

## **Report of the City Health Department / City of Winnipeg.**

### **Contributors**

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*City of Winnipeg*



*Report*  
*of the*  
*City Health*  
*Department*



FOR THE YEAR ENDING  
31st DECEMBER

**1926**





*Presented by*

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CITY OF WINNIPEG

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REPORT

of the

City Health Department

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FOR THE YEAR ENDING

31st DECEMBER

1926



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## COMMITTEE ON HEALTH

### 1926

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Alderman R. J. Shore, Chairman

Alderman A. H. Pulford

Alderman A. R. Leonard

Alderman F. H. Davidson

Alderman T. Boyd

Alderman T. Flye


Alderman W. B. Simpson

Alderman J. Blumberg

Alderman J. A. Barry

His Worship Mayor R. H. Webb  
(ex-officio member)





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# STAFF

## (December, 1926)

### Medical Health Officer

A. J. Douglas, M.D.

#### Laboratory

Bacteriologist—M. S. Loughheed, M.D.  
Assistant—Miss M. Wilson.  
Laboratory Attendant—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 and Supervising Inspector—  
    A. Officer.  
Inspector—S. J. Scheving.  
    " O. S. Oliver.  
    " B. C. Brough.  
    " J. McHardy.  
    " A. Barclay.  
    " J. Shepherd.

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

### 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 A. G. Luke.  
    " Miss H. Smyth.  
Record Clerk—G. Moore.  
Clerk—S. Steele.

\*(Leave of absence)

### Division of Records and Statistics

Secretary—A. G. Lawrence.  
Stenographer-Clerk—Miss E. S. Halliday

Stenographer-Clerk—Miss M. M. Ryan  
Stenographer-Clerk—Miss E. Fraser.

### Bureau of Child Hygiene

Manager—A. G. Lawrence.

Nurse—Miss M. M. Wonnacott.  
    " Miss A. J. Attrill.  
    " Miss L. Spratt.  
    " Miss C. Maddin.  
    " Miss A. Moore.  
    " Miss C. Munro.  
    " Miss L. A. Schwalm.  
    " Miss E. A. Bennett.  
    " Miss M. Harper.  
    " Miss M. W. Macrae.

Nurse—Miss M. Wilkins.  
    " Miss H. Carter.  
    " Miss C. Thom.  
    " Mrs. C. E. Smith.  
Dietitian—Miss A. Graham.  
Assistant—Mrs. J. McDonald  
    " Mrs. H. Twist  
    " Mrs. A. Gibson.  
Caretaker—H. Steel.

Attending Physician—R. F. Rorke, M.D.  
Attending Physician—F. G. Schwalm, M.D.

### Dairy Division

Chief Inspector—E. C. Brown.  
Creameries Inspector—F. Lutley.  
Inspector—T. J. Booth  
    " J. M. Jackson.

### Food Division

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



## Report of the Medical Health Officer

City Health Department,  
Winnipeg, Man., March 29th, 1927.

Chairman and Members of the  
Committee on Health.

Gentlemen:

I have the honor to submit for your consideration the report of the Health Department for the year 1926. 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 1,698. Assuming the population to be 197,125 (City Assessor's figures), this gives a gross death rate of 8.61. This is very nearly the same as the rate of last year, which was 8.30 and the lowest we have recorded.

The number of deaths in children under one year of age was 314, giving a mortality rate of 70.65 per 1,000 living births. This is very slightly higher than last year's rate which was 68.

There has been very little variation in these rates for the past three years; in 1924 the rate was 67.8. This would seem to indicate that if we are to get these figures reduced, more attention must be paid to pre-natal care and instruction, as at present the majority of our infant deaths occur during the first week after birth and are due to such causes as prematurity, congenital defects and inanition.

The number of births, excluding stillbirths, was 4,444, giving a birth rate of 22.54 per 1,000 population. The birth rate continues to fall; in 1925 it was 23.73; in 1924, 24.44; in 1920 it was 32.06.

I do not attempt to offer an explanation of this decline, nor have I heard a satisfactory one. It should be borne in mind, however, that the same falling off is apparent in many other places; indeed it seems to be a condition that obtains to a greater or less extent throughout the whole country. A somewhat striking fact is that, notwithstanding an increase in the marriage rate which was 12.01 per 1,000 population in 1926, against 11.46 in 1925, the birth rate continues to fall.

Details regarding births and deaths will be found in the report of the Statistician; these figures extend over the period of which we have a record, and should be studied in order to obtain an appreciation of the variations which have taken place over a lengthy interval of time.

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**Financial Statement for the Year 1926**  
**Departmental Expenditures**

**C-1 Administration and Statistics (Controllable)—**

(a) Personal Services .....	\$11,350.30
(b) Outside Services .....	172.78
(c) Material, Supplies and Repairs ....	327.24
(d) Equipment, Additions and Replace- ments .....	112.72
(f) Unforeseen Expenditure .....	250.00
	<hr/>
	\$ 12,213.04

**C-2 Bacteriological Laboratory (Controllable)—**

(a) Personal Services .....	\$ 6,036.00
(b) Outside Services .....	29.00
(c) Material, Supplies and Repairs ....	581.59
(d) Equipment, Additions and Replace- ments .....	19.49
(e) Fuel, Water, Light and Power ....	114.67
	<hr/>
	\$ 6,780.75

**C-3 Treatment and Prevention of Communicable Diseases—**

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

(a) Personal Services .....	\$11,967.86
(b) Outside Services .....	166.00
(c) Material, Supplies and Repairs ....	451.50
(d) Equipment, Additions and Replace- ments .....	281.28
	<hr/>
	\$ 12,866.64

**C-3-2 Tuberculosis (Controllable)—**

(a) Personal Services .....	\$ 4,133.81
(c) Material, Supplies and Repairs ....	1,294.92
(d) Equipment, Additions and Replace- ments .....	86.84
	<hr/>
	\$ 5,515.57

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

(b) Outside Services .....	\$ 2,214.79
(c) Material, Supplies and Repairs ....	881.37
	<hr/>
	\$ 3,096.16



**C-3-4 Automobile Services (Controllable)—**

(b) Outside Services .....	\$ 260.18	
(c) Material, Supplies and Repairs .....	606.12	
		<hr/>
		\$ 866.30
Total Controllable .....		<hr/>
		\$ 22,344.67

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

(i) Interest .....	\$ 600.00	
		<hr/>
		\$ 600.00
Total Treatment and Prevention of Communicable diseases.....		<hr/>
		\$ 22,944.67

**C-4 Sanitary Inspection (Controllable)—**

(a) Personal Services .....	\$29,904.00	
(b) Outside Services .....	39.75	
(c) Material, Supplies and Repairs ...	368.99	
(d) Equipment, Additions and Replacements .....	834.23	
		<hr/>
		\$ 31,146.97

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

(a) Personal Services .....	\$ 7,810.00	
(b) Outside Services .....	546.16	
(c) Material, Supplies and Repairs ...	211.93	
(d) Equipment, Additions and Replacements .....	279.80	
		<hr/>
		\$ 8,847.89

**C-5-2 Food Inspection—**

(a) Personal Services .....	\$ 6,666.00	
(b) Outside Services .....	36.00	
(c) Material, Supplies and Repairs ...	86.11	
(d) Equipment, Additions and Replacements .....	198.70	
		<hr/>
		\$ 6,986.81

Total Food and Dairy Inspection .....\$ 15,834.70

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

(a) Personal Services .....	\$ 4,312.57
(b) Outside Services .....	3,394.29
(c) Material, Supplies and Repairs ...	2,647.03
(e) Fuel, Water, Light and Power ....	943.02
	<hr/>
	\$ 11,296.91

**C-6-2 Visiting Nurses—**

(a) Personal Services .....	\$19,506.30
(c) Material, Supplies and Repairs ...	73.96
(d) Equipment, Additions and Replace- ments .....	523.06
	<hr/>
	\$ 20,103.32

Total Child Welfare .....\$ 31,400.23

**C-7 Medical Relief (Controllable)—****C-7-1 District Physicians—**

(b) Outside Services .....	\$ 967.00
(c) Material Supplies and Repairs ....	583.39
	<hr/>
Total Medical Relief .....	\$ 1,550.39

Gross Departmental Expenditure .....\$121,870.75

**REVENUE**

(Credited to City's Revenue Account)

Police Court Fines and Costs .....	\$ 224.25
Fees for Fumigation .....	18.99
Fees for Laboratory Work .....	232.50
Sale of Infants' Feedings at Milk Depot .....	1,428.40
	<hr/>
	\$ 1,904.14

Net Departmental Expenditure .....\$119,966.61

**Cost Per Capita**

(Population 197,125)

Gross Departmental Expenditure per Capita .....	61.8 cents
Net Departmental Expenditure per Capita .....	60.8 cents

**Communicable Diseases**

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



The total number of cases of typhoid fever reported during the year was 66 with 8 deaths. In 1925 there were 42 cases and 6 deaths. Of these 66 cases, 11 were admitted from outside points to our local hospitals for treatment; of this number 4 died. This high mortality percentage once more emphasizes the danger which attends the moving of persons acutely ill with typhoid from place to place. It is not an uncommon incident for patients suffering from this disease to be brought into the City by train or motor from places many miles distant, only to have them die, sometimes shortly after their arrival. We are of the opinion, and have been for a long time, that these cases can be cared for with much less risk to the patient by attending him where he is taken ill, than by subjecting him to the disturbance inseparable from a long train journey or motor ride. Thirteen residents contracted the infection while travelling outside the City. Forty-two cases were contracted in the City. Some of the outstanding features of the year's typhoid were the following:-

A young man contracted typhoid outside the City; on his return home he delayed getting medical attention and advice for a considerable time, being unaware of the nature of his complaint. His father and mother, the only other members of the household, became infected with the disease. The young man and the father died.

An outbreak in which milk was the carrier occurred; fifteen cases comprised this group. Infection was attributed to a carrier. Following the appearance of cases on this milk route, samples of blood, faeces and urine were taken from the persons resident at the dairy. Results were negative with the exception of one individual who gave a positive blood and a history of having had typhoid some fifteen years previously. This man's stools and urine never gave a positive result. There was another man employed at the dairy whose record was interesting. This individual had worked at another dairy some time previously and during his employment typhoid appeared on the milk route. He had worked for a farmer in the country and after his arrival typhoid developed on the farm. He had been working for the dairyman, on whose route the outbreak we are now speaking of occurred, a comparatively short time when cases appeared among the customers; the unusual thing about this individual was that despite many tests his blood was always negative to the Widal reaction, and his faeces and urine always gave negative cultures for the typhoid organism. He denied having had the disease. We examined quite a number of specimens each time with the same result. We were anxious to get him to go to hospital where he could be kept constantly under observation for a month, to see if the organism could not be found, but he would not consent to do this. In our opinion this man was an intermittent carrier. The usual measures were taken with this outbreak, the milk, which had been delivered raw, was pasteurized, and the persons whom we considered might be carriers had their services discontinued at the dairy.

This outbreak emphasizes the potential dangers associated with the use of raw milk. The dairy which was affected in this instance was



a particularly well conducted one. In my opinion the road to safety lies in pasteurization; the greater the proportion of our milk supply that is pasteurized, the less the danger from milk borne diseases.

The remainder of the cases originating in the City were scattering in their distribution, and unconnected with a demonstrable source of infection.

Smallpox prevailed to some extent throughout the year; it is always a source of regret to have to report the presence of this preventable disease year after year. Prevalence was not extensive it is true, but the disease seems to have established a foothold in the North-West and we never seem to be able to go any length of time without a case being brought to light. During the year there were 43 cases and two deaths; in 1925 we had 41 cases and no deaths. With the exception of September and October, smallpox was reported every month in the year. Nine persons contracted the disease outside the City. Eight cases were unrecognized and were discovered in tracing back from known cases.

The most interesting event in the year's smallpox history was the incident of a local cattle buyer who had been travelling in South-Eastern Manitoba where the severe type of smallpox was present. This man contracted and developed the disease while out in the country on a cattle buying expedition. He was desperately ill but managed to get on a train bound for Winnipeg. While on the train he attracted the attention of the conductor who was able to get a physician to see him at one of the stations at which the train stopped. The physician diagnosed smallpox. The conductor wired to the railway authorities in the City that he was bringing in a case of smallpox, and the railway people notified the Health Department. The patient was found to be suffering from haemorrhagic smallpox, and was removed to hospital where he died two days later. The passengers on the train were held and all were vaccinated. A record was kept of those who remained in the City and these were kept under observation throughout their period of incubation. Those who did not remain in the City, and most of these came from the same district where the cattle buyer had been operating, were allowed to return home; their local health officers were advised of their exposure and the suggestion made that they be kept under close observation. Fortunately all the persons in the coach with the patient were well vaccinated and it is satisfactory to be able to report that no second case developed.

There was another case of the severe type which terminated fatally about two months later. In this instance the original case was a vaccinated man whose immunity had not become completely exhausted and he suffered from a modified type of the disease, so mild that the case was not identified. However, three unvaccinated individuals in the house where he resided contracted smallpox and one of these died. The source of infection in this case was the same district where the cattle buyer had been visiting. No spread took place from this focus. These were the only instances of the severe type that came



to our notice during the year and had the same point of origin. The other cases we had to deal with were uniformly mild.

A student in an educational institution, while suffering from smallpox, travelled to Brandon with a party of students. On his return to the City his case was diagnosed and he was sent to hospital. Five of his companions contracted the disease. Their homes contributed ten cases; those most directly in contact with the patient in these instances were the ones attacked.

Vaccination status of the patients was as follows. Eight had vaccination marks; none of these had been successfully vaccinated within seven years. The remaining thirty-five were unvaccinated.

Chickenpox prevailed extensively during the year—seven hundred and seventy cases were notified with one death. A death from chickenpox is a very unusual thing; in this instance it was due to a complication of abscess and pneumococci peritonitis.

Many cases of chickenpox were brought to our notice through the school nurses. The affected children had no medical attendant and were discovered as a result of their being absent from school. The department kept a close watch on this disease, checking the diagnosis in all cases to make sure that smallpox was not being wrongly diagnosed.

Two thousand, eight hundred and forty-four cases of measles were reported with eleven deaths, giving a death rate of 5.5 per 100,000 population and a mortality rate of .3 per 100 cases. During the past four years measles has been very prevalent. We have had during this period 10,861 cases and 32 deaths; this gives a mortality rate for the four year period of .3 per 100 cases.

Figures for the past twelve years, divided into four year periods, show a decline in fatality from this disease. They are as follows:

	Cases	Deaths
1923-26 (incl.)	10,861	32
1922-19 "	4,747	38
1918-15 "	8,015	55
1914-11 "	5,982	78

This reduction in mortality seems rather a hopeful feature of the measles situation; it would appear to indicate that people are beginning to appreciate that measles is not a trifling affection, and are taking better care of their children when they are attacked, in the way of providing medical attention, keeping the patient in bed and being on the look-out for the appearance of complications. I do not see any other explanation that can account for this marked and very satisfactory reduction in the death rate. During the past year we used every means of control in our power. We kept cases isolated, or hospitalized them, contacts were kept under observation and excluded from school attendance, the school authorities were advised to look out for children who might be developing the disease, literature was distributed—but with it all, when measles gets a start among a non-immune population,



measures that can at present be employed to restrict its spread do not seem to be crowned with any marked degree of success.

Six hundred and seventy-six cases of scarlet fever were notified with eight deaths. The type remains mild with a mortality rate of 1.1 per 100 cases. The scarlet fever epidemic index for the year gave warning that we might expect a rise in June; this fell to a point near 75 per cent. of the normal expectancy, then it showed an upward tendency and in this position we find ourselves at the end of the year.

The type being mild we found control difficult and many unrecognized cases were brought to light by checking back. There were three isolated small outbreaks having schools for their centre and contact the mode of transmission. No milk borne outbreak occurred.

In one instance, house to house inspection of a district where cases were appearing brought unrecognized cases to light. The school nurses were of great assistance in keeping children under surveillance and particularly in watching for and excluding from school attendance, pupils suffering from abnormal conditions of the throat.

Secondary cases numbered 18; missed cases totalled 78.

Up to the present we have not attempted to immunize school children against scarlet fever as a routine measure.

Diphtheria cases numbered 554 with 20 deaths. There were 86 cases from outside the City and of this group six died. The diphtheria rate continues to improve and the effect of the prophylactic work which has been going on steadily for the past three years is appearing. When one bears in mind that for eight successive years our cases averaged 1,200 per year and the gross death rate for these years was 27.6 per 100,000 population, there is cause for satisfaction in the showing of the last three years when the average stands at 650 cases and a death rate of 11.5. This rate can be reduced still further by continued effort. It is sad to have to relate again that nearly every death which occurred during the past year was associated with failure to recognize the disease early and institute proper treatment. There are still too many people who do not seem to appreciate the danger of allowing sore throats in children to go without attention until the condition becomes desperate. It is surprising in how many of these cases the parents thought that the child was suffering from mumps.

Twenty-two unrecognized cases and ninety-six carriers were discovered in the course of the year's work. The percentage of secondary cases was rather high, being about ten per cent. of the notified cases.

Preventive inoculation with toxoid was carried on as formerly in the City schools. The number of children receiving this was 2,764.

There was a notable increase in the demand for toxoid by physicians for use among their patients and for use in institutions for children.

Antitoxin distributed during the year totalled two million, eight hundred and seventeen thousand units. Three hundred and thirty-three dollars was collected from persons in a position to pay for this.



The tuberculosis situation does not show much change. Two hundred and thirty-two cases of pulmonary tuberculosis were notified with 88 deaths. Deaths from tuberculosis of all forms numbered 116. These figures show an increase over 1925, when 183 cases were reported and 81 deaths, from the pulmonary type. The increase in cases within the City is likely the result of the activity of the various chest clinics. The increase in deaths is not so high when outside cases are deducted as it leaves only a difference of three, viz: 71 to 68.

The sources from which the cases were reported are as follows:

Hospital Outdoor Clinics .....	59
King Edward Memorial Hospital .....	62
Ninette Sanatorium .....	31
Health Department Laboratory .....	18
Physicians .....	9
Death Registration .....	20
Non-residents .....	14
St. Roch's Hospital, St. Boniface .....	19
	<hr/>
	232
	<hr/>

The striking thing about these figures is the small number of reports made by physicians; it would appear to us that there must be a considerable number of cases in the City of which we have no record. This supposition is borne out by the fact that death registration was the first intimation we had of the existence of twenty cases during the past year. It is quite possible that many of these cases whose existence is unknown to us are under supervision and are occasioning no harm, but there may be some which are quite otherwise and it is of importance that we should know of them.

Tuberculosis can be reduced very materially from where it stands to-day and one of the ways that this can be done is by the early recognition, care, and education of those who suffer from it. Education also of the public is of the greatest assistance here and every agency that helps to bring this about deserves the warmest encouragement.

The work of the clinics at the Winnipeg General Hospital and the Children's Hospital went on as usual throughout the year and rendered fine service. Nurses from this Department attend all clinics at these hospitals. They look after the preparation of the patients, make up the history charts, assist the examining physicians, do follow-up work and keep records of patients. The clinic held at the King Edward Memorial Hospital is conducted by the staff of that institution.

We distributed supplies as in former years; these included milk, refills, handkerchiefs, disinfectants and certain medical supplies.

Whooping cough was somewhat prevalent during the year, but shows a considerable decline from 1925, the figures being four hundred and twenty cases with six deaths for 1926 and six hundred and eighty-nine cases and fourteen deaths for 1925. We had difficulty with get-



ting notification of this disease; many of the patients had no physician and were discovered through the Medical Inspection of Schools. The indifference of some people to the dangers of this disease is remarkable; they do not seem to mind their own children having it, nor to care if they hand it along to their neighbours' children. This is one of the chief obstacles that stand in the way of control. We have tried for years to point out that whooping cough is a dangerous affection, particularly among young and delicate children, and that every effort should be made to curtail its spread. Until a better appreciation of this takes place on the part of some of our citizens, we are going to continue to have fatalities from this cause. As in past years, we issued vaccine for treatment. This seemed to be of decided benefit, especially if given early.

An outstanding event of the year was an outbreak of mumps of large dimensions. This was a continuation of the outbreak which commenced late in 1925. The number of cases that came to light was fifteen hundred and six. No doubt there were many more, as the majority of those affected had no physician and were discovered through the Department of Medical Inspection of Schools.

Prevalence was greatest during the first months of the year, the peak being reached in March, with four hundred and twenty cases. Subsidence took place rapidly after the closing of the schools for the summer holidays. This outbreak illustrates the ability of one of the minor infections to assume epidemic proportions. We have never had a similar experience with mumps in this City. It gave the Department considerable trouble and was the cause of a great many days of school attendance being lost by pupils. Indeed the disease did not by any means confine itself to school children, but claimed for its victims quite a number of young adults. One or two offices employing a large number of young men and women had quite a proportion of their staffs incapacitated at one time.

Why this disease should assume epidemic proportions is something that I cannot explain. Possibly increased virulence of the organisms may have been a factor. The mode of infection was likely direct or indirect contact. So far as I am aware, no serious consequences resulted to any of those affected, other than loss of time and the pain and inconvenience of the attack. Few cases with complications came to our notice. Measures of control did not seem to be very effective; these included isolation of the patient until all glandular enlargement had subsided, and concurrent disinfection.

Encephalitis lethargica still prevails to a limited extent. Seven cases were notified with seven deaths. None of these cases were associated with any known focus of infection.

No case and no death from anterior poliomyelitis was recorded for the year, rather an unusual record.

Of the thirty-one influenza deaths recorded, twenty occurred during the first four months of the year. The ages range from 2 months to 91 years, and are summarized as follows:



Cases		18	13
		Males	Females
Ages:			
Under one year			5
1 year to 2 years			2
3 years to 4 years			1
10	" "	20	2
21	" "	30	2
31	" "	40	.
41	" "	50	4
51	" "	60	3
61	" "	70	3
71	" "	80	6
81 and over			3
Total			31
Of these, 6 were non-residents.			

#### Medical Relief

District physician calls for the year totalled two hundred and ninety-eight as compared with three hundred and forty-three for the preceding year. This is the lowest number of calls for any one year since the inauguration of this service in 1912. Calls at the office totalled five hundred and two as compared with four hundred and sixty-nine for the year 1925.

Vaccinations performed, including two thousand and seventy-five done in the Laboratory, City Hall, totalled four thousand, one hundred and eleven. This shows an increase of almost one thousand, as last year's figures stood at 3,140.

Through the Nurses of the Margaret Scott Nursing Mission we were advised of many cases of Measles and Mumps, amongst the poorer citizens, often, if not always, unable to secure other advice and occasionally other infections were brought to light in a similar manner. Many of the calls coming to this office were visited by the Nurse from this Mission. The Mission has recorded one hundred and sixty such calls during 1926. This service has been of great assistance and we wish to express our appreciation of it.

Since the month of May a numerical record of all school certificates issued from the office has been kept. For the seven months ending December 31st, 1926, two thousand, one hundred and forty-six certificates were issued.

#### Insulin

Beginning September 1st, 1926 the Department undertook the distribution of Insulin to diabetic patients who had previously been supplied by the Provincial Board of Health and, in the majority of instances, were unable to pay for it.

The amount distributed for the four months, ending December 31st, 1926, was thirty-three thousand, five hundred units. The number of patients receiving this benefit being eleven.

Thirty-six dollars and seventy cents was the amount collected from those who were in a position to pay.

### Municipal Hospitals

The following summary submitted by the Municipal Hospitals shows the number of cases of communicable diseases admitted during 1926, together with number of deaths occurring at these institutions.

#### King George Hospital

Diseases	Cases	Deaths	Percentage
Diphtheria .....	410	15	3.66%
Diphtheria Carriers .....	38	—	—
Scarlet Fever .....	433	8	1.85%
Measles .....	405	7	1.73%
German Measles .....	16	—	—
Erysipelas .....	55	4	7.27%
Mumps .....	216	—	—
Whooping Cough .....	40	—	—
Smallpox .....	45	2	4.44%
Chickenpox .....	27	—	—
Miscellaneous .....	380	8	2.30%
Totals .....	2,065	44	2.13%
Died within 36 hours		19	
Corrected rate .....			1.21%

#### King Edward Memorial Hospital

	Cases	Deaths	Percentage
Tuberculosis .....	159	44	32.45%

### Report of the Clinic for Venereal Diseases

#### 705 Boyd Building, Winnipeg

The following report was furnished through the courtesy of Dr. Pullar, physician in charge of the Provincial Government's Clinic for Venereal Diseases.

During the year 1926, 1,669 patients were examined. Of these, 1,266 were cases of venereal infection, who received treatment, the balance being non-venereal patients, who were admitted for examination. Four hundred and eighty-six were cases of Syphilis and 780 were cases of Gonorrhoea.

There were 276 new cases of Syphilis and 606 new cases of Gonorrhoea, the remainder having been carried forward from the previous year.

**Syphilis**—Of the 486 suffering from Syphilis, 308 were male and 172 female; 6 children under twelve years of age. Six hundred and eleven blood examinations for Syphilis were made during this time and 7,203 treatments given.

**Gonorrhoea**—Of the 780 cases of Gonorrhoea, 602 were male and 178 female. Thirteen hundred and thirty-one smears were examined for Gonorrhoea, and 13,056 treatments were given.



<b>Treatments—Gonorrhoea</b> .....	13,056
Syphilis .....	7,203
Non-Venereal .....	1,484
	<hr/>
	17,323

#### **Report of Patients Treated in the Provincial Gaol**

There were 57 new patients treated for venereal diseases during 1926. Of these 35 were Syphilis and 22 Gonorrhoea. Two hundred and seventy-eight treatments were given for Syphilis and 1,750 for Gonorrhoea.

Seven hundred and seventy-nine blood examinations were made for Syphilis.

Respectfully submitted,

(Signed) JAS. PULLAR, M.D.

#### **Legislation Enacted**

##### **Dominion—**

No Legislation affecting this department.

##### **Provincial—**

A Regulation of the Provincial Board of Health requiring that all advertising of milk, cream, or other dairy products intended for sale, appearing on labels, containers, or vehicles for conveying the same, shall be subject to the approval of the Chairman of the Provincial Board of Health, otherwise permits for sale may be withdrawn.

The object of this regulation is to ensure that all advertising as to the quality of the milk sold, the plant, the cows, or the methods employed shall be in accordance with the facts.

Various Regulations of the Minimum Wage Board, respecting sanitary conditions in several kinds of workshops, were repealed, enacted or revised.

##### **The City of Winnipeg—**

By-law No. 12046, an amendment to the Building By-law. The By-law permits the conversion of 3-story frame buildings to tenement use, which was previously prohibited. In view of the large number of such houses at present unlawfully occupied as tenements, and the desirability of having such houses properly fitted up for such use, the By-law was a step in the right direction, but the sections of the By-law respecting sanitation do not go as far as we would like to see them go. It is extremely important that if these houses now illegally occupied as tenements are to be recognized as such, any by-law enacted with this object shall be so drafted as to vastly improve the conditions which now obtain in such houses.

#### **Legislation Required**

The most important health legislation required in the City at present is a by-law which will regulate houses of the class referred to above. Action in this matter has been deferred for years with

the result that conditions in such houses are gradually getting worse. A by-law requiring that such alterations and improvements shall be made to these houses as will render them reasonably suitable for tenement use and which will bring them under some system of registration or licensing is desirable.

### Installation of Plumbing

A few extensions were made to the sewers and water mains and we were able, upon completion of these, to serve some 48 notices to instal plumbing. In addition to this, of course, all new buildings erected during the year were properly connected and plumbing installed therein.

Eighteen outside closets were removed, but 4 new closets were constructed in connection with houses built on streets without sewers, so that the net reduction was 14. Some of the plumbing notices served have not yet expired.

#### December 31st, 1925

Brick Pits .....	318
Earth Pits .....	2

Total ..... 320

#### December 31st, 1926

Brick Pits .....	303
Earth Pits .....	3

Total ..... 306

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	836	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
December 31, 1926 .....	....	3	303	306



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

1905 .....	222.6	per	100,000	1916 .....	7.5	per	100,000
1906 .....	146.5	"	"	1917 .....	6.0	"	"
1907 .....	51.0	"	"	1918 .....	6.5	"	"
1908 .....	40.6	"	"	1919 .....	7.4	"	"
1909 .....	38.4	"	"	1920 .....	.0	"	"
1910 .....	31.6	"	"	1921 .....	.0	"	"
1911 .....	7.9	"	"	1922 .....	.0	"	"
1912 .....	5.4	"	"	1923 .....	.5	"	"
1913 .....	4.3	"	"	1924 .....	1.0	"	"
1914 .....	3.9	"	"	1925 .....	1.0	"	"
1915 .....	2.0	"	"	1926 .....	1.0	"	"

#### Extension of Sewers and Water Mains

On the completion of our annual census of outside closets, taken in December, 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, December, 1926.

Fort Rouge				Remarks
Street	Block	Houses	Total	
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	
Cambridge St.....Jackson to Lennon		7		
Cambridge St.....Lennon to Mathers		4	11	
Fleet Ave.....Guelph to Wilton		2		
Fleet Ave.....Wilton to Rockwood		2	4	
Lorette Ave.....Harrow to Guelph		2		Sewer Harrow to Rockwood, advertised Jan. 14, 1924. Not proceeded with.
Lorette Ave.....Guelph to Wilton		2		
Lorette Ave.....Rockwood to Thurso		2	6	
Scotland Ave.....Harrow to Guelph		2		Sewer Harrow to Rockwood, advertised Jan. 14, 1924. Not proceeded with.
Scotland Ave.....Guelph to Wilton		5		
Scotland Ave.....Wilton to Rockwood		1		
Scotland Ave.....Nathaniel to Cambridge		2	10	

Street	Block	Houses	Total	Remarks
Weatherdon Ave.....	Stafford to Harrow	7		
Weatherdon Ave.....	Harrow to Guelph	2		
Weatherdon Ave.....	Rockwood to Thurso	3		
Weatherdon Ave...	Nathaniel to Beaumont	1		
Weatherdon Ave..	Beaumont to Cambridge	1	14	
<hr/>				
Carter Ave.....	Stafford to Harrow	4		
Carter Ave.....	Harrow to Guelph	4	8	
<hr/>				
Hector Ave.....	Wentworth to Stafford	3		Sewer but no water.
Hector Ave.....	Stafford to Harrow	3	6	Water main to West
<hr/>				lot line of Lot 36,
Pembina Highway (scattered).....		10	10	Block 23, 1922.
Ebby Ave.....	Lilac to Wentworth	3		
Ebby Ave.....	Wentworth to Stafford	2	5	
<hr/>				
Total .....			101	
On streets with less than four houses, or				
where sewers and water mains have				
recently been constructed .....				59
<hr/>				
Total .....			160	
<b>Assiniboine Avenue to Higgins Avenue</b>				
Centre Street.....	Calder to Ellice	2		
Centre St.....	Ellice to Sargent	3	5	
<hr/>				
Keewatin St....	Rapelje to St. Matthews	2		
Keewatin St.....	Sargent to Wellington	1		
Keewatin St.....	St. Matthews to Ellice	2		
Keewatin St.....	William to Logan	3		
Keewatin St..	Logan to C.P.R. Main Line	2	10	Water main. No sewer.
<hr/>				Private sewer north of
				Logan, owned by Thos.
				Jackson & Sons. Other
				owners refuse to con-
				nect with this sewer,
				and apparently cannot
				be compelled to do so
				unless the city takes
				over the sewer. City
				sewer extends to 150 ft.
				north of Gallagher Ave.
<hr/>				
Total .....			15	
On streets with less than 4 houses, or where				
sewers or water mains recently con-				
structed .....				29
<hr/>				
Total .....			44	



## C. P. R. Main Line to North City Limits

Street	Block	Houses	Total	Remarks
Atlantic Ave.....	Airies to McPhillips	3		Water main laid. No sewer.
Atlantic Ave.....	McPhillips to Fife	2	5	
Boyd Ave.....	Prince to McPhillips	4	4	
Bannerman Ave.....	C.P.R. Beach Line to Airies .....	2		
Bannerman Ave.....	Airies to McPhillips	2	4	
Cathedral Ave...	Galloway to C.P.R. Beach Line .....	1		
Cathedral Ave.....	C.P.R. Beach Line to Airies .....	2		
Cathedral Ave...	Airies to Radford....	1	4	
Dalton St.....	Mountain to Machray	4	4	Sewer laid. 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 Airies	1	7	
Kitchener Ave.....	Near Keewatin St.	4	4	Dairies.
Lansdowne Ave. ....	Parr to Sinclair	4	4	
Monreith St.....	Mountain to Church	4	4	Sewer laid. No water main.
Mountain Ave.....	McPhillips to Fife	6	6	
Robertson St.....	Mountain to Church	4	4	
Total.....			50	
On streets with less than 4 houses, or where sewer or water mains have recently been laid .....			21	
Total.....			71	

**Elmwood**

Street	Block	Houses	Total	Remarks
Beach Ave.....	Foster to Cameron	2		
Beach Ave.....	Cameron to Kent	1		Sewer laid. No water main. Pit closets and cellars flooded and insanitary. Sewer ordered C.P.R. track to Kent St. (except between Cameron and Green), Jan. 16, 1922. Not constructed.
Beach Ave.....	*Kent to Keenlyside	3		
Beach Ave..	*Keenlyside to E. City Limits	3	9	
Herbert Ave.....	Foster to Green	6		
Herbert Ave.....	Kent to Keenlyside	4	10	Water main laid. No sewer.
Nairn Ave.....	Wolfe to Grey	2		
Nairn Ave.....	Cameron to Kent	2	4	Sewer laid. Water within 300 ft.
Total.....			23	
On streets with less than 4 houses, or where sewers or water mains have recently been laid .....				8
Total.....			31	

**Summary**

Fort Rouge .....	101
Assiniboine River to C.P.R. Main Line.....	15
C.P.R. Main Line to Northern City Limits .....	50
Elmwood .....	23

189

On streets with less than 4 houses, or where sewers or water mains have recently been laid .....	117
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Total outside closets in use Dec. 31, 1926.... 306

**Table Showing Additions and Removals During 1926**

Outside closets in use Dec. 31, 1925 .....	320
New closets built 1926 .....	10

Less closets removed during 1926 .....

24

Remaining..... 306

**Housing**

There were 575 new houses built in 1926, and also 10 apartment blocks, containing 304 suites. These were all built by private enter-



prise Vacant houses in December numbered 612 as against 811 in 1925 Vacant suites 338 as against 445. Even this fairly large increase of accommodation does not seem to do more than care for the natural increase of population. The houses illegally occupied as tenements, seem to be just as full as ever. Further details regarding housing conditions will be found in the reports of the Chief Health Inspector and the Tenement Inspector.

### **Educational Work**

On several occasions during the year, members of the Staff have been called upon to give lectures and radio talks to the public.

For the education of our own staff the following course of lectures was arranged for the season of 1925-26:-

#### **1925**

- Nov. 14—The part played by Insects in the Transmission of Disease—Dr. A. J. Douglas, Medical Health Officer.
- Nov. 21—Preventive Medicine—Dr. Fred C. Cadham, Provincial Bacteriologist.
- Nov. 28—Impressions of a recent trip to Europe—Dr. Manly Finkelstein, City Bacteriologist.
- Dec. 5—Illustrated Lecture, Occupational Diseases—Dr. Hugh Mackay.
- Dec. 12—Diet in Disease and Health—Dr. C. R. Gilmour.
- Dec. 19—Smallpox and Vaccination—Dr. A. B. Alexander, Medical Supt., City Hospitals.

#### **1926**

- Jan. 9—Impressions gathered at the Convention of the International Association of Milk and Dairy Inspectors—W. A. Shoults, V.S., Provincial Department of Health.
- Jan. 16—Problems in Smoke Abatement—Mr. P. Pickering, Smoke Inspector.
- Jan. 23—Leaves from the notebook of a City Chemist—Mr. A. Blackie, City Chemist.
- Jan. 30—Heating and Ventilating—Mr. J. Foggie, Sanitary Inspector.
- Feb. 6—A comparison of old and new theories of Food Inspection—Mr. A. Rigby, Chief Food Inspector.
- Feb. 13—Visit to Harris Abattoirs, St. Boniface.
- Feb. 20—A Talk on Sanitary Law—Mr. E. W. J. Hague, Chief Health Inspector.
- Feb. 27—Legislation for Children—Miss E. Russell, Supt. of Provincial Public Health Nurses.
- Mar. 6—Round Table discussion on Housing—Introduced by Mr. A. Officer, Tenement Inspector.
- Mar. 13—Controlling a Milk Supply—Mr. E. C. Brown, Chief Dairy Inspector.

Mar. 20—A talk on Mental Hygiene—Dr. A. T. Mathers.

Mar. 27—Annual Dinner.

Also an evening lecture in January on Tuberculosis, by Dr. D. A. Stewart, Medical Superintendent of Ninette Sanitarium.

These were well attended and much enjoyed.

#### Division of Street Cleaning

During the latter part of the year the City Council placed the Department of Street Cleaning under the Health Officer, as a division of the Health Department. This division is responsible for cleaning the streets, scavenging, and the disposal of municipal wastes. Mr. E. Wood is in charge of the division. A report from Mr. Wood, covering the period during which he has operated under the new arrangement, is included in this report.

#### Changes in the Staff

Early in the year Dr. Manly Finkelstein resigned his position as Bacteriologist to go into practice. Dr. Finkelstein, during his term of office, discharged his many duties in a highly efficient manner; his courtesy and kindness made him a favorite with our entire personnel, and he carries with him our best wishes for his success in the future.

It is a real pleasure to report that we were able to secure Dr. Morley Lougheed to succeed Dr. Finkelstein. Dr. Lougheed is no stranger to the Department, having acted in a temporary capacity during the previous year. Dr. Lougheed possesses all the qualifications of professional skill and personality that are required to fit him to render the highest quality of service.

Inspector C. W. Chisholm retired on pension, having served the City honorably and ably for twenty years.

Dairy Inspector F. Hudson resigned his position in June, and was succeeded by Mr. J. M. Jackson, who brings with him experience and training for the special line of work he will be called upon to perform.

I regret to report the death of Mr. A. G. Cowley, Caretaker of the Milk Depot, which occurred in August. Mr. H. N. Steel was appointed in his place.

Miss W. G. Aldham resigned her position as record clerk, to return to her home in England. We were sorry to lose Miss Aldham who had been with us a number of years. Mr. George Moore was promoted to her position.

Two of our young lady stenographers, Miss L. E. Gransden and Miss C. B. Morden, were claimed by matrimony. To fill these vacancies, Miss E. S. Halliday and Miss E. Fraser were appointed.

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 Chief Health Inspector

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

Dear Sir:

I have the honour 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 concise form a summary of the work done by the inspectors of this division.

The total number of inspections and re-inspections was 39,667, or 3,011 less than in 1925. We had, however, this year only 10 districts inspectors as against 11 in 1925.

Actual inspections in 1925 equalled 3,879 per man, and this year 3,967, or 88 per man, more.

Complaints numbered 2,624, or 135 less than in 1925.

## Sanitary Inspections for the Year 1926

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Complaints received in office .....	86	104	138	176	219	169	218	156	131	131	94	100	1,722
Complaints made to Inspector .....	78	64	69	79	116	93	50	66	81	83	70	53	902
Total .....	164	168	207	255	335	262	268	222	212	214	164	153	2,624
Of above—													
Complaints re non-removal of garbage, etc	33	29	30	40	72	48	30	42	43	32	30	30	459
Complaints re nuisances, etc .....	131	139	177	215	263	214	238	180	169	182	134	123	2,165
Total .....	164	168	207	255	335	262	268	222	212	214	164	153	2,624
Complaints well founded .....	139	143	182	229	298	218	236	186	182	191	140	139	2,283
Complaints unfounded or rectified previous to receipt of same .....	25	25	25	26	37	44	32	36	30	23	24	14	341
Total .....	164	168	207	255	335	262	268	222	212	214	164	153	2,624
Written notices (informal) .....	220	227	227	297	262	320	284	273	184	233	252	256	3,035
Written notices (statutory) .....	127	103	146	224	219	182	168	110	147	145	96	94	1,761
Verbal notices or warnings .....	648	654	629	806	1,061	849	596	706	797	660	724	542	8,672
Total .....	995	984	1,002	1,327	1,542	1,351	1,048	1,089	1,128	1,038	1,072	892	13,468
Inspections Made:													
Dwelling houses .....	204	197	180	205	161	180	148	148	175	158	185	512	2,453
Tenement and apartment blocks .....	92	94	103	93	94	99	76	75	98	87	131	490	1,532
Hotels and lodging houses .....	11	5	51	10	31	24	6	14	16	14	9	17	208
Schools and public buildings .....	4	13	..	..	..	3	..	1	4	1	1	1	28
Abattoirs .....	1	3	1	1	2	1	..	1	1	..	1	3	15
Workshops and factories .....	49	49	42	43	38	31	31	32	43	34	49	36	477



Sanitary Inspections For The Year 1926 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Offices .....	14	2	9	6	9	5	1	3	6	4	9	3	71
Restaurants and stores.....	59	46	57	49	51	53	64	60	77	68	82	33	699
Stables, livery, feed and sale.....	40	30	29	24	27	30	22	51	51	30	18	28	380
Stables, private.....	140	157	152	163	169	173	130	156	161	152	159	116	1,828
Laundries, hand.....	49	50	48	120	73	48	33	33	35	42	82	46	659
Laundries, steam.....	4	3	4	4	3	4	4	3	4	5	5	4	47
Dog kennels.....	11	9	8	22	22	21	15	12	14	12	16	14	176
Theatres and places of amusement.....	4	5	2	4	6	11	5	4	6	6	6	3	62
Public bath houses.....	4	4	4	8	9	8	8	4	9	8	4	4	74
Public bath houses, water samples.....	8	8	10	11	12	15	12	15	13	10	11	8	133
Comfort stations, public.....	20	20	20	20	20	22	22	12	24	20	20	20	240
Maternity and Infants' homes.....	1	..	..	..	..	2	2	..	..	..	..	..	5
Hospitals, private.....	..	..	..	1	6	3	2	..	..	..	..	..	12
Common drinking cups and towels.....	3	4	4	4	3	2	3	3	4	4	4	3	41
Barber shops.....	11	12	15	14	9	12	10	12	13	12	7	9	136
Second-hand stores and junk yards.....	22	29	19	146	62	22	20	16	26	10	18	27	417
Pool rooms.....	23	26	25	67	43	20	22	17	20	21	23	23	330
Yards, sheds, areas, etc.....	486	394	595	731	777	754	478	618	590	561	420	513	6,917
Vacant lots (nuisances).....	64	53	92	87	129	94	56	49	79	85	82	52	922
Streets and lanes (nuisances).....	291	242	273	277	289	298	294	235	269	248	348	295	3,359
Infectious diseases (houses placarded, dis- infected, etc.).....	590	464	500	16	..	..	..	..	..	..	..	..	1,576
Total number of inspections.....	2,205	1,919	2,243	2,126	2,045	1,935	1,464	1,574	1,738	1,592	1,690	2,260	22,791
Re-inspections .....	976	1,143	1,299	1,659	1,916	1,647	1,224	1,418	1,758	1,376	1,547	913	16,876
Total number of inspections and re-inspections.....	3,181	3,062	3,542	3,785	3,961	3,582	2,688	2,992	3,496	2,968	3,237	3,173	39,667

### Defects and Nuisances Discovered and Abated:

Drains, choked or defective.....	23	16	22	25	19	24	24	24	22	22	24	15	260
Sinks and wash-basins, choked or defective..	22	10	49	27	25	17	12	14	18	20	11	10	235
Water closets and fittings, choked or defec- tive .....	39	29	54	36	41	30	27	29	36	33	26	23	403
Baths and fittings, choked or defective.....	1	1	4	5	6	3	..	7	2	2	1	..	32
Urinals and fittings, choked or defective...	1	3	11	3	10	6	2	4	3	2	2	4	51
Soil-pipes, clean-outs, etc., choked or defec- tive .....	15	12	24	12	18	15	14	15	11	18	9	12	175
Catch-basins and traps, choked or defective	19	17	24	26	18	21	19	20	17	18	16	12	227
W. C. compartments, defective light and ventilation .....	2	3	3	4	2	1	5	2	2	3	1	..	28
Plumbing and water pipes, frozen.....	42	40	40	2	..	..	..	..	..	..	13	48	185
Vent stacks, frozen.....	1	..	1	..	..	..	..	..	..	..	..	3	5
Sewer connections, frozen.....	2	1	2	1	..	..	..	..	..	..	..	..	6
Water services, defective or cut off.....	36	28	39	33	18	15	16	19	21	17	21	17	280
Plumbing fixtures, insufficient.....	3	3	2	2	2	2	2	2	1	1	..	1	21
New plumbing, notice to instal.....	5	1	2	7	4	3	5	3	7	6	3	2	48
Total plumbing defects.....	211	164	277	183	163	137	126	139	140	142	127	147	1,956
Dirty yards, courts, sheds, etc.....	181	216	297	522	504	369	309	310	303	286	310	262	3,869
Poultry kept in dwelling.....	2	4	5	4	2	6	4	2	7	3	6	2	47
Pigeons kept in dwelling.....	..	2	..	2	3	3	..	3	2	1	..	..	16
Animals kept in dwelling.....	..	1	2	2	2	1	1	..	..	..	3	..	12
Poultry kept under insanitary conditions..	6	3	5	12	9	18	15	13	15	10	4	2	112
Cows or other cattle kept under insanitary conditions .....	6	3	3	3	3	4	2	3	2	6	3	2	40
Cows or other cattle kept too close to dwell- ing .....	1	..	1	..	1	1	4	1	1	3	..	..	13
Hogs, un'awfully keeping.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Horses, insanitary stables.....	3	2	3	9	6	6	5	10	4	5	..	3	56
Garbage receptacles.....	112	114	110	222	337	330	301	273	226	179	159	94	2,457



Sanitary Inspections For The Year 1926 (Continued)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Refuse receptacles.....	63	62	49	91	140	117	75	90	73	67	81	46	954
Manure bins, defective.....	44	49	60	66	69	51	41	43	45	49	65	42	624
Ash receptacles.....	45	60	20	36	9	7	6	4	5	17	22	25	256
Paper receptacles.....	9	8	10	12	19	15	16	17	16	8	8	8	146
Cellars and basements, defective.....	22	27	26	31	24	32	25	25	36	25	19	11	303
Dwellings, dilapidated and insanitary.....	13	9	18	5	4	6	3	6	3	2	5	8	82
Tenements, dilapidated and insanitary.....	..	..	..	2	4	1	..	..	..	..	1	1	9
Offices and workshops, dilapidated and insanitary.....	..	1	..	1	..	1	2	3	..	..	..	4	12
Dilapidated and insanitary other buildings..	7	3	3	2	1	8	4	4	5	4	3	2	46
Overcrowding (day inspections).....	22	20	23	17	12	15	21	16	16	18	20	11	211
Overcrowding (night inspections).....	..	..	..	..	..	..	..	..	..	..	1	..	1
Overcrowding (notices).....	6	5	..	8	..	6	5	2	1	2	2	3	40
Rat-infested buildings.....	2	3	1	6	5	4	7	4	4	4	1	1	42
Cockroach infested buildings.....	2	..	5	6	6	2	2	2	1	1	3	..	30
Bed-bug infested buildings.....	..	2	10	6	9	8	4	11	6	4	2	..	62
Chimneys, defective.....	5	6	1	2	1	2	3	4	6	7	6	5	48
Roofs, defective.....	2	7	8	11	10	11	15	18	29	18	14	12	155
Eavestroughs and rain-water leaders, defective.....	..	5	11	19	14	16	23	26	24	29	19	4	190
Gas fittings and piping, defective.....	2	1	3	..	..	..	..	..	..	1	4	..	11
Furnaces and heating apparatus defective..	15	7	6	2	..	..	..	3	10	10	13	8	74
Refrigerators, defective.....	..	..	..	..	..	..	..	..	..	..	1	..	1
Lighting, defective.....	2	2	5	6	4	3	3	3	4	2	5	3	42
Ventilation, defective.....	3	6	4	6	4	2	3	3	5	1	8	2	47
Pit closets, concrete or brick, notices.....	4	3	..	3	3	13	6	4	5	11	6	26	84

Contractors' closets, notices.....	29	28	41	53	73	78	65	73	75	73	68	25	681
Chemical or patent closets.....	..	..	..	..	..	..	..	..	..	..	..	..	..
S'agnant water, vacant lots.....	..	..	15	13	1	..	..	..	2	3	9	3	46
Other nuisances, vacant lots.....	59	49	77	73	129	91	51	48	74	84	68	52	855
Nuisances on lanes or streets.....	279	248	262	265	316	300	289	232	264	246	374	295	3,370
Total number of defects.....	946	956	1,084	1,518	1,724	1,527	1,310	1,256	1,269	1,179	1,313	962	15,044
Total plumbing defects.....	211	164	277	183	163	137	126	139	140	142	127	147	1,956
Total defects discovered (including plumbing defects).....	1,157	1,120	1,361	1,701	1,887	1,664	1,436	1,395	1,409	1,321	1,440	1,109	17,000
<b>Smoke Nuisances:</b>													
Chimneys and smoke stacks (observations)...	18	18	10	14	12	18	16	10	21	24	24	32	217
Furnaces, boilers, fuels, etc., inspections of	78	91	34	77	71	91	86	51	82	102	151	125	1,039
Total.....	96	109	44	91	83	109	102	61	103	126	175	157	1,256
Notices, statutory.....	1	1	..	1	..	..	..	..	..	2	1	3	9
Notices, verbal.....	18	15	10	14	7	6	7	7	11	23	33	37	188
Total.....	19	16	10	15	7	6	7	7	11	25	34	40	197
<b>Miscellaneous:</b>													
Water samples taken.....	12	14	12	14	13	12	12	4	13	13	12	14	145
Chemical tests (plumbing and drainage)—													
Negative.....	1	..	..	..	..	..	..	..	..	..	..	..	1
Cases reported for prosecution.....	1	..	..	3	2	..	1	..	1	..	3	1	12
Time attending court (hours).....	..	..	..	2½	1¼	2½	..	..	..	..	3½	..	10
Undertaking parlors.....	..	..	..	..	7	..	..	..	..	..	..	..	7



### **Frozen Plumbing and Water Pipes**

There were 196 cases of frozen sewers, plumbing, and water pipes. This number by no means represents all the cases of frozen plumbing which occur during the winter months. There are so many old and badly constructed buildings; so many cellars without furnaces; that it is extremely difficult in such buildings to keep the plumbing from freezing. Poverty of the tenants is also a contributory cause, and when we discover such cases we sometimes have to ask the Social Welfare Commission to assist us in getting matters put right. We had also the usual quota of occupants of lock-up stores who will not keep their stoves going at nights and over week-ends, and thus allow the plumbing to freeze.

### **Other Plumbing Defects**

These numbered 1,760 or 146 fewer than in 1925. They included choked or defective drains, sinks, wash basins, water closets, baths, urinals, soil stacks, catch basins, clean-outs and vent stacks. We found several instances where sinks and other plumbing fixtures had been installed without permits and in an unsatisfactory manner. This often occurs in dwelling houses unlawfully occupied as tenements. In one such case three sinks had been installed without vents or traps, and the waste pipes of these were buried in the loose earth under the cellar floor, thus leading to a serious nuisance being created. Such work is not done by the authorized plumbers of the City, but by some handy man.

There were 48 notices served to install new or additional plumbing fixtures. Five hundred and seventy-five new houses and 10 new apartment blocks were erected. These, with the exception of a few houses built on streets without sewer or water, were connected up and plumbing installed. There are now only 306 outside closets in use in the City.

### **Garbage, Manure and Other Receptacles**

The appearance of a City is much improved when all waste substances are kept in covered receptacles whilst awaiting removal. This also, especially in the case of manure, helps to keep down flies. One of the best ways to prevent the increase of rats is to keep all garbage in metal receptacles as their food supply is largely curtailed thereby. Whilst these various receptacles required by the by-laws are not expensive, they do not last long. The wear and tear is considerable, with the consequence that repairs or renewals are necessary. We served 3,813 notices respecting such receptacles, during the year.

### **Scavenging**

The closest co-operation has been maintained with the street Commissioner's Department in the matter of scavenging, both as to the keeping of the various kinds of refuse, whilst awaiting removal, in the proper receptacles, and also as regards the service given. We received 459 complaints regarding garbage and refuse, and when necessary took up the matter with the Street Commissioner.

There were no general complaints regarding the scavenging service.

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

To clean Contractor's closets .....	184
*To allow rebates .....	91
To remove garbage .....	34
To remove dead animals .....	38
To remove ashes .....	52
To clean brick pit closets .....	52
To remove infected bedding .....	1
To remove manure from streets or lanes .....	7
To remove tins or incombustible refuse .....	54
<b>Total .....</b>	<b>513</b>

\*There were no rebates given to Contractors on 1926 permits. The rebates shown as above were on 1925 permits held over.

It should be noted that on November 1st, 1926, the City Council again placed the Scavenging under the Medical Officer of Health as a separate division of the Health Department, with Mr. E. Wood as Chief of the division. This ought to make for better work as regards the cleanliness of the City, as the Street Cleaning is also to be a function of the new division.

#### Contractors' Closets

Permits issued, 558, as against 510 in 1925. Inspections and notices 681 or 251 less than in 1925. This would indicate that the new system of making one fee, paid at time of issue of permit, cover the cost of all cleanings necessary, is better than the old method under which a separate notice and fee was necessary for each cleaning. Five contractors were prosecuted for infractions of the by-law.

#### Feed and Sale Stables

Only 14 permits were issued for such stables, two being refused. Total inspections numbered 380.

#### Keeping of Animals

Inspections of private stables numbered 1,828, which will give some indication of the difficulty of keeping down nuisances in connection therewith. There are about 200 private cow keepers. The following cases were dealt with:

Cows kept in insanitary stables or sheds .....	39
Calves kept in insanitary stables or sheds .....	2
Horses kept in insanitary stables or sheds .....	121
Goats kept in insanitary stables or sheds .....	5
Sheep kept in insanitary stables or sheds .....	73*
<b>Total .....</b>	<b>240</b>



\*The sheep were kept in a disused tractor warehouse, situated at some distance from any dwelling.

These animals were kept in 68 different stables or sheds, except in 4 cases where no stable was provided.

**Action Taken and results:**

Stables vacated and placarded .....	3
Stables vacated but not placarded .....	16
Stables improved .....	33
Number of animals reduced .....	7
Stables demolished .....	1
Stables converted to garage .....	1
No stables. Animals disposed of .....	4
Pending .....	7
<b>Total .....</b>	<b>72</b>

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

Horses .....	48
Cows .....	14
Calves .....	2
Goats .....	3
Sheep .....	3
<b>Total .....</b>	<b>70</b>

**Poultry:**

Poultry kept in dwellings .....	47 cases
Poultry kept in insanitary sheds.....	112 "
Pigeons kept in dwellings .....	16 "
<b>Total .....</b>	<b>175 "</b>

**Other Animals:**

Animals kept in dwellings ....12 (mostly dogs and cats).

**Licensed Dog Kennels**

Permits issued, 24, or one less than in 1925. Inspections made, 176. Several complaints were dealt with regarding noise nuisance occasioned by the barking of dogs in the licensed kennels.

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

Constant vigilance is needed to prevent this. Some people will deposit manure and rubbish on streets and lanes, or on vacant lots. The notices served were as follows:

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Dirty yards, courts, sheds, etc. ....	3,869
Stagnant water on vacant lots .....	46
Other nuisances on vacant lots .....	855
Nuisances on streets and lanes .....	3,370
	<hr/>
Total .....	8,140
	<hr/>

This is 600 more than last year.

#### **Nuisances Abated Compulsorily and Charged as Taxes**

This was not found necessary in any instance this year.

#### **Compulsory Sewer Notices**

None this year.

#### **Applications for City Installed Plumbing**

One or two were received but none accepted.

#### **Overcrowding**

Day inspections made, 211, and one night inspection. Forty notices were served to abate overcrowding. Actual room overcrowding is not prevalent, and in the cases dealt with it was generally due to large families trying to live in too few rooms. We recently found a man and wife with 12 children, living in a one roomed shanty, sixteen feet square. There were only two beds in the room and little else. The man owns the shack but it is built on a city street in the outskirts of the City. The family was getting some relief from the Social Welfare Commission. It is a puzzle to know what to do with cases like this.

#### **Housing**

There were 575 new houses built, and 10 new apartment blocks, containing 304 suites. These were all built by private enterprise as the Housing Commission for the third consecutive year made no loans. Notwithstanding the number of houses and apartment blocks built, at December 31st there were only 612 vacant houses in the City, or 1.8% of all dwellings. Vacant suites numbered 338, or 4% of all suites. This is the smallest number of vacancies for some years. This amount of building just about cares for the natural increase of the population, but does not provide the kind of accommodation required for the large number of families cooped up in what were formerly one-family dwellings.

New dwellings are mostly erected for sale and not for rent. We need a few hundred small, 3 to 5 roomed cottages available for rent. They must be warm so as to economize on fuel and the rents must not be too high.

During the year we carefully checked up the total housing accommodation of the City, adding the new houses and suites, and deducting houses demolished. The result was as follows:



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Total dwelling houses .....	31,669
Total suites of rooms used as dwellings in connection with stores .....	1,143
Total suites in apartment blocks proper .....	8,268
	<hr/>
Total lettings .....	41,080
	<hr/>

In the above table of lettings, however, dwelling houses are reckoned as containing one family only, whereas it is known that a very large number house from two to ten, or even more, separate tenants or families. We do not know the exact number of such houses, but there must be from 3,000 to 5,000.

There have been 3,665 dwellings and 17 apartment blocks, with 416 suites, erected since 1918. The population in that period has increased by 13,530, or from 183,595 to 197,125; yet all this new building leaves the unlawful tenements in the same condition, and so far as our evidence goes, just as overcrowded.

In the month of October, at the request of the Chairman of the Health Committee, we prepared and submitted to that Committee a very full report on the conditions obtaining in such houses. The report referred to the information given in the Annual Reports of the Health Department during the last 10 or 12 years, the special printed Housing Survey Reports of 1918 and 1921, and the Annual Vacant House Survey Reports. The report specified in detail the reasons why we consider the conditions found today in the unlawfully occupied tenements are not conducive to the good health of the occupants, but are, on the contrary, inimical, and not in the best interests of the City as a whole. It described why it had not been found practicable during the War and the succeeding years, owing to the general shortage of houses and bad financial conditions, to enforce strictly the tenement sections of the Building By-law which should regulate such houses; and also that as a consequence of these conditions, the Department had been obliged to take action only when conditions extremely bad were disclosed. The report concluded by recommending that a by-law be enacted which would deal specially with this class of house, and which would recognize them as in a class by themselves, describing them as "Houses Let in Lodgings." The draft by-law submitted with the report contemplated the registration or licensing of the houses, and specified the improvements which should be made in order to render them somewhat more suitable for tenement use. Copies of the report and by-law were supplied to the Committee. The report and by-law were eventually filed. This leaves us just about as before.

So long as the tenement sections of the Building By-law remain as at present, these houses are, (or at least those which were converted to tenement use since November, 1909), unlawfully occupied. If the Department notified the owners of any such houses to make improvements thereto, such as for instance installing additional plumbing fixtures, we, to that extent recognize them as lawful tenements.



The only kind of a notice justifiable would be a notice to take out a permit and to properly convert the house so as to make it comply with the tenement sections. Moreover, it would not do, when so many houses of the same class are involved, to pick and choose. If we are to avoid a change of discrimination, all or none should be dealt with.

It should further be noted that many of these houses cannot be made to comply strictly with the present tenement sections of the by-law, which in any event, were intended more to regulate the erection of new apartment blocks. If we had a by-law which, whilst not requiring such houses to be brought up to the high standard required by the tenement sections of the Building By-law, would at least insist on a few reasonable improvements in such houses, the Department could then take hold of the problem with some hope of success. It is a matter of a Housing By-law rather than a Building Code. Another point might be mentioned, viz: How are future conversions to be dealt with? We have no complete record of these houses. A by-law dealing specifically with such converted houses and requiring registration or license would bring them under control and also regulate future conversions. As matters are at present, a lessee converting his house to tenement uses can scarcely be blamed for so doing when he observes a great many others doing the same thing with impunity. We hope that further consideration will be given this matter.

#### **Zoning**

Nothing has been done during the year. Several instances came to our attention of businesses established in residence districts which were the cause of complaint on the part of the residents.

#### **Gas Stoves and Fittings**

There were 11 cases dealt with of defective gas stoves and fittings. In one-family dwellings and in apartment blocks proper the ovens at least of gas stoves are connected to flues by means of pipes; but in the unlawful tenements where there are frequently from 6 to 10 gas stoves installed in one house, such is not the case and it would be extremely difficult, if not impossible, to properly connect a large number of such vent pipes to a chimney. There is frequently only one chimney in the house and by the time the pipes from the various rooms reached the chimney there would be so many bends that the draught would be negligible. In hundreds of cases gas stoves are installed unvented in small rooms which are used for both living, cooking and sleeping. With a gas stove in practically every room, the ventilation especially in Winter when the storm sashes are on, is very poor indeed and the products of combustion remain in the rooms to vitiate the atmosphere. Many times we have found gas stoves with all the burners lighted, including the oven burners, being used to provide heat in such rooms. This, with the possibility always present of the escape of small quantities of unconsumed illuminating gas owing to defective burners, leads us to believe that the use of so many gas stoves in one house, unvented, and installed in small, badly ventilated rooms, constitutes an ever present menace to the health of the occupants.



There was at least one accident in such a house during the year, when a man left the gas stove burning and went to sleep. The pan on the stove boiled over and extinguished the flame and the room then filled with unconsumed gas. This, of course was an accident and such cases are not frequent. The most serious danger, however, is that of carbon monoxide gas, either from escaping unconsumed gas, or generated during the cooking processes.

Many investigators are now at work demonstrating the dangerous properties of this deadly gas in industrial plants, garages, repair shops, and the necessity for ample means of ventilation, at all times, in places where it is known that the gas may be found. Fatal accidents draw the attention of the public to the dangers of Carbon Monoxide poisoning, as these are sudden and dramatic. Recent investigations, however, have demonstrated that the gas may be absorbed into the blood through the lungs in small quantities and accumulate with disastrous effects to the victims. Instances are given of infants taken from tenements where gas is used, in which blood tests showed beyond doubt the cause of the sickness—and some cases the death—of these small patients. We, therefore, believe that gas stoves, as at present installed in the rooming houses of the City, may be the unsuspected cause of many cases of sickness or general ill-health in which the symptoms are obscure or ill-defined. There is still no by-law to regulate gas-fitting.

#### **Trades, Manufactories, Office Buildings, Etc.**

We make no systematic inspection of such premises, but investigate all complaints received. Inspections of workshops and industrial plants number 477, and of offices, 71.

Some of the causes of complaint were as follows:- Vibration in a mill built close to dwellings. Noise. Odours from Pickle and Vinegar factory. Nuisance from storage and handling of coal. Dust nuisances from wood-cutting plant and a mortar mixing plant, etc. Lack of sufficient natural light; also inadequate ventilation in garages and offices, and defective or inadequate plumbing, were dealt with. Two or three permits for occupation of basements for business of a public character were granted. Inspection of laundries is dealt with under that head.

#### **Rats**

Complaints regarding rats numbered 42. The bounty of five cents for each rat's tail delivered at the Health Office, was continued, 3,452 being brought in; cost \$172.60. This is 766 less than in 1925. Two men working at the City Nuisance Ground brought in 1,275 tails. From the stables of a railway company, 281. From one butcher shop, 224. Two other large stables yielded 199 and 252 respectively.

There were 1,068 boxes of poison distributed gratis, of which Ward I got 20.2%; Ward II, 29%; and Ward III, 50.8%. One applicant for poison stated that a baby had been left on a verendah in a baby carriage to sleep and that a rat was found lying at the bottom



of the pram. Another person complained that a rat had run over his bed. We had no reports of rat bites this year. Rats find it easy to get food in Winnipeg. In one of the best residence districts it was found that the garages and the small sheds or cupboards which contain the garbage cans were honey-combed with rat holes. There is no specific by-law respecting rats. If there were such a by-law we could control the situation better.

#### **Public Baths and Comfort Stations**

Inspection of baths, 74; comfort stations, 240. Samples of water taken from the swimming pools and submitted to the City Bacteriologist for examination, 133. We also took a number of samples from the Y.M.C.A. pool. Both the baths and comfort stations were kept in a clean and sanitary condition during the year.

#### **Private Hospitals**

Only 4 permits were issued. Two applications were held up because information was not forthcoming as to the number of Maternity cases received during the preceding year. This is necessary because, if the principal business carried on is the receiving of Maternity cases, the premises come under the jurisdiction of the Provincial Board of Health, and no City license is required.

#### **Undertakers' Establishments**

Seven permits for License were issued. Several inspections were necessary in some cases, before the premises were approved for renewal of License.

#### **Common Drinking Cups and Towels**

Forty-one warnings were given. No systematic inspection is made for infractions of the Government Regulation, but on inspections of premises for other reasons, common cups and towels are observed.

#### **Chimneys and Furnaces**

Defective chimneys dealt with, 48. Defective furnaces or heating apparatus numbered 74. The complaints were of lack of adequate heat, and also of smoke and gases permeating buildings.

#### **Billiard Rooms**

Permits issued, 69. Inspections, 330. In May, before license permits were renewed, all pool rooms were gone over and put into a good sanitary condition.

#### **Second Hand Dealers and Junk Yards**

Permits issued, 151, (6 fewer than 1925). Inspections made, 417.

#### **Wiping Rags**

Wiping rags prepared in Winnipeg are all properly laundered and disinfected, and are put up in bales marked as required by the Government regulations. Only one plant does this work. Their machinery is of the most modern type, and the process thorough. We had one or



two complaints regarding imported wiping rags being improperly marked and took steps to have this corrected.

### **Bedding Factories**

Complaint was made that mattresses were being manufactured out of the old fillings of discarded mattresses, and without anything being done to cleanse or sterilize this material. This proved to be correct. Only one firm, however, was concerned. We warned them against this practice, as also the junk dealer who was supplying the materials, and at present the practice has ceased. There is, however, no legislation respecting the manufacture of bedding, although several of the States and Cities in the U.S.A. have statutes or by-laws governing the same. The reputable firms manufacturing bedding in Winnipeg maintain excellent plants and are very jealous for the reputation of their output. We are assured that they would welcome legislation which would regulate the materials used in this industry and prohibit the use of undesirable materials. In view of the fact that articles of bedding and upholstered furniture are imported into the Province, any legislation enacted should be Provincial. A City by-law would not be so satisfactory.

It is possible that the Provincial Board of Health, which is also investigating this matter, may decide to make and promulgate regulations on the subject. In the meantime, we are investigating the possibility of properly sterilizing second-hand bedding, and material used for re-making articles of bedding, or for upholstering. There are many thousands of second-hand mattresses, pillows, etc., bought and sold in Winnipeg annually, in Auction Rooms, second-hand stores and junk yards. One junk yard handles 2,000 old mattresses per annum, but most of these are torn up and stripped for making into roofing felt. Quite apart from the question of the possibility of transmitting communicable diseases by means of such articles, the risk of which may not perhaps be so great as might be supposed, common decency and cleanliness would demand that the public should not be imposed upon by being supplied with articles of bedding or furniture, outwardly cleanly, but filled with filthy or infected materials.

### **Barber Shops**

One hundred and thirty-six inspections were made.

### **Vermin**

Thirty complaints were received of cockroach-infested buildings, and 62 with bed-bugs.

We get a few cases of persons infested with body lice. There is no legislation here similar to the "Cleansing of Persons Act," England, which would enable us to deal forcibly with such cases. The Social Welfare Commission, we understand, arranges in some such instances for disinfection of persons and their clothing at one of the hospitals.

### **Theatres and Places of Amusement**

Sixty-two inspections were made. Only one complaint of poor ventilation was received. It was found that in order to conserve heat, the proprietor had blocked up the ventilating ducts.

### **Schools and Public Buildings**

There were 28 inspections made, mostly of private schools. The public schools we do not visit except upon complaint.

### **Laundries**

One hundred and twenty permits for license were issued, or 2 less than in 1925. Six applications were received to establish new laundries. Only one of these was approved by the Health Committee. In the case of the other five, the applicants evidently found it impossible to obtain the required consent of the owners of adjacent properties. Inspections of hand laundries, 659; Steam laundries, 47. The Chinese laundries are approximating more to modern methods of laundry work, in the use of steam and machinery.

### **Hotels**

Permits issued, 58,—one less than last year. There were 208 inspections made. In the Spring the License and Health Departments, acting in conjunction, endeavor to have all licensed hotels put into good condition before the licenses are renewed.

### **Smoke**

The report of the Smoke Inspector shows that every effort is being made to keep our atmosphere clear. Considering the great variety of coals used in Winnipeg, and the small proportions of plants equipped with automatic smoke preventive machinery, the results obtained are fairly satisfactory. This is due largely to the continuous educational campaign carried on in a quiet way by the Department, which has resulted in greater interest being taken by owners of heating and steam plants in obtaining the most satisfactory results.

It has been known for many years that a smoky atmosphere in cities is not conducive to the health of the inhabitants, but during the last year or two more recent investigations and discoveries have placed fresh emphasis on the importance of sunlight, and more especially on the importance of our receiving the full benefit of the ultra-violet rays which it would appear are absolutely necessary to the well-being of man.

Dr. Leonard Hill reports of measurements taken in England of ultra-violet radiation that smoke pollution robs the big cities of from half to two-thirds of this solar influence, and that we are only beginning to realize some of the penalties we are paying for our tolerance of the perennial smoke cloud that lies so heavily over our cities.

This is not to say that conditions in Winnipeg are anything like as bad as they are in some English and American Cities, but it does suggest that we should be vigilant in order to ensure that such conditions shall never obtain here.



### 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 proper sanitary condition or else closed up:

Dwelling houses, general insanitary condition . . . . .	22
Dwelling houses, unlawful conversion of same to duplex dwellings . . . . .	—
Dwelling houses, unlawful conversion of same to tenements . . . . .	2
Tenement houses . . . . .	—
Basement and cellar dwellings . . . . .	7
Dark rooms (dwellings) . . . . .	—
Stores occupied as dwellings . . . . .	6
Factories and workshops . . . . .	6
Stables . . . . .	3
	—
	46
	—
Notices served on owners and agents . . . . .	48
Notices served on occupants . . . . .	37
	—

#### Results:

Notices complied with (premises put into sanitary condition) . . . . .	29
Premises closed and placarded . . . . .	12
Cases still pending . . . . .	5
	—
	46
Remaining closed on December 31st, 1925 . . . . .	200
Premises repaired or demolished during 1926 . . . . .	31
	—
	169
Premises closed during 1926 (dwellings, 8; stables, 1; other premises, 3) . . . . .	12
	—
Remaining closed on December 31st, 1926 . . . . .	181
	—

### Work Done for Other Divisions or Departments

In January, February and March, our inspectors assisted the Communicable Disease Division by attending to 1,576 cases, mostly releases. We made a good many inspections of rooms and dwellings for the Social Welfare Commission, reported various infractions of the Building By-law to the City Engineer's Department, and made a number of investigations for the Statistician regarding births.

**Prosecutions for 1926**

Nature of Charges	Cases
Nuisance on premises .....	5
Deposit refuse or manure .....	5
Neglect to comply with notice of Health Officer ....	1
Contractors' closets, lack of, defective, etc. ....	5
Use leaky wagon for conveying swill .....	1
Food prosecutions .....	6
Dairy prosecutions .....	8
Total .....	31

**How Disposed of**

Fine	Cases	Fines
Convicted and reprimanded .....	4	\$
Summons withdrawn .....	1	
Summons not served .....	1	
\$ 3.00 .....	6	18.00
5.00 .....	4	20.00
8.00 .....	4	32.00
12.50 .....	3	37.50
13.00 .....	6	78.00
16.25 .....	1	16.25
22.50 .....	1	22.50
Total .....	31	\$ 224.25

This is three more than in 1925.

**General**

On March 31st, District Inspector C. W. Chisholm retired after twenty years service, carrying with him the best wishes of the staff. This left us with ten district inspectors only. The districts had to be enlarged and their size is now such that systematic house to house inspection is out of the question, and when some of the inspectors happen to be sick or away on holidays, the work is apt to get behind.

All the inspectors and clerks have, however, shown great interest in their work, and a desire that it shall not suffer, if they can help it, by this reduction of the staff.

Yours obediently,

ERNEST W. J. HAGUE,

Chief Health Inspector.



## Report of 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 1926 in housing conditions.

Complaints relating to nuisances in tenements and apartment blocks numbered 104 this year, as against 77 last year. Of these, 34 related to improper care of garbage awaiting removal, 12 referred to bed-bugs and cockroaches, and 16 to defective plumbing and drainage. As we have about 500 apartment blocks and a large number of other premises occupied as tenements, the number of complaints may not be considered excessive.

We find that many of the complaints relating to garbage are of a trivial nature, such as choked garbage chutes, garbage cans uncovered, etc. It often happens that the trouble has been rectified before inspection is made, although complaints are attended to, as far as possible, on the day of their receipt. We have more trouble with tenants who persist in getting rid of garbage and other objectionable material, by throwing it out of their windows, sometimes on other property. This practice is most common at night.

As stated in previous reports, owners and agents are usually ready to adopt means for the extermination of roaches, bed-bugs, rats, etc., when their attention is directed to such. Tenants, however, are not always ready to co-operate.

On the whole, we have little difficulty in maintaining sanitary conditions in our apartment blocks. Many of the complaints, and most of our work, is done in premises occupied illegally as tenements.

One of the worst cases of its kind that we have come across, was an old residence of 16 rooms that we found rented out to 6 families, consisting of 12 adults and 5 children. There had been installed, four improvised sinks without traps and these discharging into rusty old iron pipes which were not properly connected to the sewer. The work had been done by an amateur plumber. Two of the sinks discharged into a sewer clean-out, the cap of which had been removed for the purpose, and the other two were carried into the catch basin. At some time previous to our inspection, the latter two wastepipes had been carried down into a mud floor in the rear portion of the cellar and the liquid waste was expected to be absorbed by the earth. How long this condition had gone on we were unable to ascertain, but the earth floor had finally become water-logged and in consequence the liquid waste had backed up and it became necessary to find another outlet. In a clothes closet, we discovered an improvised sink made of sheet iron and discharged into an old black iron pipe, the latter being carried



down into the cellar as described above. We served notice on the owners, requiring all defects in the drains and plumbing system to be repaired, including removal of the insanitary fittings referred to, also the removal of the contaminated earth from the cellar. The drains were repaired, the plumbing system overhauled, the polluted earth and clay removed from the cellar, and a concrete floor laid in place thereof.

On receipt of a report from the Division of Child Welfare, we made an inspection of an old dwelling of 9 rooms, and found 8 families, consisting of 15 adults and 9 children, in occupation. One room was vacant, so that each family had only a single room in which to live and sleep. Each family had a gas stove and none of these had a hood or pipe to carry off the products of combustion and the odors of cooking. The combined rents obtained by the lessee amounted to \$153.00 per month.

The Division of Communicable Diseases brought to our attention conditions obtaining in a two-story frame building of 13 rooms, and on inspection we found the premises occupied by 7 families, consisting of 12 adults and 9 children. As usual, each family had a gas cooker, and in one case a rubber tube connection to the stove was found to be defective, and the odor of gas was quite perceptible.

The business of "farming-out" rooms for light-housekeeping, presents a problem that is as pressing today as ever. There is an increasing number of people who rent large houses and sub-let the entire premises into suites of one or more rooms to families, who, by misfortune or other reason, are forced to live in this manner. Sleeping quarters are often cramped and crowded, and, during the winter months there is little or no means for proper ventilation, especially in Zero weather.

We are constantly regulating premises such as those described above, and whilst conditions are not always so bad as those referred to, such housing conditions are far from desirable. The children appear to be the worst sufferers and when communicable disease enters such premises, it is difficult to control the spread.

With regard to plumbing fixtures, these illegal tenements are inadequately equipped, and the shortage is not conducive to personal hygiene and cleanliness. Hot water is seldom provided to the bath tubs and these fixtures are therefore seldom used except for occasional clothes washing. We hope, in time, to have our tenements so regulated that we may be able to demand a sufficient number of plumbing fixtures, such as a water-closet and sink for each family.

As stated in previous reports, the present crowding together of families under one roof, can best be properly relieved by the erection of a large number of small houses for rent, and there is no evidence at present of this being done.

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 report on smoke nuisances and their abatement for the year 1926.

### Smoke Inspections

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Observations— Chimneys and Smoke Stacks.....	18	18	10	14	12	18	16	10	21	24	24	32	217
Inspections of Fur- naces, fuel, etc.....	78	91	34	77	71	91	86	51	82	102	151	125	1,039
Totals.....	96	109	44	91	83	109	102	61	103	126	175	157	1,256
Notices— Statutory .....	1	1	..	1	..	..	..	..	..	2	1	3	9
Verbal .....	18	15	10	14	7	6	7	7	11	23	33	37	188
Totals.....	19	16	10	15	7	6	7	7	11	25	34	40	197

There were no prosecutions during the year as it was considered advisable to continue the educative policy which, it must be admitted, has had considerable effect in reducing the smoke density emitted from chimneys.

Due to a number of persistent offenders, however, instructions to prosecute were issued by the Health Committee. The publicity given this instruction had considerable effect and resulted in improved conditions.

It is the intention next winter to vigorously insist on total elimination of dense smoke and thereby, not only protect the public from smoke annoyance, but promote economy in the combustion of coal at the plants affected.

More importance is attached each year, by the Medical profession, to the necessity of eliminating smoke from the atmosphere, in order to take full advantage of the curative properties of sunlight.

Speaking at Toronto on October 11th last, Sir Henry Gauvain, M.D., of London, England, said in reference to the value of sunlight for Chronic Tubercular cripples, that the treatment is of very great help in strengthening the resistance and aiding the general health of the cripples, while emphasizing that the sun cure should not be considered

a cure for surgical Tuberculosis cases. Children present a more animated appearance and their vitality increases after about two weeks exposure, he declared. It had a tonic effect on the mind also. All possible means of checking smoke nuisances should be employed, Sir Henry urged, since the thinnest smoke film cuts off the sun's ultra-violet rays.

It is reported by the Department of Health, Newark, N.J., that where autopsies upon city dwellers have been carried out, the amount of carbon in the lungs is five times as much where soft coal is used, as in Pittsburgh, as compared with dwellers in cities that use anthracite coal.

The emission of dense smoke from chimneys represents considerable loss which is borne, not only by the plant owners, but the public also.

Belching of dense smoke from chimneys is not an industrial necessity. It is wasteful and also a nuisance and expense to the public at large.

Loss to the owner is due to incomplete combustion of the coal, which may represent as much as forty per cent. of the fuel heat value.

The disadvantage to the public is due to the presence of soot and objectionable fumes in the atmosphere. The former necessitates expense to the public, due to soiled fabric, etc.

From the viewpoint of health, continuous breathing in a smoke-laden atmosphere is conducive to diseases of the respiratory system. Dense smoke prevents the penetration of the sun's rays which have a positive beneficial effect, not only to relieve the otherwise depressing feeling caused by a cloudy atmosphere, but has actual curative properties in certain diseases.

Dense smoke from chimneys, therefore, is uneconomical, unhealthful, and is certainly preventable.

The general public are not only annoyed by the smoke, but also risk unhealthful conditions and pay for the privilege!

There are several ways in which the above mentioned condition may be remedied, viz:

(a) In the Central part of the City, connection may be made to the Central Steam Plant main.

(b) By firing often and lightly and by adopting the coking or alternate method of firing.

The alternate method means firing one half the fire box, thus leaving the other side available for ignition of the gases, as they are distilled from the coal. Excess air over the fuel bed is necessary during the period of distillation especially.

This method of firing is suitable for domestic furnaces also, where soft coal is used.

The coking method consists of firing the coal on the front portion of the furnace. After distillation, the coke is distributed over the rear



portion of the furnace and the fresh coal again placed on the front. Provision for excess air over the fuel bed, as in the former instance, is necessary for complete combustion.

(c) By the installation of suitable furnaces constructed specially for the perfect, and therefore, economical combustion of coal.

There are many types of these available, which may be installed to any furnace.

The firms manufacturing these appliances guarantee a worthwhile saving over the handfiring method.

(d) By installation of oil-burning apparatus.

(e) By the use of low volatile coal.

The latter method is far from satisfactory. There are occasions when such fuel is practically unobtainable and Bituminous coal, or in other words, a high volatile coal has to be used.

Lignite coal mixed with a small proportion of Bituminous coal is often used with good results, but in such instances, constant attention must be given to the firing.

Where there is ample boiler capacity, Canadian Lignite coal is used with excellent results.

Smoke abatement is not a hard problem provided one can have the co-operation and willingness of the owner, or party responsible, and the interest of the general public.

There are times when a change of fuel proves satisfactory. In other instances, regulating the draft and more careful firing suffices. In some cases a high ash coal is consumed on grate bars having very narrow air spaces and in others, the method of firing and too free use of the slice bar causes clinker to form over the grate area, thus preventing the passage of air.

Overloading of boilers is a common cause of smoke emission, owing to insufficient volume of air in comparison to the quantity of coal consumed per square foot of grate area.

In many instances the combustion space is too small—the gases distilled from the coal being cooled by contact with the boiler plates, before combustion commences. Excess air over the fuel bed is necessary in all cases of handfiring so that the oxygen of the air may unite with the distilled gases.

Conditions vary in different plants and it is only by careful study of the installation that satisfactory results can be obtained.

It will be understood that all the above mentioned methods of reducing the smoke density rely to a great extent on the intelligence and interest of the fireman and this is one of the principal reasons why there are recurrences of the smoke nuisance at various plants.

There have been many instances during the past Winter where Bituminous coal was substituted in place of Semi-Bituminous. The latter is a low volatile fuel and can be fired with very little smoke re-



sulting. Moreover the cost is higher than the former. That coal, other than ordered, was being delivered, was noticed only when the objectionable smoke emission was brought to the owner's attention.

It would appear that both Owners and Agents of Apartment Blocks keep better check on fuel costs than was the case a few years ago. If they further investigated the condition of their heating plants, relative to air leaks in boiler settings and general maintainance, the results would be worth while. It would be to the owners interests to appoint a person competent to supervise their boiler rooms generally and keep a check on the fuel supply during the Winter months, both as regards quality and economical firing.

Low chimneys have been the cause of many complaints. Where it is possible and reasonable to insist on such chimneys being extended, we do so. In other instances we insist on the use of a low volatile coal.

The increased use of soft coal in place of anthracite, which was formerly used, is very noticeable in the atmosphere, creating very objectionable conditions especially when a high relative humidity prevails.

Another objectionable feature has been the use of Bituminous coal in domestic furnaces and advocated by some coal dealers, who apparently have no further interest than to sell coal.

There are very few domestic furnaces suitable for such coal and the use of same results in a thick coating of soot being deposited on the heating surfaces and interior of the smoke pipes. This is uneconomical and, moreover, is a constant fire hazard.

The nuisance created by smoke from Locomotives and Round-houses continues. In the absence of the necessary legislation, we are powerless to insist on improved conditions better established. Public sentiment will eventually compel the Railways to permanently relieve the districts affected by smoke.

There has been the usual quota of complaints due to defective hot-air furnaces.

The defects found are generally broken fire pots, defective joints of same, or in the combustion chamber, and radiation flue. Improper smoke pipe connection to furnace, defective casings and smoke flues, and dangerous position of smoke pipe dampers are often found. Burnt out grates and fittings cause considerable trouble, as in such instances the furnace cannot be used, resulting in partial heating of the premises by a small stove and subsequent freezing of the plumbing.

A defective furnace may be the cause of serious unhealthful conditions and more attention should be paid by owners of property to ensure the protection a tenant is entitled to.

Inspections relative to other Departmental work were carried out in addition to smoke abatement duties.

Your obedient servant,

P. PICKERING,  
Smoke and Supervising Inspector



## Report of Chief of Street Cleaning Division

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

Dear Sir:

I beg to submit herewith the report of the Street Cleaning and Scavenging Division for the month of December, 1926.

Under the provisions of By-Law 12122 of the City of Winnipeg, passed November 29th, 1926, the work of Street Cleaning and Scavenging was placed in your care.

During the month the following work was performed.

Garbage Collection	No. Loads	Weight	Gross Cost
	Collected		Per ton.
City Teams .....	79	178,870 lbs.	\$5.46
City Singles .....	96	155,880 lbs.	4.85
Trucks and Trailers .....	1,008	2,795,440 lbs.	4.41
	1,183	3,130,190 lbs.	

Tin Collection	No. Loads	Weight	Gross Cost
	Collected		Per ton.
City Teams .....	83	186,870 lbs.	\$5.42
City Singles .....	82	137,100 lbs.	4.59
Trucks and Trailers .....	138	409,090 lbs.	3.89
	303	733,060 lbs.	

Night Soil Collection	No. Loads	Weight	Gross Cost
	Collected		Per ton.
City Teams .....	44	176,000 lbs.	\$3.66

Ash Collection	No. Loads	No. of	Gross Cost
	Collected	Cu. Yds.	Per. Cu. Yds.
Hired Teams .....	880	4,400	.54c
Trucks .....	271	1,720	.66c

Crematory Operation	Incinerator No.	Quantity Refuse Cremated	Revenue Earned	Gross Cost
				Per. ton for Crematory
No. 2 Elmwood .....		1,810,360 lbs.	\$201.79	\$1.01
No. 3 Saskatchewan .....		1,695,600 lbs.	131.50	1.06
		3,505,960 lbs.	\$333.29	

Close Co-operation was maintained between this Division and the City Engineer's Department, which resulted in this Division hiring out its surplus men and teams for snow work.

Respectfully submitted,

E. A. WOOD,  
Chief, Street Cleaning Division.

## Report of 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 1926.

The Dairy By-law adopted in the Spring of 1922 is now in its fifth year of operation and, while we may have discovered small discrepancies in its working, nothing of a serious character has developed.

The Federal Department of Agriculture is continuing with the tuberculin test on all licensed dairy herds and this includes all privately owned cows in the City. This work goes on without friction and no complaints have been registered in regard to same.

A very small number of complaints have been received concerning milk and dairies, and these have all been settled to the satisfaction of those concerned.

The most noteworthy happening of the year was an outbreak of milk-borne typhoid which demonstrated not only the latent danger from possible carriers to a raw milk supply, but also illustrated the great value of pasteurization as a preventive.

Dairy produce manufacturers located in the City, including milk plants, creameries, ice cream plants, and cheese factories, are apparently doing an increased volume of business indicating a return of prosperity.

### Milk Production

Those who have studied the agricultural returns of any of the Prairie Provinces during the past few years will have been struck with the references to the increases in dairy cattle, to the increased export of creamery butter, and the great efforts that are being put forward with a view to securing standardization, and high quality in all dairy products.

General conditions applying to milk production have changed so rapidly during recent years, that the possibility of a shortage, diversion, or tie-up of visible supply is no longer given consideration, and the only problem of an economic character requiring thought is that involved in the final disposition of the large volume of milk produced in those districts adjacent to Winnipeg from which we obtain the bulk of our supply; and this applies in a lesser degree to the entire province; in fact the three prairie provinces all come into the same category.

There are many thousands of dairy farmers outside the zones from which this City draws its milk, and these along with many of those inside the milk zones do not ship fluid milk, and therefore can only calculate on a cream-butter-fat basis in arriving at any valuation of their operations.



Fortunately the Prairie Provinces have built up a great export trade in creamery butter of such high quality that butter fat prices have been kept at a reasonably high level, and the dairy farmer who, from any cause, finds himself tied to this method of deriving income has no cause for regret, as there is nothing he can produce on his farm the price of which is so well stabilized, and the returns from which are so prompt and regular as butter fat.

Many other advantages are enjoyed by the cream shipper; he does not have to convey a load daily to the station; the more bulky and less valuable portion of his product is kept home; the skim milk being fed to pigs, calves, chickens, etc., and in this way other farm problems are assisted and rounded off.

We understand that the number of Dairy Farmers in the province of Manitoba has increased by several thousand during the past year, not entirely due to new-comers, but partially due to that steady trend from grain farming to mixed farming which has been prevalent for many years.

Mixed farming and dairy farming are so closely related and interwoven that in most cases no distinct classification could be made, and this condition is highly desirable if we expect to see permanent homes spread over our rural districts.

A good system of mixed farming carrying a dairy herd large enough to bring in some worth while return, but not so large as to make the dairy a drudge, appears to be the most conducive to the building up of permanent farm homes; and also appears likely of solving that problem, as to how the young farming community may be kept on the land.

The past year has certainly been hard on the producer. The dry summer with resulting light hay crops, and poor fodder crops, followed by an exceptional wet fall season which made the roads in most cases almost impassable, and caught many in the middle of harvest, brought about conditions which can only be described as heart-breaking. The early advent of what proves to be a hard, long Winter could not make things look any worse. Yet in spite of these adverse conditions, the dairy farmer, knowing that feed would be dear and expenses heavy, and without any promise of increased compensation for his efforts, faced the situation bravely, and although Spring may still be far away, we know he will come through smiling.

#### **City Milk Supply**

Very few cities enjoy like Winnipeg the exclusive privilege of drawing upon such a large productive area for a steady supply of milk, cream and other farm commodities; and it was this condition which enabled us a few years ago to bring into effect advanced regulations which improved the quality, methods of production, and handling of milk to a great extent, without any visible curtailment in quantity. In fact, these regulations may be said to have played a major part in creating the present stabilized condition which has existed now for the past two years.



During the deflation period and immediately following, producers were apt to feel a slight resentment at the fall in prices, and some agitation was evident with the idea of pressing for changes which might squeeze a little more income for the producer at the expense of the consumer.

The milk producers, however, were well advised, and taking stock of themselves, decided to devote their energies towards increased pro-rata production, by building up good dairy herds and growing suitable fodder crops; eventually finding that while they could not get an increase per gallon, yet they were able to get more revenue per cow, and at the same time create a small saving on the cost of feeding.

The City's regulations require that all milk distributed raw must be from tuberculin tested herds, and that all other milk shall be pasteurized.

Approximately 1,200 farmers are engaged in the production of milk and table cream for the use of our citizens, and of these 125, including two Certified Milk Farms, are licensed distributors of raw milk. The balance consisting of 725 milk shippers, and 350 cream shippers, send in their product to the large pasteurizing plants.

The City requires daily about 15,500 gallons and this is distributed by the 125 raw milk vendors, 2 large pasteurizing plants, and 5 small depots, 4 of which handle pasteurized milk and cream only. In addition to supplying the City, the pasteurizing plants distribute about 1,500 gallons, and the raw milk vendors about 500 gallons in the adjacent municipalities.

Approximately 200 private cows are kept inside the City limits and these are all tuberculin tested.

The licensed dairies are located at distances ranging from 5 to 15 miles from the centre of the City, while the milk shippers are located from 10 to 75 miles away, and the sweet cream shippers from 25 to 125 miles.

In addition there are from 10,000 to 20,000 farmers shipping cream steady or intermittently to the various creameries in the City, this being for butter making purposes; and each of these is a potential table cream shipper; and each table cream shipper is a potential milk shipper.

At the present time there is a huge waiting list made up of cream shippers who are ready to switch on to milk anytime as required.

This is a healthy condition, and everybody has a ready market for his produce, the creameries being prepared to handle twice or thrice the amount they at present receive and the system of grading employed by the Dairy Branch of the Provincial Department of Agriculture ensures fair treatment to everybody, and awards suitable remuneration as a premium to those taking extra good care of their produce.

#### **Milk Vendors Licenses**

Our regulations provide for two classes of licenses only:—Dairy license and Milk Depot license; the former applying to those vendors



who distribute the product of their own dairy herd, and the latter applying to those who purchase their supply, having same delivered at a properly equipped plant where it is prepared for distribution. The license year ends May 31st, so that the period under review covers the balance of the year to December 31st. Very seldom, however, do we have any applications between New Year and Spring so that given figures practically apply to the year.

During the license season, 125 Dairy licenses based on 3,463 milch cows, and 8 Milk Depot licenses based on 178 vehicles were issued; while two dairies and one depot dropped out of business before the end of the year leaving the number in active operation at 123 and 7 respectively, or a total of 130 against 136 for 1925.

This loss of 6 is accounted for as follows:

Two of our poorest class dairies decided early in the year to relinquish their business, while two more of indifferent character decided to confine themselves to production, and two disposed of their herds during this Winter, evidently finding themselves going behind, and occupying rented premises they made an easy get-out.

Five licenses were transferred during the year.

Revenue derived from license fees amounted to \$2,802.00, based on the following particulars:

Dairy Licenses 125—1,247 cows @ \$1.00 . . . .	\$1,247.00
2,216 " @ 50c . . . . .	1,108.00
Milk Depots 8—168 vehicles @ \$2.00 . . . . .	336.00
10 " @ \$10.00 . . . . .	100.00
Transfers—4 @ \$2.00; 1 @ \$3.00 . . . . .	11.00
	<hr/>
	\$2,802.00

#### Classification of Licenses

	1922	1923	1924	1925	1926
Licensed Dairies, raw milk . . . . .	104	114	119	129	123
Milk Depots, raw milk . . . . .	2	2	2	1	1
Milk Depots, pasteurized milk . . . . .	2	2	2	4	4
Pasteurizing plants (large Depots) . . . . .	2	2	2	2	2
Total . . . . .	<hr/> 110	<hr/> 120	<hr/> 125	<hr/> 136	<hr/> 130

#### The Licensed Dairies

These dairies have grown up with the City and several of them have been in business for 25 or 30 years. While many started on a very small scale with a few cows in a cow-shed on the rear of a City lot, they have relocated themselves from time to time as the City expanded until they are almost all pushed well outside the City Limits. The small insanitary cow-shed has developed into a sanitary stable, with concrete floors, steel stalls, water bowls, and with adequate drain-



age, air space, light and ventilation, while the scrub cow and the tubercular cow have been replaced with good grade Shorthorn and Holstein cattle all subjected to the tuberculin test and kept free from disease.

We have sometimes been criticized as to our attitude in regard to this large use of raw milk, but it must be remembered that we have passed through several critical periods when injudicious action could easily have wiped half (of what at the best was a totally inadequate supply) clean off the map. Our citizens are at least assured of an adequate wholesome supply of milk at a reasonable cost, and that the necessity for importing milk, or using made milk, or going on short rations, will not again come into evidence.

### **Pasteurizing Plants**

Milk plants of large capacity are considered necessary in order to maintain successful operations regarding the handling, pasteurization, bottling, storage, and distribution to the consumer of a high class product. In order to cope with the ever increasing demand for improved machinery and equipment it is necessary for a plant to have substantial financial backing and that men of vision and initiative should direct its policies and affairs. Winnipeg is fortunate in having two such plants whose business is largely retail, and one smaller plant engaged chiefly in pasteurizing milk and cream for the wholesale trade.

We are glad to note a small increase in the proportion of pasteurized milk consumed, and we trust that this is only the first fruits gleaned from the educational campaign, and the great efforts put forth by the pasteurizing interests to provide the public with a first class uniform product with the maximum degree of safety.

The public requires to be educated to the use of pasteurized milk, and where a large proportion of such public consists of those born or raised in rural areas, this problem is more difficult than would be the case in an old industrial centre; and we may here remark that no advertising or educational campaign will be successful unless backed up by goods of a high quality.

Large milk plants have many advantages both for themselves and the public; they employ technologists of high standing, their laboratories are well equipped, and in addition to milk they handle and prepare whipping cream, coffee cream, cultured buttermilk:—*Bulgaricus* and *Acidophilus*; they manufacture butter and cottage cheese and are prepared to take care of any emergency requirements at a moment's notice.

### **Certified Milk Farms**

There are two Certified Milk Farms producing milk under special regulations and supervision of the Provincial Board of Health. They produce and bottle ready for distribution the highest class of raw milk obtainable and under certain rigid requirements as to cleanliness and sanitation, medical examination of employees, and laboratory control, while the herd, in addition to the usual tuberculin test, is examined



periodically by a Veterinary Surgeon and all suspicious animals isolated or weeded out.

Certified milk farms require all the encouragement possible, as their milk is produced and handled under expensive conditions, and each farm employs a technical expert as manager.

The two large City milk plants handle the distribution of certified milk and few cities are so fortunate as to have two such fine farms engaged in this exclusive business. All credit should be given to those gentlemen who have given their time and money towards the fostering of these enterprises. That the stringent conditions are conformed to, is amply demonstrated by our periodic bacteriological examinations, which invariably reveal a low plate count as the normal condition of "Certified Milk."

#### **The Distribution System**

A total of 335 delivery wagons are employed in delivering milk to the consumer, of which the Milk Depots control 178 and the Licensed Dairies 157. With the exception of wholesale or bulk delivery the pasteurizing plants deliver the whole of their product in bottles, employing horse-drawn vehicles. Of the licensed dairies 10 bottle the whole of their product, and about 50 bottle a portion only, the balance being delivered in bulk. A number of these employ motor trucks even for retail delivery.

#### **Tuberculin Test**

The tuberculin test of all dairy herds supplying raw milk to the consumer, including the Certified Milk herds, is carried on continuously by the Veterinary Inspectors of the Federal Department of Agriculture, and the plan appears to be acting smoothly, without friction and to the satisfaction of all parties concerned.

The manure problem was taken well under control and many objectionable features eliminated, with a result that no recent recurrence or throwback in the shape of an outbreak has happened. Isolation accommodation of some description has been provided for most herds, and annual losses have now reached a practical minimum, which may be considered as normal on account of the large number of additions and replacements taking place in these herds almost continuously. We expect this condition to continue until such time as the restricted areas are sufficiently enlarged so as to provide a steady source of supply for dairy cattle to those wishing to replenish their herds.

For the year ending March 31st, 1926, a total of 7,003 cattle were subjected to the tuberculin test, involving 129 dairy herds. Of this number, 3,419 cattle were subjected to a first test, while 10,373 re-tests were made, making a total of 13,792 tests for the year.

Dairy herds brought under the test .....	129
Clean herds at last general test .....	99
Cattle tested during the year .....	7,003
Cattle submitted to a first test .....	3,419
Re-tests conducted .....	10,373
Total tests conducted .....	13,792
Reactors slaughtered .....	901
Open cases of T.B. slaughtered .....	2
Compensation paid for reactors .....	\$28,768.16

From the above it appears that only 30 herds at the last general test contained reactors, and that the bulk of the reactors occur among the additions.

### Milk Consumption

Approximately 15,500 gallons of milk are consumed daily in Winnipeg this being an increase of 250 gallons over the previous year. The increase in population and a slight increase in per capita consumption practically accounts for the increased gallonage. The amount of cream consumed is approximately 1,275 gallons, giving us a ratio of 12 gallons of milk to each gallon of cream.

### Classification of Daily Supply

Pasteurized milk .....	8,820 gallons	57%
Raw, from tuberculin tested cows ..	6,370 gallons	41%
Certified milk .....	310 gallons	2%

Total fluid milk .....15,500 gallons

Pasteurized cream ....	8,400 half pints =	525 gallons
Raw cream .....	1,600 half pints =	100 gallons
Pasteurized cream, ....		
bulk .....	10,400 half pints =	650 gallons

Total cream .....20,400 half pints = 1,275 gallons

### Consumption and Distribution

	Pints per capita		Gallons per day		Delivery 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 .....	0.62	.....	15,250	.....	315
1925 .....	0.62	.....	15,250	.....	330
1926 .....	0.63	.....	15,500	.....	335



**Daily Per Capita Consumption**

Fluid Milk only, Imperial measure . . . . .	0.63 pints
Milk and Cream basis, Imperial measure . . . .	0.83 pints
Fluid Milk only, U. S. measure . . . . .	0.79 pints
Milk and Cream basis, U. S. measure . . . . .	1.04 pints

**Quality of Milk**

The quality of milk and cream as supplied to the consumer has been maintained at a fair average standard throughout the year. All suspicious cases were closely checked, and although several were tested to determine if extraneous water had been added, in no instance was this found to be the case. In seven cases where subsequent tests revealed the persistence of a low butter fat content, Police Court Proceedings were instituted and convictions obtained; each sample showing evidence that cream had been subtracted either by negligence or with intent. Considering that around 2,000 samples were examined for solids, we have no doubt but what the results obtained indicate that the bulk of the milk consumed is of good quality. In no case did we find any evidence of adulteration and the sediment test reveals that with a few exceptions the milk is reasonably clean, while bacteriological examinations again show a wonderful improvement.

**Bacteria in Milk**

When we speak of bacteria in milk, we have to be careful, and not cause undue alarm to those who look with suspicion upon anything which they are given to understand may harbor bacteria.

We must remember that milk would not be natural without its complement of bacteria of a harmless nature; but that the milk plant handler in order to check or prevent deleterious organisms being conveyed to the consumer, has of necessity to apply the same repressive measures to whatever organism happens to be present, harmless or otherwise, and that cultured milks which have many virtues derive their beneficial properties from special pure cultures of certain organisms with which the milk is impregnated.

Laboratory Plate Counts have come in for criticism during recent years on account of their many variations. We have never taken actual results too seriously, but have merely used them as furnishing a comparative indication of that particular day's samples, and in most cases our results are normal; whereas should any adverse condition cause an abnormal result, the same may apply to the entire batch, and no stigma would attach itself to any one sample.

We do not consider that an exceptional low count should constitute the hall mark of perfection, nor do we consider that a very high count should justify condemnation, and in order that no milk vendor may reap an unfair advantage or suffer an undeserved disadvantage, we issue no reports on single examinations. In fact we issue the entire year's results of each individual milk under examination in one report on a single sheet, so as to ensure that the entire report only can be exhibited or made use of; and the interested vendor gets



his own report only. We have adopted a regular system to embrace those supplies from which we are able to get some worth-while results; and should any vendor prove uninterested and careless, or be one of those who do not, and apparently don't wish to understand the significance of this work, he is dropped from the list, and some more appreciative vendor takes his place. There is a limit to the amount of service of this character which we can give, and our desire is to allocate such service where it is likely to be of most benefit. Of recent years, however, we have increased the scope of this work, as we realize that it is perhaps the most important phase of milk examination.

Last year we mentioned that not so long ago plate counts as low as 5,000 or 10,000 were almost unknown in our field of operations. Such counts are now quite frequent, and this year we had some as low as 2,000 and a few odd cases at 1,000.

The samples are taken at about the average time of delivery to the consumer, wherever possible an unopened whole bottle being taken and conveyed in a suitable container to the Laboratory. Each Inspector takes no more than four samples and his vendors are grouped so as to ensure quick action once the first sample taken.

The bulk of our operations during the past year were confined to what we considered the 30 best milks supplied, as it was desirable to obtain a few continuous records rather than a mass of indefinite information which would have little value.

From these 30 sources, 306 samples were taken and these may be classified as follows:

	Vendors	Samples
Pasteurized milk .....	4	78
Certified milk .....	2	41
Raw milk, Special .....	2	26
Raw milk, Good Dairies .....	22	161
	—	—
Total .....	30	306
	—	—

Most of these milks had their good showings, but the Certified and Special milk, and one or two ordinary raw milk dairies, gave a very good showing, and in some cases had practically an uniform low count for the entire year; which goes to prove that the whole secret of a low count rests on the intelligence and individuality of the management.

#### Plate Counts—1926

Colonies	Samples
1 to 1,000 .....	3
1,001 to 2,000 .....	8
2,001 to 5,000 .....	41
5,001 to 10,000 .....	45
10,001 to 25,000 .....	60
25,001 to 50,000 .....	51
50,001 to 100,000 .....	37
100,000 or over .....	61
	—
	306



Out of these 306 samples, 157 had a count of 25,000 or less and we all know that a count of 25,000 is fairly reasonable, so that we certainly cannot complain in regard to these results. Of course we must remember that these are selected supplies and that we expect them to be good.

During the same period 132 samples were taken at random from the numerous other sources, chiefly raw milk dairies, and these gave plate counts varying from 25,000 to 250,000 and enabled us to select those to whom the regular service would be of advantage.

These results also pointed out those who have much to learn in regard to the handling of milk, or are careless in regard to such things as cleanliness, cooling and suitable storage for milk.

It has been clearly proved, however, and our results confirm the finding that even under primitive conditions the exercise of suitable care, may result in the production of a low count milk, and that no amount of sanitary equipment will do this unless under the direction of a suitably trained individual who takes nothing for granted, but gives strict personal supervision to all operations; and we believe that the time is not far distant when all milk will be subjected to absolute bacteriological control before it is allowed on the market.

#### **Sickness and Milk Borne Outbreaks**

During the year we conducted 40 special investigations in regard to sickness reported as existing on dairies, including 22 cases of communicable diseases, and 18 cases of a non-communicable character. In many cases we find that the dairymen themselves, being fully alive to the danger, have already taken such precautions as isolation and prompt medical attention, or removal of patient from the dairy to hospital. On four occasions it was considered expedient for the dairyman to have his milk pasteurized for periods of 10 to 30 days until we were satisfied that all risk of possible infection was over, and during this period the remaining members of the household were kept under close observation and treated with anti-typhoid vaccine, or anti-toxin as the case might be, and subjected to such tests as were deemed necessary.

In the meantime a thorough disinfection of everything in connection with the home and dairy, including sterilization of all milk receptacles—cans, pails and containers, is performed; and while hot water or steam is considered a good sterilization agent for such utensils, our experience teaches us that a suitable solution of sodium hypochlorite is more direct in its action and easier to apply, and for that reason it is more likely to ensure all utensils similar treatment.

In no case where an actual typhoid fever, scarlet fever, or diphtheria patient was removed from a dairy did we have any trouble or suspicion that the milk route was affected; but we go on applying all precautions because in past years we have not always been so lucky.

A milk borne outbreak where a case is discovered at the dairy is generally easy of solution; but where an outbreak on a milk route is caused by an unrecognized carrier, then the procedure is more difficult



as the case can only be built on circumstantial evidence. The typhoid outbreaks of 1925 and 1926 furnished typical examples of this class, and give interesting illustrations of the difficulties encountered.

### Consumption of Dairy Produce

Increases in per capita consumption of all lines of Dairy Produce have been accomplished during the past seven years, not only by the use of advertising and similar propoganda, but by improving the quality to such an extent that increased consumption followed.

Thus in 1919 the annual consumption of milk, cream and butter per capita was 25 gallons,  $2\frac{1}{4}$  gallons, and 25 lbs. respectively, while in 1926 these figures have increased to 30 gallons,  $2\frac{1}{2}$  gallons, and 35 lbs., and the peculiar feature of this condition is, that the average citizen has no idea that this increase has taken place even in his own household. It is a healthy condition; milk and milk products constitute the cheapest and yet the most valuable of foods, containing everything that is necessary for the building up of the human body.

The ice cream trade has also experienced quite a rise, and while we have no local statistics available, U. S. returns show that in 1910 the annual per capita consumption of ice cream was approximately one gallon; in 1916-17 this was increased to two gallons; in 1921 to  $2\frac{1}{4}$  gallons; in 1924 to  $2\frac{1}{2}$  gallons and in 1925 to 2.8 gallons, being an increased consumption in 15 years of 275%. This increase may be credited to the improved quality and to the nation-wide educational campaign dealing with the food value of ice cream, and its place on the table at all seasons of the year.

In 1925 the total ice cream consumption for the United States is given as 322,729,000 gallons, and there is not much doubt but that Canada will follow along similar lines. In fact, the city dweller should consume more ice cream in order to keep pace with his country cousin who consumes more of the natural product.

### Dairy and Milk Inspection

City Inspections numbered 5,223 in 1926 as against 5,182 for the previous year, the figures for country inspections being 1,932 and 2,024 respectively. Dairy Inspectors travelled 10,062 miles in the country as against 7,745 miles in 1925.

Dairy inspection implies examination of dairies, and the conditions under which milk is produced and handled on the farm.

Milk inspection implies examination of the product at the point of distribution, and while with our improved knowledge, we are able in many instances to find in the product as delivered, evidence of careless methods at the farm, yet we cannot definitely prove such to be the case.

No amount of examination of the finished product will ensure that proper care has been taken in production and handling. Milk inspection can certify as to the quality and wholesomeness of the milk or cream, but it cannot guarantee its freedom from contamination or



deleterious organisms; nor in the case of an apparently clean milk can we judge how much dirt or even filth has been removed by means of straining, filtration or clarification.

The argument may be used that Inspectors cannot constantly attend each dairy in order to ensure observance, but this would apply to all classes of inspection.

Successful inspection depends on the co-operation of those parties coming under such inspection, and the very fact that an Inspector is liable to call around, and occasionally does so at irregular intervals, undoubtedly has a wholesome effect.

The milk producer is only human, he does not relish adverse criticism or reports; and the fact that he does not know when he may be visited creates an atmosphere of preparedness which must be of benefit to the consumer.

The City authorities in the early days recognized the importance of Dairy Inspection in its appointments, and at a later date inaugurated Laboratory examination of the product as delivered.

Of recent years, the tendency has been to drift more towards milk inspection, and this shows as an increase in City Inspections, and a decrease in Country Inspections. Milk tests and examinations for the year just ended numbered 4,011 as against 2,823 for the preceding year, and included 1,847 milk and 113 cream tests for butter fat and solids; 438 plate counts; 1,179 sediment tests; and 434 chemical tests.

The apparent advantage of conducting such a large number of tests consists in the continuous check on the product of all vendors, which ensures the maximum quality to the consumer.

On the other hand milk examination does not detect the tubercular cow or the cow with a diseased udder; it does not detect contamination with manure or flies which have been removed by straining; nor does it detect infection of the milk with the organisms causing various diseases which may be spread by the agency of milk either through cases or carriers.

These are things which can only be controlled at the fountain head. The health of the animals, of the family and employees must be ascertained by a visit to the farm; and a few such visits quickly gives an Inspector a fair idea as to the methods employed.

Should anything of an unusual nature occur such as faulty milk, or sickness on the route which appears to warrant an investigation, then the farm is the only logical place from which to commence such investigation, and it is there that all precautionary measures must be instituted.



**Milk and Dairy Inspection 1925-26****Comparative Statement**

	1925	1926
Cow keepers stables inspected.....	712	543
Dealers and Sales stables inspected..	53	72
Pasteurizing apparatus inspected....	313	266
City Milk Depots inspected.....	106	94
City Creameries inspected.....	484	514
Delivery vehicles inspected.....	3,302	3,598
Special City Inspections.....	212	136
<b>Total City Inspections.....</b>	<b>5,182</b>	<b>5,223</b>
Licensed Dairies inspected.....	1,595	1,533
Milk and Cream Shippers inspected...	219	165
Milk and Cream Stations visited.....	8	19
Country Creameries.....	7	10
Country Milk Depots.....	47	34
Special Country inspections.....	148	171
<b>Total Country Inspections....</b>	<b>2,024</b>	<b>1,932</b>
Milk tested for Butter Fat.....	1,181	1,847
Cream tested for Butter Fat.....	111	113
Special Plate Counts.....	367	438
Sediment Tests.....	830	1,179
Chemical Tests.....	334	434
<b>Total Tests and Examinations.</b>	<b>2,823</b>	<b>4,011</b>
Milk and Cream condemned (lbs.)...	9,794	8,603
Notices issued.....	1,050	1,305
Sickness Investigated.....	31	40
Mileage Country.....	7,745	10,062

**Health and Milk Costs**

The statement has sometimes been made and often repeated that Health Officials need not be concerned regarding the price of milk; that whether milk is scarce or plentiful and prices exorbitant or reasonable, officials should have no opinion on the matter and should merely interest themselves in safeguarding the health of the people.

We do not claim that an official should take such a direct interest in prices as to attempt control or even to go so far as to suggest what prices should prevail; but we do claim that where officials by imposing repressive or drastic regulations, which may curtail, or adversely affect the visible supply; then such officials are indirectly interesting themselves by being party to a situation which may cause an increase in price. On the other hand the lack of suitable regulations, or the enforcement of same may result in an abundant supply of cheap milk of a very inferior quality as regards cleanliness and safety.



Unreasonable high prices curtail consumption, and this results in under-nourished children who are not given a fair chance to develop that growth and physique so necessary for perfect health, and an ability to withstand attacks of pathogenic organisms; and this should be all the proof required to show that the Health Official is interested in prices.

During recent years many cities and communities have put on milk campaigns with a view to increasing the consumption of milk especially among children, but such campaign would be of no value if the producer was not prepared to immediately provide the extra amount required; and where improved regulations are found necessary, the wise authorities are those who first assure themselves that an abundant supply is in sight, with sufficient surplus to take the place of that supplied by the impossible producer; and in addition there must be sufficient to take care of the increased consumption due to the improvement in quality, cleanliness and safety brought about by such regulations.

**1926 Prices of Pasteurized Milk, bottled delivered to Consumer.**  
**24 U.S. cities per 32 oz. Quart; 13 Canadian cities per 40 oz. Quart.**

	Jan.	Mar.	June	Sept.	Dec.
Birmingham, Ala.....	18	18	18	18	18
San Francisco, Cal.....	14	14	14	14	14
Denver, Colo.....	12	12	12	12	12
Hartford, Con.....	16	16	15	16	16
Washington, D. C.....	15	15	14	15	15
Miami, Fla.....	30	28	25	25	25
Chicago, Ill.....	14	14	14	14	14
Indianapolis, Ind.....	12	12	12	12	12
New Orleans, La.....	14	14	14	14	14
Baltimore, Md.....	14	13	13	13	14
Boston, Mass.....	14 ½	14 ½	13 ¼	14 ½	15
Detroit, Mich.....	14	14	14	14	14
Minneapolis, Minn.....	12	11	11	11	11
St. Louis, Mo.....	13	13	13	13	13
Atlantic City, N. J.....	14	14	14	13	15
New York, N. Y.....	15	15	15	15	15
Cincinnati, Ohio.....	12	12	12	12	14
Portland, Ore.....	12	12	12	12	12 ½
Pittsburg, Pa. ....	14 ½	14 ½	13	14	15
Newport, R. I.....	14	15	15	15	15
Salt Lake City, Utah....	10 ½	10 ½	10	10	10 ½
Richmond, Va.....	14	14	14	14	14
Tacoma, Wash.....	12 ½	12 ½	12 ½	12 ½	12 ½
Milwaukee, Wis.....	10	10	11	11	11
Victoria, B. C.....	12 ½	12 ½	12 ½	12 ½	12 ½
Calgary, Alta.....	11	11	11	11	12
Edmonton, Alta.....	12	12	10	12	13
Saskatoon, Sask.....	12	12	12	12	12
Regina, Sask.....	13	13	12	12	13
Winnipeg Man.....	12	12	12	12	12

	Jan.	Mar.	June	Sept.	Dec.
Fort William, Ont.....	12 ½	12 ½	12 ½	12 ½	14
Brantford, Ont.....	12	12	11 ½	11 ½	11 ½
London, Ont.....	10	10	10	10	11
Hamilton, Ont.....	13	13	11	12	13
Ottawa, Ont.....	11	11	10	10	11
Toronto, Ont.....	14	14	13	13	14
St. John, N. B.....	14	14	14	14	14

## Milk Prices for December, 1926 Adjusted Comparatively

	Price Per Quart	Adjusted to Imp. Quart Basis	Adjusted to U. S. Quart Basis
Birmingham, Ala....	18	22 ½	18
San. Fransisco, Cal..	14	17 ½	14
Denver, Colo.....	12	15	12
Hartford, Conn.....	16	20	16
Washington, D. C....	15	18 ½	15
Miami, Fla.....	25	31	25
Chicago, Ill.....	14	17 ½	14
Indianapolis, Ind....	12	15	12
New Orleans, La....	14	17 ½	14
Baltimore, Md.....	14	17 ½	14
Boston, Mass.....	15	18 ½	15
Detroit, Mich.....	14	17 ½	14
Minneapolis, Minn...	11	13 ½	11
St. Louis, Mo.....	13	16 ¼	13
Atlantic City, N. J...	15	18 ½	15
New York, N. Y.....	15	18 ½	15
Cincinnati, Ohio....	14	17 ½	14
Portland, Ore.....	12 ½	15 ½	12 ½
Pittsburg, Pa.....	15	18 ½	15
Newport, R. I.....	15	18 ½	15
Salt Lake City, Utah.	10 ½	13	10 ½
Richmond, Va.....	14	17 ½	14
Tacoma, Wash.....	12 ½	15 ½	12 ½
Milwaukee, Wis.....	11	13 ½	11
Victoria, B. C.....	12 ½	12 ½	10
Calgary, Alta.....	12	12	9 ¾
Edmonton, Alta.....	13	13	10 ½
Saskatoon, Sask.....	12	12	9 ¾
Regina, Sask.....	13	13	10 ½
Winnipeg, Man.....	12	12	9 ¾
Fort William, Ont...	14	14	11 ¼
Brantford, Ont.....	11 ½	11 ½	9 ¼
London, Ont.....	11	11	9
Hamilton, Ont.....	13	13	10 ½
Ottawa, Ont.....	11	11	9
Toronto, Ont.....	14	14	11 ¼
St. John, N. B.....	14	14	11 ¼



### Milk Prices

The preceding tables give particulars of price paid by the consumer in twenty-four United States Cities and thirteen Cities in Canada. The larger portion of all milk consumed in these cities is pasteurized and delivered to the consumer in bottles; for which reason we have taken the price per quart of pasteurized milk delivered as the basis of comparison.

Cities whose population runs into millions, naturally have a higher price and this condition also applies to those cities situated in large industrial districts, to those isolated away from sufficient farming or productive areas, and to those which have developed so rapidly that productive effort was unable to keep pace.

Strange though it may appear to others, in those cities where a virtual monopoly of milk distribution exists, prices are considered reasonable in comparison, and this may be ascribed to the lower overhead and the unification of delivery which enables the distributor to operate on a lower spread.

In making comparisons we must keep in mind the fact that in Canada Imperial measure is used for milk, the quart being approximately 40 oz., while the United States employs Wine measure, the quart being 32 oz.

The Imperial Quart is 25% larger than the U. S. quart, and the U. S. quart is 20% less than the Imperial quart; thus if contents alone are valued milk at 12½ cents per quart Imperial measure would be worth 10 cents per quart Wine measure, and milk at 12 cents per quart Wine measure would be worth 15 cents per quart Imperial measure. For the month of December, 1926

The average price for 24 U. S. cities was .....	14	cents
On an Imperial quart basis this would be .....	17½	cents
The average price for 13 Canadian cities was ....	12½	cents
On a U. S. quart basis this would be .....	10	cents

### Conclusion

The ensuring of a supply of milk and all other dairy products for a large urban centre is no small undertaking, the total capitalization of all branches being much larger than that pertaining to any other commodity. It is estimated that it requires the combined efforts of 75,000 cows to supply this city; 15,000 cows for whole milk; 7,500 for cream; 3,500 for ice cream; and 44,000 for butter; while on the same ratio 150,000 cows would supply the needs of the balance of the Province.

Butter exported would require 75,000 more cows giving us a total of 300,000 dairy cows estimated in Manitoba. Of course this is only a crude calculation but near enough to give some idea of the magnitude of operations involved.

Milk fed to calves, or manufactured into cheese; cheese and butter imported; cheese consumption in general; powdered milk and condensed milk imported, consumed, or manufactured, are not calculated and if they were, would have little effect on the figures arrived at.

Milk ranks in importance with bread or water in any urban community, and may well be classed as an utility. During early infancy and childhood milk is of paramount importance. Unlike other commodities milk must be produced daily and is more liable to contamination. Milk must be kept under close surveillance all the time. For this purpose trained Inspectors are necessary and these must be men of tact and discernment, familiar with all branches of dairying, and heartily interested in this work.

The staff, though small in numbers, by willing co-operation and team work have contributed in no small measure to such success as we may have attained.

I have the honor to be,

Sir,

Your obedient servant,

E. C. BROWN,

Chief Dairy Inspector.



## Dairy Inspection, 1926

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
<b>City Inspections:</b>													
Cow keepers .....	346	62	69	26	10	10	1	3	13	3	..	..	543
Cow dealers .....	7	6	6	6	5	6	..	10	7	7	..	5	72
Pasteurizers .....	26	23	18	30	24	21	18	18	20	20	26	22	266
Milk Depots .....	5	5	9	9	5	10	7	9	7	5	10	13	94
Creameries .....	27	52	48	53	49	50	22	39	37	44	47	46	514
Vehicles .....	209	270	294	313	261	281	146	344	393	383	356	348	3598
Special .....	37	10	13	16	16	23	12	2	2	3	2	..	136
Total .....	657	428	457	453	370	401	206	425	479	465	448	434	5223
<b>Notices:</b>													
General .....	184	40	..	..	125	..	..	..	..	..	..	..	349
Special .....	11	1	8	3	10	21	4	5	..	6	4	2	75
Formal .....	4	..	1	..	2	2	19	..	22	17	..	..	67
Verbal .....	36	57	108	77	80	53	38	88	67	61	57	37	759
Summons .....	..	..	..	..	8	..	10	16	4	5	5	7	55
Total .....	235	98	117	80	225	76	71	109	93	89	66	46	1305
<b>Country Inspections:</b>													
Licensed Dairies .....	144	128	158	162	140	119	40	188	152	92	108	103	1533
Milk Shippers .....	5	4	14	14	21	15	23	5	23	7	3	6	140
Cream Shippers .....	..	2	..	..	12	..	7	4	..	..	..	..	25
Milk Stations .....	..	..	1	1	2	1	3	6	..	..	..	..	14
Cream Stations .....	..	..	..	..	..	..	..	1	..	4	..	..	5
Creameries .....	..	..	1	1	1	..	1	1	1	3	1	..	10
Milk Depots .....	1	2	3	6	7	3	2	1	4	1	2	2	34
Special .....	11	7	9	17	9	10	31	24	19	12	14	8	171
Total .....	161	143	186	201	192	148	107	230	199	119	127	119	1932

<b>Mileage-Country:</b>													
Inspector A	250	220	320	415	550	420	930	770	990	780	350	250	6245
Inspector B	135	150	250	225	165	300	..	270	150	125	152	155	2077
Inspector C	85	110	110	150	90	90	80	270	185	175	190	205	1740
Total	470	480	680	790	805	810	1010	1310	1325	1080	692	610	10062
<b>Samples:</b>													
Milk Tested	97	129	126	145	168	214	94	187	194	183	156	154	1847
Cream Tested	10	9	12	12	21	9	..	1	5	14	10	10	113
Bacterial Counts	31	32	36	32	32	32	33	32	48	40	40	50	438
Sediment Tests	62	70	97	106	83	89	76	119	148	126	94	109	1179
Chemical Tests	31	32	36	32	28	32	33	32	48	40	40	50	434
Total	231	272	307	327	332	376	236	371	443	403	340	373	4011
<b>Condemnations:</b>													
Milk, lbs.	400	160	240	1010	1520	..	320	80	2020	2030	..	..	7780
Cream, lbs.	..	..	..	100	100	150	243	100	80	50	..	..	823
Total	400	160	240	1110	1620	150	563	180	2100	2080	..	..	8603
<b>Sickness Investigated:</b>													
Communicable	14	..	..	..	..	..	2	1	3	..	1	1	22
All other cases	2	..	..	1	1	2	2	2	8	..	..	..	18
Total	16	..	..	1	1	2	4	3	11	..	1	1	40



## 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 1926.

With the exception of a complaint from an institution boarding their employees, the year was remarkably free from reported illnesses due to the ingestion of food.

When conditions are normal, it is hard to enlist public interest and co-operation. Public Health is like personal health; when one is well it is taken as a matter of course, when one is ill nothing else matters.

The number of places under inspection decreased from 1,929 to 1,903, but still shows an increase of 559 places in the last seven years. There was an increase in the number of bakeries due to a number of bakers starting in business for themselves, and an increase in restaurants, which would seem to indicate that the trying times due to lack of employment for young single men, were being overcome. There was a decrease in the number of grocers, butchers and general stores.

One of the Departmental stores took possession of their new premises equipped with the most modern facilities for taking care of food stuffs.

The extraordinary weather conditions which obtained over the whole American continent were responsible for a large increase in the amount of condemnations. These conditions are reflected especially in Winnipeg, because we are at the end of a long haul, whether from the East or the West.

As an instance of the difficulties under which fruits are handled, we one day last Summer condemned a carload of cucumbers because they had been exposed to a too cool temperature in transit and broke down when exposed to the heat; and on the same track condemned a carload of tomatoes because they were heated.

We were noticeably free from complaints of bad food stuffs sold by peddlers, the publicity last year having had a beneficial effect.

On the other hand conditions which obtained at the North End Market, especially on Saturday nights, were not satisfactory. We attended these markets accordingly, late on Saturday night and four prosecutions for selling unsound fruit, resulting from our investigations, improved matters considerably.

This market has had a natural evolution from a few farmers who used to frequent the yard of a livery barn in the neighborhood, until it takes up the sidewalks of a triangular City block on an Avenue and two Streets.

The City has spent thousands of dollars in unsuccessful attempts to start a Farmers' Market. When, therefore, this developed into a



market, we extended the leniency which our by-laws allow as regards the sale of farm produce.

Unfortunately some of the near-by store-keepers at once took advantage of this to expose, at all times, and under any conditions, fruit and other products. While we can hardly take exception to the exposure of food stuffs like potatoes, which have to be peeled and cooked, provided they are raised off the ground away from dogs; the exposure of fruits, which are liable to be eaten without any further precautions, is another matter and the habit of customers handling such exposed food renders it highly desirable that the Regulations governing this should be enforced.

Oysters, oranges and celery, which in past years have at different times given rise to some apprehension on account of contamination or conditions at their source, were this year of the highest quality. This was in a large measure due to the co-operation of the Dominion Government, who require a certificate in one case, or held for inspection before releasing from Customs, in another. These requirements serve to exemplify the wide range of food inspection.

Due to modern methods of transportation and refrigeration, permitting the handling of foods from any climate and country, a knowledge of the conditions under which all foods are grown and handled is necessary.

In addition, a knowledge of the diseases or poisonous insecticide sprays used to cope with these diseases, is also necessary.

As orchards get older and the districts more thickly settled, the practice of spraying will become increasingly common on many food stuffs at present immune and, as during the Winter months we require to import the most of our fresh vegetables and fruit, this phase of the business will assume added importance.

The United States Department of Agriculture, (Bureau of Chemistry), report that fruit growers, marketing agencies, etc., are working on a nation-wide plan to ensure that vegetables and fruits, more particularly pears and apples, will be free from excessive arsenical spray residue.

One of the new features is the use of a Chlorine solution in sterilization of utensils used in the preparation and serving of food stuffs. The solution is used extensively in bottling plants, with good results in sterilizing pipes; and we have had some success with it in disinfecting water troughs in poultry feeding plants. No doubt as time goes on, other uses will be found. The preparation is liquid and certain precautions are necessary as it is affected by exposure to light. It undoubtedly has its uses in the washing of glasses or utensils where fatty matters are not present, and we are undertaking experiments to see whether it might not be advantageous to use it more generally.

#### Abattoirs

One of the abattoirs changed owners and a large amount of improvements have been done. The fertilizer plant which was antiquated has been removed and steps are being taken to install a more modern



plant; and in addition, the whole establishment was renovated inside and out.

At another plant they are installing a dry rendering plant, in order to make a hog, poultry and fox food, which will be a great improvement over the erstwhile somewhat odoriferous fertilizer.

In addition to the three abattoirs in the City, there are four situated adjacent to the City, all under Federal Inspection. There is also one abattoir outside, operating under a Provincial License, putting up principally prepared meats.

#### **Bakeries**

There was an increase of nine in the number of bakeries. These are mostly engaged in pastry making.

No doubt the fact that such goods do not require to be handled, and that they are better able to gauge their requirements, enables them to have fresh appearing goods. Whatever the cause, they seem to increase year by year.

The amount of wrapped bread is approximately 50 per cent. of the output. As there was no wrapped bread during the War, this is rather an extraordinary increase. The efficiency of the bread-wrapping machinery keeps down the cost. The cost of wrapping the different shapes of loaves by hand would be prohibitive, as some bakeries put out 30 varieties of bread.

#### **Bottling Plants**

These increased by three. While the weather conditions during the Summer were not such as to indicate any great increase in the demand for soft drinks, there seems to be quite a demand for ginger ales for export.

Bacterial counts taken during the Summer indicate that the steps taken to sterilize the bottles are fairly efficient.

#### **Butcher Shops**

The butcher stores, while fewer in number, improved in quality. The itinerant butcher, who takes a store for the Winter and moves away in Summer, was not so conspicuous. This class of butcher starting in the Fall without any particular equipment other than a bench, a knife and saw, and at a time when meat is naturally cheap is able to sell at less than the butcher who stays in business all the year round and has to provide refrigeration in Summer when trade is slack and unprofitable.

There has been a movement towards the grading of meats. The success which has attended the grading of butter, eggs and poultry, would indicate that it would be a move in the right direction, so that consumers would get the quality advertised. The matter is being given consideration by the Federal Governments of the United States and Canada.

We had several installations of meat counters equipped with glass enclosures and marble slabs. Two of these were supplied with refrigeration. In addition, some stores had their fish counters equipped in this manner with compartments filled with ice for the fresh fish, and instal-





MODERN REFRIGERATION FISH COUNTER



lations attached for sterilizing these compartments. This is a most important point as nothing deteriorates so rapidly as fish, and there is no food which is quite so tasty when properly handled, or so objectionable when improperly handled; in fact the only way for a butcher to handle fresh fish, if he wishes to retain his trade, is to keep the fish under refrigeration all the time.

### Condemnations

As indicated before, due to the extraordinary weather conditions, the condemnations increased from 120,371½ lbs. to 179,993 lbs., the increase being practically confined to fresh fruits and vegetables.

With the exception of poultry, the shipments from the country decreased.

In the case of poultry, due to the high price obtaining in the fall, we received shipment from outlying districts where the expenses of marketing have prohibited shipments in other years.

The shipments included quite a number of Tubercular specimens. These were conspicuous by the emaciated appearance of the carcass, and the peculiar dryness and striated look of the skin, the diagnosis being confirmed by the post-mortem examination of the liver and spleen. Altogether, in December, we found it necessary to condemn 185 shipments of poultry.

### Complaints

The year was remarkably free from complaints of what is commonly designated as "Ptomaine" Poisoning. In connection with this much abused word it may be pointed out that in an investigation conducted in England, into the causes of 100 cases of Food Poisoning, by the Medical Research Bureau of the Privy Council, in only three cases was there any evidence of decomposition. As Ptomaine Poisoning is the result of the ingestion of the products of proteid decomposition, the inference is that most poisoning cases have their origin in specific bacterial or chemical contamination.

### Packing Houses

Premises where no animals are killed but meat goods prepared for sale, were increased in number by the erection of a modern, fireproof plant. Another plant engaged in the canning of chicken products, under Federal Inspection, doubled its capacity and is making quite a name by the quality of its output.

The idea of packing our raw products locally, instead of sending them East to be packed, is a very commendable one, as we save two freight charges, and it is a trite saying that the less goods are handled—the less the chances for contamination, so that we should be able to put up a superior product at the source of supply.

### Prosecutions

The prosecutions this year amounted to seven. The increase over last year was directly due to conditions obtaining, as previously mentioned, at the North End Market.

The reasons for prosecution were:

Selling Rancid Butter .....	1
Selling Unsound Fruit .....	4
Killing calves in unlicensed slaughter-house .....	1
Neglecting to keep soda fountain in satisfactory condition .....	1
Total .....	7

#### Restaurants

There have been quite a number of changes in the restaurant business. Some of the largest and best known have disappeared and their places have been taken by modern and up-to-date lunch counters; the tendency for a quick lunch being now shared by a feminine clientele.

One is led to wonder just where this fashion of rapid eating is going to lead us, possibly this movement is not unconnected with the rapid increase in nervous diseases and the concomitant prescription of a suitable diet and rest.

Once more I gratefully acknowledge the willing services of Inspectors Foote and Mines.

Respectfully submitted,

ARTHUR RIGBY,  
Chief Food Inspector.



## Premises and Improvements

Description	Number under Inspection	New Modern	Cement Floors	Renovated	New Plumbing	Remodelled
Abattoirs .....	3	..	..	3	..	..
Auction Rooms .....	2	..	..	..	..	..
Bakeries .....	71	9	..	36	..	4
Bars .....	6	..	..	..	..	..
Biscuit and Cereal Factories .	3	1	..	1	..	..
Bottling Plants .....	16	2	..	2	..	..
Brewries .....	5	1	..	1	..	..
Butcher Shops .....	207	3	..	64	..	3
Butter Rooms .....	2	..	..	..	..	..
Candy Factories .....	21	1	..	5	..	..
Canning Factories .....	1	..	..	..	..	..
Cold Storage Plants .....	6	..	..	1	..	1
Commission & Produce Houses	53	7	..	3	..	..
Confectioners and Ice Cream Parlors .....	352	22	..	85	3	9
Fish Stores .....	15	..	..	1	..	..
Fruit Houses (Wholesale) ...	36	5	..	3	..	..
General Stores .....	408	14	..	22	..	2
Grocers (Retail) .....	220	7	..	61	5	5
Grocers (Wholesale) .....	27	1	..	3	..	..
Hawkers Vehicles .....	103	..	..	65	..	..
Hotel Kitchens .....	42	..	..	16	..	3
Jam and Pickle Factories ...	7	1	..	1	..	..
Markets .....	2	..	..	..	..	..
Packing Houses .....	3	..	..	..	..	..
Peanut Butter Factories .....	1	..	..	..	..	..
Popcorn Factories .....	2	1	..	..	..	..
Poultry Slaughter Houses ...	8	2	..	3	..	..
Restaurants .....	256	27	1	177	6	17
Railroad and Express Cos. ...	3	..	..	..	..	..
Sausage Factories .....	15	..	..	6	..	..
Tea, Coffee and Spice Houses	6	..	..	..	..	..
Yeast Factories .....	1	..	..	..	..	..
Totals .....	1,903	104	1	559	14	44

## Food Condemnations, 1926

Description	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Beef	..	..	590	..	..	..	..	..	..	..	375	390	1,355
Veal	..	86	456	1,434	1,096	440	599	234	1,218	861	29	212	6,665
Pork	..	..	60	..	..	..	65	..	..	..	65	390	580
Mutton	..	..	..	..	..	..	..	..	..	..	52	..	52
Poultry	306	183	319	5	23	..	79	..	..	96½	869	3,569½	5,450
Fish	35	..	240	..	..	..	..	3,270	..	60	4,253	208	8,066
Fresh Fruit	16,600	100	..	..	960	..	21,510	22,240	2,585	7,100	..	..	71,095
Dried Fruit	25	60	..	..	..	..	..	..	..	..	..	..	85
Jam	25	..	..	..	..	80	..	..	..	..	..	..	105
Vegetables	450	400	1,915	..	..	360	35,000	..	..	..	6,000	21,180	65,305
Eggs	..	..	..	70	..	..	360	45	..	..	140	..	615
Candy	50	795	..	..	..	710	2,635	1,160	100	100	..	..	5,550
Biscuits	25	475	..	..	..	..	5	..	..	..	..	..	505
Canned Goods	240	90	50	..	1,000	..	..	..	50	..	..	200	1,630
Cereals	225	225	..	100	..	..	..	200	..	..	..	500	1,250
Nuts	..	..	..	..	..	..	..	..	..	..	50	450	500
Coffee	..	..	..	..	..	..	..	100	..	..	..	88	188
Cheese	..	..	..	..	..	65	..	..	..	..	..	..	65
Game (Rabbits)	..	200	518	..	..	..	..	..	..	44	..	..	762
Pickles	..	..	..	..	50	..	..	..	..	..	..	..	50
Tea	50	225	..	..	..	..	500	100	6,540	..	..	..	7,445
Miscellaneous (Extracts)	..	..	350	..	..	..	..	..	..	..	..	..	350
Sugar	50	125	600	650	..	900	..	..	..	..	..	..	2,325
Totals	18,081	2,994	5,098	2,259	3,129	2,555	60,753	27,349	10,493	8,261½	11,833	27,187½	179,993



## Food Inspections, 1926

Premises	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Abattoirs and Packers .....	15	17	13	15	17	18	25	21	13	12	11	12	189
Bakeries .....	78	89	99	100	87	89	85	75	63	90	81	84	1,020
Bakery Vehicles .....	36	40	46	45	36	39	39	44	43	41	26	38	473
Biscuit and Cereal Factories .....	8	6	7	6	7	6	7	6	4	6	5	6	74
Breweries .....	10	11	13	10	10	16	19	15	14	10	14	14	156
Butcher Shops .....	174	184	196	194	143	167	178	152	150	154	154	178	2,024
Butter and Cheese .....	6	8	5	4	7	4	5	3	2	5	2	7	58
Candy Factories .....	32	29	37	34	32	26	16	24	23	27	25	30	335
Cold Storage Plants .....	11	12	14	8	9	10	8	5	4	4	4	6	95
Cone Factories .....	..	..	..	..	..	..	..	..	..	..	..	..	..
Fish Stores .....	32	38	40	29	29	26	23	25	18	26	18	17	321
Fruit Stores .....	58	71	87	67	85	72	104	69	102	104	88	77	984
General Stores .....	397	403	442	382	401	392	376	275	359	394	411	390	4,622
Grocers .....	160	153	156	149	154	135	126	128	127	131	154	158	1,731
Hawker's Vehicles .....	121	128	108	130	139	135	120	146	126	146	132	132	1,563
Hotel Kitchens .....	29	34	29	22	43	25	19	21	31	26	23	17	319
Ice Cream Parlors and Confectioners .....	229	224	205	215	236	221	235	167	190	232	215	211	2,580
Jam, Pickle and Spice Factories .....	10	16	22	14	8	8	16	7	9	4	5	7	126
Markets and Auction Rooms .....	6	7	5	6	5	10	7	9	9	16	13	10	103
Poultry Slaughter Houses .....	10	12	9	4	2	2	4	1	6	11	13	10	84
Produce, Commission and Eggs .....	59	58	68	57	60	77	68	52	66	63	56	60	744
Railway Cars .....	..	..	..	..	..	2	3	2	2	2	4	5	20
Railway Express .....	4	3	5	7	2	6	3	4	7	5	6	6	58

Restaurants and Lunch Counters ..	315	329	341	355	324	346	293	303	252	328	304	325	3,815
Sausage Factories .....	21	22	22	16	14	15	23	20	19	19	26	19	236
Special .....	74	84	91	88	96	109	63	123	95	131	115	150	1,219
Temperance Bars .....	1	..	2	4	5	..	3	2	2	1	2	3	25
Totals .....	1,896	1,978	2,062	1,961	1,951	1,956	1,868	1,699	1,736	1,988	1,907	1,972	22,974
Notices to improve conditions .....	55	112	107	150	118	88	95	71	110	123	106	100	1,235

## Prosecutions

Insanitary Premises .....	..	..	..	..	..	1	..	..	..	1	..	..	2
Unsound Food .....	..	1	..	..	..	..	..	..	1	3	..	..	5
Exposing to Contamination .....	..	..	..	..	..	..	..	..	..	..	..	..	..
No Permits .....	..	..	..	..	..	..	..	..	..	..	..	..	..
Amount of Fines and Costs .....	..	\$16.25	..	..	..	\$13.00	..	..	\$8.00	\$60.00	..	..	\$97.25



## Report of Bacteriologist

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

Medical Health Officer.

Dear Sir:

I have the honor to submit herewith a report of the work performed in the Bacteriological Laboratory for the year ending December 31st, 1926.

The work done is shown in the following table and for comparison the totals of the preceding three years are added:

1926	Swabs for Diphtheria		Sputa for T.B.		Urethral Smears	Widals for Typhoid	Water	Milk and Cream	Urinalyses	Miscellaneous	Vaccinations	Total Examina- tions per Month
	Pos.		Pos.		Pos.	Pos.						
January ....	453—	37	39—	9	43—10	5—0	49	118	46	9	47	809
February ...	492—	47	57—	7	29—6	3—0	55	147	35	25	85	928
March .....	473—	25	52—	5	39—7	4—0	65	150	23	22	186	1014
April .....	368—	8	46—	5	14—4	2—0	63	169	21	21	120	824
May .....	675—	47	39—	6	41—7	4—0	59	196	33	14	921	1982
June .....	1030—	22	36—	9	35—5	7—3	71	235	14	9	317	1754
July .....	1796—	28	41—	5	14—1	7—2	64	117	23	21	320	2403
August .....	1420—	15	23—	3	20—5	16—4	61	211	13	7	145	1916
September ..	472—	21	18—	1	29—2	10—1	58	217	14	11	86	915
October ....	891—	53	34—	3	29—5	10—3	68	217	30	14	83	1369
November ..	977—	46	35—	2	23—1	1—0	59	190	14	11	141	1451
December ..	516—	12	48—	4	24—0	1—0	50	193	23	11	42	1451
1926 Totals .	9563—	361	468—	59	340—53	70—13	715	2160	289	175	2493	16273
1925 Totals .	8714—	378	501—	50	317—68	32—4	536	1472	339	140	1731	13782
1924 Totals .	13737—	1393	485—	53	388—69	39—1	542	1286	556	248	1359	18640
1923 Totals .	18126		516		348	40	581	948	613	192	800	22164

### Water

During the year 715 samples of water were tested bacteriologically. Enumeration of colonies and 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 showed the usual seasonal variation and were never dangerously high.

2. Public Swimming Baths. Samples from Cornish, Pritchard and Y. M. C. A. baths were tested weekly while open.

3. Various water mains. Samples were taken from mains which were undergoing alteration.

4. Samples from private individuals, residences, hotels, etc.

The total number of tests done outnumber considerably the number of preceding years.

### **Milk and Cream**

The number of specimens examined totalled 2,160, showing an increase of 50% to 100% over previous years. These specimens were examined for butter fat content and the milk for water and solids. There were 440 bacterial counts made which varied from 1,000 to over 100,000 colonies per c.c.

#### **Source:**

1. Dairy Inspectors brought in 1,936 samples of milk and 104 samples of cream. This was the chief cause of the increase in the total of specimens submitted.
2. The Bureau of Child Hygiene sent in 44 samples of milk and skimmed milk, and 22 samples of cream.
3. Private individuals submitted 32 specimens of milk and 25 of cream, including three specimens of ice cream.

### **Diphtheria Swabs**

Swabs examined for the diphtheria bacillus totalled 9,563, a slight increase over last year, but much less than formerly when the disease was much more prevalent. Positives amounted to 361.

These swabs were brought in by Doctors, Nurses, Health Inspectors, School Nurses, Margaret Scott Nursing Mission Nurses, and others. Many of the swabs were taken in this Laboratory especially from children going to Summer Camps. During the holiday months of June, July and August, 3,646 swabs, or almost 40% of the total, were taken largely due to this cause.

### **Widals for Typhoid Fever**

Blood examinations for agglutination of typhoid, paratyphoid, and other organisms isolated from patients, totalled 70 with 13 giving positive reaction. The increase over the previous year was due to increase in typhoid fever cases during the summer.

### **Urethral Smears**

These totalled 340 for the year, which includes all smears from the urethra, vagina and cervix examined for the presence of gonococci. These smears are sent in for examination by the Doctors.

### **Urinalyses**

These totalled 289. Specimens are sent in for examination by Doctors, Nurses, Insurance Companies, the Bureau of Child Hygiene, and by private individuals. The tests required are chemical, microscopic, sugar estimations, and for tubercle bacilli.

### **Vaccinations**

These gave a total of 2,493, which is the largest yet recorded in this laboratory. The source of individuals making up the list was as follows:



1. Children up to and including school age, especially in the month of May, when 921 were vaccinated.

2. Employees of the railroads, who are now practically required to be recently vaccinated.

3. Large stores. One of these requires all new employees to be recently vaccinated.

4. Contacts with cases.

There were 671 certificates issued.

#### **Miscellaneous Tests**

This includes examination of mother's milk, gastric contents, hairs for parasites, blood counts, preparation of vaccines, and bacteriological examination of foods sent in by Mr. Rigby, Chief Food Inspector.

#### **Dispensary Work**

Examination of school children for freedom from contagious diseases and issuing of certificates for return to school, has been continued as usual.

Adults have come for free medical advice. The more serious of these cases have been referred to the Winnipeg General Hospital. House calls have been made at the request of welfare agencies and these cases were disposed of at the time, usually by having the patient transferred to Hospital.

In conclusion I desire to express my appreciation for the manner in which Miss Wilson, my assistant, and Mr. Harry Robinson, the Laboratory attendant, have fulfilled their respective duties.

Respectfully submitted,

M. S. LOUGHEED, M.D.,

Bacteriologist.

## Report of Chief of Division of Communicable Diseases

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

Dear Sir:

I have the honor to submit report on the work done by this Division during the past year.

Tabulated monthly reports, tables and summaries relating to Diphtheria, Scarlet Fever and other matter are attached hereto.

The work of this Division varies little year by year, in fact any change or comment we may make seems almost like repetition of previous reports, nevertheless, we have a few interesting notes to make regarding the past year's work and much food for thought in some of the tables and summaries presented.

Our preventive schedule, for Smallpox conducted yearly in the schools during the past ten years now embraces Diphtheria and we have succeeded during 1926 in covering, systematically, every public school. The bulk of this work is done during the months following the summer holidays.

These duties falling to the lot of this Division means extra work but its results are already seen in the decline in numbers of cases of Diphtheria reported since 1923. We believe that concentrated effort towards vaccination of school children has been a factor in cutting down our number of cases of Smallpox reported.

Smallpox appeared in virulent form on two occasions but fortunately we were able to prevent spread. The disease in milder form appeared repeatedly throughout the year.

Typhoid Fever which appeared on a milk route in July and reappeared in September gave some cause for uneasiness for a time.

Measles, Mumps and Chickenpox were reported in considerable numbers; the former two diseases were with us during the latter months of 1925 and were merely completing the outbreak already started, whereas Chickenpox was reported in largest number during November and December, 1926.

Scarlet Fever gave us considerable trouble, and towards the end of the year was being reported from widely separated districts. Where it appeared in schools and districts localized, we prosecuted the most vigorous efforts to suppress same by house to house visitation. We received much assistance from the School Medical Inspection Department; the nurses checking closely sick children and absentees who gave a history of sore throats and rashes.

The summary "Inspectors' Reports" shows the work done monthly and requires no further comment.

### **Tuberculosis:**

Three nurses have carried on the work of visiting the homes of Tuberculous patients and have conducted the work of the clinics held



at the Winnipeg General Hospital three days a week, also at the Children's Hospital two days a week.

There was an increase in number of cases reported and a slight increase in deaths. Cases, two hundred and thirty-two; deaths 88, distributed as follows:

	Ward 1.	Ward 2.	Ward 3.	Non-Resident	Total
Cases .....	45	81	86	20	232
Deaths .....	10	31	30	17	88
Population ....	58,409	65,785	72,931	..	175,125

The morbidity and mortality rate per 100,000 population is as follows:

	Ward 1.	Ward 2.	Ward 3.
Morbidity rate .....	77	123	117
Mortality rate .....	17	47	41

Summary of cases and deaths as they appear in each district:

	District 1.	District 2.	District 3.	Outside.	Unclassified	Total
Cases .....	91	66	51	20	4	208
Positive .....	71	25	26	..	..	122
Clinically Positive ....	20	41	25	..	..	86
Deaths .....	28	23	20	17	..	88

In dividing the city into districts no attempt has been made to equalize from the standpoint of population. District 1 for instance has a non-visiting list of thirty-four against one in District 3.

	Ward 1.	Ward 2.	Ward 3.	Total
Number on Visiting List .....	135	129	141	405
Non-visiting cases .....	34	18	41	53
Patients in King Edward Memorial Hospital .....	48	29	27	104
Patients in Ninette Sanatorium ....	34	6	17	57
Patients in St. Roch's Hospital ....	9	5	5	19
Patients in Children's Hospital ....	2	1	2	5

Summary showing number and classification of patients in each district:

	Total	Positive	Clinically Positive	Suspects	Contacts
District 1. ....	135	86	26	8	15
District 2. ....	129	28	53	16	32
District 3. ....	141	31	39	29	42

Not all cases of tuberculosis known to the Department are visited by the nurses, for should the attending physician so request, the case is written up and filed with the non-visiting list.

	District 1.	District 2.	District 3.
Non-visiting .....	34	18	1

District 1 embraces much of the best residential property in Winnipeg; District 2 is adjacent; District 3 lies East of Main Street and North Main Street, West to limits.

During the year the Department supplied a total of 10,561 quarts of milk to patients unable to pay for same.

Age Incidence	Cases	Deaths
0-10 .....	18	3
11-20 .....	51	16
21-30 .....	66	19
31-40 .....	35	18
41-50 .....	23	14
51-60 .....	6	11
61-70 and over .....	9	7
	208	Total....88
Outside cases .....	20	—
Unclassified .....	4	—
Total .....	232	

The following table shows the length of time cases which terminated in death were known to the Department.

City Deaths .....	71	Non-resident deaths .....	17
Reported by Death Registration .....	18		
Known less than 1 month .....	9		
Between 1 and 2 months .....	5		
Between 2 and 3 months .....			
Between 3 and 4 months .....	2		
Between 4 and 5 months .....			
Between 5 and 6 months .....	9		
Over 6 months .....	28		
Total .....	71		

This table clearly demonstrates the fact that many patients are in the advanced stages of the disease before reaching the Department's records. This has been referred to in previous reports and apparently we must continue to press the need for earlier reporting of cases as a means at least, of fully understanding our position.

A comparative table showing nationality of cases recorded for the years 1926-1925 is as follows:



	1926	1925
Canadian .....	63	55
English .....	31	23
Scotch .....	13	8
Irish .....	7	7
Icelandic .....	4	9
Swedish .....	3	3
Norwegian .....	3	1
German .....	12	13
Polish .....	21	6
Ruthenian .....	2	5
Austrian .....	2	1
Russian .....	1	6
Jewish .....	13	14
Chinese .....	4	6
American .....	2	3
Greek .....	1	1
Ukrainian .....	22	12
Negro .....	1	1
French .....	1	..
Rumanian .....	1	..
Finlander .....	1	1
Danish .....	..	3
	<hr/> 208	<hr/> 177

Summaries showing the work done at the clinics held at the Winnipeg General Hospital and Children's Hospital is attached to this report. The Nurse's monthly report and a table showing living conditions of patients added to their records during the year is also attached.

We regret to report that Inspector Triggs, who has suffered indifferent health during the past two years, was compelled to remain off duty during the year.

We received assistance from the branch of Sanitary Inspection during the period that measles and mumps was most prevalent.

Miss Winnifred Aldham, record clerk for this Division who had given nine years splendid service, was granted leave of absence during the year and we regret to say that later she found it necessary to resign. This position has been filled by promoting Mr. G. Moore and appointing in his place Stuart Steel as Junior clerk.

In conclusion we again take pleasure in recording our thanks to the staff of the Municipal Hospital; the staff of the Medical Inspection Department of Public Schools; the Margaret Scott Nursing Mission and other agencies; their assistance and co-operation has meant much to this Division.

Respectfully submitted,

WM. J. T. WATT,

Chief, Division of Communicable Diseases.

## Communicable Diseases, 1926

	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Totals 1926		Totals 1925	
	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.....	4	2	..	..	3	1	2	..	1	2	2	..	9	..	19	2	14	1	8	..	4	..	..	..	66	8	42	6
Smallpox.....	11	..	1	..	5	..	1	1	1	..	6	1	5	..	6	..	..	..	..	..	3	..	4	..	43	2	41	..
Chickenpox.....	70	..	52	..	71	..	65	..	84	..	87	..	35	..	15	1	27	..	50	..	101	..	113	..	770	1	662	..
Measles.....	993	2	923	1	548	4	216	3	99	1	13	..	2	..	1	..	4	..	6	..	13	..	26	..	2844	11	2411	9
Scarlet Fever.....	33	1	45	1	38	1	41	2	30	..	56	1	31	..	22	..	55	..	104	..	129	..	92	2	676	8	645	8
Whooping Cough.....	38	..	33	..	56	..	43	2	38	2	25	1	14	..	23	..	27	1	48	..	50	..	27	..	422	6	689	14
Mumps.....	186	..	258	..	420	..	201	..	196	..	92	..	18	..	9	..	10	..	27	..	48	..	41	..	1506	..	436	..
Diphtheria.....	28	..	45	2	59	1	35	1	48	3	52	2	37	1	36	1	52	2	69	2	52	4	41	1	554	20	515	26
Diphtheria Carriers.....	7	..	11	..	6	..	2	..	20	..	12	..	15	..	7	..	5	..	4	..	13	..	5	..	107	..	101	..
Erysipelas.....	10	..	11	6	16	5	12	..	5	..	3	..	6	1	2	..	3	..	5	..	4	..	13	2	90	14	57	5
Tuberculosis, Pulmonary.....	33	8	15	5	27	12	25	6	16	7	20	4	22	12	15	5	17	7	12	4	18	9	12	9	232	88	182	80
Poliomyelitis, Anterior.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1
Meningitis, Cerebro Spinal.....	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1
Influenza.....	4	4	3	3	7	8	5	5	3	2	1	2	2	1	1	2	1	..	2	2	2	2	..	..	31	31	33	31
Encephalitis, Lethargic.....	1	1	1	1	1	1	1	1	..	..	..	..	..	..	1	1	..	..	1	1	..	1	1	..	7	7	7	5
Puerperal, Septecemia.....	1	1	2	2	1	1	..	..	..	..	..	..	..	..	..	..	1	1	1	1	1	1	..	..	7	7	8	8
Totals.....	1419	19	1401	22	1258	34	649	21	541	17	369	11	196	15	157	12	216	12	337	10	438	17	375	14	7356	204	5830	194



Communicable Disease Rates

	1926				1925				1924				1923			
	Cases	Deaths	Rate per 100,000	Rate per 100	Cases	Deaths	Rate per 100,000	Rate per 100	Cases	Deaths	Rate per 100,000	Rate per 100	Cases	Deaths	Rate per 100,000	Rate per 100
Diphtheria .....	554	20	10.1	3.6	515	26	13.3	5.04	885	22	11.2	2.4	1,285	34	17.	2.6
Scarlet Fever .....	676	8	4.	1.1	645	8	4.09	1.2	583	11	5.6	1.8	676	12	6.	1.7
Measles .....	2,844	11	5.5	.3	2,411	9	4.6	.37	913	4	2.	.4	4,693	8	4.	.17
Whooping Cough .....	422	6	3.0	1.4	689	14	7.17	2.03	430	7	3.5	1.6	415	16	8.	3.8
Typhoid Fever .....	66	8	4.0	12.1	42	6	3.07	14.3	36	6	3.	16.6	26	5	2.5	19.3
Typhoid Fever, Corrected .....	...	2	1.	...	...	2	1.	...	...	1	1.02	...	...	1	...	...
Tuberculosis of Lungs .....	232	88	44.6	37.5	183	81	41.5	44.2	183	87	44.6	47.5	204	96	48.2	47.
Tuberculosis, All Forms .....	...	...	...	...	...	104	53.2	...	...	120	61.5	...	...	128	63.7	...
Influenza .....	31	31	...	...	33	31	15.8	...	26	25	12.8	...	38	38	...	...
Erysipelas .....	90	14	7.1	15.5	57	5	...	...	68	7	...	...	49	6	...	...
Smallpox .....	43	2	1.	4.6	40	...	...	...	126	...	...	...	121	...	...	...
Puerperal Fever .....	7	7	...	...	8	8	...	...	10	8	...	...	3	3	...	...
Cerebro Spinal Meningitis .....	1	1	...	...	1	1	...	...	8	7	...	...	5	5	...	...
Anterior Poliomyelitis .....	...	...	...	...	1	1	...	...	13	3	...	...	1	...	...	...
Lethargic Encephalitis .....	7	7	...	...	7	5	...	...	11	10	5.1	90.9	128	36	20.4	28.3
Diphtheria Carriers .....	107	...	...	...	101	...	...	...	429	...	...	...	705	...	...	...
Mumps .....	1,506	...	...	...	436	...	...	...	10	...	...	...	55	...	...	...
Chickenpox .....	770	1	...	...	662	...	...	...	1,120	...	...	...	979	...	...	...

## Deaths, 1926

Diseases	Totals	Outside	Institutional	Ward 1.	Ward 2.	Ward 3.
Typhoid Fever .....	8	6	..	..	2	..
Smallpox .....	2	..	..	..	..	2
Chickenpox .....	1	..	..	1	..	..
Measles .....	11	3	1	2	3	2
Scarlet Fever .....	8	5	..	1	..	2
Whooping Cough .....	6	..	..	3	3	..
Diphtheria .....	20	6	1	3	5	5
Erysipelas .....	14	3	..	3	5	3
Tuberculosis, Pulmonary ...	88	17	..	10	31	30
Meningitis, Cerebro Spinal .	1	1	..	..	..	..
Influenza .....	31	6	1	7	7	10
Puerperal Fever .....	7	2	..	..	3	2
Encephalitis, Lethargic ....	7	2	..	2	2	1
	<u>204</u>	<u>51</u>	<u>3</u>	<u>37</u>	<u>61</u>	<u>57</u>

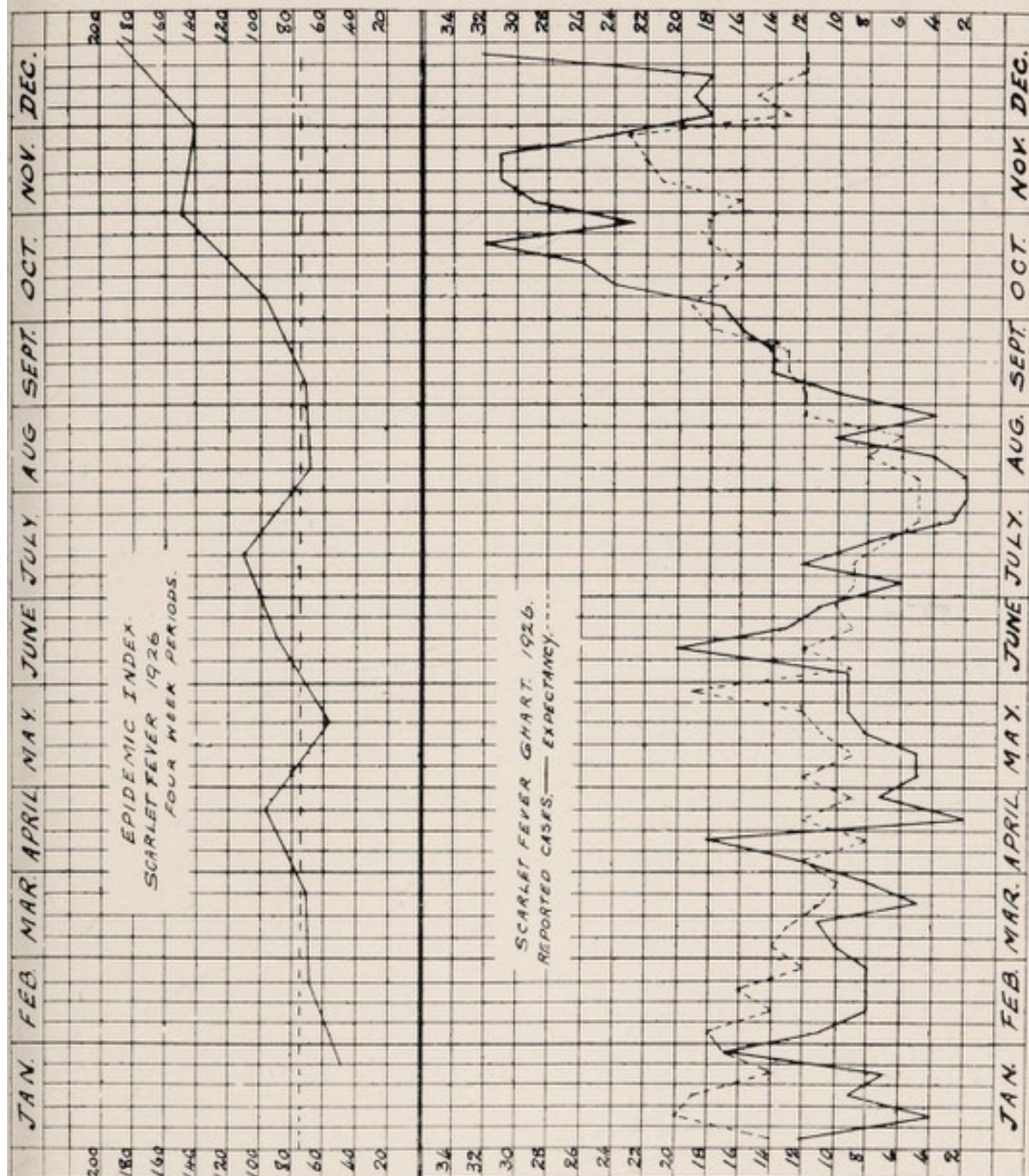


## Scarlet Fever, 1926

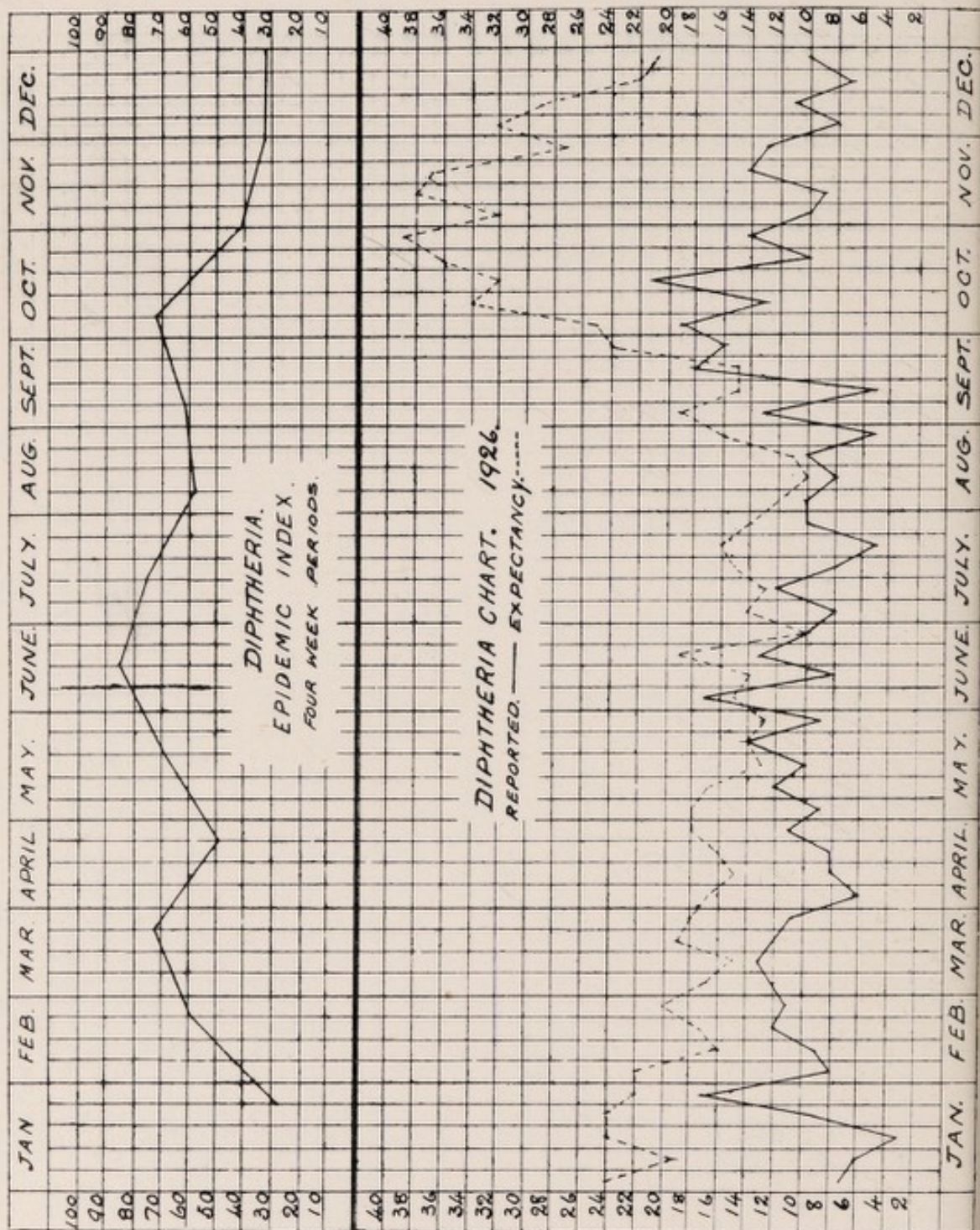
	January	February	March	April	May	June	July	August	September	October	November	December	1926 Totals	1925 Totals
Scarlet Fever Cases	33	45	38	41	30	56	31	22	55	104	129	92	676	645
Secondary Cases	4	6	7	6	2	9	6	4	11	19	28	13	115	83
Return Cases	1	1	1	7	1	1	2	4	4	3	7	3	6	4
Missed Cases	1	1	1	6	1	3	1	1	1	3	5	4	35	53
Institutional Cases	3	4	4	6	5	7	6	2	1	1	6	12	25	47
Outside Cases	11	11	14	12	16	25	12	10	30	66	69	33	64	40
School Children	14	15	3	5	2	7	3	4	7	18	21	11	86	55
Sec'y to School Children	7	5	6	4	5	12	8	5	8	16	17	21	114	127
Under School Age	1	1	4	8	2	2	3	1	4	1	7	1	24	27
Sec'y to Under School Age	6	7	6	1	1	3	1	1	1	4	6	13	57	85
Adults	3	2	3	6	1	5	4	1	2	7	5	1	5	5
Secondary to Adults	4	2	3	6	1	5	4	1	2	7	5	4	43	5
Suspects	4	2	3	6	1	5	4	1	2	7	5	4	43	5

## Diphtheria, 1926

	January	February	March	April	May	June	July	August	September	October	November	December	1926 Totals	1925 Totals
Diphtheria Cases	28	45	59	35	48	52	37	36	52	69	52	41	554	515
Diphtheria Carriers	7	8	6	2	20	12	15	7	5	4	13	5	96	100
Secondary Cases	1	1	7	3	4	5	1	2	2	7	5	5	48	53
Return Cases	1	1	1	1	1	1	1	1	1	1	1	1	4	2
Unrecognized Cases	1	4	3	3	1	2	1	1	2	1	3	2	22	10
Outside Cases	1	4	7	3	4	6	9	6	16	12	14	4	86	76
Institutional Cases	5	8	11	1	17	10	4	7	7	2	2	6	80	37
Institutional Carriers	1	4	1	2	14	2	1	1	1	1	2	3	27	16
Suspects	1	1	1	2	2	3	5	1	3	5	1	1	24	16









## Inspector's Report, 1926

	January	February	March	April	May	June	July	August	September	October	November	December	Totals 1926	Totals 1925
Number of Visits.....	1,294	1,222	1,174	840	705	1,044	469	427	512	978	655	566	9,886	8,700
Houses Quarantined.....	1,036	952	882	457	348	287	151	115	172	286	360	273	5,319	3,975
Quarantines Raised.....	75	127	118	143	103	43	31	35	31	29	62	64	861	1,417
Quarantines Inspected.....	69	49	53	111	79	96	82	80	105	66	53	58	901	1,726
Other Calls.....	114	94	121	129	175	618	205	197	204	597	180	171	2,805	1,582
New Cases Investigated.....	1,089	1,049	994	520	395	297	161	122	188	314	398	306	5,833	4,643
Rooms Fumigated.....	12	7	6	8	2	10	3	5	..	2	13	..	68	53
Houses Fumigated.....	..	..	..	..	..	..	..	1	..	..	..	..	1	7
Special Reports.....	1	3	4	2	2	1	1	4	2	3	4	5	32	35
Sanitary Defects Reported.....	8	13	8	13	4	9	3	2	3	2	2	7	74	26
Linen Disinfected.....	90	75	101	69	64	83	82	60	86	154	178	123	1,165	1,052
Rooms Sprayed.....	1	3	10	12	25	30	9	17	28	20	8	18	181	58
Houses Sprayed.....	..	..	..	2	2	2	2	1	2	1	1	3	16	4

## Children's Hospital Tuberculosis Clinic, 1926

	January	February	March	April	May	June	July	August	September	October	November	December	Totals 1926	Totals 1925
Cases .....	35	105	73	90	118	62	64	48	44	39	29	26	733	269
Old Cases.....	23	79	45	49	86	43	40	31	28	28	17	15	484	132
New Cases.....	12	26	28	41	32	19	24	17	16	11	12	11	249	137
Examinations .....	30	47	38	36	68	30	43	34	31	29	15	14	415	196
X-Ray Examinations.....	13	20	23	41	38	24	16	20	11	20	15	12	253	109



Winnipeg General Hospital Tuberculosis Clinic, 1926

	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.		Totals 1926		Totals 1925	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
Cases .....	88	8	93	31	124	36	63	21	48	29	45	28	98	17	56	14	69	10	37	22	31	25	36	24	788	265	625	169
Old Cases .....	58	5	65	14	87	18	44	11	32	12	12	15	63	12	41	9	49	5	30	10	26	16	28	15	535	142	448	98
New Cases .....	30	3	28	17	37	18	19	10	16	17	33	13	35	5	15	5	20	5	7	12	5	9	8	9	253	123	173	71
Men .....	38	5	31	16	29	18	28	6	15	7	13	10	29	5	18	7	29	5	9	7	9	7	20	9	268	102	264	70
Women .....	32	3	44	13	58	18	25	14	28	20	32	18	46	12	34	7	40	5	19	12	18	17	16	15	392	154	284	88
Children .....	18	..	18	2	37	..	10	1	5	2	..	..	23	..	4	..	..	..	9	3	4	1	..	..	128	9	73	11
Examinations .....	61	6	37	20	40	23	32	20	26	23	16	16	43	12	24	11	23	4	19	17	13	21	14	12	348	185	317	130
X-Ray Examinations ..	39	2	29	12	46	15	14	6	6	10	10	10	33	5	14	6	26	4	10	8	4	5	7	12	238	95	158	54





## Tuberculosis, 1926

Rooms Occupied by One Family	PATIENTS				CONTACTS			
	With Room to Self	With Bed But Not Room to Self	With Neither Bed Nor Room to Self	Total Patients	Total Contacts	Sleeping in Same Bed as Patient	Sleeping in Separate Bed but Same Room	Totals
1 Room.....	12	2	1	15	5	1	4	5
2 Rooms.....	4	1	10	15	21	12	4	16
3 Rooms.....	4	3	16	23	82	23	12	35
4 Rooms and Over.....	85	16	41	142	726	44	20	64
Totals .....	105	22	68	195	834	80	40	120

## Infectious Diseases, 1926

DISEASES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Wards .....	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
Typhoid Fever.....	1 ..	1 ..	2 ..	..	1 ..	..	3 2 1	6 ..	7 5 1	2 6 ..	1 2 1	..
Smallpox .....	.. 3	..	..	..	..	1 5	..	3 ..	..	..	1 1	..
Chickenpox .....	16 24	8 11	12 9	10 12	7 6 39	26 29 31	6 13 13	3 7 5	1 19 6	3 20 27	20 46 27	22 41 18
Measles .....	449 376	165 553	282 168	70 65	11 35 23	3 9 3	..	..	1 1 1	2 1 4	1 11 6	5 7 9
Scarlet Fever.....	20 5	6 18	13 13	20 13	11 6 10	2 25 29	5 9 17	7 5 10	18 14 21	45 22 32	49 55 14	28 28 23
Whooping Cough..	10 15	14 11	13 9	25 2	12 17 2	1 8 15	5 2 2	10 6 6	7 5 11	2 15 31	9 4 6	4 7 15
Diphtheria .....	8 8	11 14	13 17	15 11	9 12 15	6 16 21	3 8 17	9 7 15	10 10 15	3 19 35	4 18 19	3 18 10
Tuberculosis Pul.	6 9	15 1	10 16	3 9	13 1	5 5 9	7 6 8	3 4 6	7 2 4	.. 8 3	7 4 5	1 4 3
Mumps .....	50 84	35 107	84 57	108 132	147 56	28 21 43	3 3 9	2 2	1 ..	7 14 7	5 27 8	13 13 6

## Tuberculosis, 1926

	January	February	March	April	May	June	July	August	September	October	November	December	Totals 1926
K. E. M. Hospital.....	8	3	7	2	10	9	3	6	3	4	5	3	62
Ninette Sanatorium.....	10	2	..	5	1	0	6	..	4	..	3	..	31
Clinics .....	6	2	14	12	2	6	3	2	5	2	3	2	59
Death Sheet.....	1	2	3	2	2	..	5	1	..	3	..	1	20
City Laboratory.....	3	1	1	2	1	1	2	1	1	2	1	2	18
St. Roche's.....	5	5	1	1	..	2	..	2	1	..	2	..	19
Doctors and Others.....	..	..	1	1	..	..	2	2	2	..	2	..	9
Outside Cases.....	..	..	..	..	..	2	1	1	2	1	3	4	14
Tuberculosis Cases.....	33	15	27	25	16	20	22	15	17	12	18	12	232
Tuberculosis Deaths.....	8	5	12	6	7	4	12	5	7	4	9	9	88
Milk Supplied: No. of Quarts.....	976	840	1,083	1,017	1,015	1,009	1,027	708	682	713	749	742	10,561
Patients .....	32	32	38	34	32	34	34	24	22	22	25	23	..



Schick Test and Toxoid Administration. Schools, 1926

School	SCHICKED						Not Read		1926	1926		
	Total		Negative		Positive		1926	Pos. Not Treated		One Dose	Two Doses	
	1926	1925	1926	1925	1926	1925			1926			1925
Faraday .....	112	192	23	91	79	111	10	..	1	5	73	
William Whyte .....	139	263	66	114	73	149	..	2	..	12	61	
Norquay .....	228	446	86	201	128	245	14	3	1	14	113	
David Livingstone.....	188	242	65	137	122	105	1	1	..	8	114	
Champlain .....	50	141	13	64	35	77	2	2	..	6	29	
Aberdeen .....	177	271	75	122	102	149	..	4	2	17	83	
Flo. Nightingale.....	10	73	5	21	5	52	..	..	2	1	4	
Lord Nelson.....	84	158	40	93	44	65	..	..	..	3	41	
Margaret Scott .....	94	258	27	104	63	143	4	11	..	6	57	
Luxton .....	84	159	21	81	53	78	10	24	1	7	45	
King Edward.....	162	505	77	217	85	288	..	11	..	2	83	
Ralph Brown.....	96	213	20	52	71	161	5	..	..	3	68	
Machray .....	140	216	62	76	75	140	3	8	..	7	68	
Peretz .....	62	..	21	..	41	..	..	..	..	6	35	
Stratheona .....	161	534	60	228	101	306	..	2	..	9	92	
Argyle .....	61	81	18	32	42	48	1	1	..	6	36	
Somerset .....	77	122	31	42	46	180	..	1	..	3	43	
Victoria .....	13	73	4	30	9	42	..	1	..	1	8	
Albert .....	87	128	28	43	54	85	5	..	..	2	52	
Dufferin .....	119	236	53	90	64	146	2	..	..	4	60	
Ellen St. Kind.....	32	..	15	..	17	..	..	..	..	..	17	
Montcalm .....	46	98	8	25	38	72	..	1	..	1	37	
Pinkham .....	83	161	17	77	66	84	..	1	1	4	61	
Cecil Rhodes .....	105	198	18	49	80	147	7	2	..	3	77	
Mulvey .....	90	113	14	37	71	76	5	..	3	..	68	

Wellington .....	85	135	24	56	58	79	3	..	..	..	3	53
John M. King .....	139	172	54	74	75	98	10	..	..	..	8	67
Isbister .....	123	111	42	36	63	75	18	1	..	..	3	60
General Wolfe .....	85	161	20	62	65	82	..	..	..	..	8	57
Carlton .....	85	155	23	39	60	112	2	4	..	..	8	52
Principal Sparling .....	128	159	50	49	76	104	2	6	..	..	9	67
Greenway .....	103	149	23	33	80	116	..	2	..	..	8	73
Isaac Brock .....	97	152	19	..	69	..	9	..	2	..	14	53
Laura Secord .....	93	129	22	..	71	..	..	..	..	..	2	69
Lord Roberts .....	119	208	34	56	76	152	9	..	..	..	7	69
Riverview .....	59	124	16	22	34	97	9	5	..	..	6	28
Gladstone .....	54	75	12	16	40	59	2	..	..	..	5	35
Port Rouge .....	24	46	8	4	13	42	3	..	..	..	..	13
Wolseley .....	61	82	18	30	43	52	..	..	..	..	1	42
Lord Selkirk .....	114	202	33	61	76	141	5	..	..	..	8	68
George V. ....	30	87	9	37	20	50	1	..	..	..	2	18
Sir S. Steele .....	36	73	6	28	30	45	..	..	..	..	1	29
Elmwood .....	30	93	5	40	24	53	1	..	..	..	3	21
Anna Gibson .....	38	35	10	8	26	27	2	..	..	..	2	24
Earl Grey .....	72	131	10	50	61	81	1	..	..	..	11	50
La Verendrye .....	82	111	15	32	65	79	2	..	..	..	6	59
Grosvenor .....	58	71	10	17	47	54	1	..	..	..	5	42
St. Ignatius .....	30	51	5	7	22	44	3	..	..	..	4	18
Sir J. Franklin .....	31	32	11	13	15	19	5	..	..	..	..	15
River Heights .....	43	63	6	20	34	43	3	..	1	..	4	29
St. Edward's .....	83	..	51	..	32	..	..	..	..	..	5	27
St. Mary's .....	60	..	24	..	33	..	3	..	..	..	9	24
	4462	7688	1427	2816	2872	4653	163	93	14	275	2587	



## Report of Manager of 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 the year 1926.

In spite of the slightly higher population figures, births continued to show a decrease from the 1920 maximum, the rate for that year being 32.06 per 1,000 population against 22.54 for 1926. The latter rate is the lowest yet recorded for the city, but is still higher than the rates of older communities in the East. Decreasing birth rates are the rule in almost every city at the present time, and the Winnipeg decrease is in no way remarkable.

In 1926 there were registered 4,444 live births and 314 deaths of infants under one year of age, as compared with 4,632 live births and 315 infant deaths during 1925. These figures give infantile mortality rates of 70.6 per 1,000 live births for 1926, or 2.6 deaths higher than the 1925 rate of 68.0.

### Cause of Increase

An examination of the records and charts shows that the increase is due to a higher mortality from diseases of early infancy, the rate for this cause being 37 deaths per 1,000 live births against 29 for 1925. This rate of 37 is the highest since 1913.

A feature of the situation which may cause some surprise is that the section showing one of the worst rates in this connection is the area between the Assiniboine River and Ellice Avenue and from Young Street west to the city limits, a residential district in which within the past few years there has been considerable building of homes. Here the mortality rate from diseases of early infancy was 58 per 1,000 live births, as compared with 37 for the entire city and a low of 18 for one of the sections favored by mothers of Central European birth. Infants born of Canadian and British mothers have invariably shown a lower viability than those born of parents of foreign origin, the latter infants suffering more from diarrhoeal and respiratory diseases.

### Puerperal Deaths

Twenty-five mothers died from puerperal causes, giving a rate of 5.6 per 1,000 live births, or .2 higher than last year and .2 above the average for the past seven years.

### Fewer Stillbirths

Stillbirths in 1926 numbered 156, against 188 for 1925, giving a rate of 35.1 per 1,000 live births against 40.6 for the latter year. The current rate is the lowest stillbirth rate recorded since 1912.



### Pre-Natal Care Necessary

The continued high early infancy and maternal death rates again emphasize the necessity for the pre-natal instruction and care, particularly for mothers of first children, who are the chief sufferers. Unfortunately, however, these are the cases which do not come early enough under the physician's care and the Child Welfare Nurses do not learn of the case until after the child's birth is registered. Expectant mothers who consult the nurses are those who know the nurse personally from long association and the matter is a confidence between the nurse and mother. This phase of the work is shown when a new nurse takes over a district—her pre-natal consultations are practically nil until the mothers receive her as a confidante. The length of time necessary to accomplish this varies in different sections of the city, according to the nationality and social standing of the mothers and the personality of the nurse.

### Midwife Attendants

The number of live births attended by midwives continued to show a decline, 164 cases being recorded in 1926, against 250 for 1925. These figures give percentages of the live births of 3.7% and 5.5%, respectively. In 1918, 19.8% of the total births were attended by midwives.

### Increase in Hospitalization of Maternity Cases

Coincident with the large decrease in the number of births attended by midwives is the increase of births in hospitals. This has been especially marked during the past few years, as the following figures show:

1912	.....	31.5% of births in hospitals and maternity homes
1917	.....	36.3% of births in hospitals and maternity homes
1922	.....	53.3% of births in hospitals and maternity homes
1926	.....	70.9% of births in hospitals and maternity homes

### Causes of Infant Deaths

The leading cause of death, as has been the case since 1917, was diseases of early infancy, which accounted for 165 deaths of the total of 314 which occurred in 1926. Diseases of the respiratory system caused 51 deaths; of the digestive system, 33 deaths, and all other diseases, 65 deaths.

The above figures give rates per 1,000 live births as follows; 1925 rates being given for comparison:

	1926	1925
Diseases of early infancy	37.1	32.2
Diseases of respiratory system	11.5	11.6
Diseases of digestive system	7.4	10.6
All other diseases	14.6	13.6
	<hr/> 70.6	<hr/> 68.0



### Infant Mortality According to Sections of City

			Rates per 1,000 Live Births		
			1926	1925	
			Under	Under	Under
			1 Year	1 Month	1 Month
I	West	Fort Rouge, west of Pembina . . .	60	37	37
I	East	Fort Rouge, east of Pembina . . . .	70	35	38
II		Red River to Spence Street . . . . .	78	48	39
III	South	Assiniboine River to Ellice Ave. . .	102	66	31
III	North	Ellice Ave. to Notre Dame Ave. . . .	52	36	26
IV	West	Notre Dame Ave to C.P.R. Tracks . .	57	23	16
IV	Centre	Sherbrook St. to Main St. . . . .	93	49	47
IV	East	Point Douglas, south of C.P.R. . .	73	54	76
V	East	Point Douglas, north of C.P.R. . .	74	25	53
V	South	C.P.R. Tracks to Selkirk Ave. . .	82	37	39
V	North	Pritchard Ave. to Burrows Ave. . .	63	34	16
VI	West	Burrows to Limits, west of No.			
		500 . . . . .	79	46	21
VI	East	Burrows to Limits, east of No.			
		499 . . . . .	67	42	59
VII		Elmwood . . . . .	47	31	64
			—	—	—
	City		73	42	38
	Non-residents		63	36	44
			—	—	—
	Gross Rates		71	41	39

The section showing the highest rate, 102 deaths per 1,000 live births, is III South, (Assiniboine River north to Ellice Avenue; Young Street west to city limits), a residential district in which it would be supposed the infant mortality rate was lower than the average. In 1926, particularly in the section south of Portage Avenue, there was considerable sickness during the year, and each group of diseases showed a higher mortality than the average for the city. As previously mentioned, the chief reason in this section for the 31 point increase over the city rate was the large number of deaths from diseases of early infancy.

In 1925 and 1926, the number of births in this section were practically the same, but the infant deaths in 1926 were twice as high as in 1925. Further analyses of these births and deaths reveal the fact that the high death rates are amongst infants born of Canadian and British mothers, the rates in this section being the highest in the city of their respective nationalities. By way of contrast, the infants born of mothers from Central and Southern Europe have their lowest death rate in this section, but their number is too small to give a useful rate. The figures are:

**District III**

	Live Births	Infant Deaths	Rates	City Rates
Canadian .....	399	37	93	78
British .....	334	27	81	60
Central and Southern Europe .....	30	1	(35)	75

It is also noteworthy that the section showing the second highest Canadian rate is Fort Rouge, with a rate of 85. The lowest Canadian rate, 16, was in Elmwood.

The highest mortality rate amongst infants born of English mothers, 87, occurred in the residential area lying between the Assiniboine River and Notre Dame Avenue, west of Spence Street, and the lowest, 43, in Fort Rouge.

The following table shows the changes which have taken place in the various infant death rates according to nationality of the mother:

Infant Deaths per 1,000 Live Births						
	1926	1925	1924	1922	1920	1913
Canadian . . . . .	78	58	62	103	89	118
British . . . . .	60	72	63	70	92	125
Scandinavian . . . . .	59	70	66	135	98	116
Southern and Cent- ral European . . . . .	75	65	78	94	142	372

**Babie's Clinic**

There were 425 new cases recorded against 457 for 1925. By sections, the cases are classified as follows:

District	I.	II.	III.	IV.	V.	VI.	VII.	City	Non-Res.	Total	
Section	W. E.		S. N.	W. C. E.	E. S. N.	W. E.					
1926 . . . . .	14 14	25	27 36	29 30	7	31 72 37	32 42	24	420	5	425
1925 . . . . .	17 14	26	33 36	29 50	14	31 54 38	36 70	35	483	4	487

Attendance at the Clinic totalled 4,664, against 4,853 for 1925. By months, the attendance was:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1926 ..	310	353	358	434	434	388	474	471	426	383	353	280	4,664
1925 ..	385	358	390	412	390	362	483	468	440	414	376	375	4,853

**Milk Dispensary**

The total feedings prepared numbered 27,885, against 24,446, the increase reflecting the greater amount of sickness which was prevalent during 1926. The number of free feedings were largely increased, being 12,108 against 9,679 for 1925. The Children's Hospital feedings numbered 6,569, against 7,683 for 1925. In 1920, the first year the department took over the preparation of these feedings, they numbered 10,389, so that the present figures are a pleasing indication of the reduced amount of serious sickness amongst babies.



### Child Welfare Nurses

The thirteen visiting nurses made 43,938 visits to babies in their homes, calling on 2,733 new babies, or 83 per cent. of the live births to resident mothers. Through the courtesy of the St. Boniface Registrar, we secured birth records of Winnipeg babies born in that city, and these were also visited by our nurses. These figures are not included in our rates as there is no provincial system in force for distributing the vital statistics records according to the municipality of origin of the case.

There was considerable sickness in some districts during the year, and the number of visits made show a decided increase over those of 1925 because of this condition. Sick calls, which are answered whenever received, were unusually heavy in the first three months of the year, when the weather conditions were particularly trying through the cold and deep snow. The amount of sickness during this season may be gauged by the infant mortality rate which stood at 90 at the end of April (71 for the year), against 72 at the end of April, 1925, (68 for that year).

Further particulars of the nursing activities are given on page 105.

I again desire to place on record my appreciation of the work of the Bureau's staff; each member has rendered devoted service, particularly those nurses called upon to give, under a physician's orders, daily treatments over long periods, Sundays and holidays included, to infants with but a slender hold on life.

Respectfully submitted,

(Signed) A. G. LAWRENCE,  
Manager, Bureau of Child Hygiene

## Child Welfare Nurses, 1926

1926	No. of days on duty	Total live births visited	Deaths of infants visited more than once	Visits to babies	Visits to Infants' Homes	Calls to sick Babies	Requested calls	Cases referred to physicians	Cases referred to Milk Depot	Cases referred to Hospitals	Cases referred to Social Welfare	Cases referred to M. S. N. M.	Cases sent to Fresh Air Camp	Pre-natal advice given	Private demonstrations	Treatments to babies	Lectures given
January	292½	236	6	3,435	18	325	169	41	25	16	..	3	..	48	9	192	7
February	282	237	7	3,707	14	275	131	38	20	23	3	2	..	43	7	177	5
March	316	256	7	3,988	6	249	124	37	18	21	1	2	..	39	15	281	7
April	290	266	6	4,128	20	211	126	31	29	31	1	2	..	40	5	234	6
May	249	204	7	3,448	11	169	121	59	27	19	1	3	2	41	11	227	5
June	271½	192	1	3,863	13	113	78	40	34	20	1	4	11	45	14	132	4
July	205	250	..	2,824	11	100	88	24	24	12	..	..	8	54	8	84	..
August	238½	228	4	2,901	11	120	103	33	24	13	1	3	..	28	2	67	..
September	277½	214	2	3,883	5	120	113	38	22	19	..	3	..	50	6	73	4
October	294½	206	3	3,999	6	115	113	30	16	17	..	1	..	43	6	62	6
November	290	210	3	3,616	8	122	131	51	17	21	..	5	..	43	8	122	6
December	298	234	5	4,146	12	193	153	39	10	15	..	1	..	44	7	176	6
Totals	3,304½	2,733	* 51	43,938	135	2,112	1,450	461	266	227	8	29	21	518	98	1,827	56

\*In addition to this total, 235 live births to Winnipeg mothers occurred in St. Boniface Hospital, and were visited by our nurses.



## Babies' Milk Depot Report for Year 1926

1926	No. of Cases and Feedings				Feedings				Supplies Used																
	Total attendance at Clinic	Cases attending for first time	Cases on Dispensary List at 1st of month (including Children's Hospital)	Children's Hospital Feedings	Milk Depot			Cash Collected (in heavy type) (in light type)	Lactic acid	Protein	Sherry Whey	Acidified	Condensed milk	Whole milk (qts.)	Skim milk (qts.)	Cream (qts.)	Powdered sugar (lbs.)	Sugar of milk (Lactose) (lbs.)	Barley flour (lbs.)	Scotch Oatmeal (lbs.)	Dextri Maltose (lbs.)	Protein Powder (lbs.)	Corn Syrup (lbs.)	Evaporated Milk	
					Free feedings	Total feedings (excluding Children's Hospital)	Grand total feedings (including Children's Hospital)																		
January.....	310	30	68	638	629	918	1,547	2,185	\$ 129 23	213	8	228	61	1,151	522	30 1/4	8	16	30	11 1/2	25	19	31	.....	
February.....	353	29	80	610	690	1,036	1,726	2,336	104 90	125	30	433	50	1,330	416	27	7	14	21	11 1/2	35	7	28	.....	
March.....	358	34	84	497	783	1,157	1,940	2,437	75 88	98	44	524	17	1,436	494	35	7	8	23 1/2	15 1/2	50	11	63	.....	
April.....	434	49	82	555	790	1,148	1,938	2,493	92 74	40	81	412	17	1,341	432	34	8	6	22 1/2	15	30	16	73	.....	
May.....	434	38	87	518	819	1,361	2,180	2,698	82 18	77	46	348	22	1,258	542	42 1/2	10	4	23 1/2	15 1/2	50	10	50	.....	
June.....	388	40	69	411	772	964	1,736	2,147	85 20	51	100	300	.....	1,058	448	35	10	7	22 1/2	15	45	21	40	.....	
July.....	474	48	70	335	786	1,125	1,911	2,246	71 63	85	103	315	6	1,096	492	34	6	8	23 1/4	15 1/2	40	23	48 1/2	.....	
August.....	471	45	69	584	826	1,140	1,966	2,550	141 38	256	215	3	365	1,150	654	38	11	7	24	15 1/2	35	53	54 1/2	.....	
September.....	426	39	90	605	859	1,150	2,009	2,614	160 60	368	278	256	10	1,068	812	39 3/4	10	6	31 1/2	15	30	65	59	.....	
October.....	383	25	80	603	815	801	1,616	2,219	152 48	224	225	203	35	992	524	33 1/4	6	5	27 1/4	11 1/4	40	47	51	.....	
November.....	353	31	66	550	721	635	1,356	1,906	113 80	119	115	274	15	910	502	23	8	8	22 1/2	7 1/2	30	39	59	22	
December.....	280	17	58	663	718	673	1,391	2,054	140 03	149	114	301	.....	1,165	464	25 3/4	.....	8	25	7 3/4	25	.....	62	.....	
Totals.....	4064	425	903	6569	9208	12,108	21,316	27,885	\$2,778 45	1805	1379	3	3749	233	13,955	6302	397 1/4	91	97	296 1/2	159 1/2	433	311	619	22

## Report on Vital Statistics

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 1926.

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

Respectfully submitted,

A. G. LAWRENCE,  
Secretary.

### Summary of Statistics

	1926	1925
Area of City Land, 14,865 acres; water, 622 acres; total, 15,287 acres (23.9 square miles).		
Population (City Assessor's figures).....	197,125	195,148
Persons per acre of land.....	13.26	13.13
Natural increase, excess of births over deaths.....	2,746	3,013
Rate per 1,000 population.....	13.93	15.44
Stillbirths .....	156	188
Rates per 1,000 live births.....	35.10	40.59
Births, excluding stillbirths.....	4,444	4,632
Rate per 1,000 population.....	22.54	23.73
Deaths, excluding stillbirths.....	1,698	1,619
Rate per 1,000 population.....	8.61	8.30
Deaths of infants under 1 year.....	314	315
Infantile mortality rate per 1,000 living births.	70.65	68.00
Marriages .....	2,368	2,237
Rate per 1,000 population.....	12.01	11.46



Gross Typhoid Fever Death Rates per 100,000 Population

	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
	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	4.0
	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	.5	1.0	1.0	1.0	1.0	1.0	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 (165-203)
1926	197,125	44.6	14.2	100.4	7.6	39.1	105.5	12.2	4.0	70.5	15.7	12.2	32.5	12.7	62.9
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

1926		STILLBIRTHS				LIVE BIRTHS				DEATHS			
Year	Population	Total Stillbirths		Rate per 1M Live Births		Total Live Births		Rate per 1M Population		Total Deaths		Rate per 1M Population	
		Male	Female	1926 Totals	1925 Totals	Male	Female	1926 Totals	1925 Totals	Male	Female	1926 Totals	1925 Totals
January.....	197,125	6	5	11	17	190	188	378	396	83	65	148	143
February.....	195,148	7	6	13	15	193	163	356	360	66	72	138	135
March.....	194,850	16	5	21	10	218	211	429	415	94	84	178	169
April.....	199,300	3	6	9	28	193	182	375	419	78	82	160	149
May.....	199,129	6	10	16	17	179	180	359	433	91	64	155	163
June.....	196,947	9	9	18	21	211	206	417	415	67	51	118	147
July.....	192,571	4	3	7	13	204	158	362	408	63	65	128	110
August.....	183,378	11	4	15	16	202	174	376	362	62	65	127	130
September.....	183,595	5	3	8	16	185	162	347	375	68	55	123	111
October.....	182,848	4	7	11	20	179	162	341	372	71	64	135	135
November.....	200,090	9	7	16	9	186	172	358	334	75	67	142	100
December.....	201,981	8	3	11	6	185	161	346	343	65	81	146	127
Totals.....	184,730	88	68	156	188	2,325	2,119	4,444	4,632	883	815	1,698	1,619

Year	Population	Total Stillbirths		Rate per 1M Live Births		Total Live Births		Rate per 1M Population		Total Deaths		Rate per 1M Population	
		Male	Female	1926 Totals	1925 Totals	Male	Female	1926 Totals	1925 Totals	Male	Female	1926 Totals	1925 Totals
1926	197,125	156	188	35.1	35.1	4,444	4,444	22.54	22.54	1,698	1,698	8.61	8.61
1925	195,148	188	223	40.6	40.6	4,632	4,632	23.73	23.73	1,619	1,619	8.30	8.30
1924	194,850	223	211	46.8	46.8	4,762	4,762	24.44	24.44	1,544	1,544	7.78	7.78
1923	199,300	211	252	40.5	40.5	5,214	5,214	26.16	26.16	1,698	1,698	8.52	8.52
1922	199,129	252	238	44.8	44.8	5,629	5,629	28.27	28.27	1,801	1,801	9.04	9.04
1921	196,947	238	251	39.5	39.5	6,029	6,029	30.61	30.61	1,721	1,721	8.74	8.74
1920	192,571	251	206	40.6	40.6	6,174	6,174	32.06	32.06	2,270	2,270	11.79	11.79
1919	183,378	206	245	39.2	39.2	5,254	5,254	28.65	28.65	2,108	2,108	11.49	11.49
1918	183,595	245	192	43.6	43.6	5,621	5,621	30.61	30.61	2,706	2,706	14.74	14.74
1917	182,848	192	254	35.2	35.2	5,446	5,446	29.79	29.79	1,728	1,728	9.45	9.45
1916	200,090	254	225	42.5	42.5	5,980	5,980	29.88	29.88	2,072	2,072	10.35	10.35
1915	201,981	225	257	38.6	38.6	5,823	5,823	28.82	28.82	1,763	1,763	8.73	8.73
1914	203,255	257	240	44.4	44.4	5,789	5,789	28.48	28.48	1,955	1,955	9.62	9.62
1913	184,730	240	240	43.0	43.0	5,577	5,577	30.2	30.2	2,204	2,204	11.9	11.9



Deaths by Months, Sex and Age Period, 1926

	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.....	19	13	2	2	1	2	2	2	3	3	1	3	8	5	6	10	16	9	16	11	8	5	2	2	2	2	2	2	83	65
February.....	15	19	2	5	1	1	...	...	...	...	3	2	8	6	7	8	10	6	7	7	8	14	4	2	...	...	...	...	66	72
March.....	26	11	3	4	...	...	2	2	4	4	5	7	11	9	8	11	8	12	11	9	12	7	4	6	...	...	...	...	94	84
April.....	15	21	2	6	3	2	3	3	2	3	4	7	5	5	7	7	7	8	12	8	12	9	4	5	1	...	...	...	78	82
May.....	18	10	4	3	2	3	2	1	4	4	3	3	8	7	7	3	9	4	11	14	17	4	5	6	1	2	...	...	91	64
June.....	13	10	1	1	...	...	3	2	1	1	3	2	5	4	6	4	13	10	12	3	7	6	3	6	...	...	...	...	67	51
July.....	9	7	4	4	...	...	2	2	5	2	4	3	5	5	9	7	12	5	9	12	3	8	4	2	...	...	...	...	63	65
August.....	11	14	1	...	2	1	1	...	6	6	4	5	2	5	6	8	7	4	14	8	5	10	3	4	...	...	...	...	62	65
September.....	14	8	2	2	2	1	...	...	1	4	8	3	5	5	8	7	5	5	9	3	11	8	4	6	...	...	...	...	68	55
October.....	12	3	1	...	...	...	4	3	2	6	2	4	4	10	9	9	10	10	11	4	12	8	4	6	...	...	...	...	71	64
November.....	13	12	3	2	2	...	1	2	3	3	3	2	6	5	10	7	15	6	7	12	10	8	1	7	1	1	...	...	75	67
December.....	10	11	1	3	1	...	3	...	3	1	2	6	11	4	6	11	13	9	9	18	7	7	3	6	1	1	...	...	65	81
Totals.....	175	139	26	32	13	14	20	24	28	41	42	47	78	69	89	92	125	88	128	109	112	94	41	58	6	7	...	1	1883	815
Combined	314		58		27		44		69		89		147		181		213		237		206		99		13		1		1,698	
Totals.....1926	315		70		25		46		82		109		135		170		181		226		185		60		14		1		1,619	
Percentages of																														
Totals.....1926	18.49		3.42		1.59		2.59		4.06		5.24		8.66		10.66		12.54		13.96		12.13		5.83		.77		.06		100.0	
Totals.....1925	19.46		4.32		1.54		2.84		5.06		6.73		8.34		10.50		11.18		13.96		11.43		3.71		.87		.06		100.0	

## Social Status of Decedents, 1926

	Male	Female	Total	Per Cent. of Total
Single, under 16 years .....	251	228	479	28.2
Single, 16 years and over .....	135	69	204	12.0
Total: Single.....	386	297	683	40.2
Married .....	395	318	713	42.0
Widowed .....	94	199	293	17.3
Divorced .....	..	..	..	..
Unknown .....	9	..	9	.5
	884	814	1,698	100.0

## Ratio of Males to 100 Females

	1926	1925	1924	1923	1922	1921	1920	1919
Stillbirths .....	129	132	137	134	105	138	153	125
Live Births ...	110	108	100	106	103	107	106	106
Deaths .....	108	110	113	118	115	110	115	113
Twin Births ...	50	48	57	58	74	89	88	77
Triple Births ..	1	..	..	..	1	..	..	..

## Attendant at Birth

(Excluding Stillbirths—1923-26)

	1926	1925	1924	1922	1920
Physicians.....	4,276...96.2%	94.5%	94.0%	90.5%	89.0%
Midwives.....	164				
Unattended.....	4	3.8%	5.5%	9.5%	11.0%
Unknown .....	..				

## Illegitimacy (Including Stillbirths)

	1926	1925	1924	1923	1922	1921	1920	1919
Illegitimate births.....	313	279	284	280	299	317	262	270
Per cent. of total births.	6.8	5.8	5.7	5.4	5.3	5.0	4.1	4.9



### Nativity of Decedents, 1926

Winnipeg .....	417	Ukraine .....	1
Manitoba (rest of) .....	120	Belgium .....	3
Alberta .....	3	Denmark .....	4
New Brunswick .....	9	Finland .....	2
Nova Scotia .....	13	France .....	1
Ontario .....	261	Germany .....	18
Prince Edward Island .....	5	Greece .....	2
Quebec .....	38	Holland .....	1
Saskatchewan .....	12	Iceland .....	27
Canada .....	19	Italy .....	4
Newfoundland .....	2	Norway .....	3
England and Wales .....	250	Roumania .....	9
Channel Islands .....	3	Russia .....	73
Ireland .....	55	Spain .....	1
Scotland .....	129	Sweden .....	20
Australia .....	1	Switzerland .....	3
India .....	2	China .....	4
New Zealand .....	1	East Indies .....	1
Austria .....	45	United States .....	63
Bohemia .....	1	South America .....	1
Galicia .....	17	West Indies .....	1
Hungary .....	1	Ocean .....	1
Poland .....	41	Unknown .....	10
		Total .....	1,698

### Summary

	Deaths		Per Cent. of Total	
	1926	1925	1926	1925
Canada .....	899	907	53.0	56.0
British Isles .....	437	363	25.7	22.4
Europe (excluding British Isles) .....	277	274	16.3	16.9
United States .....	63	53	3.7	3.3
Asia .....	7	6	.4	.4
Other Countries .....	4	3	.2	.2
Ocean .....	1	..	.1	.
Unknown .....	10	13	.6	.8
Totals .....	1,698	1,619	100.0	100.0

## Stillbirths According to Nationality of Mothers

	Rates per 1,000 Live Births							
	1926	1925	1924	1923	1922	1921	1920	1919
Canadian .....	27	34	46	40	37	48	45	34
British .....	41	45	49	45	42	33	44	41
Southern and Central								
European .....	46	45	49	32	51	34	32	36

## Comparative Infant Mortality Table

	No. Births	No. Deaths	Rates per 1,000 Births
1926 .....	4,444	314	70.6
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	1926		Rates per 1,000 Live Births				
	Live Births	Deaths	1926	1925	1924	1923	1922
Canadian .....	1,750	137	78	59	62	74	103
English and Welsh .....	783	44	56	70	65	81	65
Irish .....	138	8	58	54	86	40	61
Scottish .....	432	29	67	82	48	77	85
American (U.S.A.) .....	209	12	57	40	41	70	78
Scandinavian .....	102	6	59	70	66	81	135
Southern and Central							
European .....	1,002	75	75	65	78	87	94
All Others .....	28	3	..	..	..	..	..



**Infant Mortality, Cause of Death****Number of Deaths**

	1926	1925	1912
Acute communicable diseases .....	16	12	28
Other general diseases .....	25	20	80
Of nervous system and of organs of special sense .....	15	14	78
Of respiratory system .....	51	54	147
Of digestive system .....	33	49	399
Malformations and diseases of early infancy .....	165	149	251
All other diseases .....	9	17	23
Totals .....	314	315	1 006

**Rate per 1,000 Births**

	1926	1925	1912
Acute communicable diseases .....	3.6	2.6	5.8
Other general diseases .....	5.6	4.3	16.4
Of nervous system and of organs of special sense ....	3.4	3.0	16.0
Of respiratory system .....	11.5	11.6	30.2
Of digestive system .....	7.4	10.6	81.9
Malformations and diseases of early infancy .....	37.1	32.2	51.6
All other diseases .....	2.0	3.7	4.7
	70.6	68.0	206.6

**Per Cent. of Total**

	1926	1925	1912
Acute communicable diseases .....	5.1	3.8	2.8
Other general diseases .....	8.0	6.3	7.9
Of nervous system and of organs of special sense ....	4.8	4.5	7.8
Of respiratory system .....	16.2	17.1	14.6
Of digestive system .....	10.5	15.6	39.6
Malformations and diseases of early infancy .....	52.5	47.3	25.0
All other diseases .....	2.9	5.4	2.3
Totals .....	100.0	100.0	100.0

**Classification of Ages of Decedents Under One Year of Age  
1926**

	No. of Deaths	Rate per 1,000 Births	Per Cent. of Total
Minutes to 1 week .....	140	31.5	44.6
Over 1 to 2 weeks .....	17	3.8	5.4
Over 2 to 3 weeks .....	8	1.8	2.5
Over 3 weeks to 1 month .....	16	3.6	5.1
<hr/>			
Minutes to 1 month .....	181	40.7	57.6
Over 1 to 2 months .....	23	5.2	7.3
Over 2 to 3 months .....	23	5.2	7.3
<hr/>			
Minutes to 3 months .....	227	51.1	72.2
Over 3 to 6 months .....	42	9.4	13.4
Over 6 to 9 months .....	27	6.1	8.7
Over 9 and under 12 months .....	18	4.0	5.7
<hr/>			
	314	70.6	100.0

For comparison with the above, the final figures for the years 1925 and 1912 are given below:

**1925**

	No. of Deaths	Rate per 1,000 Births	Per Cent. of Total
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/>			
	315	68.0	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/>			
	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 100 to 106.



1926 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 109
<b>I.—Epidemic, Endemic, and Infectious Diseases</b>																	
1	Typhoid and paratyphoid fever:																
	(a) Typhoid fever.....	4	4				2	1	1	4							8
6	Small-pox.....	2					1			1							2
7	Measles.....	4	7	4	3	1	3										11
8	Scarlet fever.....	3	5	1	3	1	1			2							8
9	Whooping-cough.....	3	3	3	3												6
10	Diphtheria.....	8	12	3	3	3	8	2		1							20
11	Influenza:																
	(a) With pulmonary complications specified.....	8	6	1	1	1		1	1		2		2	3	2		14
	(b) Without pulmonary complications specified.....	10	7	4	1			1	1		1	4	1	1	2	1	17
	Totals, Nos. 1 to 11.....	42	44	16	14	6	15	5	3	8	3	4	3	4	4	1	86
<b>Dysentery:</b>																	
16	(b) Bacillary.....		1					1									1
	(c) Unspecified or due to other causes.....		2										1	1			2
21	Erysipelas.....	6	8	7							1	2	1	3			14
23	Lethargic encephalitis.....	3	4					1	2		1	2	1				7
24	Meningococcus meningitis.....	1						1									1
25	Other epidemic and endemic diseases:																
	*(a) Chicken-pox.....		1				1										1
29	Tetanus.....	1	1	1										1			1
30	Mycoses.....	1											1				2
31	Tuberculosis of the respiratory system.....	51	37	1	1	1		13	20	19	14	10	9				1
32	Tuberculosis of the meninges and central nervous system.....	7	5	1	1	2		2	2	4							88
																	12





SEX		AGE IN YEARS													Totals	
		AGE IN YEARS														
		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
Male	Female	10	12	1	3	8	1	1	1	2	4	4	4	3	3	22
58	Anemia, chlorosis:	1	3				1	1								4
	(a) Pernicious anemia															
	(b) Other anemias and chlorosis															
60	Diseases of the thyroid gland:															
	(a) Exophthalmic goiter															
	(b) Other diseases of the thyroid gland															
61	Diseases of the parathyroid glands															
62	Diseases of the thymus gland															
63	Diseases of the adrenals (Addison's disease)															
64	Diseases of the spleen															
65	Leukemia and Hodgkin's disease:															
	(a) Leukemia															
	(b) Hodgkin's disease															
66	Alcoholism (acute or chronic)															
69	Other general diseases															
Totals, Class II		150	156	13	4	3	5	8	9	18	48	62	68	49	19	306
III.—Diseases of the Nervous System and of the Organs of Special Sense																
70	Encephalitis	1	4	1				1				2		1		5
71	Meningitis:															
	*(a) Simple meningitis															
	*(b) Nonepidemic cerebrospinal meningitis	5	9	5		3		1	1		2	2				14
73	Other diseases of the spinal cord	1								1						1
		3	1								1	3				4

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SEX		AGE IN YEARS												Totals			
		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	
		Male	Female														
99	Bronchitis:	1	1														2
	(a) Acute.....	1	1														3
	(b) Chronic.....	2	1										1	1	1		3
	(d) Unspecified (5 years and over).....	1	2										1	1	2		3
100	Bronchopneumonia:																76
	* (a) Bronchopneumonia.....	39	37	38	8	1				3		3	3	7	8	5	57
101	Pneumonia:																6
	(a) Lobar.....	27	30	6	2			1	2	3	4	5	17	11	5	1	8
	(b) Unspecified.....	4	2	2	1						1	2					3
102	Pleurisy.....	6	2	3	1				1		1	1	1				1
103	Congestion and hemorrhagic infarct of the lung.....	1	2										1	2			3
105	Asthma.....	1												1			1
106	Pulmonary emphysema.....	1													1		1
107	Other diseases of the respiratory system (T.B. excepted):																5
	(c) Others under this title.....	1	4	1	1						1			1	1		
	Totals, Class V.....	85	81	51	14	1		1	3	6	7	11	24	24	18	6	163
VI.—Diseases of the Digestive System																	
108	Diseases of the mouth and annexa.....	3												1			3
109	Diseases of the pharynx and tonsils (including adenoid vegetations):																7
	* (b) Others under this title.....	2	5	2	1		1		2		1						1
110	Diseases of the esophagus.....		1							1							

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## VII.—Nonvenereal Diseases of the Genitourinary System and Annexa

	Under 10 years	Between 10 and 19 years	Between 20 and 64 years	65 years and over	Total
128 Acute nephritis (inc. unspecified under 10 years of age)	2	1		1	2
129 Chronic nephritis (inc. unspecified 10 years and over)	38	24	1	4	67
131 Other diseases of the kidneys and annexa	1	2	1	2	6
132 Calculi of the urinary passages	1				1
133 Diseases of the bladder	1				1
135 Diseases of the prostate	4				4
137 Cysts and other benign tumors of the ovary	2		1		3
138 Salpingitis and pelvic abscess (female)	3		1	2	6
139 Benign tumors of the uterus	2		1	1	4
141 Other diseases of the female genital organs	2		1		3
Totals, Class VII	44	38	2	8	92









1926 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 109	
181	Accidental absorption of irrespirable, irritating, or poisonous gas.....	3	4	2				3		1	1								7
182	Accidental drowning.....	2	1						1	1		1							3
183	Accidental traumatism by firearms (wounds of war ex.).....	1									1								1
185	Accidental traumatism by fall.....	7	11				1		1	2	1	2	3	3	4	1			18
187	Accidental traumatism by machines.....	3						1		1	1								3
188	Accidental traumatism by other crushing (vehicles, railways, landslides, etc.):																		
	* (a) Railroad accidents.....	5					1		1	1		2							5
	* (b) Street-car accidents.....	2						1						1					2
	* (c) Automobile accidents.....	13	3				1	4	1	5	4		1						16
	* (f) Injuries by other vehicles.....	1								1									1
	* (g) Landslides, other crushing.....	1										1							1
189.	Injuries by animals (not poisoning).....	2					1	1											2
190	Wounds of war.....	1																	1
193	Excessive cold.....	1	1							1			1						2
196	Other accidental electric shocks.....	1										1							1
197	Homicide by firearms.....	1	1					1		1									2
199	Homicide by other means.....		1									1							1
	(a) Homicide by criminal abortion.....		1						1										1
202	Other external violence.....	4			1			1		1	1								4
Totals, Class XIV.....		91	33	4	4	1	7	13	13	23	19	21	9	5	4	1			124





1926  
CAUSE OF DEATH  
(By Month)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
<b>I.—Epidemic, Endemic, and Infectious Diseases</b>													
1 Typhoid and paratyphoid fever:													
(a) Typhoid fever.....	2		1	1	2	1		2	1				8
6 Small-pox.....						1							2
7 Measles.....	2	1	4	3	1								11
8 Scarlet fever.....	1	1	1	2		1			1			2	8
9 Whooping-cough.....		2	1	2	2	1	1	1	2	2	4	1	20
10 Diphtheria.....				1	3	2							6
11 Influenza:													
(a) With pulmonary complications specified.....	1	1	6	4	1			1		2			14
(b) Without pulmonary complications specified.....	3	2	2	1	1	2	1	1			2		17
Totals, Nos. 1 to 11.....	9	7	15	14	10	7	2	5	4	4	6	3	86
16 Dysentery:													
(b) Bacillary.....								1				1	1
(c) Unspecified or due to other causes.....								1				1	2
21 Erysipelas.....		6	5				1					2	14
23 Lethargic encephalitis.....	1	1	1	1				1		1	1		7
24 Meningococcus meningitis.....												1	1
25 Other epidemic and endemic diseases:													
*(a) Chicken-pox.....													
29 Tetanus.....					1		1						1
30 Mycoses.....				1				1					2
31 Tuberculosis of the respiratory system.....	8	5	12	6	7	4	13	4	7	4	9	9	88
32 Tuberculosis of the meninges and central nervous system.....	1	1	1	1	3	1	1	1	1		1	1	12
33 Tuberculosis of the intestines and peritoneum.....		1	1	1				2					5

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1926 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
58	Anemia, chlorosis:	2	1	3	1	6	3	1		1	1	1	3	22
	(a) Pernicious anemia.....				2									4
	(b) Other anemias and chlorosis.....							1						
60	Diseases of the thyroid gland:	2			2	1	1		1	1	1			8
	(a) Exophthalmic goiter.....				1		1		1					6
	(b) Other diseases of the thyroid gland.....				1							1	2	2
61	Diseases of the parathyroid glands.....		1		1				1					6
62	Diseases of the thymus gland.....				3	1		1						4
63	Diseases of the adrenals (Addison's disease).....			2				1		1				4
64	Diseases of the spleen.....											1		1
65	Leukemia and Hodgkin's disease:													
	(a) Leukemia.....			1	3	1		1	1					7
	(b) Hodgkin's disease.....			1	1					1		1		4
66	Alcoholism (acute or chronic).....			1						1				2
69	Other general diseases.....		1		1	1	2							5
Totals, Class II.....		20	15	37	29	24	33	26	19	26	22	26	29	306
III.—Diseases of the Nervous System and of the Organs of Special Sense														
70	Encephalitis.....		1		4									5
71	Meningitis:													
	*(a) Simple meningitis.....				2	2		1	2	1	1	2	3	14
	*(b) Nonepidemic cerebrospinal meningitis.....		1											1
73	Other diseases of the spinal cord.....		1				1				1	1		4

74	Cerebral hemorrhage, apoplexy:	6	6	6	14	7	2	3	6	4	9	5	2	70
	(a) Cerebral hemorrhage.....	2	1	1	.....	.....	.....	.....	1	.....	1	.....	.....	7
	(b) Cerebral embolism and thrombosis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
75	Paralysis without specified cause:	1	2	2	1	.....	.....	1	.....	.....	1	2	.....	10
	(a) Hemiplegia.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	2
	(b) Others under this title.....	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	3
76	General paralysis of the insane.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	3
77	Other forms of mental alienation.....	2	1	1	.....	1	1	.....	1	.....	.....	.....	.....	6
78	Epilepsy.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	2	5
80	Infantile convulsions (under 5 years of age).....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
81	Chorea.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3
83	Softening of the brain.....	2	1	.....	3	2	1	.....	.....	1	3	2	2	17
84	Other diseases of the nervous system.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
86	Other diseases of the ear and of the mastoid process:	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	3
	* (a) Diseases of the ear.....	.....	1	1	.....	.....	1	.....	.....	.....	1	.....	.....	5
	* (b) Diseases of the mastoid process.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Totals, Class III.....	14	15	11	25	17	7	7	13	7	18	15	10	159
<b>IV.—Diseases of the Circulatory System</b>														
87	Pericarditis.....	1	1	1	1	.....	.....	1	.....	.....	.....	1	.....	1
88	Endocarditis and myocarditis (acute).....	1	3	2	2	5	.....	.....	.....	2	1	.....	2	10
89	Angina pectoris.....	17	11	11	13	20	10	16	14	3	4	3	.....	23
90	Other diseases of the heart.....	.....	.....	.....	.....	.....	.....	.....	.....	9	18	18	17	174
91	Diseases of the arteries:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	(a) Aneurysm.....	1	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	4
	(b) Arteriosclerosis.....	1	2	3	2	1	.....	.....	2	1	1	4	2	19
	(c) Other diseases of the arteries.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
92	Embolism and thrombosis (not cerebral).....	1	2	.....	2	1	1	.....	.....	2	1	1	1	12
93	Diseases of veins (varices, hemorrhoids, phlebitis, etc.).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
	Totals, Class IV.....	22	19	17	20	27	12	18	17	17	27	27	22	245





[illegible]



1926 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
<b>VIII.—The Puerperal State</b>														
143	Accidents of pregnancy:													
	(a) Abortion.....							1			1		1	1
	(b) Ectopic gestation.....							1		1				2
	(c) Others under this title.....		1			1		1			1			2
144	Puerperal hemorrhage.....													4
145	Other accidents of labor:													
	*(c) Others under this title.....							1						2
146	Puerperal septicaemia.....	1	2	1			1			1	1	1		6
	(a) Septic abortion (Induced).....			1					2				2	3
148	Puerperal albuminuria and convulsions.....			1								1		2
Totals, Class VIII.....		1	3	2		1	1	4	2	2	3	3	3	25
<b>IX.—Diseases of the Skin and of the Cellular Tissue</b>														
151	Gangrene.....			1						1		1		3
153	Acute abscess.....									1				1
Totals, Class IX.....				1						2		1		4
<b>X.—Diseases of the Bones and of the Organs of Locomotion</b>														
155	Diseases of the bones (tuberculosis excepted).....	1	1			1								3
Totals, Class X.....		1	1			1								3

**XI.—Malformations**

159 Congenital malformations (stillbirths not included):

* (a) Congenital hydrocephalus.....	1																	1				3
* (b) Congenital malformations of the heart.....	1																	3				17
* (c) Others under this title.....	4																	1				13

Totals, Class XI.....

**XII.—Early Infancy**

160 Congenital debility, icterus, and sclerema.....

161 Premature birth; Injury at birth:

\* (a) Premature birth (not stillborn).....

\* (b) Injury at birth (not stillborn).....

162 Other diseases peculiar to early infancy.....

Totals, Class XII.....

**XIII.—Old Age**

164 Senility.....

Totals, Class XIII.....

**XIV.—External Causes**

165 Suicide by solid or liquid poisons (corrosive substances excepted).....

166 Suicide by corrosive substances.....

167 Suicide by poisonous gas.....

168 Suicide by hanging or strangulation.....

169 Suicide by drowning.....

170 Suicide by firearms.....

171 Suicide by cutting or piercing instruments.....

172 Suicide by jumping from high places.....

175 Poisoning by food.....

177 Other acute accidental poisonings (gas excepted).....

178 Conflagration.....

179 Accidental burns (conflagration excepted).....



1926 CAUSE OF DEATH (By Month)		January	February	March	April	May	June	July	August	September	October	November	December	Totals
180	Accidental mechanical suffocation.....	1			1									2
181	Accidental absorption of irrespirable, irritating, or poisonous gas.....	1	1			1			2		1	1		7
182	Accidental drowning.....		1				1		1					3
183	Accidental traumatism by firearms (wounds of war ex.).....										1			1
185	Accidental traumatism by fall.....	2		3	1		2	3		1	3	2	1	18
187	Accidental traumatism by machines.....	1		1	1									3
188	Accidental traumatism by other crushing (vehicles, railways, landslides, etc.):.....													
	* (a) Railroad accidents.....						1	1			1		2	5
	* (b) Street-car accidents.....								2					2
	* (c) Automobile accidents.....	2	1		1	2	1	1	1	3	2	2		16
	* (f) Injuries by other vehicles.....												1	1
	* (g) Landslides, other crushing.....		1								1			1
189	Injuries by animals (not poisoning).....							1						2
190	Wounds of war.....				1									1
193	Excessive cold.....		1	1										2
196	Other accidental electric shocks.....									1				1
197	Homicide by firearms.....					1		1						2
199	Homicide by other means.....			1										1
	(a) Homicide by criminal abortion.....												1	1
202	Other external violence.....		2						1			1		4
Totals, Class XIV.....		10	10	11	7	7	11	14	11	9	14	10	10	124





