumors of the buccal cavity.....	...	...	...	...	...	...	...	...	...	...	...	3	
44	Cancer and other malignant tumors of the stomach, liver.....	9	5	8	7	7	12	5	6	10	3	5	79												
45	Cancer and other malignant tumors of the peritoneum, intestines, rectum.....	2	3	1	1	3	...	2	1	3	...	1	20												
46	Cancer and other malignant tumors of the female genital organs.....	1	4	1	2	1	5	...	2	1	2	...	22												
47	Cancer and other malignant tumors of the breast.....	1	1	2	2	...	5	1	1	3	...	...	16										
48	Cancer and other malignant tumors of the skin.....	...	...	...	...	...	1	...	2	...	...	...	4				
49	Cancer and other malignant tumors of other or unspecified organs.....	2	4	3	9	3	4	1	3	2	3	4	41												
	Totals, Nos. 43 to 49.....	15	17	15	22	14	27	9	10	16	9	11	185												
50	Benign tumors and tumors not returned as malignant (tumors of the female genital organs excepted).....	2	...	...	1	...	...	...	1	...	...	...	4				
51	Acute rheumatic fever.....	...	1	1	1	1	1	...	...	...	...	1	6								
52	Chronic rheumatism, osteoarthritis, gout.....	...	...	1	...	...	...	...	1	...	...	...	2			
57	Diabetes mellitus.....	2	...	1	1	2	2	...	1	1	...	4	14												
58	Anemia, chlorosis: (a) Pernicious anemia.....	2	1	3	4	...	1	3	1	1	1	1	18												
59	Diseases of the pituitary gland.....	...	...	...	...	...	...	1	1	...	...	...	2			
60	Diseases of the thyroid gland: (a) Exophthalmic goiter..... (b) Other diseases of the thyroid gland.....	2	2	...	1	...	1	...	2	3	1	...	12												
		...	...	...	...	...	...	3	...	...	...	1	4			

1925 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
62	Diseases of the thymus gland.....	1	...	...	...	1	1	...	...	...	...	...	...	3
65	Leukemia and Hodgkin's disease:	2	...	...	2	...	...	1	1	...	...	...	3	7
	(a) Leukemia.....	...	...	...	...	...	...	...	...	...	...	...	...	2
	(b) Hodgkin's disease.....	...	...	...	2	...	...	1	1	...	...	...	...	1
66	Alcoholism (acute or chronic).....	...	1	...	2	...	...	2	1	...	1	...	...	7
69	Other general diseases.....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals, Class II.....		26	22	21	34	18	33	20	16	19	26	11	21	267
III.—Diseases of the Nervous System and of the Organs of Special Sense														
70	Encephalitis.....	...	...	...	3	1	...	...	...	2	1	1	...	8
71	Meningitis:	1	2	2	1	2	...	2	...	1	...	1	1	13
	*(a) Simple meningitis.....	...	1	...	...	...	...	...	...	...	...	...	...	1
	*(b) Nonepidemic cerebrospinal meningitis.....	...	...	...	...	...	...	...	...	...	...	...	...	1
72	Tabes dorsalis (locomotor ataxia).....	...	...	...	...	...	...	...	1	...	...	...	...	1
73	Other diseases of the spinal cord.....	...	...	1	...	...	...	1	...	...	...	...	...	2
74	Cerebral hemorrhage, apoplexy:	9	11	8	4	6	4	8	4	3	10	2	7	76
	(a) Cerebral hemorrhage.....	1	1	...	...	...	...	1	2	...	...	...	...	5
	(b) Cerebral embolism and thrombosis.....	...	...	...	...	...	...	...	...	...	...	...	...	...
75	Paralysis without specified cause:	1	2	...	2	...	...	1	...	1	1	...	...	8
	(a) Hemiplegia.....	...	1	...	...	...	...	...	...	...	...	...	...	1
	(b) Others under this title.....	...	...	...	...	...	...	1	...	...	...	...	3	4
76	General paralysis of the insane.....	...	...	...	...	...	...	...	...	...	...	...	...	1
78	Epilepsy.....	...	...	1	...	...	...	...	...	...	...	...	...	1
80	Infantile convulsions (under 5 years of age).....	...	...	1	...	...	...	...	...	1	1	...	1	4
81	Chorea.....	...	...	1	...	...	...	1	...	1	...	...	...	2

82	Neuralgia and neuritis.....	1	1	4	3	7	9	15	8	13	147	1
84	Other diseases of the nervous system.....	1	1	4	3	7	9	15	8	13	147	15
86	Diseases of the ear and of the mastoid process: *(a) Diseases of the ear..... *(b) Diseases of the mastoid process.....	1	1	1	1	1	1	1	1	1	1	4
	Totals, Class III.....	13	15	13	18	7	9	15	8	13	147	1
IV.—Diseases of the Circulatory System												
87	Pericarditis.....	1	2	1	2	3	1	3	4	1	1	1
88	Endocarditis and myocarditis (acute).....	2	1	1	1	2	1	1	1	1	1	23
89	Angina pectoris.....	2	3	1	2	3	2	2	2	1	1	17
90	Other diseases of the heart.....	16	13	9	14	9	5	18	7	8	123	4
91	Diseases of the arteries: (a) Aneurysm..... (b) Arteriosclerosis..... (c) Other diseases of the arteries.....	1	3	1	2	1	1	1	1	1	4	4
92	Embolism and thrombosis (not cerebral).....	1	1	1	3	1	1	1	1	1	11	11
93	Diseases of veins (varices, hemorrhoids, phlebitis, etc.).....	1	1	1	1	1	1	2	2	3	17	4
94	Diseases of the lymphatic system (lymphangitis, etc.).....	1	1	1	1	1	1	2	1	1	5	1
	Totals, Class IV.....	23	19	20	18	13	10	26	18	15	206	206
V.—Diseases of the Respiratory System												
97	Diseases of the nasal fossae and their annexa: *(a) Diseases of the nasal fossae..... *(b) Others under this title.....	1	1	1	1	1	1	1	1	1	1	1
98	Diseases of the larynx.....	1	1	1	1	1	1	1	1	1	1	4
99	Bronchitis: (a) Acute..... (b) Chronic..... (d) Unspecified (5 years and over).....	4	1	1	1	1	2	1	1	1	9	9
100	Bronchopneumonia: *(a) Bronchopneumonia..... *(b) Capillary bronchitis.....	6	5	13	5	1	3	3	2	6	55	1

1925 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
101	Pneumonia:	4	5	16	8	6	9	1	3	2	7	8	4	73
	(a) Lobar.....			1		1	1						1	4
	(b) Unspecified.....				1					1			2	5
102	Pleurisy.....													
103	Congestion and hemorrhagic infarct of the lung.....	1	2	1	2	1	2					2	1	12
105	Asthma.....	1												1
107	Other diseases of the respiratory system (T.b. excepted) (c) Others under this title.....		1					2	1		1			5
Totals, Class V.....		13	18	33	16	15	19	5	8	8	14	12	15	176
VI.—Diseases of the Digestive System														
109	Diseases of the pharynx and tonsils (including adenoid vegetations):													
	* (b) Others under this title.....					1			1	1	1			4
110	Diseases of the esophagus.....													1
111	Ulcer of the stomach and duodenum:			1										
	(a) Ulcer of the stomach.....		1					1						3
	(b) Ulcer of the duodenum.....	2				3	1		1		1	1	1	10
112	Other diseases of the stomach (cancer excepted).....					1	1		1		1		2	6
113	Diarrhea and enteritis (under 2 years of age).....	1		1	5	13	3	4	6	8	2	3		46
114	Diarrhea and enteritis (2 years and over).....					2		2		1		1		6
117	Appendicitis and typhlitis.....		1	5	3	4	5	2	3	4	1		5	39
118	Hernia, intestinal obstruction:													
	(a) Hernia.....	2	1	1		1	1		1	1			1	5
	(b) Intestinal obstruction.....				2	1	1		1	3				13

1925 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
144	Puerperal hemorrhage.....	...	...	...	...	...	...	1	...	...	...	...	1	2
145	Other accidents of labor: *(a) Cesarean section..... *(c) Others under this title.....	...	1	...	...	...	2	...	1	...	1	...	1	2
146	Puerperal septicemia.....	...	...	...	...	...	...	...	...	1	...	2	3	11
147	Puerperal phlegmasia, alba dolens, embolus, sudden death.....	...	...	...	...	...	1	...	...	1	...	1	...	2
148	Puerperal albuminuria and convulsions.....	...	...	...	...	...	...	...	...	...	...	...	...	1
149	Following child-birth (not otherwise defined).....	...	1	...	...	...	...	...	...	...	...	...	...	1
Totals, Class VIII.....		1	2	1	2	3	3	1	3	1	1	3	7	25
IX.—Diseases of the Skin and of the Cellular Tissue														
151	Gangrene.....	...	...	...	1	1	...	...	2	2	...	1	...	5
152	Furuncle.....	...	...	1	...	...	...	...	...	...	...	...	...	3
153	Acute abscess.....	...	1	...	...	...	...	...	1	...	...	...	...	2
154	Other diseases of the skin and annexa.....	...	...	2	...	...	...	...	...	...	...	...	...	2
Totals, Class IX.....		...	1	3	1	1	...	...	3	2	...	1	...	12
X.—Diseases of the Bones and of the Organs of Locomotion														
155	Diseases of the bones (tuberculosis excepted).....	...	...	1	...	1	...	...	3	...	1	...	...	6
156	Diseases of the joints (T.b. and rheumatism excepted).....	...	...	...	1	...	...	...	...	...	...	...	...	1
Totals, Class X.....		...	...	1	1	1	...	...	3	...	1	...	...	7

1925 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
177	Other acute accidental poisonings (gas excepted).....			1					2					3
178	Conflagration.....		2						2				1	3
179	Accidental burns (conflagration excepted).....		2					1		1	3	1	1	10
180	Accidental mechanical suffocation.....	1	2	1								1		5
181	Accidental absorption of irrespirable, irritating, or poisonous gas.....											1		2
182	Accidental drowning.....			1		1	4	1	2		1	1		9
183	Accidental traumatism by firearms (wounds of war excepted).....										1			1
185	Accidental traumatism by fall.....	1	1	1	1	1	4	1	3			1	2	16
187	Accidental traumatism by machines.....		1	1			1				1			4
188	Accidental traumatism by other crushing (vehicles, railways, landslides, etc.):													
	* (a) Railroad accidents.....					2		1	1		1		1	6
	* (b) Street-car accidents.....					1								2
	* (c) Automobile accidents.....					2	1	2		1	2	1	1	10
	* (g) Landslides, other crushing.....	1												1
189	Injuries by animals (not poisoning).....							1			1			2
193	Excessive cold.....		3											3
196	Other accidental electric shocks.....						1							1
197	Homicide by firearms.....				1									1
199	Homicide by other means.....					1		1						3
200	Infanticide (murder of infants less than 1 year of age).....							2						2
201	Fracture (cause not specified).....								1					1
202	Other external violence.....	1		1		1								3
Totals, Class XIV.....		4	11	8	7	9	15	13	16	5	11	6	8	113

Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Population	1,000,000	1,050,000	1,100,000	1,150,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	1,450,000	1,500,000
Area (sq. miles)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Exports	\$100,000,000	\$105,000,000	\$110,000,000	\$115,000,000	\$120,000,000	\$125,000,000	\$130,000,000	\$135,000,000	\$140,000,000	\$145,000,000	\$150,000,000
Imports	\$100,000,000	\$105,000,000	\$110,000,000	\$115,000,000	\$120,000,000	\$125,000,000	\$130,000,000	\$135,000,000	\$140,000,000	\$145,000,000	\$150,000,000
Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

1890

