

Report of the Department of Health / City of Montreal.

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CITY OF MONTREAL

Report of the Department of Health

OF

MONTREAL

1931

By DOCTOR S. BOUCHER, D.P.H.,
Director of the Department.



MONTREAL

1932




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CITY OF MONTREAL

Report of the Department of Health
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Director of the Department.



MONTREAL

1932

CITY OF MONTREAL

MAYOR :

His Worship CAMILLIEN HOUDE.

EXECUTIVE COMMITTEE :

Alderman J. ALLAN BRAY,* President; Alderman W. S. WELDON, J. M. SAVIGNAC, TANCREDE FORTIN, ALF. MATHIEU, Members.

HEALTH DEPARTMENT :

S. BOUCHER, M.D., D.P.H., Director.
T. A. REEB, Secretary.

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* Mr. Bray resigned in September; he has been replaced as Member of the Executive Committee by Mr. Ovide Taillefer, and as President by Mr. Tancrede Fortin.

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STAFF OF THE DEPARTMENT OF HEALTH.

DIRECTOR'S OFFICE :

Dr. S. BOUCHER, Director.
 Mr. T. A. REEB, Secretary.*
 Mr. LEO DeLONGCHAMPS, Archivist.
 Mr. GEORGES ROCHON, Accountant.
 Miss H. SAINT-CYR, Senior stenographer clerk.
 1 Messenger.

DIVISION OF CONTAGIOUS DISEASES :

Dr. J. H. GERVAIS, Superintendent.
 2 Senior clerks.
 3 Junior typists.
 3 Epidemiologists.
 1 Epidemiologist (temporary).
 1 Nurse (supervisor).
 9 Nurses (one acting as temporary superintendent of Smallpox hospital).
 2 Nurses (temporary).
 4 Distinctors.
 1 Janitor (Smallpox hospital).
 1 Cook (Smallpox hospital).

DIVISION OF CHILD HYGIENE :

Dr. AD. GROULX, Superintendent.
 1 Senior stenographer clerk.
 5 Junior clerks.
 1 Messenger.
 Dr. C. A. BOURDON, chief inspector for Medical Inspection of schools.
 1 Medical inspector (supervisor).
 21 Medical inspectors of schools.
 4 Dental inspectors of schools.
 1 Head nurse.
 5 Nurses supervisors.
 87 Visiting school nurses.
 2 Nurses inspecting boarding houses for children.
 2 Nurses (temporary) in baby clinics.
 6 Asst.-nurses.
 4 Psychiatrists.
 4 Nurses (psychologists).
 1 Nurse — test of hearing.

* Died in February, 1932.

DIVISION OF SANITATION :

Mr. AIME COUSINEAU, C.E., Sanitary engineer and superintendent.

- 1 Secretary.
- 1 Plan examiner.
- 2 Clerks.
- 1 Senior typist clerk.
- 1 Junior typist clerk.
- 1 Chief inspector.
- 1 Supervisor of plumbing inspectors.
- 11 Plumbing inspectors.
 - 1 Inspector of gas connections and appliances.
 - 1 Supervisor of Sanitary inspectors.
- 25 Sanitary inspectors (one for inspection of boarding houses for children, private maternities, etc.).
- 2 Laundries inspectors.
- 2 Inspectors for barber shops, etc.

DIVISION OF FOOD INSPECTION :

Dr. A. J. G. HOOD, M.V., Superintendent.

- 1 Chief clerk.

Section No. 1 — Milk inspection.

- 1 Supervisor.
- 2 Typist clerks.
- 10 Country inspectors.
- 7 City inspectors.

Pasteurization inspection.

- 1 Supervisor.
- 7 Inspectors.

Section No. 2 — Meat inspection.

- 1 Supervisor.
- 1 Clerk.
- 1 Typist clerk.
- 1 Inspector of abattoirs in suburbs, and ice.
- 8 District inspectors.
- 6 Veterinary surgeons, meat inspection stations.
- 2 Asst.-inspectors, meat inspection stations.
- 1 Inspector, private abattoirs.

Section No. 3 — Inspection of dining-rooms, restaurants, etc.

- 1 Supervisor
- 1 Clerk.
- 1 Typist-clerk.
- 7 Inspectors.

Section No. 4 — Inspection of bakeries:

- 1 Supervisor.
- 2 Inspectors.

DIVISION OF MEDICAL CONTROL :

- Dr. J. A. BRIEN, Superintendent.
- 3 Visiting physicians.
- 2 Clerks.

DIVISION OF LABORATORIES :

- Dr. A. BOLDUC, Superintendent and bacteriologist.
- Dr. R. BERARD, Bacteriologist.
- Mr. E. GIGUERE, Chemist.
- 1 Chief analyst, milk section.
- 1 Asst.-analyst, milk section.
- 1 Technician.
- 2 Laboratory helpers.
- 1 Junior typist clerk.

DIVISION OF STATISTICS :

- Dr. EUG. GAGNON, Superintendent.
- Dr. J. A. LABROSSE, Statistician.
- 2 Clerks.
- 1 Typist clerk.

DIVISION OF MUNICIPAL ASSISTANCE :

- Mr. A. CHEVALIER, Superintendent.
- Mr. C. J. GAUTHIER, Joint-superintendent.
- 1 Chief clerk.
- 1 Stenographer clerk.
- 6 Clerks.
- 1 Chief investigator.
- 7 Investigators.
- 1 Clerk in charge, Social Service Exchange.
- 2 Clerks, Social Service Exchange.
- 2 Clerks, Social Service Exchange.
- Mr. J. DESROCHERS, Supervisor, Meurling Refuge.
- 1 Senior clerk.
- 2 Furnacemen.
- 1 Head laundryman.
- 1 Head cook.
- 5 Guards.

1931

CITY OF MONTREAL

EXECUTIVE COMMITTEE

DEPARTMENT OF HEALTH

DIRECTOR'S OFFICE

The Director

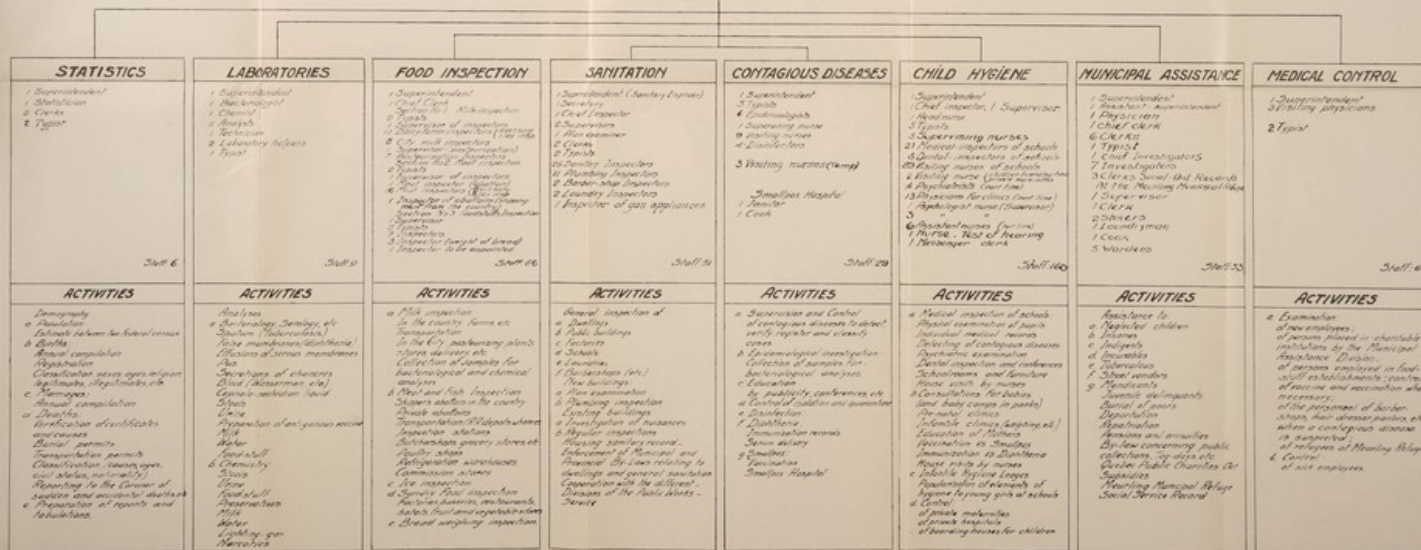
1 Secretary 1 Archivist
1 Accountant 1 Typist
1 Messenger

General Administration

BOARD OF HEALTH (Advising Board)

Member

The Chairman of the Executive Committee (Ex officio)
The Director of the Department of Health (Ex officio)
Three Members of the City Council
Two Members of the Faculty of Medicine of the University of Montreal
Two Members of the Faculty of Medicine of McGill University



Planned: March 8th 1980
 Actual: April 28, 1980

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ANNUAL REPORT

1931

To the Chairman and
Members of the Executive Committee.

Gentlemen: —

I have the honour to submit the report of the Department of Health, for the year 1931.

Expenses.

The total expenditure for 1931 in the Department of Health amounted at \$2,508,127.33, distributed as follows:

Hygiene	\$ 535,706.54
Municipal Assistance	1,717,932.49
Pensions and annuities (Pensioners)	234,488.30
Allocations to Universities	20,000.00
Official time (McGill University)	150.00

It should be noted that payment of allocations to Universities, of Pensions and Annuities to pensioned employees, and payment for the Official Time should preferably come under another Service than the Health Department.

The City's population for 1931 having been estimated at 813,000, the expenditure for the section of Hygiene is distributed at the rate of \$0.659 per capita of population; the rate for the Municipal Assistance being \$2.113; the increase of expenditure over the year 1930 was for Hygiene properly speaking, \$0.045 cents per head of population.

The following list shows the detail of expenditure during the year.

Hygiene.

GENERAL ADMINISTRATION EXPENSES :

Library: Books and reviews	\$	288.00	
Lectures to the public, to officials and campaign against tuberculosis and infant mortality through various means.. . . .		148.50	
Auto service (Director's office) . . . . .		.....
	—————	\$	436.56

DIRECTOR'S OFFICE :

Salaries	\$	13,700.00	
Employees' transportation allocation		360.75	
Supplies		221.14	
Congress		543.61	
Casual		179.41	
	—————	\$	15,004.91

SANITATION :

Salaries	\$	80,017.59	
Employees' transportation allocation		5,141.34	
Supplies for plumbing tests, etc.		114.97	
Supplies for plumbers' examinations		55.19	
Fees: plumbers' examiners.		400.00	
Uniforms		3,431.72	
Supplies		232.16	
Casual		178.87	
	—————	\$	89,571.84

CONTAGIOUS DISEASES :

Salaries	\$ 34,943.06	
Employees' transportation allocation	3,123.96	
Disinfectants	198.66	
Supplies	404.78	
Scholarship	600.00	
Vaccine	1,600.00	
Maintenance of small-pox hospital	1,456.85	
Transportation of patients.	.....
Houses quarantined. . . .	.....
Uniforms	840.55	
Casual	185.00	
	<hr/>	\$ 43,352.86

CHILD HYGIENE :

Salaries	\$172,206.74	
Employees' transportation allocation	1,688.04	
Municipal baby clinics and maternal clinics	31,465.52	
Baby camps	123.15	
Supplies	3,928.18	
Diphtheria immunization . .	5,508.63	
Measuring scales.	3,537.05	
Uniforms	5,331.05	
Scholarship	600.00	
Purchase of serum re: Po- liomyelitis	2,168.00	
Illustrated publications. . .	3,650.53	
Casual	183.85	
	<hr/>	\$ 230,390.74

FOOD INSPECTION :

Salaries	\$ 94,277.69	
Employees' transportation allocation	4,805.70	
Special inspections	30.32	
Samples of food .. . . .	.....
Supplies	1,479.30	
Auto service (superintendent)	178.23	
Travelling expenses (milk inspectors in the country)	15,034.45	
Medical examination of dairy employees	104.15	
Rental of butchers' stalls Nos. 51 and 53, Bonse- cours Market	976.24	
Casual	193.60	
	<hr/>	\$ 117,079.68

MEDICAL CONTROL :

Salaries	\$ 12,556.37	
Employees' transportation allocation	463.51	
Supplies, casual, interpreter	147.26	
	<hr/>	\$ 13,167.14

STATISTICS :

Salaries	\$ 8,940.00	
Supplies	124.80	
Congress	206.53	
Casual	169.40	
	<hr/>	\$ 9,440.73

LABORATORIES :

Salaries	\$ 15,096.17	
Material, apparatus, instru- ments	676.50	
Supplies	647.40	
Milk analysis.. . . .	763.75	
Employees' transportation allocation	1.50	
Casual	76.76	
	<hr/>	\$ 17,262.08
Total		<hr/> \$ 535,706.54

Municipal Assistance.

Salaries	\$ 27,298.97	
Employees' transportation allocation	1,616.82	
	<hr/>	\$ 28,915.79

ADMINISTRATION :

Supplies	\$ 34.45	
Casual	182.76	
	<hr/>	\$ 217.21

SOCIAL SERVICE EXCHANGE	\$ 250.00	250.00
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ASSISTANCE :

Burial of poor and unknown people	\$ 4,370.00	
Repatriation of strangers..	1,622.69	
	<hr/>	\$ 5,993.59

SUBSIDIES :

Institutions of charity .. .	\$116,200.00	
Baby clinics (independent)	8,500.00	
	<hr/>	\$ 124,700.00

CONTRACTS, STATUTORY OBLIGATIONS AND OTHERS :

Maintenance of insane . . .	\$324,456.92	
Destitute children in Industrial schools	86,755.83	
Juvenile Court	6,500.00	
Maintenance of children in Reform schools	34,739.01	
Hospitalization of incurables	59,628.80	
Hospitalization of tuberculous	73,000.00	
Grey Nuns (Home)	14,600.00	
Oeuvres de Notre-Dame de la Merci (Home)	30,420.00	
St. Luke Hospital (vagrants), etc.	10,950.00	
Hospitalization of indigents (Quebec Public Charities Act): Paid to institutions	118,452.38	
* Government's account . . .	771,236.28	
	<hr/>	\$1,530,739.22

MEURLING REFUGE :

Salaries	\$ 14,551.25	
Food	6,476.48	
Maintenance	4,349.00	
Linen	1,739.95	
	<hr/>	27,116.68
Total		<hr/>
		\$1,717,932.49

* This item is subject to revision, the Government's accounts having been transmitted too late to permit checking before publication of this report.

DEMOGRAPHIC MOVEMENT.

Population.

The population of Montreal is evaluated by the Superintendent of the division of Statistics of the Department of Health, at 813,000 inhabitants, on the first of July, 1931.

The preliminary report of the Federal Census taken on the first of June, 1931, gives to the City of Montreal a population of 810,925 inhabitants; however, as all the figures of the Statistical services are based on the evaluation of the population at the middle of the year, it was necessary to make an adjustment and establish the population to the first of July, 1931, by adding to the figures of the Federal Census, 2075 inhabitants, or a total of 813,000 inhabitants.

The rate of births, marriages and deaths are consequently based on that figure.

Birth rate.

The number of births in 1931 amounted to 20,699; in 1930 it had been 20,993, which shows a decrease of 294.

Comparing it with the year 1929, when there were 20,415 births, shows an increase of 284.

The proportion of births per 1,000 inhabitants, based on the valuation of the population at 813,000 is 25.46, being 2.70 per thousand below the average for the five years from 1926 to 1930, and of 4.91 below the average for the ten preceding years.

The birth rate has shown a slight decrease of 1.11% in 1931, over the year 1930.

Table I compares the number and the rate of births for the year 1931 with the ten preceding years, taken separately and in groups of five and of ten years.

TABLE I

BIRTHS

Period 1921-1925 (5 years)

Years	Population	Number of births	Proportion per 1000 inhabitants
1921	618,506	21,136	34.17
1922	630,800	20,720	32.84
1923	642,650	20,527	31.94
1924	655,800	21,500	32.78
1925	669,800	21,976	32.81
Average.. . . .	643,510	21,172	32.90

Period 1926-1930 (5 years)

1926	684,500	21,098	30.82
1927	699,500	20,740	29.65
1928	742,000	20,307	27.37
1929	762,000	20,415	26.79
1930	790,000	20,993	26.57
Average.. . . .	735,600	20,711	28.16

Period 1921-1930 (10 years)

Average.. . . .	689,555	20,941	30.37
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Year 1931

Year 1931	813,000	20,699	25.46
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Marriage rate.

In 1931 there were 6,196 marriages, as against 6,643 in 1930, representing a decrease of 447 for the year 1931.

The proportion per thousand of population is therefore 7.62, being 1.53 below the ten years average from 1921 to 1930.

Table II compares the rate and the number of marriages in 1931 with the preceding ten years taken separately and in groups of five and ten years.

TABLE II
MARRIAGES

Period 1921-1925 (5 years)			
Years	Population	Number of marriages	Proportion per 1000 inhabitants
1921	618,506	5,984	9.67
1922	630,800	5,589	8.86
1923	642,650	6,103	9.49
1924	655,800	6,058	9.24
1925	669,800	6,102	9.11
Average	643,510	5,967	9.27
Period 1926-1930 (5 years)			
1926	684,500	6,133	8.95
1927	699,500	6,320	9.03
1928	742,000	6,825	9.20
1929	762,000	7,332	9.62
1930	790,000	6,643	8.41
Average	735,600	6,651	9.04
Period 1921-1930 (10 years)			
Average	689,555	6,309	9.15
Year 1931			
Year 1931	813,000	6,196	7.62

Death rate.

The number of deaths in 1931 rose to 9,886 as against 10,256 in 1930, showing in consequence a decrease of 370 deaths.

The proportion compared to the population is 12.16 per thousand as against 12.98 in 1930, or a decrease of 0.82 per thousand.

The 1931 death rate is 1.83 below the average for the five years from 1926 to 1930. It is 2.42 below the average of the ten preceding years.

Table III shows a statement of the mortality since 1921 for each year separately and by groups of five and ten years.

TABLE III
DEATHS

Period 1921-1925 (5 years)

Years	Population	Number of deaths	Proportion per 1000 inhabitants
1921	618,506	9,740	15.74
1922	630,800	9,945	15.76
1923	642,650	10,074	15.67
1924	655,800	9,752	14.87
1925	669,800	9,545	14.26
Average	643,510	9,811	15.24

Period 1926-1930 (5 years)

1926	684,500	9,660	14.12
1927	699,500	9,991	14.28
1928	742,000	10,961	14.77
1929	762,000	10,604	13.92
1930	790,000	10,256	12.98
Average	735,600	10,294	13.99

Period 1921-1930 (10 years)

Average... ..	689,555	10,052	14.58
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Year 1931

Year 1931	813,000	9,886	12.16
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Natural increase of the population.

The natural increase of the population is represented by the surplus of births over deaths.

In 1931 the excess of births over deaths was 10,813 while for the ten years from 1921 to 1930 it was 10,889 which shows a decrease of 76.

The natural increase of the population shows for the year 1931 a rate of 13.3 per thousand of population.

TABLE IV**NATURAL INCREASE OF THE POPULATION**

Years	Births	Deaths	Excess of births over deaths
1921-1925	105,860	49,055	56,805
1926-1930	103,555	51,470	52,085
Average (10 years) ..	20,941	10,052	10,889
Year 1931... ..	20,699	9,886	10,813

Infant mortality.

The registered number of deaths in 1931 of children under 1 year is 2,345 as against 2,620 in 1930, showing therefore a decrease of 275 in the total.

The proportion per 1,000 births is 113.3 in 1931, as against 124.8 in 1930, representing a decrease of 11.5 per thousand.

Table V indicates the variations in infant mortality during the last ten years, for each year separately and in groups of five and of ten years.

TABLE V
DEATHS FROM 0 TO 1 YEAR PER 1,000 BIRTHS
(Still-born not included)

Period 1921-1925 (5 years)

Years	Births	Deaths under one year	Proportion per 1,000 births
1921	21,136	3,289	155.6
1922	20,720	3,304	159.4
1923	20,527	3,057	148.9
1924	21,500	3,151	146.5
1925	21,976	2,690	122.4
Average	21,136	3,289	155.6

Period 1926-1930 (5 years)

1926	21,098	2,521	119.5
1927	20,740	2,424	116.9
1928	20,307	2,929	143.7
1929	20,415	2,701	132.3
1930	20,993	2,620	124.8
Average	20,711	2,639	127.4

Period 1921-1930 (10 years)

Average	20,941	2,868	137.0
------------------	--------	-------	-------

Year 1931

Year 1931	20,699	2,345	113.3
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Infant diarrhoea.

Table VI shows a statement of infant mortality from diarrhoea during the last ten years, of children from 0 to 1 year, as well as in periods of five years from 1921 and the averages for the five years and ten years periods.

The percentage of deaths from diarrhoea is 39.5 per thousand, in 1931, while the average for the ten years from 1921 to 1930 is 49.2, which indicates a decrease of 9.7 per thousand births, in favour of the year 1931.

TABLE VI

DEATHS FROM DIARRHOEA, FROM 0 TO 1 YEAR

Period 1921-1925 (5 years)				
Years	Total of deaths 0 to 1 year	Deaths by diarrhoea 0 to 1 year	Percentage of deaths by diar- rhoea	Per 1,000 births
1921	3,289	1,361	41.3	64.4
1922	3,304	1,380	41.8	66.6
1923	3,057	1,158	37.9	56.4
1924	3,151	1,086	34.5	50.5
1925	2,690	1,014	37.7	46.1
Average ..	3,098	1,199	38.7	56.6
Period 1926-1930 (5 years)				
1926	2,521	817	32.4	38.7
1927	2,424	799	32.9	38.5
1928	2,919	971	33.3	47.8
1929	2,701	865	32.0	42.4
1930	2,620	877	33.5	41.8
Average ..	2,637	866	32.8	41.8
Period 1921-1930 (10 years)				
Average ..	2,867	1,033	35.7	49.2
Year 1931				
1931	2,345	817	34.8	39.5

Deaths from diarrhoea, from 0 to 2 years.

Table VII indicates the mortality from diarrhoea of children from 0 to 2 years. The percentage of deaths from these diseases in 1931 is 32.8, against 32.4 in 1930, which shows a slight increase of 0.4 per cent, but the average for the ten preceding years from 1921 to 1930 having been 33.4, indicates a decrease of 0.6% in favour of the year 1931.

TABLE VII

DEATHS FROM DIARRHOEA, FROM 0 TO 2 YEARS

Period 1921-1925 (5 years)

Years	Total of deaths 0 to 2 years	Deaths by diarrhoea 0 to 2 years	Percentage of deaths by diar- rhoea
1921	3,711	1,432	38.6
1922	3,831	1,482	38.7
1923	3,682	1,249	33.9
1924	3,615	1,172	32.4
1925	3,202	1,098	34.3
Average	3,608	1,287	35.7

Period 1926-1930 (5 years)

1926	2,952	877	29.7
1927	2,846	870	30.6
1928	3,434	1,061	30.9
1929	3,165	958	30.3
1930	2,985	966	32.4
Average	3,076	946	30.8

Period 1921-1930 (10 years)

Average	3,342	1,116	33.4
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Year 1931

Year 1931	2,676	877	32.8
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**Deaths from 0 to 1 year per 1,000 births and by periods
of ten years.**

Table VIII shows the average of deaths from 0 to 1 year, in periods of ten years since 1907 to 1930, and the mortality for the year 1931.

This table is certainly the one showing most obviously the constant decrease occurring in infant mortality.

Indeed, its perusal shows that for each period of ten years there has been a constant decrease from 1907 to 1931; it may perhaps be slight from one period to another, but the particularly interesting feature is that it has been constant and regular, the average of decrease being, for these 15 periods, of 5.6 per thousand births.

TABLE VIII

**DEATHS FROM 0 TO 1 YEAR PER 1,000 BIRTHS, AND
BY PERIODS OF TEN YEARS.**

Years	Deaths	Decrease
1907-1916	221.1	
1908-1917	214.2	7.0
1909-1918	208.3	5.9
1910-1919	201.1	7.2
1911-1920	196.9	4.2
1912-1921	188.2	8.7
1913-1922	183.4	4.8
1914-1923	176.7	6.7
1915-1924	171.7	5.0
1916-1925	165.1	6.6
1917-1926	158.6	6.5
1918-1927	153.0	5.6
1919-1928	148.2	4.8
1920-1929	143.7	4.5
1921-1930	137.0	6.7
1931	113.3	

Percentage of deaths 0 to 1 year, compared with the total of deaths.

Table IX indicates the proportion of deaths from 0 to 1 year compared to the total of deaths.

The proportion of deaths from 0 to 1 year compared to total of deaths was 23.72 in 1931; it is a decrease of 1.82 per cent on the figure for the year 1930, but a decrease of 1.44 per cent from the average for the five years from 1927 to 1931.

TABLE IX

PERCENTAGE OF DEATHS 0 TO 1 YEAR, COMPARED WITH THE TOTAL OF DEATHS.

Period 1922-1926 (5 years)

Years	Total deaths	Deaths from 0 to 1 year	Percentage
1922	9,945	3,304	33.32
1923	10,074	3,057	30.34
1924	9,752	3,151	32.31
1925	9,549	2,690	28.17
1926	9,660	2,521	26.10
Average (5 years)	9,796	2,944	30.05

Years 1927-1931 (5 ans)

1927	9,991	2,424	24.26
1928	10,961	2,919	26.63
1929	10,604	2,701	25.47
1930	10,256	2,620	25.54
1931	9,886	2,345	23.72
Average (5 years)	10,340	2,602	25.15

Percentage by periods, of deaths under 1 year, compared to the total of deaths from 0 to 1 year.

Table X allows to compare the percentage, by periods, of deaths under 1 year compared to the total of deaths from 0 to 1 year, since the year 1925.

This table shows, besides, the average for the five years 1926 to 1930, and the percentage for 1931.

In comparing the 1931 figures with the five years average from 1926 to 1930, this table shows there has been a notable decrease in deaths from the age of 3 months to the age of 12 months.

This would show that infant health notions are spreading and that the Baby Clinics have a considerable effect to obtain this result.

TABLE X

PERCENTAGE BY PERIODS, OF DEATHS UNDER 1 YEAR, COMPARED TO THE TOTAL OF DEATHS FROM 0 TO 1 YEAR.

Age	1926	1927	1928	1929	1930	Average 5 years	1931
Under 24 hours ..	8.76	13.33	17.06	17.25	14.7	14.2	12.8
1 day to 1 week ..	11.54	10.73	11.10	11.18	11.3	11.2	13.2
1 week to 1 month	12.74	14.02	11.41	12.77	14.7	13.1	14.0
1 to 3 months	16.89	18.73	17.20	18.59	20.6	18.4	21.6
3 to 6 months	19.67	15.39	19.39	18.59	18.3	18.3	18.9
6 to 9 months	15.20	13.57	13.05	11.62	11.6	13.0	11.9
9 to 12 months	15.20	14.23	10.79	10.00	8.8	11.8	8.2
Total	100.00	100.00	100.00	100.00	100.0	100.0	100.0

Percentage of deaths from certain causes, compared with the total of deaths from 0 to 1 year.

Table XI indicates the percentage of deaths from certain causes, compared to the total of deaths from 0 to 1 year.

It will be noted that diarrhoeal diseases show a slightly increase of 2.0% as compared to the average of the five years 1926 to 1930, and that they still cause the highest number of deaths from 0 to 1 year.

TABLE XI
PERCENTAGE OF DEATHS FROM CERTAIN CAUSES,
COMPARED WITH THE TOTAL OF DEATHS
FROM 0 TO 1 YEAR.

Causes of deaths	1926	1927	1928	1929	1930	Average 1931 5 years	
Pneumonia	3.73	2.89	2.67	2.18	3.09	2.91	2.39
Broncho-pneumonia.	9.28	8.41	9.25	8.63	8.78	8.87	10.28
Dis. of the stomach	1.51	2.19	2.33	0.07	0.31	1.28	0.77
Diarr. and enteritis.	32.41	32.95	33.27	32.02	33.47	32.83	34.84
Malformation	3.89	2.93	2.50	3.78	4.66	3.55	5.41
Premature birth . . .	7.77	9.32	15.79	16.92	17.25	13.41	18.08
Congenital debility.	19.20	21.07	16.24	17.55	14.20	17.65	13.05
Meningitis (simple).	2.58	2.14	2.19	3.78	2.25	2.59	1.15
Syphilis	1.31	1.44	1.06	1.37	2.44	1.52	1.79
Contagious diseases	8.60	7.51	6.61	6.22	6.22	7.03	4.99
Others	9.72	9.15	8.09	7.48	7.33	8.36	7.25
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

**Cases reported and deaths from certain contagious
diseases.**

Table XII shows the number of cases reported and of deaths from certain contagious diseases, in period of five years from 1922 to 1926, the average of these five years, and in period of five years from 1927 to 1931, as well as the average for these five years.

TABLE XIII
Year 1931 — Deaths from 0 to 1 year.

Table XIII indicates that deaths of nurslings have been more numerous:

1° Amongst babies from 1 to 3 months and from 3 to 6 months.

2° During the months of August and September.

TABLE XII

**CASES REPORTED AND DEATHS FROM CERTAIN
CONTAGIOUS DISEASES.**

Years		Diph- theria	Scarlet fever	Meas- les	Whoop- ing cough	Erysi- pelas	Chick- en-pox	Small- pox	Ty- phoid fever
1922	Cases	1285	2113	2445	390	101	483	—	271
	Deaths	153	98	36	75	25	—	—	63
1923	Cases	1195	2035	1995	599	130	669	—	165
	Deaths	160	71	55	142	18	1	—	47
1924	Cases	753	3057	1328	538	103	818	9	150
	Deaths	102	97	40	87	12	6	—	51
1925	Cases	788	2371	3438	620	164	896	—	140
	Deaths	100	58	59	93	21	1	—	52
1926	Cases	1219	2119	1302	718	1641	792	—	105
	Deaths	139	48	27	129	31	1	—	34
Average (5 years)	Cases	1048	2139	2102	573	132	732	2	166
	Deaths	131	74	43	105	21	2	—	49
1927	Cases	1854	2058	2636	756	167	669	10	5131)*
	Deaths	219	38	47	106	42	3	—	553)
1928	Cases	1632	2291	4347	275	201	1246	108	173
	Deaths	157	39	65	37	35	9	—	39
1929	Cases	1254	3135	2471	1993	223	1835	40	98
	Deaths	115	65	26	88	26	3	—	27
1930	Cases	930	2364	2077	2014	206	2723	5	196
	Deaths	83	41	21	76	35	2	—	40
1931	Cases	750	1800	7352	966	179	2517	—	128
	Deaths	71	20	30	29	20	5	—	34
Average (5 years)	Cases	1284	2170	3777	1201	195	1798	33	1145
	Deaths	129	41	38	67	32	4	—	139
Average (10 years)	Cases	1166	2153	2939	887	163	1265	18	645
	Deaths	130	58	40	86	26	3	—	94

* Epidemic.

YEAR 1931 — DEATHS FROM 0 TO 1 YEAR

Month		Under 24 hours		1 day to 1 week		1 week to 1 month	
		Sex	Total	Sex	Total	Sex	Total
January.....	M	12	23	22	31	24	43
	F	11		9		19	
February.....	M	19	28	13	20	18	26
	F	9		7		8	
March.....	M	21	32	16	28	16	28
	F	11		12		12	
April.....	M	25	36	21	32	17	39
	F	11		11		22	
May.....	M	18	25	18	33	9	23
	F	7		15		14	
June.....	M	15	22	14	28	9	13
	F	7		14		4	
July.....	M	20	27	11	22	8	23
	F	7		11		15	
August.....	M	16	25	12	21	17	27
	F	9		9		10	
September.....	M	8	17	23	30	16	30
	F	9		7		14	
October.....	M	14	24	13	23	13	32
	F	10		10		19	
November.....	M	9	20	7	19	10	19
	F	11		12		9	
December.....	M	13	21	12	23	11	25
	F	8		11		14	
Total.....	M	190	300	182	310	168	328
	F	110		128		160	
Average.....		25.0		25.8		27.3	
Per cent.....		12.8%		13.2%		14.0%	

XIII.

Classified by month, sex and age categories.

1 to 3 months		3 to 6 months		6 to 9 months		9 to 12 months		TOTAL	
Sex	Total	Sex	Total	Sex	Total	Sex	Total	Sex	Total
19	44	20	40	9	21	7	14	113	216
25		20		12		7		103	
24	39	16	35	12	19	13	31	115	198
15		19		7		18		83	
19	36	16	34	18	36	10	21	116	215
17		18		18		11		99	
20	42	13	23	15	24	9	16	120	212
22		10		9		7		92	
14	33	17	25	8	19	7	13	91	171
19		8		11		6		80	
21	34	13	19	4	6	3	8	79	130
13		6		2		5		51	
25	44	39	61	18	27	6	10	127	214
19		22		9		4		87	
33	63	23	51	29	41	11	23	141	251
30		28		12		12		110	
23	49	27	47	14	27	5	18	116	218
26		20		13		13		102	
20	40	15	36	6	18	7	12	88	185
20		21		12		5		97	
17	30	22	37	14	22	6	15	85	162
13		15		8		9		77	
19	36	27	36	9	20	5	12	96	173
17		9		11		7		77	
254	490	248	444	156	280	89	193	1287	2345
236		196		124		104		1058	
40.7		37.0		23.4		16.0		195.2	
21.0%		18.9%		11.9%		8.2%		100.0%	

A few principal causes of mortality.

Table XIV shows the number of deaths from certain principal causes, from 1921 to 1925, the average for these five years; the number of deaths for 1926 to 1930 from the same causes and the average for these five years. It shows besides, the average of deaths from the same causes, for the 10 years 1921-1930, and deaths during the year 1931, from the same diseases.

TABLE XIV
A FEW PRINCIPAL CAUSES OF MORTALITY.

Deaths from 1921 to 1931					
Period 1921-1925 (5 years)					
Years	Cancer	Bright's dis- ease	Organic dis- eases of the heart	Broncho- pneu- monia	Pneu- monia
1921	462	542	747	543	567
1922	489	571	768	538	521
1923	539	618	687	580	542
1924	546	655	696	485	407
1925	605	676	719	482	583
Average ..	528	612	723	526	524
Period 1926-1930 (5 years)					
1926	609	738	727	507	454
1927	601	762	821	431	351
1928	641	674	867	666	500
1929	749	794	1204	465	346
1930	806	664	1235	540	500
Average ..	681	726	971	522	430
Period 1921-1930 (10 years)					
Average ..	605	669	847	524	477
Year 1931					
1931	808	741	1322	452	328

**Proportion of deaths from diseases mentioned in table XIV
compared to the total of deaths.**

Table XV shows the proportion of deaths in periods of 5 years, the average for the five years from 1921 to 1925 and from 1926 to 1930 and average for the 10 years from 1921 to 1930, from the diseases mentioned in table XIV, compared to the total of deaths, and deaths from the same diseases for the year 1931.

This table indicates an increase in 1931 of 0.3% in the proportion of deaths from cancer, an increase of 1.0% in deaths from Bright's disease and an increase of 1.4% in deaths from organic diseases of the heart, over the preceding year.

There was also an increase of 0.3% in the proportion of deaths from broncho-pneumonia, but a decrease of 0.1% in the proportion of deaths from pneumonia.

TABLE XV

**PROPORTION OF DEATHS FROM DISEASES MENTIONED IN TABLE XIV COMPARED TO THE
TOTAL OF DEATHS**

Period 1921-1925 (5 years)

Years	Total of deaths	Cancer	Bright's disease	Organic diseases of the heart	Broncho- pneu- monia	Pneu- monia
1921	9,740	4.7%	5.6%	7.7%	5.6%	5.8%
1922	9,945	4.9%	5.7%	7.7%	5.4%	5.2%
1923	10,074	5.3%	6.1%	6.8%	5.7%	5.4%
1924	9,752	5.6%	6.7%	7.1%	5.0%	4.2%
1925	9,549	6.3%	7.1%	7.5%	5.0%	6.1%
Average ..	9,812	5.4%	6.2%	7.4%	5.4%	5.3%

Period 1926-1930 (5 years)

1926	9,660	6.3%	7.6%	7.5%	5.2%	4.7%
1927	9,991	6.0%	7.6%	8.2%	4.3%	3.5%
1928	10,961	5.8%	6.1%	7.9%	6.1%	4.6%
1929	10,604	7.0%	7.5%	11.3%	4.4%	3.3%
1930	10,256	7.9%	6.5%	12.0%	4.3%	3.4%
Average ..	10,294	6.6%	7.1%	9.4%	4.9%	3.9%

Period 1921-1930 (10 years)

Average ..	10,052	6.0%	6.6%	8.4%	5.2%	4.6%
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Year 1931

Year 1931.	9,886	8.2%	7.5%	13.5%	4.6%	3.3%
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Deaths per 100,000 population, from diseases mentioned
in table XIV from 1921 to 1931.

Table XVI indicates the proportion of deaths per 100,000 population, from diseases mentioned in table XIV for the years 1921 to 1930, in periods of 5 years, the average for five years, from 1921 to 1925 and for five years from 1926 to 1930, and the average for ten years from 1921 to 1930, as well as the average of deaths for the year 1931.

A study of this table shows that in 1931 the proportion of deaths from cancer is 2.64 lower than in 1930; it is 17.45 higher than the average for the five years 1921-1925, and 7.06 higher than the average for the five years 1926-1930, and 12.26 higher than the average for the ten years 1921-1930; consequently, the death rate from cancer is constantly increasing and corresponds with the observations gathered in a great number of countries.

Deaths from Bright's disease which were 664 in 1930 have increased to 741 in 1931. If we consider these deaths compared with the population, we arrive at an average of 95.02 per 100,000 inhabitants for the period of 1921 to 1925; an average of 99.16 for the five following years; of 97.09 for the 10 years and 91.14 for 1931. It is quite an amelioration in regards to the average of the last ten years.

Deaths from organic diseases of the heart have still increased considerably in 1931; not only for the average of the last ten years, but also for over the year 1930.

On the other hand, broncho-pneumonia and pneumonia are decreasing to quite an extent.

TABLE XVI

DEATHS PER 100,000 POPULATION, FROM DISEASES
MENTIONED IN TABLE XIV FROM
1921 TO 1931

Period 1921-1925 (5 years)

Years	Cancer	Bright's disease	Organic diseases of the heart	Brocho Pneu- monia	Pneu- monia
1921	74.69	87.63	120.77	87.77	91.67
1922	77.52	90.52	121.75	85.29	82.59
1923	83.87	96.16	106.90	90.25	84.34
1924	83.26	99.88	106.13	73.95	62.06
1925	90.32	100.92	107.34	71.96	87.04
Average	81.93	95.02	112.58	81.84	81.54

Period 1926-1930 (5 years)

1926	..	..	..	88.97	107.81	106.21	74.07	66.32
1927	..	..	..	85.92	108.93	117.36	61.61	50.32
1928	..	..	..	86.39	90.83	116.84	89.76	67.38
1929	..	..	..	98.29	104.20	158.00	61.02	45.41
1930	..	..	..	102.02	84.05	156.33	55.32	43.80
Average	92.32	99.16	130.95	68.36	54.65

Period 1921-1930 (10 years)

Average	87.12	97.09	121.76	75.10	68.10
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Year 1931.

Year 1931	99.38	91.14	162.61	55.60	40.35
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Mortality from tuberculosis.

The number of deaths from tuberculosis, in all its form, was 887 in 1931, having been 983 during previous year; it shows consequently a decrease of 96 on the whole number. The proportion per 100,000 population which in 1930 was 124.4, is of 109.1 for 1931, showing a decrease of 15.3 and the average of the ten preceding years which was 138.8 shows a decrease of 29.7 in favour of the current year.

Table XVII shows the number of deaths since ten years, pulmonary and other forms separately, the general total, as well as the proportion per 100,000 of population; it is divided in two parts and indicates the average of deaths in periods of five years, the average for ten years and also the number of deaths for the year 1931.

TABLE XVII

DEATHS FROM TUBERCULOSIS

Period 1921-1925 (5 years)

Years	Popula- tion	Pulmo- nary	Other forms	Total	Proportion per 100,000 inhabitants
1921... ..	618,506	741	179	920	148.7
1922... ..	630,800	761	179	940	149.0
1923... ..	642,650	813	167	980	152.5
1924... ..	655,800	807	171	978	149.0
1925... ..	669,800	805	131	936	139.7
Average. . . .	643,510	785	165	950	147.7

Period 1926-1930 (5 years)

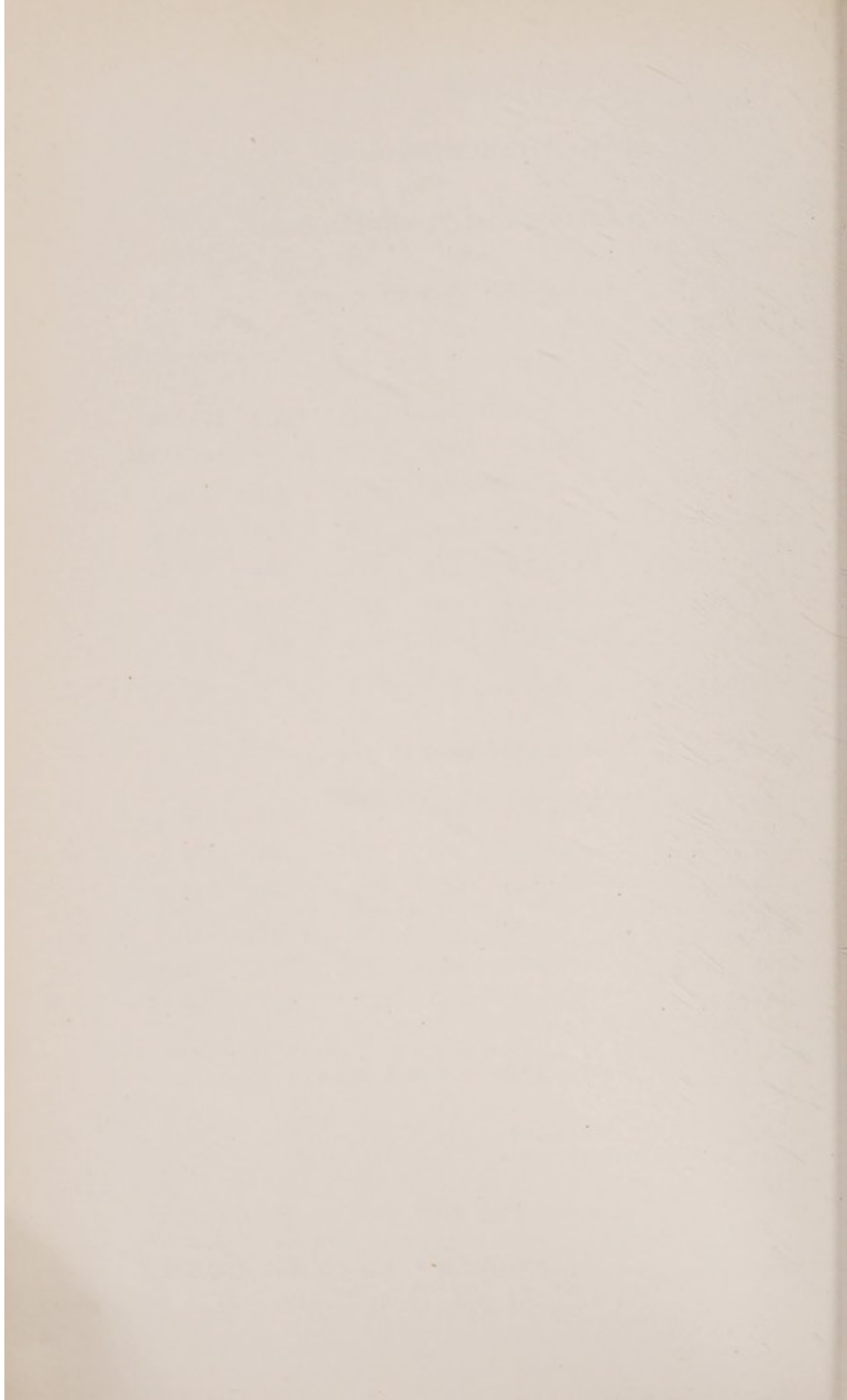
1926... ..	684,500	796	158	954	139.4
1927... ..	699,500	763	123	886	126.6
1928... ..	742,000	801	137	938	126.4
1929... ..	762,000	823	190	1,013	132.9
1930... ..	790,000	806	177	983	124.4
Average. . . .	735,600	798	157	955	129.9

Period 1921-1930 (10 years)

Average. . . .	689,555	791	161	952	138.8
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Year 1931

Year 1931 . . .	813,000	766	121	887	109.1
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Comments

THE POLIOMYELITIS.

The poliomyelitis epidemic which has preceded that of 1931, occurred in 1916. Since then, there were a few cases reported every year, but Montreal has been fortunately spared, although this disease frequently appeared, in some intensive form, in many cities of North America.

The Table below shows the number of cases reported with the deaths from 1920 to 1930.

Year	Cases	Deaths	Year	Cases	Deaths
1920	10	5	1926	4	3
1921	10	3	1927	4	3
1922	7	2	1928	22	2
1923	10	5	1929	37	6
1924	4	3	1930	10	3
1925	9	5			

In 1931, the epidemic was rather prevalent: the total of cases reported and confirmed was of 744. The deaths came to 74, exactly 10% of the cases.

For the complete report of the 1931 epidemic we advise the reader to turn to page 102 under section of Contagious Diseases; however, I take this present opportunity to make a few remarks.

In 1916, after some rare cases, the disease became intensified in August, even more so in September, reaching its highest mark in October. Declining quickly in November, the epidemic receded to such an extent that only one case was reported in December.

From January to July, 1931, there were only two cases, then the disease took its regular development during July, August and September, to attain its highest point during the week from September 27 to October 3rd, and then to

suddenly decline during October and continuing to diminish with but a few cases weekly, to the end of the year.

The following Table indicates the progress and decline of this epidemic:

Onset	Number of cases	Number of deaths
In May	1	1
In June	1	0
In July	12	1
From 1st to 8th Aug.	21	0
From 9th to 15th Aug.	18	2
From 16th to 22nd Aug.	31	0
From 23rd to 29th Aug.	53	4
From 30th Aug. to 5th Sept.	54	2
From 6th to 12th Sept.	58	7
From 13th to 19th Sept.	54	7
From 20th to 26th Sept.	87	12
From 27th Sept. to 3rd Oct.	107	7
From 4th to 10th Oct.	84	12
From 11th to 17th Oct.	68	7
From 18th to 24th Oct.	30	4
From 25th to 31st Oct.	23	4
From 1st to 7th Nov.	14	1
From 9th to 14th Nov.	7	1
From 15th to 21st Nov.	4	2
From 22nd to 28th Nov.	6	0
From 29th Nov. to 4th Dec.	3	0
From 5th to 11th Dec.	6	1
From 12th to 18th Dec.	1	0
From 19th to 25th Dec.	0	0
From 26th to 31st Dec.	1	0

The mode of treatment applied by the Physicians and in the Hospitals was the one actually recommended and

consist of poliomyelitis convalescent serum. Its distribution was made by the Health Department, free of charge, to all Physicians and Institutions who asked for it.

Usually the dose injected to each patient was of 25 c.c.

In spite of the fact that the above treatment is valuable only if applied before paralysis has set in, it was distributed to all those who wanted to use it, without any regard to what period of the disease employed.

However, a general revision of all the positive cases taken care of with the said treatment (omitting all suspected cases) gives a total of 540 cases, with the following results:

1° NUMBER OF CASES TREATED WITH SERUM: 540

Favorable result.

	Before paralysis	After paralysis
Cases improved	35	146
Cases cured	55	120

Unfavorable result.

Unimproved cases	31	101
Deceased	15	37

2° CASES TREATED WITHOUT SERUM: 118

Favorable result.

Improved	31
Cured	51

Unfavorable result.

Unimproved	15
Deceased	21

In view of the above, and the result obtained, we cannot but help to form the opinion that this mode of treatment has failed to come up to our expectations.

Consequently, we come to the conclusion that, if the serum utilized is to be effective, its manner of treatment must, at least, be modified: the dose increased, the injections repeated, etc., and we must continue to make urgent scientific research, because of the gravity and serious consequences to which the patients are exposed.

HOSPITALS FOR CONTAGIOUS DISEASES.

The actual capacity for the hospitalization and treatment of contagious patients in the City of Montreal is 280 beds; the capacity for hospitals of contagious patients has not been increased since 1905 and it has become quite inadequate, because the population of this city has more than doubled since they have been built. There are two hospitals for contagious persons: Alexandra (Protestant) and St. Paul Hospitals (Catholic) either catholics or protestants are treated in any of these two establishments.

Both corporations are working out in pursuance of contracts passed with the city of Montreal.

The contract passed with the Corporation of Notre-Dame Hospital for the maintenance of St. Paul Hospital, will mature on the 1st of January, 1934; it was replaced by another passed with the Corporation of St. Luc Hospital which will come into effect at that date.

In pursuance of this contract a new hospital will be built, with a capacity of 300 beds, ipso facto increasing of 170 the quantity of beds available for contagious patients.

It will be elevated on a piece of land provided by the City, which is located on Sherbrooke Street, opposite Moreau Street, and where presently stands the City's Small-pox Hospital.

The piece of land rented to the St. Luc Hospital for the erection of the Contagious Diseases Hospital has the following dimensions: 415 feet depth x 350 width, bounded on each side by a lane of 20 feet.

The agreement passed with the St. Luc Hospital contains, amongst articles of less importance, the following:

Article 1. — The said City of Montreal, by the presents, rent to the said St. Luc Hospital, presents and accepting by its representatives above mentioned, a piece of land for the purpose of a hospital for contagious patients.

Article 2. — The present lease (for the use of the piece of land) is consented to for a term of twenty-five (25) years, from the first of January, 1934, in consideration of payment of one dollar a year, payable at the City Hall, every year, on the first day of May.

Article 3. — The said St. Luc Hospital hereby obliges itself to construct, within a delay of two years from the date hereof, a hospital of a capacity of 300 beds and to adequately equip same, so that it will be in a position to give to its contagious patients the most modern treatments.

Article 4. — The said St. Luc Hospital also obliges itself to submit to the authorities of the City, the plans and estimates that will be prepared for the erection of the said hospital, and to begin such construction only after approbation, by the City, of the plans and estimates. It is also stipulated that the city's engineers may supervise the construction of the hospital, moreover, that until the end of

the present contract, the City is authorized to inspect, from time to time, the building to see if it is properly maintained.

Article 5. — The said St. Luc Hospital agrees and expressly obliges itself to receive, to treat and to care for, all such persons or patients that the said City may send or cause to be sent, to the said hospital, of all races and creeds without distinction, suffering from any one of the following diseases: diphtheria, scarlet fever, measles, erysipelas, whooping-cough, mumps, chicken-pox, or any other contagious disease.

Article 6. — The said St. Luc Hospital agrees and obliges itself to go at its cost, in quest of sick persons in any and all parts of the City.

Article 7. — The discharge of the patients sent to the said hospital by the said City shall be subject to the regulations governing quarantine as established by the Health Department of the City of Montreal and also to the rules of the Board of Health of the Province of Quebec.

Article 8. — All the beds in the said hospital shall be reserved for the citizens of Montreal, when the number of cases shall require full capacity. The sick persons from other municipalities will be cared for in the hospital only if such municipalities agree to pay a sufficient price, per day of hospital treatment, to cover all expenses, including expenses as to capital and interest.

Article 9. — The said hospital undertakes, as much as it will be possible, to entrust the internal administration of the hospital, to a religious community of women.

Article 10. — In the event of an epidemic and at all times when the said City shall judge it necessary, the said City shall have the right of the exclusive use of all the beds of the hospital for treatment of persons affected with one contagious disease only, whatever mentioned or not in the present contract without any changes as regard to payment conditions.

Article 11. — In consideration of the treatments and cares given to patients, the City shall pay to the said hospital a rate of three dollars and thirty cents (\$3.30) per day, for each bed occupied.

Article 12. — All sums of money shall be paid by the said City to the said hospital in and by four instalments, payable on the last legal day of the months of March, June, September and December, each year.

Article 13. — The said City hereby obliges itself to guarantee the loan to be made for the erection of the said hospital, which loan shall not exceed a million five hundred thousand dollars (\$1,500,000.00) in capital and interest, with the agreement that the rate of interest shall not be more than five per cent (5%) per year.

Article 14. — The said City hereby obliges itself to pay a sufficient amount to reimburse the deficit that may be shown at the end of every year if the revenues are not sufficient to pay the annual instalment to the sinking fund, the loan's interest and the general expenses for the administration and care of the building. It is specially convened and agreed that the said hospital shall accumulate the surplus revenues, if any, of every past year and the City shall be called upon to pay the deficit only, as is hereby agreed, if the amount of the accumulated surplus is not sufficient to pay the deficit.

Article 15. — It is understood that the said City shall exercise an absolute control of the said hospital from the point of view of hygiene and of the treatment to patients.

Article 16. — The Director of the Health Department or its representative shall visit the said hospital and the hospital's authorities shall immediately give any information asked.

Article 17. — The said City shall be represented by one of its members on the Board of Direction of the said hospital, during the construction of the hospital and also, until the maturity of the present contract.

Article 18. — The said hospital shall keep assured against fire, the building and furniture to such an amount sufficient to guarantee the said City of reimbursement of all the moneys it could have advanced and guaranteed.

Article 20. — It is expressly agreed and this condition is of the essence of the present agreement that at the end of this contract, the said City will become absolute and exclusive proprietary of the said hospital and its equipment, unless a new agreement shall have been passed between the said City and the said hospital.

The increase in the capacity of beds will be of a great assistance to the Health Department, to exercise a control of the spreading of contagious diseases.

When a contagious patient is cared for in a hospital, he is no longer a source of contagion to his family nor the community.

SCHOLARSHIPS GRANTED TO THE PERSONNEL.

Among the important events which occurred in the year 1931, I wish to point out particularly that two physicians of the staff of the Department of Health, attended the John Hopkins University of Baltimore, Md., in order to complete their studies and obtain degrees in Public Health.

For this purpose the City Administrators voted to each one a scholarship of \$1,200.00 on the following terms:

(a) Appointment to be made by the City Executive Committee, on the recommendation of the Director of the Department of Health.

(b) Appointed physicians to remain in the City's employment for a period of five years.

(c) Leave of absence granted with salary for the duration of the course.

The two physicians selected are to specialize: one in child hygiene, the other in epidemiology. Both registered at the John Hopkins University in September, 1931, for the session 1931-1932 and will return by the end of June, 1932.

Such special training of members of the staff will contribute greatly in maintaining the Department of Health of the City on a high standard.

The City Administrators will, no doubt, be willing to adhere to such a progressive move and I hope that other scholarships will be granted to medical officers, as the increased efficiency of their services will more than compensate the City for the money spent, and moreover will constitute a real economy from a social stand-point.

THE EDUCATION AND TRAINING OF SANITARY OFFICERS.

During the convention of the American Public Health Association, held in Montreal during the month of September, the foundation of a Public Health Institute in the Province of Quebec was suggested in a paper read at a joint meeting of the International Society of Medical Health Officers and the American Society of School Physicians.

As it is important that this action be known and that, to insure the success of the project, the idea be spread as much as possible, the paper in question is published hereunder.

It is entitled "The Education and Training of Sanitary Officers", and, immediately following, there is also published a draft of organization entitled "Public Health Institute of the Province of Quebec — Constitution".

The Education and Training of Health Workers.

Municipal and provincial health departments find it difficult to secure, for their staffs, individuals who are qualified by training and experience. This difficulty exists as regards all classes of employees, but it is experienced, particularly, in connection with sanitary inspectors, food inspectors and industrial hygiene inspectors.

Physicians and nurses do, in many cases, make up for their lack of previous training. There are individuals who, through experience, reach a high standard of efficiency despite their not having had any special academic preparation in Public Health. However, we must recognize, as a standard, that, in general, academic training is necessary for those who intend to enter the field of Public Health.

One should not lose sight of the fact that a public health official is, first of all, the health teacher of the masses. His health teaching can only be done effectively when he himself, through adequate preparation and continued study, has a thorough understanding of his subject. The problems he will have to solve require knowledge which is secured by study under the direction of competent teachers.

Those who are entering the field of public health should not be drifters — simply looking for a position as a means of livelihood. They should come to it, prompted by a desire for public service, at an age when they will be free to choose their career and able to benefit by special instruction. Indeed, the preparation of health workers would with advantage be undertaken immediately upon their leaving school, after they have received an adequate general education.

Public health workers should possess high ideals and should not be concerned merely with the question of

salary. They should possess a genuine interest in their work, and realize that, notwithstanding all its difficulties, theirs is a noble and high ambition. They should be ready to meet rebuffs and even failures without the dread of defeat.

The individual who possesses a natural interest in public health finds in the Public Health School an opportunity for acquiring the necessary knowledge and securing the training required to make his work interesting and effective.

An understanding of Public Health has spread among the people. In the Province of Quebec, Public Health has recently been given considerable stimulus through the organization of County Health Units. The public are demanding that their political leaders recognize measures that are intended for the protection of health, with the result that candidates for municipal or provincial office include public health as a main plank in their platforms.

In response to public opinion, commendable efforts are being directed everywhere towards the improvement of the public health services. There is one important link still missing, which is nevertheless essential if the public health services are to be as efficient as we would wish them to be — the education of personnel.

At the present time, there are, in the Province of Quebec, two schools for the preparation of public health nurses, namely "L'Ecole d'Hygiène Sociale Appliquée" of "L'Université de Montréal" and the School for Graduate Nurses of McGill University. Courses leading to the Diploma in Public Health, open to graduates in medicine, are given at the three medical schools in the Province.

Municipalities have considerably increased their population during the past few years. Many of them have had

to organize a public health service. Invariably they begin their organization by appointing a part-time physician, this being followed by the appointment of a nurse. The need for adding a third official is soon felt, one who will be responsible for inspections covering milk, meat and foods generally, nuisances, etc.

It may be possible for the municipality to secure a physician and a nurse who are able to perform their duties satisfactorily, but this is not the case as regards the third official. It not infrequently happens that the last-named possesses none of the qualifications which are essential to the fulfilment of his duties. The result is not satisfactory, indeed, conditions are worse than if the appointment had not been made. The people whom he attempts to supervise soon discover his ignorance, with the result that they lack confidence in him, they disregard his advice and feel that he is of no use. At the same time, they are not made to realize the importance of the proper care of foods and of the sanitation of their dwellings.

There is only one way to overcome this deficiency, and that is by organizing a special school for the training of those who are entering the public health services.

It is for these reasons then that I would suggest, as important, the creation of a Public Health Institute, where candidates for positions in the Public Health Service could be trained for whatever field of public health they might desire to enter, whether child hygiene, epidemiology, food inspection, including milk, sanitation, statistics, or laboratories.

It is of equal importance for the Province to have a Public Health Institute, as it is to have a Technical School, a Commercial High School, or a School of Fine Arts.

Public Health is a speciality requiring knowledge

which may best be acquired through theoretical and practical studies in a well organized school under the direction of a competent teaching staff.

Those who seek to attain to the higher offices may take their training at the universities organized to give courses in Public Health. It is out of the question to send most of the employees or candidates for the public health service to those universities, and it is not to be expected that they will go of their own accord. Therefore, we should have a Public Health School where these individuals could receive the necessary education, without too great displacing, or causing undue interference with their duties and entailing much expense.

A Public Health Institute is needed in the Province of Quebec. Such an Institute would provide all public health services in the province with valuable officials, and, for industrial and commercial establishments, competent workers for the sanitary supervision of factories, the handling of foods, etc.

Commercial organizations would, without a doubt, soon use the services of graduates of such an institution in preference to any others, thus a new career would be opened, to which a number of young people would be attracted for training.

Is it not reasonable to expect that, in time, health workers will be required by law to furnish a certificate of training, as is now done in the case of teachers, nurses or technical workers in certain trades.

The public Health Institute would be a strong factor in spreading public health knowledge. Teaching bodies would not be slow to make use of the advantages it offered to further their own knowledge and so benefit their pupils in primary or high schools and even in colleges.

In addition to those attending the Institute for preparation as health workers in private or public organizations, lay teachers and members of the various religious communities, both men and women, would also form a large body of students for special instruction.

It appears that the organization of a Public Health Institute in this Province would meet an immediate need, that it would render real service and that it would have the support of public opinion.

The Institute could be made a reality with the co-operation of the Provincial Department of Health, the Department of Health of the City of Montreal, and that of the three Universities of the Province, Université de Montréal, McGill and Laval Universities. Financial support might be expected from the Provincial Government and the City of Montreal.

PUBLIC HEALTH INSTITUTE OF THE PROVINCE OF QUEBEC.

Constitution.

ARTICLE 1. — A public health institute, to be known as "The Public Health Institute of the Province of Quebec" is hereby constituted. Its head office shall be in Montreal.

Purpose.

ARTICLE 2. — The aim of the Public Health Institute is to promote the teaching and practice of public health, and more especially:

(1) To provide for the technical training (both theoretical and practical) of those who intend to do public health work, namely, physicians, veterinarians, dentists, nurses, engineers, sanitary inspectors: inspectors of food, sanitation, etc.

(2) To provide for the technical training of the personnel of the various voluntary health organizations, such as well-baby and other health conferences,

anti-tuberculosis dispensaries, dental clinics, social service, bed-side nursing service, etc., and of those who are in charge of the health services in industrial and commercial establishments.

(3) To provide for the instruction in hygiene both of religious and lay teachers attached to the various educational institutions: primary schools, high schools, technical schools, domestic science schools, normal schools, schools of higher commercial studies, classical colleges, etc., as well as in the novitiates of the various religious communities.

(4) To provide for the instruction in hygiene of the population in general, by means of lectures, exhibitions, meetings, etc.

(5) To provide for the application of practical measures, such as vocational training, industrial hygiene, periodic medical examination, etc.

(6) To promote the spread, throughout the Province, in any manner that is deemed suitable and effective, of scientific knowledge with the object of safeguarding public and personal health and promoting individual normal development.

In order to enable it to attain these objectives, the Institute may organize independent teaching, enter into such agreements with the universities as may be necessary in order that a course of lectures in public health be given by the universities, establish a museum and a library, publish a bulletin and a journal, organize a public health association, etc.

ARTICLE 3. — The programme of the courses of the Institute may be divided into various sections, as follows:

(1) A section for physicians who are to specialize in public health;

(2) A section for nurses who are to specialize in public health;

(3) A section for professors, teachers, etc.;

(4) A section for sanitary inspectors: inspectors of food in general, of milk, sanitation, etc.

The Institute may add such branches as it may deem necessary or advisable to create, such as a sanitary engineering branch, a mental hygiene branch, an industrial hygiene branch, a research branch, etc.

The courses may be so combined as to permit of their being given jointly to the pupils of the different sections.

Powers.

ARTICLE 4. — The Public Health Institute is authorized:

(1) To organize a comprehensive system of teaching, both theoretical and practical, in public and personal hygiene.

(2) To draw up the curriculum and to appoint the lecturers.

(3) To confer degrees, certificates or diplomas on the persons who shall have followed the courses and successfully passed the examinations, the whole in accordance with the by-laws of the Institute;

(4) To receive subsidies, grants, contributions, gifts, etc.;

(5) To administer the funds so placed at its disposal;

(6) To adopt any by-law deemed necessary for the regulation of its internal organization and conduct.

Membership.

ARTICLE 5. — The Institute shall be composed of charter members, active members, associate members, corresponding members, and a teaching staff.

Charter members.

The charter members shall be.....
Dean of the Faculty of Medicine of Laval University;
..... Dean of the Faculty of Medicine

of the University of Montreal;
 Dean of the Faculty of Medicine of McGill University;
 Director of the Provincial Bureau
 of Health; Director of the Health
 Department of the City of Montreal. They shall be ap-
 pointed for life.

Active members.

The active members must be professors in a Faculty of Medicine of one of the three universities of the Province, or hold an official position in a public health department (federal, provincial or municipal), and be residents of the Province of Quebec.

Ten shall be appointed by the charter members, and shall be selected as follows:

- Two shall be professors in Laval University;
- Two shall be professors in the University of Montreal;
- Two shall be professors in McGill University;
- Two shall be officials of the Provincial Bureau of Health;
- Two shall be officials of the Health Department of the City of Montreal.

They shall be appointed for a period of two years, and shall be eligible for re-appointment; however, in case they should be replaced, they shall retire from office alternately so that when the second appointment is made, one only of the two members shall be replaced, the other remaining in office for a third year; the choice of the member who is to remain in office shall be made by drawing lots.

Associate members.

The associate members shall be selected by the Board of Directors from among the group who are actively engaged in public health work, or who are teaching, or who are in a position to further the attainment of the objects which the Institute has in view, more especially physicians, dentists, professors, engineers, architects, nurses, men in public life, etc.

Corresponding members.

The corresponding members shall be those residing outside of the Province of Quebec; they must be on the staff of a recognized university, or hold an official position in a public health department or health organization.

Teaching staff.

The lecturers, as well as the members of the staff giving practical instruction, shall be appointed by the Board of Directors, under whose control they shall be. Their duties shall be determined by the by-laws adopted by the Board of Directors.

Board of Directors.

The Board of Directors of the Institute shall be composed of the charter members and ten active members appointed by the charter members.

The Board of Directors shall fill any vacancy which may occur in its membership.

The appointment of a member to replace a director must be concurred in by the vote of at least two-thirds of the remaining directors.

The Board of Directors shall, at all times, be composed of not less than fifteen members, the deceased charter members to be replaced by active members, who shall be selected from among those belonging to the same organization as the former incumbent, that is to say, to the Faculty of Medicine or to the health organization which he represented.

The active members, the associate members and the corresponding members shall be appointed by the Board of Directors in the manner determined by the by-law.

The Board of Directors shall have the power to administer the affairs of the corporation, to enact by-laws, to prepare the curriculum, to appoint its officers, as well as the teaching staff, etc.

Dues.

All members of the Institute shall pay an annual fee of five dollars.

All members of the Institute shall receive the publications edited by the Institute; they shall have access to the library and to the museum, and shall be associated with the Institute in all its activities and participate therein; they shall have membership in the public health association organized by the Institute.

Officers.

ARTICLE 6. — The Board of Directors shall appoint from among its members a Chairman, a Vice-Chairman and two secretaries, one French-speaking and the other English-speaking.

Chairman.

The Chairman shall direct the deliberations of the Board of Directors, etc. In case of his absence, the Vice-Chairman shall act as Chairman at the meetings of the Board of Directors.

Secretaries.

The Secretaries shall represent the Board of Directors in its dealings with the various sections of the Institute. They shall receive the reports of the heads of sections and transmit these to the Board of Directors. They shall prepare and submit to the Board of Directors the year-book of the Institute. They shall act as joint secretaries at the meetings of the Board of Directors. They shall perform all the duties assigned to them by the Board of Directors.

ARTICLE 7. — Any amendment to the constitution shall be previously communicated, in writing, to the Board of Directors and the vote of three-fourths of the members shall be required for its adoption.

SUMMARY PLAN OF TEACHING.**INSTITUTE OF HYGIENE. — PHYSICIANS.****1° Post-graduate courses.**

For physicians immediately after their graduation, program fulfilled in, approximately, one month

2° Post-graduate courses.

Courses during vacation, program fulfilled in, approximately, one month.

3° Regular course.

School year of from 8 to 9 months for physicians wishing to take a grade.

1st year — certificate.

2nd year — D.P.H. grade.

NURSES.

1° Post-graduate courses.

For nurses immediately after their graduation, program fulfilled in, approximately, one month.

2° Post-graduate courses.

Courses during vacation or during the year, program fulfilled in, approximately, one month.

3° Regular course.

School year of from 8 to 9 months for nurses desiring to take a grade.

1st year — certificate.

2nd year — P.H. Nurse grade.

MEMBERS OF THE CLERGY, TEACHERS, MEMBERS OF RELIGIOUS COMMUNITIES, MEMBERS OF VARIOUS ASSOCIATIONS.

1° Service of lectures. — Possibly leading to the grant of a certificate.

2° Course lasting from 2 to 3 months possibly leading to the grant of a certificate of capacity.

GENERAL PUBLIC.

One lecture or a series of lectures in the different centers of the Province.

MEANS OF OBTAINING THE COOPERATION OF THE MEMBERS OF THE MEDICAL PROFESSION.

- 1° Study of said means.
- 2° Putting them into practice.
Example: (a) immunization against diphtheria, typhoid fever, etc., etc.; (b) propaganda against tuberculosis, infantile mortality, etc., public health propaganda.
- 3° Preliminary preparation of the physicians in order to render their intervention efficient.

SUBJECT TREATED.

- (a) History, development of the application of public health measures.
- (b) Definition, fundamental principles.
- (c) Organizations: federal, provincial, municipal; powers and attributes of each of these sections.
- (d) Urban organizations: large and small towns.
- (e) Rural organizations.
- (f) Prevention of transmittable diseases.
- (g) Prevention of acquired diseases: professional or accidental.
- (h) Prevention of tuberculosis: pulmonary, of the bones or ganglionic.
- (i) Prevention of infantile mortality.
- (j) Legislation: federal, provincial, municipal.

- (k) Statistics.
- (l) Bacteriology.
- (m) Chemistry.
- (n) Parasitology.
etc., etc.

N.B. — These subjects to be grouped and to apply to the special public to whom they are presented.

REMARKS.

In order to make the Institute known and attract students, lectures are to be given in the whole Province showing the advantages it offers and the importance for the whole population of knowing and practising hygiene, its interest from the humanitarian, national, economic, personal point of view.

ANNUAL MEETING, AMERICAN PUBLIC HEALTH ASSOCIATION.

The City of Montreal had the honour, in 1931, of acting as host to the American Public Health Association, when the Association held its Sixtieth Annual Meeting, from the 14th to the 17th of September.

Previously, the Association had met in Montreal in 1894.

The International Society of Medical Officers of Health, The Conference of State Sanitary Engineers, The American Association of School Physicians, and the International Association of Dairy and Milk Inspectors arranged for their annual meetings to be held in Montreal at the same time.

Dr. Hugh S. Cumming, Surgeon-General of the United States Public Health Service and President of the American Public Health Association, presided at the meeting.

Dr. Louis I. Dublin, Third Vice-President and Statistician of the Metropolitan Life Insurance Company, who succeeds Dr. Cumming as President of the American Public Health Association, was present at the meeting. Four delegates attended from England, Dr. Charles Porter, Dr. James Fenton and Dr. George F. Buchan, who are Medical Officers of Health of London boroughs, and Sir Allen Powell, Chief Officer of Public Assistance of the London County Council. Among the 1,400 delegates registered were many prominent individuals, holding important positions in American and Canadian health organizations.

The scope and quality of the subjects on the programme were such as to make the meeting one of considerable importance from the scientific point of view, and to serve as an incentive, not only to Montreal, but to the Province of Quebec, indeed to the whole of Canada.

The meeting was not only worthy of note as a scientific gathering, but it was also made particularly enjoyable by reason of the social events which were arranged.

A three-day boat excursion on the St. Lawrence and the picturesque Saguenay rivers, in which over two hundred delegates participated, followed the meeting.

This excursion included a stop at Quebec City, where the delegates were received by Dr. Alphonse Lessard, Director of the Provincial Bureau of Health, at a luncheon given at the Chateau Frontenac, one of the Canadian Pacific hotels.

Another stop was made at Grosse-Ile, where the Quarantine Station of the Department of National Health is located. Dr. J. D. Pagé, Chief of the Division of Quarantine and Immigration Medical Services, received the delegates.

POPULATION.

The population of Montreal was, on the 1st of June, 1931, of 810,985 inhabitants according to the census made by the Federal Government (preliminary report).*

The evaluation of the population of this city, made by the Division of Statistics of the Health Department, for 1931, was of 810,000 inhabitants.

The concordance of these figures is interesting; in view of the fact that, after the Census of 1921, protestations were numerous, because many thought that the Federal Government's figures were incorrect.

The figures used by those who criticized, were not taken from the same sources than those of the Health Department and they estimated that the population of the City was much higher.

These critics have brought us to study this question carefully so that the evaluation we could make, should be based on known facts.

The evaluation of the population must be done with great care, because it serves as basis for the Vital Statistics, and if it was not exact, all the figures we could publish would be ipso facto erroneous.

We are pleased to be able to demonstrate that the figures published by the Health Department are sufficiently exact and that they can be trusted in every respect.

BREAST-FEEDING.

During 1931 the infant mortality has decreased quite considerably; indeed, the proportional death rate which, in

* Since this report has been written, a final report of the Federal Census Bureau was received, establishing the population of Montreal at 818,577 inhabitants, which is 7,652 more than the total of the preliminary report.

1930, was of 124.8 per thousand births, has receded to 113.3; however, it is still at too high a figure and we are searching, by all means, to strengthen the organization of the campaign which we began almost 20 years ago.

It is a well known fact, now, that breast-feeding is one of the principal agents to prevent infant mortality, but, in spite of our advices, the quantity of mothers who nourish their baby, is not increasing.

For this reason, during 1931, we thought advisable to undertake a campaign of propaganda of which we expect good results.

It was inaugurated by a lecture to physicians and nurses of the division of Child Hygiene, delivered by Dr. Gaston Lapierre, Professor of Pediatrics at the University of Montreal and at the school of Applied Social Hygiene and Physician attached to the Ste. Justine Hospital.

An illustrated poster entitled "Mother feed your baby yourself" was prepared and printed, 25,000 copies of which were distributed to appropriate locations, where they could attract the most attention.

Moreover, the address given by Dr. G. Lapierre on Breast-feeding was published in the Health Bulletin and copies were sent to all the physicians of the City, to the authorities of all religious denominations and to all others who could contribute to the success of the campaign.

Both the poster and the lecture were profusely distributed through the medium of Baby Clinics; they will soon be sent, with other circulars and posters, to all mothers, immediately after registration of their child's birth (this will be possible only in 1932, with the new organization which will permit us to have notice of every birth as soon as reported).

The table below is a copy of the poster.

MAMAN NOURRISSEZ VOUS-MÊME VOTRE ENFANT



A SIX MOIS, il commence à faire ses dents sans trouble.

L'ALIMENT QUE VOUS LUI DONNEZ A UNE INFLUENCE CONSIDÉRABLE SUR SA SANTÉ...

VOTRE LAIT est celui qui lui CONVIENT LE MIEUX

Il prévient les troubles

GASTRO-INTESTINAUX et le RACHITISME.

Il fera de votre bébé un enfant VIGOUREUX et PLEIN DE SANTÉ.

Si vous vous abstenez de le nourrir, vous risquez SA SANTÉ et SA VIE.

PENSEZ AU BONHEUR D'UNE MÈRE ET D'UN PÈRE lorsque leurs enfants sont brillants de SANTÉ....

De leur développement normal dépendra leur SUCCÈS À L'ÉCOLE et leur AVENIR.



NOURRI PAR SA MÈRE, le bébé aura une croissance normale et développera bien son intelligence.

FED BY ITS MOTHER, the baby will grow satisfactorily and its intelligence will develop normally.

MOTHER FEED YOUR BABY YOURSELF

THE FOOD YOU GIVE THE CHILD HAS A VITAL INFLUENCE ON ITS HEALTH...

YOUR MILK is the one which SUITS IT BEST



A L'ÂGE PRÉ-SCOLAIRE, il sera fort et résistera aux maladies.

It will prevent

GASTRO-INTESTINAL troubles and RICKETS.

It will make your baby a VIGOROUS and a HEALTHY child.

Should you refrain from nursing your baby, you endanger its HEALTH and its LIFE.

THINK OF THE HAPPINESS OF MOTHER AND FATHER when their children are in the best of HEALTH.... Their SUCCESS IN SCHOOL and their FUTURE will depend on their normal development.



FAMILLE HEUREUSE, A HAPPY FAMILY, enfants nombreux sains, many children, healthy, vigorous and intelligent.



A L'ÂGE SCOLAIRE, il sera capable de bien supporter les fatigues de l'école, et il aura des succès en classe.

AT SCHOOL AGE, it will be able to adjust itself to school life and to be successful in class.

MONTREAL

Service de Santé - Dept. of Health
Div. de l'Hyg. de l'Enfance.
Child Hygiene Div.



A VINGT ANS, il sera bien préparé à embrasser une carrière dans laquelle il aura du succès.

AT THE AGE OF TWENTY, it will be well prepared to start its career and to carry it on successfully.

Cette brochure est dédiée aux mères de familles de la Cité de Montréal par le Maire, le Président, et les Membres du Conseil Exécutif et du Conseil de Ville.

Elle fait partie d'une campagne entreprise par le Service de Santé pour attirer la toute attention des mères de familles sur les dangers de la malnutrition infantile, et de la malnutrition infantile, et de la malnutrition infantile.

Les écrivains sont respectueusement invités à se procurer dans cette campagne pour leur les écrivains les leur écrivains.

DEMANDEZ AU SERVICE DE SANTÉ LA BROCHURE SUR L'HYGIÈNE DE LA

This poster is dedicated to the mothers of the City of Montreal by the Mayor, the Chairman and members of the Executive Committee, and the members of the City Council.

It is part of the campaign carried on by the Department of Health for the purpose of reducing the rate of infant mortality. All mothers should read it, keep it near at hand, and read it again from time to time.

The children are earnestly requested to co-operate in this campaign by every possible means.

APPLY TO THE DEPARTMENT OF HEALTH FOR THE PAMPHLET "THE CARE OF THE INFANT."



CHILD HYGIENE DIVISION.

Owing to its primordial importance, the Child Hygiene Division is steadily receiving all our possible efforts to perfect its organization and to improve its work; there were a few improvements, during 1931, which deserve to receive mention; they are the following:

1° Additions to the staff.

Nomination of three medical inspectors, thirteen nurses, 1 psychiatrist and two clerical assistants.

2° Mental Hygiene.

Inauguration of the Psychometric Test on the Protestant Board of School Commissioners, which, in so doing, is applying a similar programme in existence in the schools of the Catholic Commission.

3° Organization of two pre-natal clinics.

These pre-natal clinics have been organized and are working in co-operation with the nurses of the School of Applied Social Hygiene; these nurses supervise the recruiting of the cases.

In spite of the fact that it is very difficult to have these clinics frequented, the recruiting made has kept them quite busy and it is our intention, if the success persists, to gradually increase their number.

4° Pupils' eye defects.

In the schools of the Protestant Commission and with the co-operation of the The Canadian National Institute for the Blind, the pupils suffering from eye defects were subjected to a special survey with the object of obtaining special class-rooms especially equipped for children suffering from such defects.

5° Test of hearing.

The system for the pupils' hearing sensitivity was inaugurated a few years ago.

Through the medium of the "Audiometer", the degree of the loss of hearing sensitivity was searched out; this work was done by the regular staff of school inspectors.

This system has been reorganized by the adoption of a new method for the working out of which a special employee who, with the "Audiometer", has to inspect the schools one after the other; it is a possibility that another special employee will soon be added, so that this service may be vulgarized amongst the students.

6° Immunization against diphtheria.

The work of immunization against diphtheria, which began in 1928 is still much appreciated by the public which takes advantage of the opportunity offered, in such a way that the number of children vaccinated, in 1931, is much higher than that of 1930.

The number of children immunized in 1931 was of:

1st injection: 10,972.

2nd injection: 10,500.

3rd injection: 10,056.

Have undergone Posterior Schick Test: 3,654.

As in 1930, those who discontinued after the 1st or the 2nd injection, are relatively few; the above figures indicate exactly the number of children injected to the 31st of December; but it must be remembered that those who did not finish their immunization, at the end of the year, continue to receive it, the following year, and to undergo the Posterior Schick.

SUBSIDIES TO CHARITABLE INSTITUTIONS.

During the year 1931, a large number of charitable institutions presented petitions to obtain subsidies from the City; such request were generally made for the reconstruction or the enlargement of the buildings intended for the hospitalization of the sick, the old people, the poor, to cover deficits or to undertake new deeds of charity.

As the assistance and the relief for the poor in a large city like Montreal become a very important problem, and bring a very great expenditure, the petitions were transmitted to me with instructions to make a general study of the question.

The following report was sent to the Executive Committee on the 18th November, 1931.

RE : PETITIONS FOR SUBSIDIES BY CHARITABLE INSTITUTIONS.

Montreal, November 18th, 1931.

To Mr. Honoré Parent, K.C., Director of Departments, by
Dr. S. Boucher, Director of the Department of
Health.

Dear Sir: —

On March 11th, 1931, you forwarded to me the documents of all the petitions for subsidies made to the City hospitals and various other charitable institutions. Since then you have forwarded me some others, with the instruc-

tions of making a general report on the advisability of granting such subsidies.

In reply, I am submitting the following general report.

It is a fact that charitable institutions cannot meet their obligations solely with the income derived from their operations nor from the aid of private charities.

All charitable institutions, hospitals, hospices and others must secure help from both the provincial and municipal governments. It is for this reason that I am greatly in favor of the principle of granting to these institutions the aid of the municipal as well as that of the provincial government, in as far as this is possible.

In addition to the amounts paid by the City of Montreal in virtue of the provincial laws, the City has granted in the years 1930 and 1931 substantial subsidies to various charitable institutions.

The following is a list of these institutions and of the amounts granted to each by the City of Montreal.

SPECIAL SUBSIDIES GRANTED BY THE CITY IN 1930-1931.

GENERAL HOSPITALS, ETC.

Contracts.

Contracts	Institutions	For what purpose	Engage-ment	Annual payment	Term	Paid	Date of payment's
19-2-1931 Modific. 7-4-31	St. Luke Hospital	Construction	—	\$50,200.	20 years	—	1st February 1st August
23-4-1931	Dispensaire Hospice St-Henri	Use of premises for 15 years	\$15,000.	—	—	\$15,000.	
30-9-1931	St. Mary's Hospital	Construction	—	\$29,285.	20 years	—	31st March 30th September
Resolution 13-10-1931	Hebrew General and Maternity Hospital	Construction	\$50,000.	\$12,500.	4 years	—	January

Résolutions.

Résolutions:	Institutions	For what purpose	Engage-ment	Annual payment	Term	Paid	Date of payment's
2-6-1930	Notre-Dame Hospital	Construction	\$50,000.	\$12,500.	4 years	\$12,500.	January
23-1-1931	Children's Memorial	Construction	\$45,000.	\$15,000.	3 years	\$15,000.	January
10-3-1931	Montreal General Hosp.	Fill up deficit	—	\$25,000.	20 years	\$25,000.	16th May
17-6-1931	Ecoles Ménagères Pro- vinciales	Construction	\$ 4,000.	\$ 4,000.	30 years	—	Payable with annual grants.
31-7-1931	Jewish Hospital for in- curables	Land					

In the granting of these subsidies, the City of Montreal is obliged to draw upon the general revenue which is appropriated to its administration, as it has no special revenues for the purpose of granting such subsidies.

The number of petitions for subsidies has been very numerous, the following is a list of these petitions and of the amounts petitioned for.

REQUESTS FOR GRANTS.

General Hospitals.

Institutions	Amounts requested		Purpose of the request
	Capital	Annuity	
Homeopathic Hospital.....	Not specified.	—	Deficits.
Hôtel-Dieu.....	\$600,000.00	—	Construction.
Post-Graduate Hospital.....	Land	—	Construction projected.
Women's General Hospital..... (situated at Westmount)	\$50,000.00	\$15,000. (more)	Deficit.

Special Hospitals.

Ste-Justine Hospital.....	\$200,000.00	—	Construction.
Montreal Children's Hospital.....	\$125,000.00	—	Construction.
Montreal Convalescent Home (Approximate cost of the lands) ..	\$ 27,879.04	—	Construction projected.
Institut du Radium..... (Section of the University Hosp.)	—	\$30,000.	Construction.
Royal Victoria Hospital..... (Montreal Maternity.)	Not specified.	—	

Assistance and educational establishments.

Institut Nazareth pour les Aveugles.	\$100,000.00	—	Construction.
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REQUESTS FOR SUBSIDIES. — (Suite.)

Crèches.

Institutions	Amounts requested		Purpose of the request
	Capital	Annuity	
Crèche d'Youville (Grey Nuns)	Not specified.	—	Deficit.

Sanatoriums for tuberculous.

Institut Bruchési	\$640,000.00	—	Construction projected.
Laurentian Sanatorium Association .	\$ 60,000.00 (1925-31)	\$10,000.00 (more)	Deficit.

Other institutions.

Hospice for Crippled Children	Not specified.	—	Foundation for boys, crippled & poor.
Œuvres Notre-Dame de la Merci . . .	\$100,000.00	—	
Villa de la Broquerie	55,000.00	—	
Association Canadienne des Aveugles	10,000.00	—	
Neuro-Chirurgical Institute	—	\$15,000.00	
Fédération Catholique des Eclaireurs Canadiens-français	—	5,000.00	
Canadian National Institute for the Blinds	—	4,000.00	
Les Buissonnets	—	Not specified.	

To this list might be added several other petitions from various other associations, although these are not of as great an importance as the others, they are nevertheless justifiable.

These separate petitions do not tend to coordinate the work of public charities and when so granted, a complicated situation is the result; wherein some certain kinds of institutions may be increased beyond reason, while certain others which are of a more deserving and urgent

nature, might not receive a sufficient grant and might be moreover totally neglected. Among the latter, I may mention homes for paralytics and for epileptics, sanatoriums for pulmonary and bone tuberculosis, asylums for infants and hospitals for children, etc.

The question of public assistance demands a complete study and consideration of the situation with the object in view of the formation of an organization which would govern all these needs and so prevent the too rapid development of certain kinds of institutions in detriment to these others whose numbers at present are insufficient. By the formation of such an organization, the work of those institutions of similar natures would be coordinated and a more complete cooperation would be established between them all.

This should be done by a Commission appointed by the Government which is the more interested party in this matter and not by the Municipality.

The municipalities should not intervene, except in answer to the call of the Government which, while specifying the amounts the municipalities should contribute would indicate the sources of income whereby such contributions could be paid. This would take care of the enlargements of existing institutions, the construction of new buildings or new foundations, as well as the maintenance of the institutions that already exist under the Quebec Public Assistance Act. In this manner, the organization already existing under said act would be enlarged and completed.

In this manner the population of all the municipalities in the Province would be called upon to contribute equally to public charity, whereas otherwise the burden has to be borne almost entirely by large municipalities.

The Quebec Government has already done much for charity and during the last years, it has created an organization which has surely done much good. Due to the rapid increase in requirements, the institutions are again

making pressing appeals to obtain the aid of the municipalities in addition to that of the Government, even in the case where it is for the purpose of foundation or of enlargement or of reconstruction.

The Public Assistance of the Province of Quebec was organized by an act sanctioned on the 19th of March, 1921.

Under this act, a provincial service of public assistance was created.

This act defines the obligations imposed on the municipalities as regards the institutions recognized as public charitable institutions.

It enacts moreover the taxes to be imposed, in order to make it practical and states to whom the proceeds of said taxes will be remitted.

This act gives to the Service of Public Assistance power to determine the rate of payment granted to the different charitable institutions per day of hospitalization and per patient.

It gives at the same time to the Quebec Government, through its Service of Public Assistance, power to grant to charitable institutions subsidies in the form of an aggregate sum payable at once or by annuities.

It enacts that the rate paid per day for the hospitalization of the poor shall be paid jointly in the proportion of 50% each by the Quebec Government and the municipality in which the poor person resides.

Moreover (Art. 46), it enacts that the tax formerly known as "The Rights of the Poor" shall be remitted one-half to the Quebec Government and one-half to the disposal of the municipality to pay its share of the maintenance of the poor in charitable institutions.

The collection of said tax is to be entirely at the expense of the municipality.

In order to dispose of the funds required to pay the expenses resulting from the coming into force of this act of Public Assistance the Government reserved the proceeds of several taxes which are mentioned in Article 51 of the act, which reads as follows:

"Article 51. — The amounts which must be paid over to the Treasury Department to form part of the special fund known as the Public Charities Fund shall include:

1. That part of the duties collected by municipalities under the provisions of section 46 of this act and which must be paid over according to the terms thereof;

2. The duties collected for licenses for places of amusements under the Quebec License Act (Chap. 25);

3. The duties collected for race-course licenses and entry duties at race-meetings, under the Quebec License Act;

4. The registration fees for apparatus employed in making bets or wagers upon race-courses and the duties imposed upon the said bets and wagers, under the Quebec License Act.

The moneys collected under the provisions of paragraphs 2, 3 and 4 shall be paid over to the said fund after deducting the cost of collection."

Moreover, by an act, the Government imposed a tax on meals in hotels and restaurants; the proceeds of this tax are paid to it in their entirety.

Municipalities, in order to pay their share of the maintenance of poor people in institutions have only the share accruing to them from the tax called "The Rights of the Poor".

The City of Montreal under the Article 338a of its charter, has the right to grant subsidies for charitable

purposes, but has no special income to be used for this purpose; the result of which is that when it grants any subsidy the money must be taken from its general income.

Until 1930 the City had not granted any subsidies to charitable institutions coming under the Public Assistance Act of Quebec, but in the years 1930 and 1931, it granted those mentioned in the table already given in this report.

It must be noted that the institutions situated in the City of Montreal are in no way municipal institutions and that they are used to a certain extent by the population of the other municipalities of the Province.

It must be taken into consideration also that when the Government grants a subsidy in this manner, the citizens of Montreal have contributed a fair share thereof.

It will be interesting to show in what position the city finds itself at present, as regards hospitals, infants homes and maternity hospitals, by considering the number of beds on which the population can count. With this reason in view I think it advisable to publish the following tables, showing: —

1. The number of beds at present at the disposal of the public in the different institutions;
2. The additions which will be made within a couple of years, construction having already been started on some, others being almost finished and others being on the point of starting.
3. The additions which are still only projects.

General hospitals.

Institutions	Actual number of beds			Additions		
	Private	Semi private	Public	Total	Under construction	Projects
Montreal General Hospital.....	48	57	299	404	—	—
Royal Victoria Hospital.....	135	13	314	462	—	—
Hôtel-Dieu de St-Joseph.....	53	82	165	300	160	—
Notre-Dame.....	82	25	183	290	206	—
Saint-Luc.....	40	20	112	172	218	—
Ste-Jeanne d'Arc.....	28	39	92	159	—	275
Western.....	20	6	59	85	—	—
St. Mary's.....	5	10	35	50	200	—
Hôp. Gén. de la Miséricorde.....	27	27	—	54	—	—
Homeopathic.....	28	28	41	97	—	154
Chinese.....	7	8	10	25	—	—
Women's General.....	31	49	102	182	—	—
Hôpital Universitaire.....	—	—	—	—	500	—
(Montreal University)	—	—	—	—	140	—
Jewish General.....	—	—	—	—	—	—
	504	364	1412	2280	1424	429

Situatd at
Westmount

Hospitals for children.

Institutions	Actual number of beds				Additions		
	Private	Semi private	Public	Total	Under construction	Projects	Remarks
Sainte-Justine.....	30	—	290	320	—	—	
Children's Memorial.....	—	—	115	115	200	—	
Shriner's Hospital.....	—	—	60	60	—	—	
Montreal Children's Hospital.....	—	—	—	—	75	55	
	30	—	465	495	275	55	

Hospitals for tuberculous.

Sacré-Cœur	39	52	309	400	—	—	Construction to replace old hospital.
Grace Dart Home	—	—	45	45	55	—	
Laurentian Sanatorium	12	38	200	250	—	—	
Institut Bruchési	3	—	45	48	—	—	
Mount Sinai Sanatorium	—	—	94	94	—	—	
Sanatorium Bruchési	—	—	—	—	—	400	
	54	90	693	837	55	400	

Hospitals for cancerous.

Institutions	Actual number of beds			Additions		
	Private	Semi private	Public	Total	Under construction	Projects
Sacré-Cœur.....	14	19	117	150	—	—
Institut du Radium.....	3	—	20	23	—	—
	17	19	137	173	—	—
						Will be included in the University Hospital.

Hospitals for chronic diseases.

Sacré-Cœur.....	16	21	117	154	—	—
	16	21	117	154	—	—

Homes for convalescents.

St-Joseph des Convalescentes.....	—	1	56	57	—	300
Montreal Convalescent Home.....	2	6	25	33	—	100
Moore's Home.....	—	—	27	27	—	—
Hastings' Convalescent Home.....	—	—	6	6	—	—
	2	7	114	123	—	400

Institutions	Actual number of beds				Additions		
	Private	Semi private	Public	Total	Under construction	Projects	Remarks
Saint-Paul Hospital.....	10	—	116	126	—	—	Will close the 31-12-33. Will be replaced 1-1-34 by St. Luke Hospital.
Alexandra Hospital.....	12	—	138	150	—	—	
Civic Hospital (small-pox).....	—	—	62	62	—	—	
St-Luc Hospital.....	—	—	—	—	300	—	Will open the 1-1-34.
	22	—	316	338	300	—	

Maternities.

Royal Victoria Hospital.....	56	35	117	208	—	—	
(Montreal Maternity)							
Catherine Booth Mother's Hospital	10	25	15	50	—	—	
Maternité de la Miséricorde.....	5	8	234	247	—	—	
Connected with General or Children Hospitals:							
Sainte-Justine.....	—	8	10	18	—	—	
Ste-Jeanne d'Arc.....	9	3	4	16	—	—	
Notre-Dame.....	9	—	9	18	8	—	
Jewish Hospital.....	—	—	—	—	37	—	
Women's General Hospital.....	11	10	22	43	—	—	Situated at Westmount.
	100	89	411	600	45	—	

Crèches.

Institutions	Actual number of beds			Additions		
	Private	Semi private	Public	Total	Under construction	Projects
Crèche de la Miséricorde.....	—	—	292	292	—	—
Crèche St-Paul.....	—	—	230	230	—	—
Crèche d'Youville.....	—	—	767	767	—	—
Protestant Infants' Home.....	—	12	88	100	—	—
Montreal Foundling & Baby Hosp.	2	—	75	77	—	—
	2	12	1452	1466	—	—

Beds for babies in general hospitals and maternities.

Section "A": Royal Victoria Hospital..... (Montreal Maternity) Catherine Booth Mother's Hospital Women's General Hospital.....	Private	Semi private	Public	Total	Under construction	Projects	Remarks
Sainte-Justine.....	—	—	—	110	—	—	Situated at Westmount.
Sainte-Jeanne d'Arc.....	10	25	15	50	—	—	
	—	—	—	40	—	—	
	—	8	10	18	—	—	
	10	4	4	18	—	—	
Section "B": Jewish General Hospital.....	—	—	—	—	30	—	
	20	37	29	236	30	—	

The following table is a continuation of the preceding ones, in which is shown the number of beds in the various institutions which are presently at the public's disposal, together with the number of beds there will be when new constructions are finished and the number of beds there will be if the projects are brought to fruition. This table shows in addition the proportion of beds per 1,000 of the population that there is now and that there will be later in general hospitals, in hospitals for children and in hospitals for tuberculous patients, when the new constructions will have been finished.

SUMMARY

Hospitals, maternities, crèches, etc.

Institutions	Number of beds actual total	Number of beds per 1,000 of population	Under construction 1931-1932	Number of beds per 1,000 of population	Projects of construction or enlargement in 1932
General hospitals.....	2280	2.81	1424	4.56	429
Hospitals for children.....	495	0.61	275	0.96	55
Hospitals for tuberculous.....	837	1.03	55	1.09	400
Hospitals for chronic diseases.....	154	—	—	—	—
Hospitals for cancerous.....	173	—	—	—	—
Hospitals for convalescents.....	123	—	—	—	400
Maternities.....	600	—	45	—	—
Creches.....	1466	—	—	—	—
Beds for babies in maternities.....	236	—	30	—	—
Hospitals for contagious.....	338	—	174 (on addition the 1-1-1934)	—	—

POPULATION: 810,925 (Preliminary report, census 1931).

In conclusion, I would ask you to submit to the Executive Committee the following: —

1. That the question of Public Assistance in the City of Montreal is of Provincial interest and that it should be studied jointly by the Government and by the City.

2. That the creation or the enlargement of institutions should be decided upon only after the adoption of a plan, prepared so as to meet the demand and to prevent too large an expansion where it is not urgent.

3. That special subsidies should be granted only by the Government, which could impose a general tax, to which all citizens of the Province would contribute, for the reason that they are all equally interested, in so far as institutions are always at the disposal of all the citizens of the Province, although they are very often situated in the large centers.

4. That the present system of paying for hospitalization, half by the Government and half by the Municipality, should be continued as it is equitable and just. However, all the municipalities of the Province should be forced to meet their obligations by the enactment of an "Act of Residential Aid".

5. That there is no objection to the Government passing a law allowing the municipalities to contribute to the foundation of the institutions which are lacking or to the enlargement of existing establishments. In such cases the amounts granted by the municipalities should come from special taxes imposed for such purpose.

Respectfully submitted,

S. BOUCHER, M.D., D.P.H.,

Director of the Department of Health.

HEALTH COMMISSION.

This Commission was appointed by the City Council according to by-law No. 1044 and was composed, for the year 1931, as follows: —

Alderman J. Allan Bray,* Chairman of the Executive Committee;

Alderman H. A. Quintal, M.D.;

Alderman Z. H. Lesage, M.D.;

Alderman F. W. Gilday, M.D.;

Mr. S. Boucher, M.D., D.P.H., Director of the Department of Health;

Dr. L. de L. Harwood, Dean of the Faculty of Medicine, the Université de Montréal;

Dr. E. G. Asselin, Professor at the Faculty of Medicine, Université de Montréal;

Dr. A. Grant Fleming, Professor at the Faculty of Medicine, McGill University;

Dr. Frank G. Pedley, Professor at the Faculty of Medicine, McGill University.

The by-law stipulates that:

“The said Health Commission constitutes a consulting body, whose duty is to advise the municipal authorities on all matters pertaining to public health, and to submit to the Executive Committee all recommendations or suggestions it may consider opportune on questions relating to public health, which it has had under study, either on request from the said committee or by its own initiative.”

* Mr. Bray resigned and was replaced in September, 1931, by Alderman Tancred Fortin, K.C.

During the year, this Commission studied the following questions:

Collection of garbage on religious and on civic holidays.

Sanitary conditions in public baths.

Additions to the staff of the Department of Health.

Mental Hygiene in the Schools.

Immunization against diphtheria; report presented by the Director of the Department of Health.

The Poliomyelitis in Montreal; report presented by the Director of the Department of Health.

Publication of an illustrated poster entitled: "Mother feed your baby yourself".

Opportunity by the Municipality to allow subsidies to hospitals.

Display of fruits and vegetables outside the establishments.

BY-LAW CONCERNING PRIVATE MATERNITIES AND PRIVATE HOSPITALS.

The by-law concerning private maternities and private hospitals, project of which has been laid before the City Administrators in 1931, has not been adopted, because the Charter did not confer them such power.

Such power was given to them at the last Session of the Provincial Legislature by an amendment to Article 300 of the City Charter, which article gives to the Council the power of making by-laws, by adding after paragraph 170 thereof, the following paragraph:

171. — “To regulate private maternities and private hospitals and subject them to the granting of a permit by the Director of Police Department and of a permit by the Director of the Health Department; to regulate the equipment, linen, general care and nourishment in such establishments as well as the staff thereof; to compel the owners or directors or persons in charge of said establishments to keep a record and to submit a report of their operations to the Director of the Health Department, and to subject said private maternities and said private hospitals to an inspection by the Director of the Health Department or his representatives.”

Consequently, it shall be presented once more; as has been published in the Annual report of 1930, we request the reader who may wish to read it again, to same.

Division of Contagious Diseases

CONTAGIOUS DISEASES DIVISION.

Doctor S. Boucher,

Director, Department of Health,

City of Montreal.

Sir: —

I have the honour of handing you over the general statement of the activities of the Contagious Diseases Division during the year 1931.

In the course of that year, 17,158 cases of contagious diseases were registered, of which 2,124 were tuberculosis; these figures are somewhat higher than those of 1929 and 1930. Measles alone, which amounts to 7,333 on the total reported cases, must account for the said increase.

On 1,207 cases of death by communicable diseases in 1931, 887 were of tuberculosis, while in 1930, on 1,436 cases, 983 were of tuberculosis. This shows a total lessening of 229, of which 96 were attributable to tuberculosis.

The last mentioned disease excepted, the death average by communicable diseases reported has been of 2.12% in 1931, against 3.26% in 1930.

The diseases that prevailed after measles are chicken pox (2,501) and scarlet fever (1,730 cases).

Only 706 cases of diphtheria are figuring for 1931 while 1,254 cases in 1929, and 930 in 1930.

During the summer and fall of 1931, we have had an epidemic of acute anterior poliomyelitis (Infantile

Paralysis). The details of this epidemic are shown at the end of the present report, in chapter "Epidemiological Summary".

Three important facts which have occurred during 1931 ought to be especially mentioned.

1. Contract with St. Luke Hospital for the construction of an hospital reserved for the treatment and maintenance of infectious patients of the city.

2. The granting of a scholarship to a physician of the Contagious Diseases Division for the obtainment of a university degree.

3. Allowance of additional credits for the purchase of serum for the treatment of poliomyelitis cases during the epidemic.

All operations of this Division are shown in the following summary:

Cases reported and confirmed	17,158
Cases hospitalized (St. Paul and Alexandra) ..	2,617
Cases visited by the nurses (including subsequent visits)	24,237
Cases visited by epidemiologists to confirm diagnosis	6,344
Houses placarded	6,939
Houses disinfected	4,677
Various visits by disinfectors	2,819
Visits and special investigations by supervising nurse	670
Literature distributed (approximately copies) ..	20,000

Laboratory.

Various analysis submitted:

Antiseptics	3
Researches of Rabies bacillus (with negative results)	5

Blood (Widal's test)	4
Diphtheria (examination after culture)	4,488
Stools (agglutination test for typhosus bacillus and paratyphoid A. & B. bacilli)	97
Urine (agglutination test for typhosus bacillus and paratyphoid A. & B. bacilli)	85

Diphtheria.

Free distribution of anti-diphtheric serum:

(a) curing doses	828
(b) prevention doses	928

Stations for free distribution of antidiphtheric serum	18
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Free distribution of Toxoid (anatoxine Ramon) for immunization against diphtheria (number of vials)	2,240
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Free distribution of diphtheria toxine for Schick Test (number of vials)	1,390
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Number of complete immunizations reported to this Division, and done by the Division of Child Hygiene and other institutions:

(a) By Division of Child Hygiene	9,520
(b) By Child Welfare Association of Montreal	950
(c) By Fédération d'Hygiène Infantile	740
(d) By Ecole d'Hygiène Sociale Appliquée	140

Total	11,360
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The City supplies, free of charge, the necessary quantity of anatoxine Ramon and of Schick toxine, on condition that these institutions transmit regularly to the Division of Contagious Diseases a detailed report of their operations. The work they are carrying on, since 1929, with a uniform operating technic, will be finally appreciated in its results only in the coming years.

In 1931, they have registered a total of inscriptions amounting to 12,461 together with 6,201 posterior Schick tests.

It is important to note here, that the latter figures mentioned above, constitute a rather notable difference from the total (11,365) of immunizations for 1931; it is due to the fact that several record-cards are kept in immunization centres, which on the 31st of December have to wait for the final Schick test before reporting to our Division.

A list of diphtheria cases that occurred amongst immunized people in 1930 and 1931 shows that 15 of them have suffered from that disease on a total of 22,897, representing the very small average of 0.06%.

Eleven other cases have also been recorded, but the sufficient amount of injections, to consider them as immunized, has not been given.

Such results should urge us to intensify the campaign of immunization, and we rely on the generous co-operation of physicians, parents and educators to help us in reaching our aim.

Small-pox and vaccination.

Since January, 1930, no case of small-pox has been reported to the Department of Health.

Vaccination against small-pox has been carried on very actively during 1931.

During the months of June and July, special attention has been brought to the staff of industrial and food products establishments. This work has been attended by physicians of the Child Hygiene Division, who have visited 121 establishments during that time.

The total amount of vaccinations made by physicians appears as follows:

(a) by the Contagious Diseases Division ..	7,052
(b) by the Child Hygiene Division	13,080
(c) by the Medical Control Division	5,000
<hr/>	
Total	25,132

Number of vaccination certificates issued by physicians	23,620
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Dog bites:

Number of cases reported	398
Number of dogs kept under quarantined ob- servation	363
Number of dogs' heads submitted to the laboratory for analysis and research of Corpus Negri	5
Positive results of animal or human rabies..	0

Typhoid Fever.

Number of cases reported during the year . .	129
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Number of deaths attributable to this disease	34
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Representing a percentage of	26.3%
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The distribution by months of the cases reported, of their source of origin, of hospitalization and of deaths are shown in Table No. 1. Other tables in numerical order, which constitute the detailed operations of the Contagious Diseases Division, are hereafter.

TABLE No. 1
CASES OF TYPHOID FEVER REPORTED FROM JANUARY 1st TO 31st DECEMBER, 1931

1931 Months	MONTREAL CASES				OUTSIDE CASES but hospitalized in Montreal	
	Number of cases	Source of infection		Cases hospital- ized	Number of deaths	Place of residence
		In Montreal	In other localities			
January.....	2	2	.....	3	2	Pointe-aux-Trembles..... 3
February.....	2	2	.....	.....	4	Outremont, P.Q..... 2
March.....	3	3	.....	3	.....	St-Charles, P.Q..... 1
April.....	5	4	1	4	.....	Chambly, P.Q..... 1
May.....	4	4	.....	2	2	Maple Grove, P.Q..... 1
June.....	13	12	1	10	.....	Longueuil, P.Q..... 1
July.....	33	29	4	21	5	New-Glasgow, P.Q..... 1
August.....	23	14	9	19	2	St-Scholastique, P.Q..... 7
September.....	11	11	.....	4	6	St-Adolphe d'Howard, P.Q..... 1
October.....	19	18	1	11	5	Caughnawaga, P.Q..... 1
November.....	10	10	.....	5	4	Contrecoeur, P.Q..... 1
December.....	4	4	.....	5	4	Plage Laval, P.Q..... 2
Total.....	129	113	16	87	34	22

Percentage of deaths: 26.3%.

CLASSIFICATION OF CONTAGIOUS DISEASES PER MONTHS, 1931

	January	February	March	April	May	June	July	August	September	October	November	December	Total	Total of deaths in 1931
Diphtheria.....	77	42	43	47	47	55	40	45	74	87	69	80	706	71
Scarlet fever.....	198	159	149	144	163	142	44	57	88	154	207	225	1730	20
Measles.....	112	200	547	1757	2050	1193	229	52	42	225	406	520	7333	30
German measles.....	9	10	17	23	21	11	3	1	.....	1	8	13	117	.....
Whooping-cough.....	112	104	113	90	42	35	58	81	55	51	103	120	964	29
Mumps.....	47	52	99	36	71	50	6	1	21	23	73	109	588	.....
Chicken-pox.....	347	199	266	261	218	218	66	23	46	149	349	359	2501	5
Small-pox.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erysipelas.....	21	13	16	33	12	13	11	14	8	12	9	8	170	20
Typhoid.....	2	2	3	5	4	13	33	23	11	19	10	4	129	34
C. S. meningitis.....	1	1	2	.....	1	.....	.....	.....	.....	1	1	2	9	3
Poliomyelitis.....	.....	.....	.....	.....	1	.....	.....	95	268	314	48	14	744	74
Puerperal septicaemia.....	1	4	2	2	3	4	1	.....	3	5	2	2	29	34
Purulent ophthalmia.....	.....	1	.....	3	.....	5	3	1	.....	1	.....	.....	14	.....
Total.....	927	787	1257	2401	2633	1739	498	393	616	1042	1285	1456	15034	320
Tuberculosis:														
Pulmonary tuberculosis.....	159	159	183	123	227	157	146	162	121	136	102	162	1837	766
Tuberculosis, other forms.....	10	31	40	27	39	26	20	23	17	19	17	18	287	121
Grand total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17158	1207

TABLE No. 3

CLASSIFICATION OF CONTAGIOUS DISEASES BY AGES, 1931

Diseases	Under 1 year	1 to 5 years	6 to 10 years	11 to 20 years	21 to 30 years	31 to 40 years	41 to 50 years	51 to 60 years	61 to 70 years	71 to 80 years	81 to 90 years	91 to 100 years	Total
Diphtheria.....	16	347	216	77	34	11	5	1	1	..	..	..	706
Scarlet fever.....	14	655	715	238	75	24	7	1	1	..	..	..	1730
Measles.....	222	3057	3255	763	26	7	2	1	..	..	..	..	7333
German measles.....	4	35	66	5	5	1	1	..	..	..	..	..	117
Whooping-cough.....	115	539	296	12	1	1	..	..	..	..	..	..	964
Mumps.....	3	143	368	62	1	8	2	..	..	1	..	..	588
Chicken-pox.....	147	961	1274	102	11	5	1	..	..	..	..	..	2501
Small-pox.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas.....	14	10	4	7	21	45	34	15	13	6	1	..	170
Typhoid.....	..	9	23	47	31	11	6	2	..	..	..	..	129
C. S. meningitis.....	1	1	4	3	..	..	..	..	..	..	..	..	9
Poliomyelitis.....	29	449	199	61	6	..	..	..	..	..	..	..	744
Puerperal septicaemia.....	..	..	..	1	13	14	1	..	..	..	..	..	29
Purulent ophthalmia.....	12	1	..	..	1	..	..	..	..	..	..	..	14
Total.....	577	6207	6420	1378	225	127	59	19	14	7	1	..	15034
Tuberculosis:													
Pulmonary tuberculosis.....	10	11	38	366	580	387	250	136	48	11	..	..	1837
Tuberculosis, other forms.....	12	27	23	51	67	43	37	12	12	3	..	..	287
Grand total.....													17158

TABLE No. 4
CLASSIFICATION OF CONTAGIOUS DISEASES BY NATIONALITIES, 1931

Diseases	French Canadians	English Canadians	Jews	Other nationalities	Total
Diphtheria.....	453	125	44	84	706
Scarlet fever.....	780	684	191	75	1730
Measles.....	3360	2640	998	335	7333
German measles.....	40	54	18	5	117
Whooping-cough.....	568	314	34	48	964
Mumps.....	422	110	36	20	588
Chicken-pox.....	1576	642	150	133	2501
Small-pox.....					
Erysipelas.....	76	67	16	11	170
Typhoid fever.....	90	23	4	12	129
C. S. meningitis.....	8	1			9
Poliomylitis.....	555	126	26	37	744
Puerperal septicaemia.....	21	5	1	2	29
Purulent ophthalmia.....	12			2	14
Total.....	7961	4791	1518	764	15034
Tuberculosis:					
Pulmonary tuberculosis.....	1210	402	95	130	1837
Tuberculosis, other forms.....	167	91	15	14	287
Grand total.....					17158

TABLE No. 6

CONTROL OF CONTAGIOUS DISEASES, 1931

Diseases	Control Visits			
	Diagnosis	Supervision of quarantined houses	Disinfections	Placards
Diphtheria	61	2404	625	670
Scarlet fever	206	3012	1399	1311
Typhoid fever	220	218	74	
Measles	37	113	4	
German measles	1994	7216	400	3827
Chicken-pox	985	2557	52	
Whooping-cough	327	1127	57	442
Tuberculosis	19	743	1144	
C. S. meningitis	6	9	23	3
Scabies	32	35		
Influenza	34	4		
Smallpox				
Erysipelas	5	96	67	
Skin diseases	30	4		
Poliomyelitis	533	1614	634	686
Purulent ophthalmia	2	11		
Mumps	329	663	3	
No infection	780		195	
Miscellaneous	744	4411		
Total	6,344	24,237	4,677	6,939

Besides their work, the epidemiologists vaccinated 7,052 persons and issued 5,858 verification certificates.

2,819 miscellaneous visits have also been made by officers attending fumigation.

Alexandra and St. Paul Hospitals

TABLE No. 7

DURATION OF SOJOURN OF PATIENTS.

Patients hospitalized	2,869
Number of days of hospitalization	75,627
Average sojourn for each patient	28
Maximum hospitalization by day	267
Minimum hospitalization by day	86
Average hospitalization by day	176

Mortality

	Per- centage
Deaths during the year 1931 125	4.30%
Deaths during the first 48 hours 63	2.10%
Number of deaths happened after the first 48 hours 63	2.10%
Proportion of deaths during the first 48 hours to the total deaths	50%

Miscellaneous

Ambulance calls	2,063
Microscopical examinations	2,017
Urine analysis	19,630

Alexandra and St. Paul Hospitals

TABLE No. 8 FLUCTUATION OF PATIENTS AND DEATH RATE

Diseases	In hospital January 1st, 1931	Admitted	Total number of patients.	Percentage of cases	Results			In hospital December 31st, 1931	Total
					Cured	Dead	Percentage of deaths		
Diphtheria.....	47	509	556	19 %	444	61	10 %	51	556
Scarlet fever.....	195	1192	1387	48 %	1190	19	1.3 %	178	1387
Measles.....	2	448	450	15 %	433	9	2 %	8	450
Erysipelas.....	2	119	121	4 %	111	7	5.7 %	3	121
Chicken-pox.....	3	50	53	1.8 %	52	1	...	1	53
Whooping-cough.....	2	39	41	1.4 %	34	3	7.3 %	4	41
Mumps.....	...	6	6	...	6	...	...	...	6
Scabies.....	1	1	2	...	2	...	...	...	2
Meningitis (t. b. c.).....	...	2	2	...	...	2	...	...	2
German measles.....	...	1	1	...	1	...	...	...	1
Poliomyelitis.....	...	242	242	8.3 %	199	17	7 %	26	242
Typhoid fever.....	...	1	1	...	...	1	...	...	1
Pneumonia.....	...	1	1	...	...	1	...	...	1
Ultero-végétative endocarditis.....	...	1	1	...	...	1	...	...	1
Diffuse phlegmon.....	...	1	1	...	...	1	...	...	1
Nephritic toxemia.....	...	1	1	...	...	1	...	...	1
Tetanus.....	...	1	1	...	...	1	...	...	1
Acute miliary tuberculosis (t. b. c.).....	...	1	1	...	...	1	...	...	1
Hereditary syphilis.....	...	1	1	...	...	1	...	...	1
Total	252	2617	2869		2472	126	4.30 %	271	2869

Alexandra and St. Paul Hospitals

TABLE No. 9

INTUBATION AND RESULTS

Ages	Intubations	Cured	Deaths	Percentage of deaths
Under 1 year	1	.....	1	100%
1 to 2 years.....	10	6	4	40%
2 to 3 years.....	14	12	2	14%
3 to 4 years.....	12	11	1	8%
4 to 5 years.....	11	8	3	27%
5 to 6 years.....	4	4	.....	.....
6 to 7 years.....	5	3	2	40%
7 to 8 years.....	.....	.....	.....	.....
8 to 9 years.....	3	3	.....	.....
9 to 10 years.....	2	2	.....	.....
Total.....	62	49	13	20%

TABLE No. 10

NATIONALITY AND RELIGION OF PATIENTS

Nationalities	Total	Percentage	Religion	Total	Percentage
French-Canadians.....	2293	87%	R. Catholics.....	1744	66%
Jews.....	171	6%	Protestants.....	691	26%
Other nationalities.....	153	5%	Jews.....	172	6%
			Other religions.....	10	.38%
Total.....	2617		Total.....	2617	

" EPIDEMIOLOGICAL SUMMARY "

ACUTE ANTERIOR POLIOMYELITIS

(Infantile Paralysis)

In 1931, on 744 cases of acute poliomyelitis registered to the Contagious Diseases Division, there were 74 cases of death, representing exactly 10% of those reported.

When studying the particularities that have marked out the development of this disease, we must consider only the cases that occurred during this epidemic, that is to say from July the 14th to December the 1st. Deducting the cases reported after that time, the following remarks are therefore referring to 730 of them instead of 744.

If we take note of the date of the onset, it is in the middle of July that the first cases of poliomyelitis have been brought to our knowledge. During the few following weeks, there has been a steady progressive evolution of cases. At the end of September and at the beginning of October their epidemic development had reached its maximum of intensity. On the 1st of December, the epidemic was practically over.

GENERAL OUTLINE OF THE EPIDEMICAL PERIOD.

1931						Total
Months	July	August	Sept.	Oct.	Nov.	
No. of cases	15	174	306	205	30	730

Sex:

Masculine	376
Feminine	354
	— 730

Nationality:

French-Canadians	531
English-Canadians	134
Jews	41
Others	24
	— 730

On the total of 730 cases of poliomyelitis,

371 were hospitalized,
 13 were infected elsewhere,
 24 strangers hospitalized in Montreal.

Number of cases per family:

1 case in 576 families, 79%.
 2 cases in 50 families, 6.8%.
 3 cases in 13 families.
 4 cases in 1 family.
 4 cases in 1 institution.
 3 cases in 1 institution.
 2 cases in 1 institution.
 1 case in 2 institutions.

Classification of cases by age: —

From 0 to 5 years inclusively . .	474	65%
From 6 to 10 years inclusively . .	197	26%
From 11 to 15 years inclusively . .	40	5.4%
From 16 to 20 years inclusively . .	13	1.7%
From 21 to 30 years inclusively . .	6	0.8%

Number of deaths by age: —

From 0 to 5 years inclusively ..	47	6.4%
From 6 to 10 years inclusively ..	20	2.7%
From 11 to 15 years inclusively ..	4	
From 16 to 20 years inclusively ..	1	
From 21 to 30 years inclusively ..	1	

The school attendance has not seem to have affected in any way the poliomyelitis epidemical progression.

So, for an approximative school population of .. 150,000
 attending a number of schools of 297
 The number of school children affected was of. 246

(Deduction is made of the 4 cases from 16 to 20 years who do not attend schools.)

From the 14th of July to September, 1931, 65 of 207 cases reported were of school age (from 6 to 20 years) or a percentage of 31.4%.

From the 15th of September to December, 1931, 181 of 523 cases reported, are of school age (from 6 to 20 years) or a percentage of 34.6%.

TABLE No. 11

CLASSIFICATION OF CASES BY DATE OF ONSET

Week of the onset	Number of cases	Average per day	Number of deaths
1931			
July:			
from 11 to 17.....	4	0.5	—
from 18 to 24.....	4	0.5	—
from 25 to 1st August.....	7	1.0	1
	15		
August:			
from 2 to 8.....	18	2.5	—
from 9 to 15.....	18	2.5	2
from 16 to 22.....	31	4.4	—
from 23 to 29.....	53	7.5	4
from 30 to 5th September...	54	7.7	2
	174		
September:			
from 6 to 12.....	58	8.2	7
from 13 to 19.....	54	7.7	7
from 20 to 26.....	87	12.7	12
from 27 to 3rd October.....	107	15.2	7
	306		
October:			
from 4 to 10.....	84	12.	12
from 11 to 17.....	68	9.7	7
from 18 to 24.....	30	4.2	4
from 25 to 31.....	23	3.2	4
	205		
November:			
from 1 to 7.....	14	2.	1
from 8 to 14.....	7	1.	1
from 15 to 21.....	4	0.5	2
from 22 to 28.....	5	0.7	—
	30		
Grand total.....	730		73

TABLE No. 12

POLIOMYELITIS

From January 1st to October the 29th, 1931

Wards	Population	Number of cases reported	Percentage
Ahuntsic.....	18,588	19	0.10%
Bourget.....	23,162	38	0.16%
Crémazie.....	13,453	4	0.02%
Delorimier.....	40,003	33	0.08%
Hochelaga.....	19,164	48	0.25%
Lafontaine.....	9,432	5	0.05%
Laurier.....	18,412	8	0.04%
Maisonneuve.....	25,380	31	0.12%
Mercier.....	21,266	18	0.08%
Montcalm.....	13,565	25	0.18%
Mount Royal.....	7,919	2	0.02%
Notre Dame de Grâces....	52,973	18	0.03%
Papineau.....	15,550	15	0.09%
Préfontaine.....	16,082	54	0.33%
Rosemont.....	37,078	73	0.19%
St. André.....	24,578	4	0.01%
St. Anne.....	15,974	2	0.01%
St. Cunegonde.....	18,087	4	0.02%
St. Denis.....	20,435	16	0.07%
St. Edouard.....	30,900	23	0.07%
St. Eusebe.....	16,276	51	0.31%
St. Gabriel.....	17,608	17	0.09%
St. George.....	22,088	1	0.004%
St. Henry.....	25,361	29	0.11%
St. James.....	21,228	10	0.04%
St. Jean.....	23,916	17	0.07%
St. Jean Baptiste.....	26,367	17	0.06%
St. Joseph.....	11,620	1	0.008%
St. Lawrence.....	20,892	3	0.01%
St. Louis.....	18,281	9	0.04%
St. Mary.....	12,047	41	0.34%
St. Michel.....	24,527	5	0.02%
St. Paul.....	22,687	19	0.08%
Ville Marie.....	11,702	7	0.05%
Villeray.....	45,587	63	0.13%
Total.....		730	

FREE DISTRIBUTION OF SERUM APPEARS AS FOLLOWS :

To hospitals and to private physicians:

St. Paul, 201 bottles, i.e.	5,025 c.c.
Ste. Justine, 73 bottles, i.e.	1,825 c.c.
Alexandra, 37 bottles, i.e.	925 c.c.
Women's General, 3 bottles, i.e.	75 c.c.
Miséricorde, 2 bottles, i.e.	50 c.c.
Hôtel-Dieu, 2 bottles, i.e.	50 c.c.
To private physicians, 140 bottles, i.e.	3,500 c.c.

Total: 458 bottles, i.e. 11,450 c.c.

	Number of bottles	Number of c.c.
Up to date (Dec. 1st 1931) the Health Department has been supplied with	520	i.e. 13,000
There has been a free distribution of	458	i.e. 11,450
	<hr style="width: 10%;"/>	<hr style="width: 10%;"/>
Balance available	62	i.e. 1,550

Serum supply.

The amount of antipoliomyelitis serum used by the Children's Memorial hospital and prepared in their laboratories does not appear in the preceding table.

In 1929, a subscription was made in order to secure sufficient quantity of serum to face all contingencies.

Under the direction of a special committee (The Anti-poliomyelitis Committee) composed of a group of phy-

sicians, this work was intrusted to the Children's Memorial Hospital's Laboratories. During the epidemic, patients referred to this hospital have been treated with the serum kept in reserve. In accordance with an agreement between the said committee and the Health Department, it has been decided that private physicians and other institutions were to be supplied with free serum according to certain rules of definite proceeding.

It is only fair to express here our gratefulness to this committee, for the excellent work they have carried on, by providing the Department of Health of the City with the sufficient amount of serum for treatment of cases.

However, we have had to make twice an appeal to the generosity of the Provincial Board of Health of Ontario who has forwarded us 2 litres.

Moreover, the Executive Committee has voted special funds which, before the exhaustion of serum, have enabled us, during the epidemic, to intensify the preparation of this serum in prevision of further needs.

The Provincial Board of Health of Quebec has not directly supplied the Department of Health of Montreal, for they have decided to keep in reserve the serum prepared in their laboratories, in order to answer the needs of other municipalities of the province.

All activities carried on in the course of the epidemic together with the results of our observations are condensed in the statement hereunder. To give a final appreciation of the consequence of facts they infer, would be to anticipate a little.

On the 31st of December, after investigation of every case having suffered from poliomyelitis during the epidemic, we have been able to set the standing of the situation as follows:

Number of cases reported 730

Number of cases treated:

With serum	583 being 79.8% of cases reported
Without serum	147 being 20.08% of cases reported
	<hr/>
	730

Number of cases:

Improved	212 being 29.04% of cases reported
Unimproved	147 being 20.08% of cases reported
Cured	226 being 30.9% of cases reported
Deceased	73 being 10.0% of cases reported
Suspected. (No state of paralysis)	72 being 9.8% of cases reported

In the study of these different states, it is advisable to make the division of those that have been treated with serum before or after the setting of paralysis and also of those that have not received such a treatment.

Proportional statement.

Improved (212):

Serum before paralysis	35 being 16.5%
Serum after paralysis	146 being 68.8%
No serum	31 being 14.6%

Unimproved (147):

Serum before paralysis	31 being 21.09%
Serum after paralysis	101 being 68.6%
No serum	15 being 10.2%

Cured (226):

Serum before paralysis	55 being 24.3%
Serum after paralysis	120 being 53.09%
No serum	51 being 22.5%

Deceased (73):

Serum before paralysis	15 being 20.5%
Serum after paralysis	37 being 50.6%
No serum	21 being 28.7%

Suspected (72) — (No paralysis):

Treated with serum	43 being 59.7%
Treated without serum	29 being 40.2%

On these 583 cases having been injected with serum 136 were then treated before showing paralysis symptoms representing a percentage of 23.3%, and 404 cases treated after the state of paralysis being confirmed, representing a percentage of 69.3%. The 43 other cases have never shown any signs of paralysis.

In closing this report, I wish to express my keen gratefulness for the courtesy and generous co-operation of the staff put at my disposal, in the many circumstances when I had to call on the assistance of other divisions of the Department of Health.

Yours respectfully,

J. H. GERVAIS, M.D., D.P.H.,

Superintendent of the Contagious
Diseases Division.

Division of Child Hygiene

DIVISION OF CHILD HYGIENE

Dr. S. Boucher, D.P.H.,
Director, Department of Health,
Montreal.

Dear Sir: —

I have the honour to submit the report of the Division
of Child Hygiene for the year 1931.

Respectfully submitted,

C. A. BOURDON, M.D.,

Superintendent ad interim of the
Division of Child Hygiene.

REPORT OF WORK OF CHILD HYGIENE DIVISION FOR YEAR 1931.

New appointments made during the year 1931 have permitted the department to revise certain activities and to reorganize the work of this division. Mention will be made of this in the report which follows.

A very worthy object, the granting of a scholarship to the superintendent of this division to follow a year study at Johns Hopkins University in Baltimore, was accomplished during the past year. This scholarship was one of two granted by the City Administration of Montreal and recommended by the Director of the Department of Health, Dr. S. Boucher.

It is indeed an event which marks a new era in the progress of this movement, and if continued will contribute to have amongst the personnel of the Department of Health a larger group of competent physicians who will be fully qualified to render excellent health service to the population of Montreal.

Three Medical-Inspectors of schools have been appointed during the year 1931, Drs. P. R. Dunn, R. Côté and L. Dubreuil, one of which was to replace Dr. A. H. Crévost, promoted to the new position of supervisor. With the appointment of the above physicians, the number of Medical Inspectors of schools makes a total of 22, being an increase of two over the year 1930.

In the Mental Hygiene Division a new psychiatrist, Dr. G. N. Paterson-Smyth, has been appointed to make a survey of abnormal children in the schools under the jurisdiction of the Protestant School Board.

The number of school districts under nursing supervision have been increased from four to five and this new district has been placed under the control of Miss M. A. Macroix, promoted to supervisor.

A former visiting school-nurse, Miss B. Sicard, has been specially appointed to test acuity of hearing in both

the French and English schools, by means of special equipment "Audiometer No. 4-A, Western Electric".

Thirteen new permanent nurses were appointed for school inspection work at the beginning of September 1931.

Eight nurses attached to clinics were made permanent at the end of December, 1931.

With these new promotions, the number of permanent nurses in the Child Hygiene Division has been increased from 76 to 102.

A new junior office clerk, Miss R. Champoux, and messenger-clerk, Mr. A. Bernier, have been added to the personnel of the office.

The following table shows the total number of employees of this division to the 31st of December for the years 1930 and 1931.

	1930	1931
Superintendent	1	1
Senior clerk	1	1
Junior clerks	4	5
Messenger . . . . .	..	1
Chief Medical-Inspector. . . .	1	1
Medical-Supervisor . . . . .	..	1
Medical-Inspectors	20	22
Dental-Inspectors.	4	4
Chief-Nurse, R.N.	1	1
Supervisors of Nurses, R.N. . .	4	5
Visiting-Nurses, R.N.	68	80
Nurse for Audition Tests, R.N.	..	1
Visiting-Nurses for Boarding Houses for Children, R.N.	1	2
Clinic Nurses, R.N. (1930-10 temp. 1931-8 perm., 2 temp.)	10	10
Nurses Assistants	7	6
Nurses (Psychology)	2	3

Psychiatrists (Partial time) ..	2	3
Physicians (Baby Clinics), (temporary, part-time) ..	13	12
	—	—
Total	139	159

MEDICAL INSPECTION OF SCHOOLS

1930-31

A summary of the medical inspection of primary schools, of secondary schools both French and English, and of a certain number of independent schools follows:

Number of catholic schools, French and
English 228

Number of protestant schools 50

Number of pupils (cath. French and Eng-
lish schools) 107,243

Number of pupils (protestant schools) . . . 31,597

18 Medical-inspectors.

Aver.: schools 15.4; pupils 7,713

1 Medical-inspector to replace doctors
absent.

60 Visiting-nurses.

Aver.: schools 4.6; pupils 2,314

8 Nurses to replace nurses absent.

Dental-inspectors (4).

Aver.: schools 69.5; pupils 34,710

Psychologists (3).

Aver.: schools 76.0; pupils 35,748

7°	Psychiatrists (1 full-time). (Cath. French and English schools).	
	Aver.: schools 114.0; pupils	53,622
	Psychiatrists (2 half-time). (Catholic French and English schools).	
	Aver.: schools 57.0; pupils	26,811 e

RESULT OF THE STAFF'S WORK IN THE SCHOOL MEDICAL INSPECTION

School year 1930-31

TABLE I

1°	Work of Chief Medical-Inspector:	
	Visits to schools	11
	Visits to clinics	11
	Special visits and investigations	
	Notices to School Boards on sanitary conditions of school buildings	
2°	Work of Medical-Supervisor:	
	Visits to schools	2
	Visits to clinics	2
	Special visits	
3°	Work of Chief-Nurse:	
	Visits to schools	
	Visits to clinics or different nurses "Centres" under control of supervisors of nurses..	1
	Special visits and investigations	1
	Attendances at meeting of Nurses Centres..	
4°	Work of Supervisors of Nurses:	
	Visits to schools	1,2
	Visits to clinics V.A.D. or S-pox	9
	Visits to control Home visits	
	Home visits	2
	Special visits and investigations	2
	Attendances at different nurses Centres..	8
	Calls to office at City Hall	4

Staff Meetings:

General meetings and lectures (City Hall) ..	28
Nurses meetings in the centres	269

WORK OF MEDICAL INSPECTORS**TABLE II**

		Percentage
Number of schools to visit	278	
Number of visits to schools.. ..	7,454	
Number of pupils enrolled in schools	138,840	
Seen by doctors:		
Number of pupils (special cases and physical exam.)	91,424	65.84% (1)
Number of pupils (special cases examined)	26,836	19.32% (1)
Number of pupils (complete physical examinations)	64,588	46.51% (1)
Number of normal pupils	27,532	42.62% (2)
Number of defective pupils	37,056	57.37% (2)
Number of physical defects found	62,916	
Number of dental defects	36,743	56.88% (2)
Number of notices to parents ..	75,055	
Number of pupils found not vaccinated	1,181	

(1) The percentage of pupils seen by the doctor (91,424), those special cases examined (26,836) and the number of physical examinations (64,588), are based on the total number of pupils frequenting the schools (138,840).

(2) The percentage of normal pupils (27,532), of defective pupils (37,056), of dental defects (36,743), is based on the total number of pupils who have undergone a complete physical examination (64,588).

TABLE III
PHYSICAL EXAMINATIONS
(Complete)

Defects found:	Number	Proportion per 100
Eyes	8,350	13.27%
Ears	1,245	1.98%
Nose	5,615	8.92%
Tonsils	13,079	20.79%
Lymphatic system	9,536	15.16%
Goitre	669	1.06%
Skin	3,642	5.79%
Lungs	2,030	3.23%
Heart	2,036	3.24%
Digestive system	816	1.30%
Genito-urinary system	135	0.21%
Orthopedic	1,448	2.30%
Nervous system	1,242	1.97%
Mental condition	517	0.82%
Malnutrition	12,556	19.96%
Total defects	62,916	100%

Control examinations

For the school year 1930-31, during the months of April, May and June, the medical-inspectors have re-examined the pupils already examined during the year of the preceding years, to ascertain the defects in order to make statistics in regard to treatment.

At the opening of the classes in September, 1931, a new method to advise parents of treating defects found in their children, has been employed. This notice, made out in double, will allow us to make a control of the results obtained during the same year, and as a result of the future reports will differ from the following report giving the results for the year 1930-31.

TABLE IV

RESULTS OF CONTROL EXAMINATIONS

Number of pupils with defects reexamined..... 42,885

Defects	Total	Not treated	Defects treated				
			Cured	Im- proved	Unim- proved	Total	%
Grand total.....	66983	33811	15051	14188	3933	33172	49.52%
S.....	7817	4311	2214	844	448	3506	44.88%
t.....	1118	490	313	169	146	628	56.17%
e.....	5524	3515	1033	915	61	2009	36.37%
sils.....	15957	8856	3346	3615	140	7101	44.45%
nds.....	10462	5862	1877	2515	208	4600	43.96%
re.....	601	387	34	104	76	214	35.61%
.....	3457	623	2189	534	111	2834	81.98%
gs.....	1826	394	922	277	233	1432	23.66%
rt.....	2313	1040	501	467	305	1273	55.04%
estive system.....	535	149	227	118	41	386	72.15%
ito-urinary system...	80	40	11	17	12	40	50.00%
opedic.....	1153	767	72	159	155	386	33.48%
vous system.....	1048	588	76	259	125	460	44.85%
eral condition.....	15092	6789	2236	4195	1872	8303	55.02%
h.....	43389	27783	8068	7002	536	15606	35.97%

N.B. — The percentage of defects treated is based on the total number of defects served.

The school medical inspectors, in addition to the work at the schools, have given from 3 to 5 o'clock p.m. consultations in the different baby clinics.

These clinics at the same time are centres where vaccination against small-pox and immunization against diphtheria are furnished free of charge and are at the disposal of the public for the whole year.

WORK OF VISITING SCHOOL NURSES

During the first five months of the year 1931 and in cooperation with the Canadian National Institute for the Blind, the visiting nurses have made a survey in the English protestant schools, also in a few English catholic

schools, of all the pupils suffering from defective vision after correction with glasses.

These pupils have undergone a preliminary examination of vision, by the school medical inspectors, and about 89 of those showed defective vision below 3/10. At the the beginning of June, 1931, these children were conducted to the ophthalmological clinic of the Royal Victoria Hospital for a final examination. Out of this number, 19 pupils, 15 protestants and 4 catholics, showed ocular disabilities, with avoidable blindness provided they are given instruction in "sight saving classes".

The report of this survey was sent to the Canadian National Institute for the Blind, also to the authorities of the Protestant School Board. Following our recommendation the school authorities sent a teacher to take a special course in the management of a class like this, and the class was opened at the beginning of November, 1931, in the Wm. Dawson school, with 8 pupils enrolled.

This survey will continue and new cases will be directed to this school on the recommendation of an eye specialist.

WORK — SCHOOL NURSES

TABLE V

Number of schools to visit	278
Number of pupils enrolled in schools	138,840
Number of visits to schools	26,348
Number of home visits	35,698
Number of pupils examined (special cases and visits in class-rooms) (x)	861,168
Number of pupils showing defects	205,903
Number of pupils referred to the doctors (special cases)	26,836

(x) This total includes children seen more than once for uncleanliness, pediculosis, skin diseases, etc.

Number of pupils excluded from school ..	6,431
Number of readmitted to schools	5,572
Number of sundry treatments	36,338

Detail — Contagious diseases:

Measles	297
Scarlet fever	72
Diphtheria	44
Chicken-pox	380
Mumps	258
Whooping-cough	63
German-measles	6

(Defects:

Uncleanliness	54,968
Pediculosis	67,045
Skin	42,689
Teeth	22,810
Eyes	9,353
Ears	3,959
Lymphatic system	9,910
Nervous system	3,221
Mental condition	574
General condition	26,383

MENTAL HYGIENE SECTION

1930-1931

The staff appointed to make the survey of the abnormal children in the French and English catholic schools, consists of two permanent psychiatrists, part-time, and two permanent psychologist-nurses, full-time.

A medical-inspector and a visiting-nurse, full-time, and possessing the training required, have been temporarily transferred to the mental hygiene section.

The survey of the abnormal is limited to the pupils of the 1st, 2nd and 3rd years, it has been done up to date only in the catholic schools.

For the school year 1931-32, an English psychiatrist, part-time, and a visiting-nurse also English, permanent and full-time, will make the survey in the protestant schools.

TABLE VI
WORK OF PSYCHIATRISTS AND PSYCHOLOGIST-NURSES

	Classes 1st., 2nd. and 3rd. year (1)	Special cases (2)	Total	
Number of schools visited			48	
School population in schools visited			26352	
School population in grades: 1st., 2nd and 3rd			13218	
Number of pupils reported	3296	268	3564	
Number of pupils examined	2508	268	2776	
Number of pupils normal	404	20	424	
Number of pupils abnormal	2104	248	2352	
a) Unsteady	55	4	59	
b) Backwards	1716	214	1930	
c) Backwards & unsteady	333	30	363	

Classification

				Recom- mendations
The backwards	2049	244	2293	
1—Slow-minded	688	59	747	Ordinary classes
2—Border-line	798	80	878	Auxi- liary classes
3—Mental debility	416 539 —	62 87 —	478 626 —	
4—Feeble minded	123 23	25 18	148 41	La Jem- merais School
5—Idiocy	1		1	Baie St. Paul Asylum

N. B.—These statistics are established after revising the records.

(1) Results of the regular examination which was carried on in the 1st., 2nd. and 3rd. year.

(2) Result of the examination of some pupils in the preparatory classes or over the third year.

DENTAL HYGIENE SECTION

During the school year 1930-31, dental prophylaxis in the schools has been cared for by four dental-inspectors.

TABLE VII

WORK OF DENTAL-INSPECTORS IN THE SCHOOLS

Number of schools to be visited... ..	278
Number of pupils enrolled in schools ..	138,840
Number of visits to schools	1,291
Number of lectures	2,424
Number of pupils who attended lectures	105,193

DENTAL EXAMINATION

Number of pupils examined	21,199	
Number of defects:		
Caries	18,166	48.13
Pyorrhoea alveolar.. . . .	104	0.27
Gingivitis	1,426	3.78
Prophylaxis (urgent)	18,049	47.82
Total defects	37,745	100%
Number of notices sent to parents .. .	18,399	

The percentage is based on the total number of defects found (37,745).

DAILY VACATION BIBLE SCHOOLS

In the months of July and August for a period of six weeks, the organization known as the "Daily Vacation Bible Schools" of Montreal, opens in the forenoon a cer-

tain number of classes where children are given special training: manual training, singing, etc.

In the Montreal district 7 schools have been opened with an enrolment of about 1,065 children.

The medical examination in these schools has been cared for by four medical-inspectors and four nurses of the Child Hygiene Division.

Following the examinations made by the doctors, all parents of children who were suffering from any defect whatever, were visited by the nurses who explained to them the importance of having these defects treated.

TABLE VIII

Number of pupils examined	852
Number of pupils normal	562
Number of pupils with physical defects	290
Number of physical defects found	356
Number of dental defects	332
Number of pupils found not vaccinated	92
Number of pupils vaccinated	46
Number of notices to parents	218
Number of home visits	383

HYGIENE OF THE CHILD

The hygiene of the child and the campaign against infantile mortality are two important points in the programme of this division.

Baby clinics

The personnel of the Child Hygiene Division has worked very actively and particularly so in the 36 municipal clinics to make effective the campaign undertaken

by the Health Department of the City of Montreal, in favor of breast feeding.

The doctors and nurses whether it be at the clinics or in visits to the homes, have endeavoured to show to the mothers all the advantage of breast feeding.

Posters reading "Mother nurse your baby yourself" were placed and distributed in all the clinics.

Certain modifications have been made in the St. Denis municipal public bath building which has enabled us to instal the St. Arsène clinic in larger quarters, the old premises will be used as a meeting centre for the nurses of the northern district.

At the beginning of February, 1931, a new clinic was opened in St. Irénée parish, but against this the Bonneau clinic was closed in March, 1931.

The total number of municipal baby clinics is 36.

Comparison with the three years 1929-1930-1931 follows:

	Consultations	Weighing	Home visits
1929	37,496	1,304	33,568
1930	48,984	1,070	41,325
1931	61,280	1,297	38,402

Also besides these 36 municipal clinics there are in the City of Montreal 33 independent clinics, twenty being French and thirteen English.

These clinics are under the control of the two following organizations: "La Fédération d'Hygiène Infantile" and the "Child Welfare Association".

However, monthly reports of above clinics are sent regularly to our office, then compiled.

Table IX gives the result of the work which has been accomplished in all the clinics of the City.

TABLE IX
BABY CLINICS REPORT FOR THE YEAR 1931

Name of Clinics	Registrations		Deaths		Weighing		Consultations		Visits		
	New	(1)	Number	%	Nurses	Physicians	Average per child	Children entered	New entries	Total	
(Municipal Clinics)											
Laurier.....	478	509.9	5	0.9	313	3573	7.1	1686	526	2212	
Rosemont.....	289	266.4	7	2.6	5	3409	12.8	705	1025	1730	
St-Jean Berchmans.....	261	197.2	3	1.6	20	3122	15.8	864	636	1510	
St-Irénée.....	253	117.4	1	0.9	96	2682	22.8	365	412	777	
Villeray.....	252	186.3	8	4.3	13	2233	12.0	713	924	1647	
Delorimier.....	248	71.3	3	4.2	1	2318	32.5	621	950	1571	
St-Arsène.....	239	106.8	8	7.5	.....	2120	19.8	935	812	1747	
Maisonnette.....	221	164.2	5	3.1	3	2225	13.6	268	415	683	
St-Henri.....	213	141.3	4	2.8	12	2062	14.6	521	473	994	
St-Edouard.....	213	135.8	6	4.4	9	1560	11.5	447	567	1014	
St-Etienne.....	207	79.3	3	3.8	5	1750	22.1	764	703	1467	
St-Vincent Ferrier.....	200	181.6	7	3.9	1	1962	10.8	705	472	1177	
St-Gabriel.....	197	152.7	18	11.8	208	2492	16.3	850	1149	1999	
St-Jean de la Croix.....	189	136.1	3	2.2	23	1867	13.7	431	535	1066	

St-Marc.....	186	95.2	1	1.1	38	1565	16.7	609	377	986
St-Ambroise.....	178	142.7	2	1.4	228	1821	12.8	547	363	910
Côte St-Paul.....	173	69.3	3	4.3	99	1877	27.1	593	317	900
St-Jacques.....	170	182.8	4	2.2	26	1483	8.2	489	336	825
St-Sacrement.....	168	111.4	5	4.5	3	1731	15.6	362	644	996
Baril.....	164	101.2	8	7.9	6	1378	13.6	412	562	974
St-Clément.....	157	132.4	5	3.9	19	1508	11.4	546	549	1095
St-Anselme.....	157	80.3	2	2.5	4	1080	13.5	468	715	1183
St-Zotique.....	147	78.7	3	3.8	8	2159	27.4	402	546	948
St-Jean-Paptiste de Lasalle.....	140	113.1	2	1.8	8	1876	16.6	641	393	1034
St-Denis.....	109	96.0	1	1.1	3	1031	10.7	233	1019	1252
Ste-Clotilde.....	105	124.8	.....	.....	55	1296	10.4	562	325	887
St-François Solano.....	100	93.7	2	2.1	1	1194	12.7	227	263	490
St-Jean de Matha.....	94	76.7	1	1.3	5	929	12.1	242	248	490
Ste-Hélène.....	84	210.1	3	1.4	5	1329	6.3	595	610	1205
St-Bernard.....	81	125.6	1	0.9	2	1089	8.7	534	486	1020
Notre-Dame des Victoires.....	81	125.6	13	10.4	1	910	7.2	227	380	607
St-Jean Vianney.....	70	64.1	.....	.....	37	524	8.2	358	278	636
Ste-Claire.....	67	47.1	1	2.2	11	764	16.2	237	263	500
Côte des Neiges.....	63	46.0	.....	.....	1	591	12.9	300	173	473
St-Pascal Paylon.....	40	37.3	5	13.4	.....	473	12.7	331	153	484
Total.....	6142	4723.3	148	2.4	1297	61280	9.9	19188	19214	38402
Average.....	170.6	131.2	4.1	.....	36.1	1702.2	.....	533.0	533.7	1066.7

BABY CLINICS REPORT FOR THE YEAR 1931 — (Continued)

Name of Clinics	Registrations		Deaths		Weighing		Consultations		Visits	
	New	(1)	Number	%	Nurses	Physi- cians	Average per child	Children entered	New entries	Total
English (Independent) Clinics:										
Montreal Foundling.....	367	411.3	1	0.3	799	1313	3.2	.....	.....	2155
Rosemount.....	309	569.2	4	0.7	877	2520	4.5	.....	.....	1904
Maisonnette.....	254	395.6	6	1.5	701	2404	6.1	.....	.....	1702
Iverley and Coursol.....	240	369.4	6	1.6	468	1842	4.9	.....	.....	1416
Amherst Park.....	188	286.8	1	0.4	487	1461	5.1	.....	.....	2096
Park Extension.....	174	353.6	1	0.3	414	1235	3.5	.....	.....	2330
Montreal General Hospital.....	171	435.8	4	0.9	383	1351	3.1	.....	.....	1803
Pointe St-Charles.....	162	280.2	2	0.7	2102	1193	4.3	.....	.....	1387
Notre-Dame de Grâces.....	139	180.0	3	1.7	317	1017	5.7	.....	.....	1341
St-Paul.....	114	234.7	2	0.9	409	1099	4.7	.....	.....	1727
Mount-Royal.....	97	369.3	1	0.3	490	1060	2.9	.....	.....	2050
St. Ann's.....	80	166.2	2	1.2	149	1019	6.2	.....	.....	615
Côte des Neiges.....	53	65.3	.....	.....	177	417	6.3	.....	.....	229
Total.....	2348	4117.4	33	1.4	7773	17931	7.6	.....	.....	20755
Average.....	180.6	216.7	2.5	.....	597.9	1379.3	.....	.....	.....	1596.5

(French (Independent)
Clinics:

Ste-Brigide.....	374	.....	10	2.7	.....	5089	13.6	.....	1637
St-Vincent de Paul.....	342	.....	26	7.9	.....	8181	23.9	.....	2059
Hochelaga.....	340	.....	11	3.2	.....	7534	22.2	.....	2759
St-Stanislas.....	337	.....	9	2.7	.....	6446	19.1	.....	1786
Sacré-Cœur.....	314	.....	6	1.9	.....	5356	17.1	.....	4186
Immaculée-Conception.....	307	.....	5	1.6	.....	5127	16.7	.....	1325
Notre-Dame du Perp. Secours.....	273	.....	6	2.2	.....	3922	14.4	.....	1243
St-Catherine.....	261	.....	5	1.5	.....	4045	15.5	.....	4112
St-Alphonse d'Youville.....	230	.....	5	2.2	.....	2886	12.6	.....	1398
St-Cunégonde.....	220	.....	6	2.7	.....	5668	25.8	.....	1488
St-Cécile.....	212	.....	2	0.9	.....	2656	12.6	.....	907
St-Jean-Baptiste.....	207	.....	6	2.9	.....	5979	28.9	.....	612
St-Eusèbe.....	195	.....	1	0.5	.....	3505	17.9	.....	1648
St-Jeanne d'Arc.....	188	.....	2	1.1	.....	4130	21.9	.....	1659
St-Pierre.....	184	.....	7	3.8	.....	3567	19.4	.....	1163
Enfant-Jésus.....	180	.....	4	2.2	.....	3603	20.0	.....	1253
St-Joseph.....	159	.....	2	1.3	.....	4354	27.4	.....	864
St-François d'Assises.....	133	.....	2	1.5	.....	3214	24.1	.....	1277
St-Elisabeth.....	123	.....	2	1.6	.....	1184	9.6	.....	1003
Stadacona.....	90	.....	2	2.2	.....	659	7.3	.....	659
Total.....	4669	.....	119	2.3	.....	87105	18.7	.....	34412
Average.....	233.1	.....	5.9	.....	.....	4355.2	.....	.....	1720.6
Grand total.....	13159	8840.7	300	2.3	9070	166316	12.6	19188	93569
Average.....	190.7	180.4	4.4	.....	185.1	2410.4	.....	533.0	1356.1

(1) Figures in this column indicate the average number of children attended by the clinic each month in the year.

The percentage of deaths and the average of consultations per child, in the french independent baby clinics, have been calculated from the total of registrations. The total of deaths comprises only children under 1 year, whereas in the English and the municipal baby clinics, it comprises children under two (2) years.

Table X gives a comparative statement of the work of the clinics for each of the three years.

TABLE X
COMPARATIVE STATEMENT OF THE WORK DONE
IN THE BABY CLINICS

	1929	1930	1931
Number of clinics	71	68	68
Children registered	12,607	13,807	13,159
Number of deaths	352	313	300
Proportion of deaths	5.0%	4.6%	4.4%
Number of consultations	149,856	154,103	163,316
Average per child	11.8	11.2	12.6
Home visits	82,215	82,362	93,569
Municipal grant to independent clinics . .	\$8,500.00	\$8,500.00	\$8,500.00

Baby Camps in the Parks

Two baby clinics are opened in the summer months, one in Lafontaine Park and the other at St. Helen's Island.

They are furnished with the necessary material for first aid (dressing urgent wounds), and they are also provided with hammocks, an ice box and a stove for the needs of the mothers.

In the kiosk which has been remodelled at Lafontaine Park, there is a baby clinic in charge of a doctor and two graduate nurses, where the mothers are able to register their babies during the months of July and August every day from 9 a.m. to 5 p.m., except Saturday and Sunday.

Also, all children who wish to, are vaccinated free of charge against small-pox.

TABLE XI
WORK — BABY CAMPS
1931

	Lafontaine Park	St. Helen Island	Total
Camp open for a period of.....	2 months	2 months	
Number of registrations.....	432	146	578
Number of consultations (doctor).....	705		705
Number of consultations (nurse).....		182	182
Dressings.....	295	196	491
Number of vaccinations.....	2174		2174
Number of revaccinations.....	223		223
Number of certificates.....	1654		1654

PRENATAL CLINICS

Eight clinics which were opened in 1921 were discontinued in 1925. At the end of October, 1931, two prenatal clinics were reorganized in co-operation with the "Ecole d'Hygiène Sociale Appliquée" who gave us the aid of its student nurses.

Clinics were opened in the parishes of St. Jean-Berchmans and Ste. Philomène, in Rosemount district.

The following table shows the results obtained for the first two months, November and December, 1931.

TABLE XII

	Rosemount Clinic	St-Jean Berchmans Clinic	Total
Total registrations.....	25	17	42
Total discharged.....	4		4
Balance, December 31st., 1931.....	21	17	38
Consultations with doctor.....	65	32	97
Blood-pressures.....	63	30	93
Urinalysis.....	57	31	88
Home visits:			
Recruitment visits.....	95	59	154
To registered mothers.....	19	67	86
Post-partum visits.....	4		4
Notices to family physicians.....	14	25	39
Lectures or practical-lectures.....	7	2	9

CHILD HYGIENE LEAGUES

In order to spread the ideas of infant hygiene in their own families, the Child Hygiene Division brought about the formation of the Child Hygiene Leagues amongst young girls of school age and in certain women's associations.

The young girls who were given a course in elementary hygiene, followed a program arranged by the Department of Health.

These young girls should be previous hygiene agents in their family and surroundings.

TABLE XIII
CHILD HYGIENE LEAGUES

	Groups	Members
By the Inspecting Staff:		
Group 1— { St. Vincent-Ferrier St. Alphonse d'Youville N.-Dame du St. Rosaire }	1	51
Group 2—St. Edouard.....	1	43
Group 3—Delorimier.....	1	38
Group 4—Rosemount.....	1	39
Group 5—Baril.....	1	54
Group 6— { St. Cunégonde St. Irénée St. Zotique St. Elizabeth St. Clotilde St. Henri }	1	135
Total.....	6	360
Independent Associations:		
Victorian Order of Nurses.....	9	161
Montreal Parks and Playgrounds.....	6	75
Ecole d'Hygiène Sociale Appliquée.....	2	33
Total.....	23	629

CHILDREN'S BOARDING HOUSES

The supervision of children's boarding-houses has been done in 148 boarding-houses, of which 62 were discontinued during the year 1931.

Number of Children's Boarding-houses Jan. 1st,		
1931	114	
Permits issued during the year	34	
Permits discontinued		62
	—	—
	148	62
Number of boarding-houses December 31st, 1931	86	

PRIVATE MATERNITY HOSPITALS

The number of private maternity-hospitals under supervision was 34, of which 10 were discontinued during the year.

Birth in these maternity-hospitals were 322 legitimate and 362 illegitimate children, making a total of 684.

WORK OF NURSES

The inspection of children's boarding-houses and of private maternity-hospitals, is entrusted to two nurses who devote to it their full time.

TABLE XIV

	Visits	Number of investigations	Actions taken
Children's boarding houses	2109	614	4
Private maternity hospitals	331	70	.....
Total	2440	684	4

IMMUNIZATION AGAINST DIPHTHERIA

The total number of children immunized in 1931 by the personnel of this division was 10,972, an increase of

1,056 over the year 1930. Of this number 1,714 children have been immunized in the schools they attend and 9,258 in the 34 free stations spread over all parts of the City.

All children of 7 years and over have received the Schick test, 710 of which were done in the schools and 2,999 in the immunization centres, making a total of 3,709 anterior Schicks.

Method employed.

The method extolled and employed consists in making three injections of Anatoxine-Ramon, in increasing doses at three weeks intervals (in the schools at one week intervals); the first dose $\frac{1}{2}$ c.c., the second 1 c.c. and the third 1.5 c.c. for all children over 9 months of age, without a previous Schick Test, up to the age of six or eight years, and also all children over 8 years of age who give a posterior Schick.

Four or six months after the last injection the posterior Schick Test is employed for to ascertain if immunization has occurred. If the test is still positive, a fourth injection or a supplementary injection is given.

The following table shows the results of immunization against diphtheria from September, 1928, to December, 1931.

For the inscriptions made in 1931, the reports will be completed during the year 1932, in proportion as the subsequent injection and the posterior Shicks will be given.

The figures in the column "1931" show the work which has been done from the 1st of January to the 31st of December only.

TABLE XV
IMMUNIZATION AGAINST DIPHTHERIA

	1928 1929	1930	1931 31 dec.	Total
I—Anterior schicks.....	1253	3746	3709	8708
Negative reaction.....	715	2466	2398	5579
Positive reaction.....	456	1158	1110	2724
Immunized.....	435	1128	1066	2629
Not immunized.....	21	30	44	95
Doubtful reaction.....	21	10	7	38
No readings.....	61	112	194	367
II—Total registration for immunization.....	4568	9916	10972	25456
1o—Received 3 doses.....	3946	9108	9520	22574
2o—Received only 2 doses.....	283	405	.....	688
3o—Received only 1 dose.....	339	403	.....	742
Difference of.....	622	808	.....	1430
III—Posterior schicks.....	3557	8384	3654	15595
a) Total:				
Negative reaction.....	3347	7962	.....	11309
Positive reaction.....	40	88	.....	128
No readings.....	170	334	.....	504
b) Details:				
1o—After 2 doses:	102	129	.....	231
Negative reaction.....	90	117	.....	207
Positive reaction.....	5	8	.....	13
No readings.....	7	4	.....	11
2o—After 3 doses:	3455	8255	.....	11710
Negative reaction.....	3257	7845	.....	11102
Positive reaction.....	35	80	.....	115
No readings.....	163	330	.....	493
3o—Number of children who had no schick test after 2 or 3 doses.....	672	1129	.....	1801
IV—Repeated injections (4th dose).....	36	55	21	112
Posterior Schicks.....	32	64	.....	96
Negative reaction.....	32	61	.....	93
Positive reaction.....	.....	2	.....	2
No readings.....	.....	1	.....	1

TABLE XVI

IMMUNIZATION IN THE SCHOOLS

	1931
I—Anterior Schicks	710
Negative reaction	467
Positive reaction	218
Immunized	216
Not immunized	2
Doubtful reaction	0
No readings	25
II—Total registration for immunization	1714
Received 3 doses	1494
III—Posterior Schicks	574
IV—Repeated injections (4th dose)	8

VACCINATION AGAINST SMALL-POX

Vaccination against small-pox is done in the clinics during the whole year and on the same days and same hours as consultations.

During the summer holidays, in the month of August and the first week of September, in order to give the school population greater facilities of being vaccinated before classes open, 39 vaccination centres have been installed in all parts of the City. These bureaux are either in the baby clinics or in municipal buildings (police stations, etc.).

In the clinics special hours are reserved for vaccination in the forenoon, in order not to interfere with clinic work which is more patronized during the summer.

Further more, the staff of this division is also asked to do vaccination in food and industrial establishments.

The following table shows the number of vaccinations made by the medical-inspectors in 1931.

TABLE XVII

Number of vaccinations:

At Lafontaine Park	2,174
In the clinics	10,399
In the food and industrial establishments	507
	<hr/>
Total	13,080
Number of verifications or certificates	10,151
Number of revaccinations	291

PUBLICATIONS

Circulars, posters and publications distributed by the Child Hygiene Division are as follows:

Circulars:

- No. 1.—“Medical Inspection of Schools”.
- No. 2.—“Height and Weight of Children”.
- No. 3.—“Immunization against Diphtheria”.
- No. 4.—“Help the Child”.

Posters:

- “Care of the Infant”.
- “Help the Child”.
- “Mother, feed your Baby yourself”.

Publications:

"Care of the Infant".

"Prenatal Care".

"Child Hygiene League".

During the year 1931 our doctors and nurses have given freely their help to the Contagious Diseases and Medical Control divisions.

In closing, allow me to cordially thank all employees for the fine co-operation they have given to the success of the programme of this division and at the same time I wish to show my appreciation for the devotion that they have displayed in the accomplishment of their duties.

Respectfully submitted,

C. A. BOURDON, M.D.,

Superintendent ad interim of the
Division of Child Hygiene.

Division of Sanitation

DIVISION OF SANITATION

Mr. S. Boucher, M.D., D.P.H.,

Director, Department of Health,
City Hall, Montreal.

Dear Sir: —

I have the honour to submit the annual report of the Division of Sanitation for 1931, in which the totals of the year are only given; the statistics by months and weeks being available in the reports submitted to you weekly.

The regular work of the Division of Sanitation is divided into four parts:

- I.—Examination of plans and specifications of new constructions and buildings which are intended to be modified.
- II.—Sanitary records of dwellings.
- III.—Sanitary inspection and investigation of nuisances.
- IV.—Inspection of plumbing and drainage.

I

EXAMINATIONS OF PLANS AND APPLICATIONS FOR PERMITS

(a) New buildings	3,942
(b) Modified buildings	1,533
(c) Plumbing and drainage (permits granted) . .	2,672

II

SANITARY RECORDS OF DWELLINGS

Statistics of the completed house survey have been given in the 1929 annual report. The revision which was started in the same year was continued in 1931, with the following results:

(a)	Inspections	23,520
(b)	Findings:	
1.	Dark rooms occupied	86
2.	Dark rooms not occupied (used for storage, etc.)	204
3.	Inhabited cellars and other unsanitary dwellings	125
(c)	Notifications:	
1.	Concerning dark rooms	60
2.	Concerning inhabited cellars and other unsanitary dwellings	115
(d)	Execution:	
1.	Dark rooms suppressed	745
2.	Dark rooms placarded	546
3.	Inhabited cellars and other unsanitary dwellings	13

III

(a) Sanitary inspection

Complaints:

Total number	9,913
Founded	6,382
Not founded	3,531

The measures ordered and executed after investigation are the following:

Plumbing and drainage	1,544
Constitutional insalubrity	424

Acquired insalubrity (dwellings)	1,457
Acquired insalubrity (yards and out-houses)	2,957
Total number of complaints founded	6,382
Water leakage	2,477

(b) Regular inspections

The following table gives the total number of inspections in each class of buildings and the defects found therein:

	Inspections (1)	Plumbing and drainage (2)	Light and ventilation (3)	Inhabited cellars	Other defects	Unclean
Dwellings	39204	4418	163	113	526	892
Boarding houses	260					
Boarding houses for children (4)	101					
Public buildings, stores and other establishments	3226	230				326
Educational establishments (5)	658	41				32
Industrial establishments	3203	304				488
Theatres, moving pictures, etc.	397	28				37
Laundries (By-law No. 1009)	592	38				30
Barber-shops, etc. (By-law No. 1006)						
Barber-shops	441	124				509
Hair-dressing parlors	559					
Manicuring parlors	5					
Establishments:—Mattresses, filling material. By-law No. 1089	877					

(1) These figures include the number of dwellings, public buildings, stores, etc., visited in 1931 exclusive of second visits. 23520 records of dwellings have been filed, revised and indexed. This work serves as basis for the establishment of the sanitary record of housing.

(2) In many places defects were found after a smoke or oil test which was necessary in 41 cases; 28 smoke and 13 oil of mint tests.

(3) Rooms not lighted directly from the exterior.

(4) The supervision of this work is under the jurisdiction of the Division of Child Hygiene. Inspections before granting permits are only made by this Division.

(5) A general inspection of all schools is made at the end of the school year in order to permit the execution of the ordered repairs during the holidays. The inspection of schools, during the year is made by the Division of Child Hygiene, and when necessary the help of this Division is called.

(c) Inspection of lanes, yards, cellars and out-houses

This work can be summarized as follows:

	Number of inspections
Lanes	3,928
Yards	37,528
Vacant lots	2,255
Sheds	49,324
Cellars or basements	16,826
Drains and plumbing systems	49,565
Manure boxes (nuisances)	193
Stables	1,166

(d) Privy vaults and cesspools

There are at present in the City of Montreal 728 privy vaults and cesspools, nearly all of which are located in the wards annexed to the City in the last few years.

The construction of public sewers only would cause these vaults and cesspools to be removed.

IV

DRAINAGE AND PLUMBING

(New or modified buildings)

	Number of inspections
1. Drains	2,604
2. Piping (before installation of fixtures) . .	3,096
3. Piping (after installation of fixtures) . . .	3,641
4. Oil of mint tests	1,175
5. Water tests	4,145
6. Works completed and tested	2,472
7. Calls for inspection	4,663

V

BUREAU OF PLUMBING EXAMINERS

(a) Number of sittings	20
(b) Total number of plumbers examined	157
(c) New licenses granted to master-plumbers	7
(d) New licenses granted to journeymen-plumbers	61

VI

LICENSE PERMITS

(a) Master-plumbers (By-law No. 318)	609
(b) Journeymen-plumbers (By-law No. 318)	556
(c) Barber-shops (By-law No. 1006)	1,555
(d) Laundries (By-law No. 1009)	366
(e) Establishments: Mattresses, filling materials, etc. (By-law No. 1089)	182

VII

NOTICES

Official notices served	4,930
Second notices	905
Notices given by inspectors	21,374

Proceedings

Actions taken (Recorder's Court)	27
Convictions	25

VIII

Supervision (number of visits)	808
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Yours very truly,

AIME COUSINEAU, C.E.,

Superintendent-Engineer,
Division of Sanitation.

Division of Food Inspection

DIVISION OF FOOD INSPECTION

Mr. S. Boucher, M.D., D.P.H.,
Director, Department of Health,
City Hall, Annex.

Dear Sir: —

I have the honour to submit herewith the annual report of the Division of Food Inspection for the year 1931.

In the following table will be found a brief statement of the work performed by the different sections of the division under my supervision.

Respectfully submitted,

A. J. G. HOOD,

Superintendent,
Food Inspection Division.

DIVISION OF FOOD INSPECTION

Section No. 1

Inspection of milk in the City, 1931

COLLECTION OF SAMPLES FOR CHEMICAL ANALYSIS.

MILK						CREAM		
On the street	At railway stations	In groceries	In dairies	In various places	Total	Collected by the inspectors on the markets.	Submitted by citizens	Total
835	20	348	223	615	2041	45	64	109

COLLECTION OF SAMPLES FOR BACTERIOLOGICAL ANALYSIS

Milk	4,945
Cream	29
Ice cream	130
Drinking water Re: washing of dairy utensils	614
Drinking water	304
Drinking water for ice cutting	40
Water from wells and springs	18
Condensed milk	1
Butter milk	6
Total	6,087

EXAMINATION OF MILK IN THE CITY

Milk :

Acidity tests	2,636
Sediments tests	19,808
Temperatures taken	27,362
Total number of gallons examined	377,360

Section No. 1—(Continued)

Confiscation :

Milk (in gallons)	49,267
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INSPECTION OF MILK PRODUCERS IN THE
COUNTRY

1931

Inspections :

Dairy Score cards	4,373
Special	9,004
At Railway Stations	104
	<hr/>
Total	13,481

Cows :

Number examined	65,676
Clean	59,055
Tuberculin tested within the year	60,141
Tuberculin test overdue	5,535

Stables :

Number	4,373
Clean	4,042
With concrete floor	3,748
With 400 cubic feet of air space per animal	4,175
With 1 foot of light area per animal	4,107
Whitewashed entirely	4,218
Whitewashed (walls only)	200

Dairies :

Number	4,290
Clean	4,241
Unfinished or unsuitable	55

Section No. 1—(Continued)

Refrigeration :

With ice	3,887
With spring water	139
Producers not having satisfactory cooling systems	347

Miscellaneous :

Written notices	1,006
Written notices by letter from the office . .	5,312
Producers interdicted	207

INSPECTION OF CREAM PRODUCERS IN THE
COUNTRY

1931

Inspections :

Dairy Score cards	2,028
Special	1,193
At Railway Stations	8
Total	3,229

Cows :

Number examined	23,640
Clean	19,146
Tuberculin tested within the year	20,784
Tuberculin test overdue	2,856

Stables :

Number	2,028
Clean	1,578
With concrete floor	1,307
With 400 feet cubic of air space per animal	1,895
With 1 foot light area per animal	1,691
Whitewashed entirely	1,631
Whitewashed (walls only)	64

Section No. 1—(Continued)

Dairies :

Number	1,636
Clean	1,203
Unfinished or unsuitable	392

Refrigeration :

With ice	721
With spring water	2
Producers not having satisfactory refrigeration	1,305

Miscellaneous :

Written notices	224
Written notices by letter from the office	764
Producers interdicted	67

INSPECTIONS IN THE CITY.

At the Railway Stations	542
In dairies	5,320
In groceries	7,153
In dining-rooms	1,182
In restaurants	6,633
In markets	271
In stables	132
In private houses	39
In various places	199
Special	1,239

Total	22,710
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Milk cows examined	4,294
Empty cans examined	32,424
Empty cans confiscated	459
Can tops (lids) confiscated	217
Notices for poor milk	40
Written notices (various)	4,324
Actions taken	22
Condemnations	22
Actions lost	1

Section No. 1—(Continued)

OBSERVATIONS AND IMPROVEMENTS, 1927 to 1931

Inspection of dairy farms

	1927	1928	1929	1930	1931
Number of producers visited.....	3312	3616	4548	4358	4373
Cows examined.....	49913	56486	66144	63672	65676
Cows found clean.....	44526	49425	56527	54695	59055
Stables with cement floor.....	2295	2707	3483	3524	3748
Stables with 400 cubic feet of air per animal.....	2840	3442	4319	4008	4175
Stables with one square foot of glass per animal.....	2889	3164	3954	3919	4107
Whitewashed stables.....	2691	3397	4123	3942	4218
Clean stables.....	2999	3323	4075	3915	4042
Producers having a dairy.....	2988	3421	4214	4174	4296
Producers whose dairy was not found satisfactory.....	324	195	334	184	55
Producers whose dairy is maintained in a clean condition.....	2371	3104	3814	3760	4241
Producers having ice.....	2678	3028	3660	3987	3887
Producers cooling milk in spring water or wells.....	153	503	139	152	139
Producers not having satisfactory cooling systems.....	381	175	749	219	347
Notices in writing.....	416	239	302	680	1006
Notices (letter from office).....	554	740	5395	5180	5312
Producers interdicted.....	203	145	333	192	207

Section No. 1—(Continued)

PROGRESS IN THE METHODS AND EQUIPMENT OF MILK PRODUCERS

1927 to 1931

	1927	1928	1929	1930	1931
Cows:					
Clean.....	89.41%	87.49%	85.46%	85.90%	89.94%
Stables:					
Whitewashed.....					
Clean.....	83.84%	93.94%	90.65%	89.93%	96.91%
With concrete floors.....	90.54%	91.89%	89.59%	89.83%	92.43%
	69.29%	74.86%	76.58%	80.86%	85.70%
Milk rooms:					
Number.....	90.21%	94.66%	92.65%	95.77%	98.23%
Clean.....	79.35%	90.73%	90.50%	90.08%	98.72%
Refrigeration:					
With ice.....	80.85%	83.73%	80.47%	91.48%	88.88%
With spring water or wells.....	4.61%	13.92%	3.05%	3.48%	3.19%

AVERAGE QUALITY OF THE MILK ACCORDING TO THE (BABCOCK) CENTRIFUGAL TEST
AND THE (QUEVENNE) LACTO-DENSIMETER AT 60° Fah.

1931 Month	Density			Butter Fat			Number of samples
	Minimum	Maximum	Mean	Minimum	Maximum	Mean	
January.....	1.029	1.031	1.030	3.2%	5%	3.6%	187
February.....	1.027	1.031	1.031	2.7%	5%	3.5%	305
March.....	1.028	1.031	1.030	3.2%	5.8%	3.6%	150
April.....	1.029	1.031	1.030	3.3%	6.4%	3.5%	80
May.....	1.029	1.031	1.030	3.3%	5.2%	3.4%	196
June.....	1.028	1.032	1.031	3.2%	5.8%	3.6%	200
July.....	1.028	1.031	1.030	3.1%	4.1%	3.6%	6
August.....	1.028	1.032	1.031	3.2%	4.2%	3.6%	127
September.....	1.029	1.032	1.030	3.1%	4.2%	3.6%	96
October.....	1.029	1.032	1.031	2.6%	4.6%	3.6%	250
November.....	1.029	1.032	1.031	3.4%	4.2%	3.9%	213
December.....	1.021	1.032	1.030	2.3%	6%	3.8	231
Mean.....	1.027	1.031	1.030	3.5%	5.4%	3.6%	
Total.....							2041

DIVISION OF FOOD INSPECTION

Milk Section No. 1—(Continued)

RECAPITULATION, 1931

Total number of establishments	15,606
“ “ “ inspections	39,420
“ “ “ cows examined	93,610
“ “ “ samples of milk, cream and ice-cream collected for chem- ical and bacteriological ana- lysis	8,237
“ “ “ various examinations of milk, cream and ice-cream	49,806
“ “ “ gallons of milk examined . .	377,360
“ “ “ gallons of milk confiscated .	49,267
Complaints	64
Actions taken	21
Condemnations	21
Written notices	11,446
Permits recommended	509

Section No. 2

	Total number of establishments	Total number of inspections
Private abattoir (City)	1	274
Private abattoirs (Country) . . .	368	1,543
Markets	6	421
Butchers	1,189	13,008
Poultry dealers	68	558
Fish stalls	37	377
Cold storages	7	92
Sundry manufacturers	28	268
Groceries	1,299	8,513
Sundries	51	484
Special . . . . .	....	484
Total	3,054	26,022

Section No. 2—(Continued)

Actions taken	30
Convictions	26
Cases dismissed	4
Complaints	97
Samples collected	153
Written notices	2,215
Dogs visited, having bitten someone	901
Analysis	167
Research Re: Negri bodies	6
Permits granted	1,318
Country abattoirs interdicted	126

CARCASSES INSPECTED AND CONFISCATED

At the private abattoir

	Inspections	Confiscations
Cattle	802	3
Calves	1,934	..
Carcasses of mutton	2,390	2
Hogs	1,393	..
Total	6,519	5

At the Meat Inspection Stations

	Inspections	Confiscations
Calves	23,789	106
Carcasses of mutton	4,758	5
Hogs	25,599	10
Sundries	156	7
Total	54,302	128

N.B. — The inspection at the public abattoirs is performed by the Federal Government.

Section No. 2—(Continued)

At the Commission Stores

	Inspections	Confiscations
Calves	45,645	371
Carcasses of mutton	10,188	65
Hogs	35,437	173
Total	91,270	609
Total number of carcasses inspected	152,091	...
Total number of carcasses confiscated . . . . .	...	742

FOODSTUFFS AND MEATS CONDEMNED (lbs)

	Private abattoir	Inspection stations	Commis- sion stores	Markets, butchers, etc.	Total
Beef			100	2233	2333
Veal		139	1300	2028	3467
Mutton		120	104	362	586
Pork		7089	10386	5006	22481
Poultry			3423	1245	4668
Fish				53541	53541
Fruits and veg.				34618	34618
Sundry meats	12621	2673	1962	7959	25215
Sundry foodstuff				40352	40352
Total	12621	10021	17275	147344	187261

Ice 4½ tons.

N. B.—The above foodstuffs and meats have been condemned for the following reasons: spoiled, mouldy, slimy, sour, dirty and affected with disease; and calves too young.

RECAPITULATION

Total number of establishments	3,054
Total number of inspections	26,022
Total number of carcasses inspected	152,091

Section No. 2—(Continued)

Total number of carcasses condemned	742
Foodstuffs and meats condemned (lbs)	187,261
Actions taken	30
Convictions	26
Cases dismissed	4
Complaints	97
Samples collected	153
Written notices	2,215
Dogs visited having bitten someone	901
Analysis	167
Research Re: Negri Bodies (all negative)	6
Permits granted	1,318
Country abattoirs interdicted	126

Section No. 3

SECTION OF INSPECTION FOR RESTAURANTS,
DINING-ROOMS, BAKERIES, ETC.

1° Establishments for
which a permit is
necessary :

Kind of establishments	Number of establishments to be visited	Number of visits
Restaurants	4,466	16,963
Dining-rooms	926	5,999
Bakeries	128	1,844
Confectioneries	70	898
Pastry shops	135	1,355
Fruit and vegetable stores . .	240	1,597
Beverage manufacturers . . .	59	571
Various manufacturers	109	976
Total	6,133	30,203

Section No. 3—(Continued)

2° Establishments for
which a permit is not
necessary :

Institutions	112	63
Hotels and taverns	231	194
	<hr/>	<hr/>
Total	343	257

3° Sundries :

Vehicles	1,478 (1)	1,224
Special inspections . . . . .	.....	5,874
	<hr/>	<hr/>
Total	1,478	7,098
	<hr/>	<hr/>
Grand total	6,476	37,558

4° Samples collected for
analysis :

Bacteriological	468
Chemical	5
	<hr/>
Total	473

5° Confiscations :

Utensils	4
Fruits (in pounds)	14,258
Vegetables (in pounds)	79,307
Various foodstuffs (in pds.)	9,400
	<hr/>
Total	102,965

(1) The number of vehicles to be examined does not appear in the total.

Section No. 3—(Continued)

6° Sundries :

Complaints	50
Written notices	3,604
Actions taken	138
Actions in Court on January 1st, 1931	2
Actions withdrawn	47
Actions thrown out	1
Convictions	92

7° Permits :

Granted in restaurants, din- ing-rooms and candy stores	6,029
Granted in bakeries, confec- tioneries, pastry-shops, beverage manufacturing and various manufactur- ing	594
Deferred on January 1st, 1932	26
Refused on January 1st, 1932	57
<hr/>	
Total number of permits	6,706

P.S. — The surplus of permits with the number of establishments to be visited in 1931 is caused by the fact that there has been some establishments where more than one permit was granted, due to the fact that these establishments have changed owners, and that said permits are not transferable.

Section No. 3—(Continued)

COMPARATIVE TABLE

Section of Inspection for Restaurants, Dining-Rooms,
Bakeries, Confectioneries, Pastry-Shops, etc.

Establishments	1930		1931	
	To be visited	Visited	To be visited	Visited
1—Establishments for which a permit is necessary:				
Restaurants.....	3998	16953	4466	16963
Dining-rooms.....	773	3689	926	5999
Bakeries.....	128	910	128	1844
Confectioneries.....	55	369	70	898
Pastry-shops.....	96	680	135	1355
Fruit and vegetable stores.....	184	1200	240	1597
Beverage manufacturing.....	55	299	59	571
Various manufacturing.....	102	532	109	976
Cooked meats establishments.....	18	116	(1)	(1)
2—Establishments for which a permit is not necessary:				
Institutions.....	97	134	112	63
Taverns.....	237	347	231	194
3—Sundries:				
Vehicles.....	1173(2)	187	1478(2)	1224
Special inspections.....		4625		5874
Total.....	5743	30041	6476	37558
4—Samples collected for analysis:				
Chemical.....				5
Bacteriological.....				468
Total.....				473
5—Confiscations:				
Utensils.....		94		4
Fruits (in pounds).....		59846		14258
Vegetables (in pounds).....		142850		79307
Various foodstuffs (in pounds).....		4036		9400
Total.....		206732		102965

Section No. 3—(Continued)

COMPARATIVE TABLE

Section of Inspection for Restaurants, Dining-Rooms,
Bakeries, Confectioneries, Pastry-Shops, etc.
(Continued)

	1930	1931
6—Sundries:		
Complaints.....		50
Written notices.....	6,785	3,604
Actions in Court on January 1st.....		2
Actions taken.....	217	138
Actions withdrawn.....	101	47
Actions thrown out.....		1
Convictions.....	114	92
Actions in Court on December 31st.....	2	0
7—Permits:		
Granted in restaurants, dining-rooms, candy stores, etc.....	5052	6029
Granted in bakeries, confectioneries, pastry-shops, beverage manufacturing.....	367	594
Deferred on December 31st.....	282	26
Refused on December 31st.....	35	57
Total permits.....	5736	6706

P. S.—The surplus of permits with the number of establishments to be visited in 1931 is caused by the fact that there has been some establishments where more than one permit was granted, due to the fact that these establishments have changed owners, and that said permits are not transferable.

- (1) These establishments are now under the supervision of Section No. 2.
- (2) The number of vehicles to be examined does not appear in the total.

Section No. 4

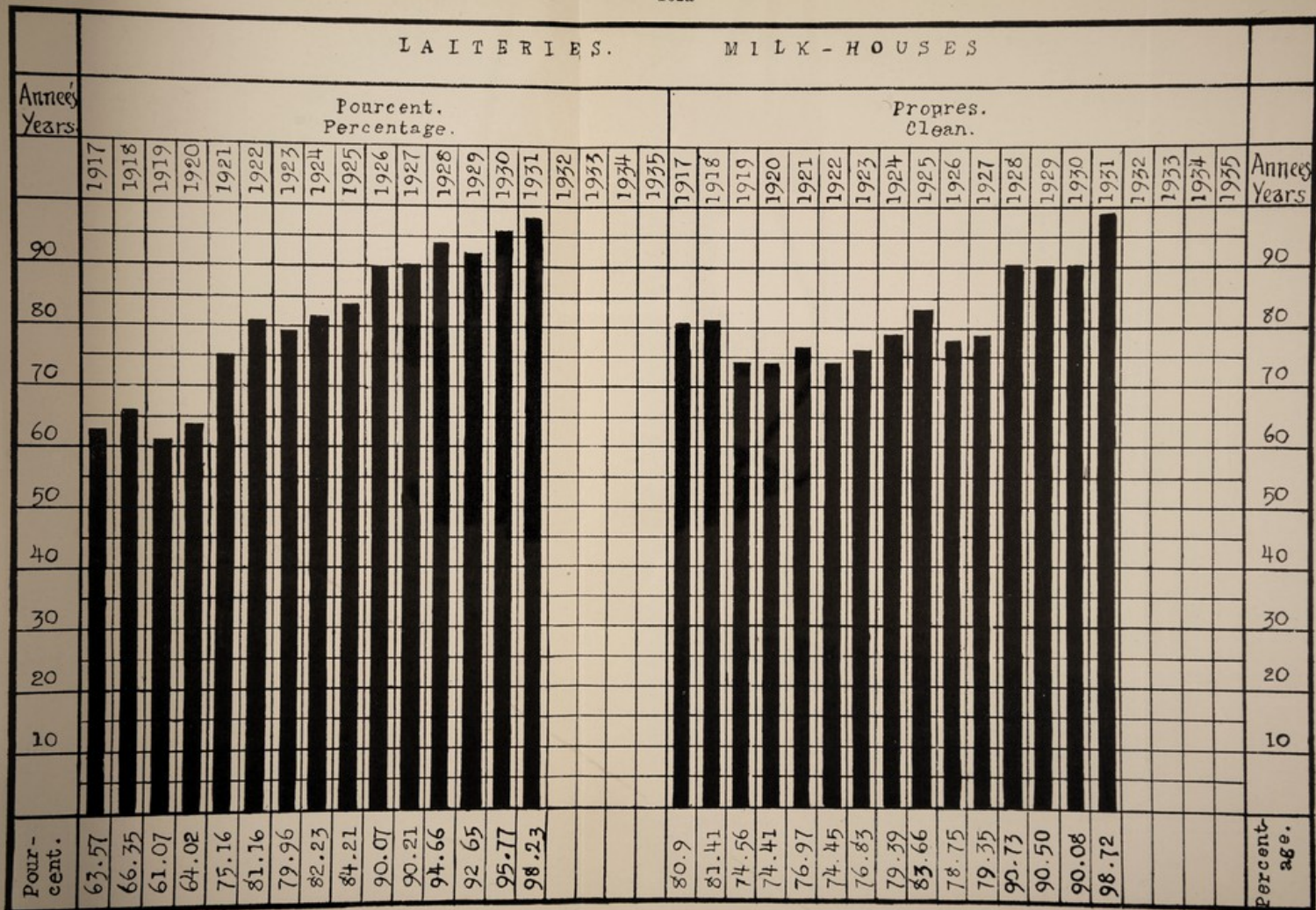
WEIGHT OF BREAD IN THE CITY OF MONTREAL
DURING THE YEAR 1931.

	Inspections made	Loaves weighed	Loaves confiscated	Notices sent	Actions taken
in bakeries.....	530	95461	21761	95	6
in grocery stores.....	2592	75523	105	197	2
in pastry shops.....	161	3223	130	12	0
in restaurants.....	2050	19275	19	175	0
in vehicles.....	89	1670	24	3	1
Total.....	5422	195152	22039	482	9

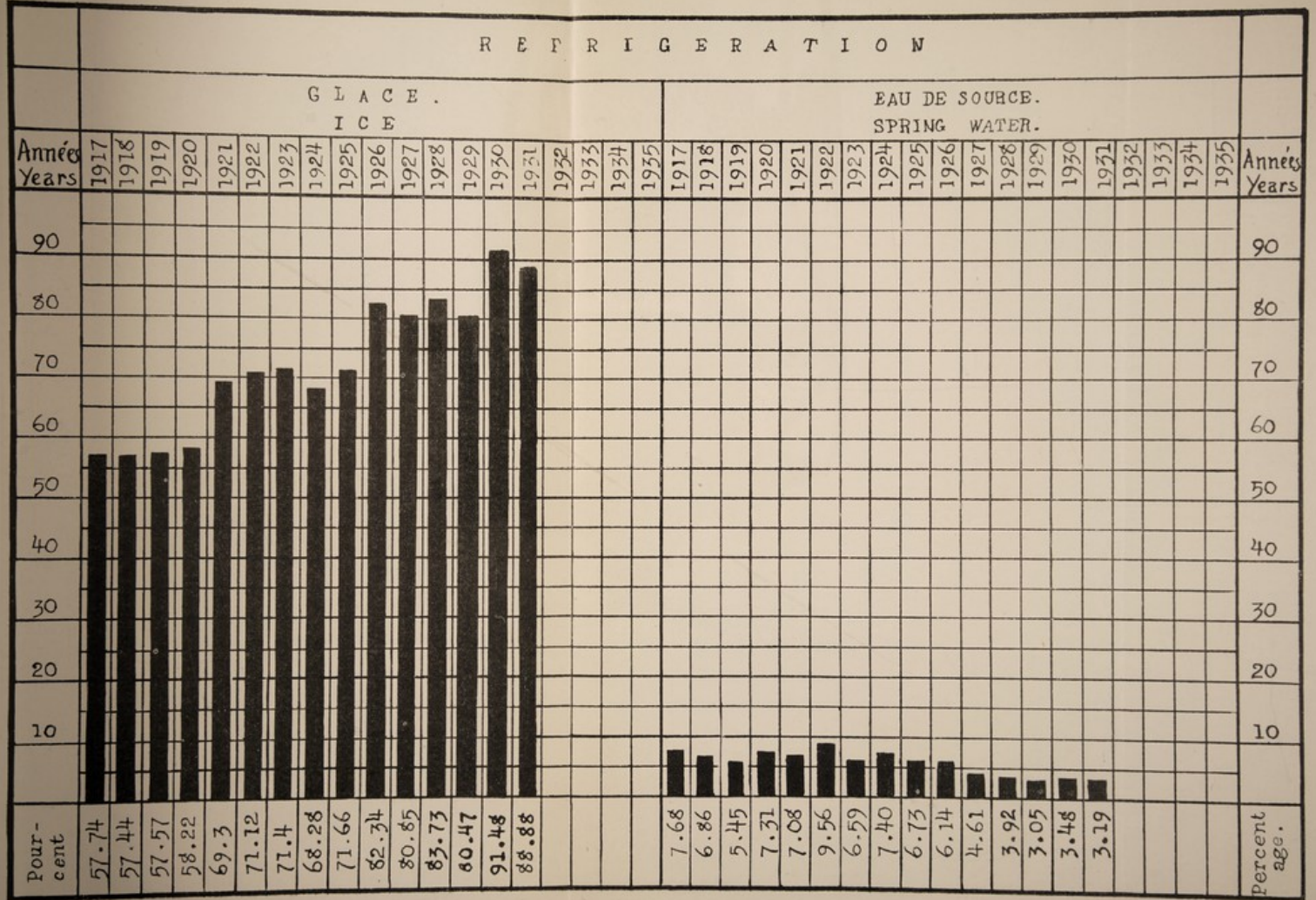
DEPARTMENT OF HEALTH
Dr. S. Boucher, M.D., D.P.H., Director

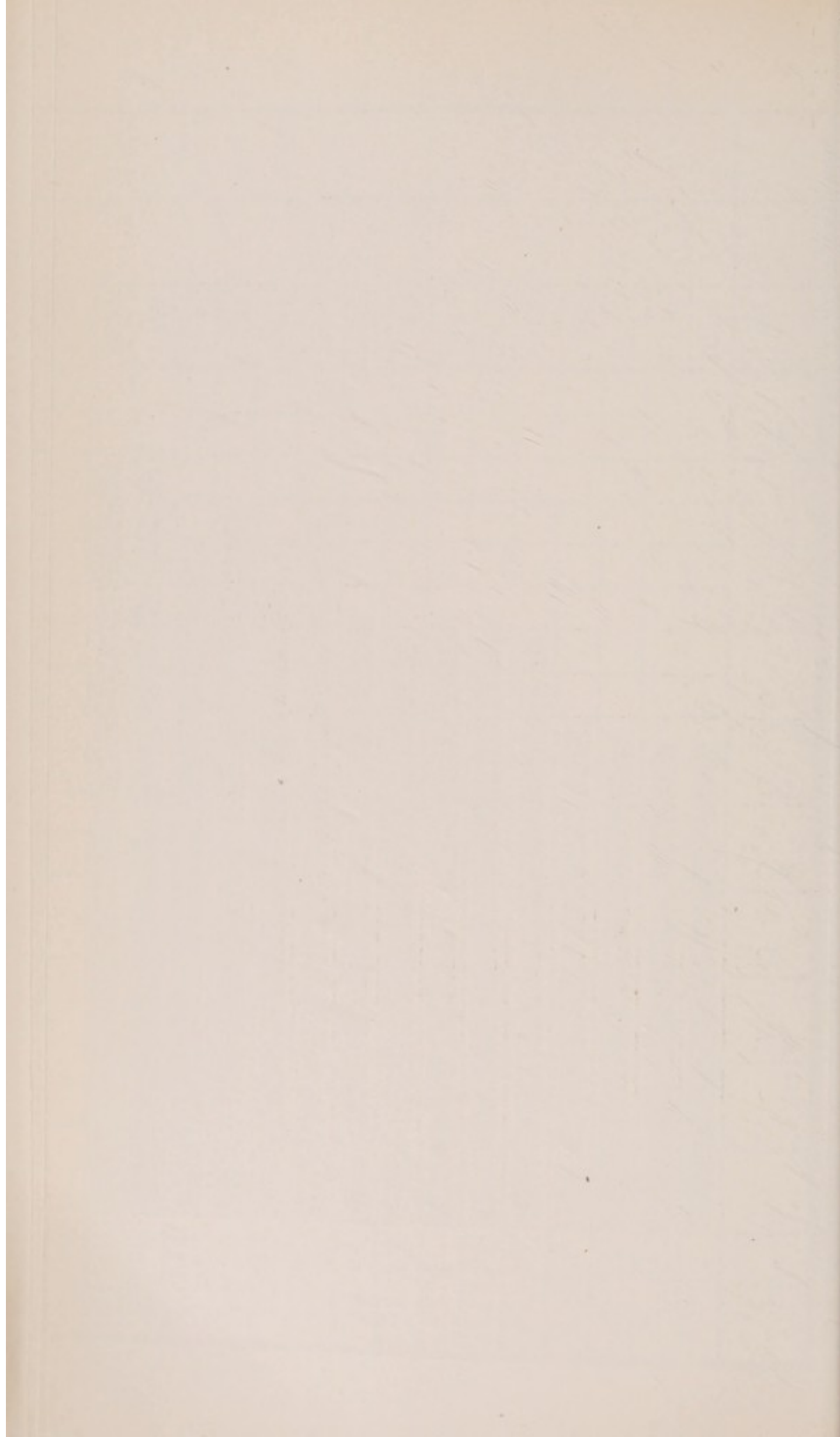
FOOD INSPECTION DIVISION
Dr. A. J. G. Hood, V.S., Superintendent

City Milk Inspection Section	Milk and Dairy Farms Inspection Section	Meat Inspection Section	General Food Inspection Section
<p>7 Districts—7 Inspectors Places visited and duties:</p> <p>Dairies. Groceries. R.R. depots and boats. Milk depots. Stables. Milk cows. Milk waggons. Empty cans inspection. Special inspections. Samples collected for chemical and bacteriological analysis.</p> <p>Districts: No. 1—A. E. Marleau. 2—A. Lavallée. 3—A. Bélanger. 4—G. Savage. 5—J. N. T. Laberge. 6—J. A. Séguin. 7—J. E. Enard.</p> <p>Pasteurization Section</p> <p>7 Districts—7 Inspectors Places visited and duties: Control of pasteurization and cleanliness in 44 milk plants. Control of 31 special milk establishments. Samples collected for chemical and bacteriological analysis.</p> <p>Inspectors: Geo. A. West. J. E. Paradis. C. A. Lemieux. H. N. Leduc. G. Bouchard. J. P. Désalliers. J. A. Lapierre.</p>	<p>9 Districts—10 Inspectors Places visited and duties:</p> <p>Regular inspections. Special inspections. Inspection of milk cows. Inspection of cow stables. Inspection of dairies. Inspection of cans and utensils. Score cards.</p> <p>Inspectors: J. E. Bourbonnière. Dr. J. L. Gauthier, V.S. Dr. J. Piché, V.S. Dr. J. P. Dautre, V.S. Dr. E. Richer, V.S. Dr. L. Chevreuil, V.S. Dr. G. M. Tetreau, V.S. Dr. A. Martel, V.S. Dr. E. C. Legault, V.S. Dr. R. Lanfrais, V.S.</p> <p>Supervisor: Dr. Ant. Pratte, V.S.</p>	<p>7 Districts—7 Inspectors Places visited and duties:</p> <p>Private abattoir. Markets. Butchers stalls. Poultry dealers. Fish stalls. Cold storages. Sundry manufacturers. Groceries. Sundry. Special.</p> <p>Districts: No. 1—E. H. Theoret. 2—J. Anguignon. 3—H. Provost. 4—R. Jalbert. 5—Dr. A. L. Lorrain, V.S. 6—Dr. J. Laberge, V.S. 7—F. Gagnon.</p> <p>Inspection Stations. 4 Stations—Staff: No. 1—Dr. L. Samson, V.S. 2—Dr. E. Durocher, V.S. H. Bélaïr. 3—Dr. M. Laberge, V.S. H. S. Masterman. 4—Dr. C. Sauvé, V.S. Dr. J. L. Archambault, V.S. Dr. A. Desrosiers, V.S.</p> <p>Private Abattoir: M. Roberts.</p> <p>Abattoirs (Country): J. L. Nault.</p> <p>Visits of dogs having bitten someone: Dr. J. Laberge, V.S.</p>	<p>7 Districts—7 Inspectors Places visited and duties:</p> <p>Restaurants. Dining rooms. Bakeries. Pastry shops. Confectioneries. Fruits and vegetables. Carbonated beverages. Sundry manufacturers. Institutions. Taverns. Waggons. Special.</p> <p>Samples collected for chemical and bacteriological analysis.</p> <p>Districts: No. 1—A. Bernier. 2—J. E. Daignault. 3—A. Lapointe. 4—E. Martel. 5—F. Brunelle. 6—P. Brunet. 7—J. A. Desjardins.</p> <p>Supervisor: L. G. Forté.</p> <p>Weighing of Bread Section</p> <p>Places visited and duties: Control of weight of bread in all establishments where it is baked or sold.</p> <p>Inspectors: C. A. Gareau. Alb. Hotte.</p> <p>Supervisor:</p>

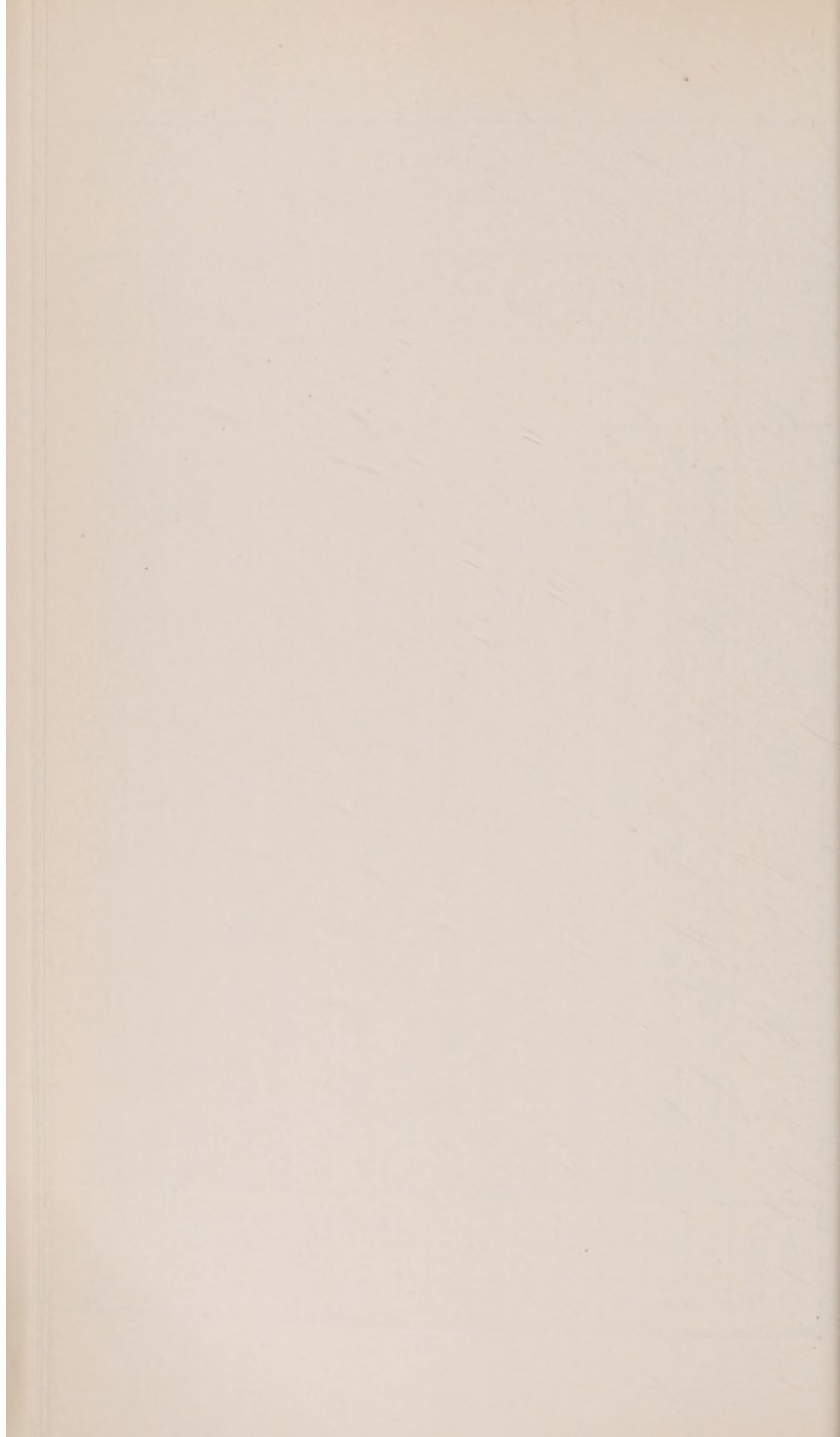


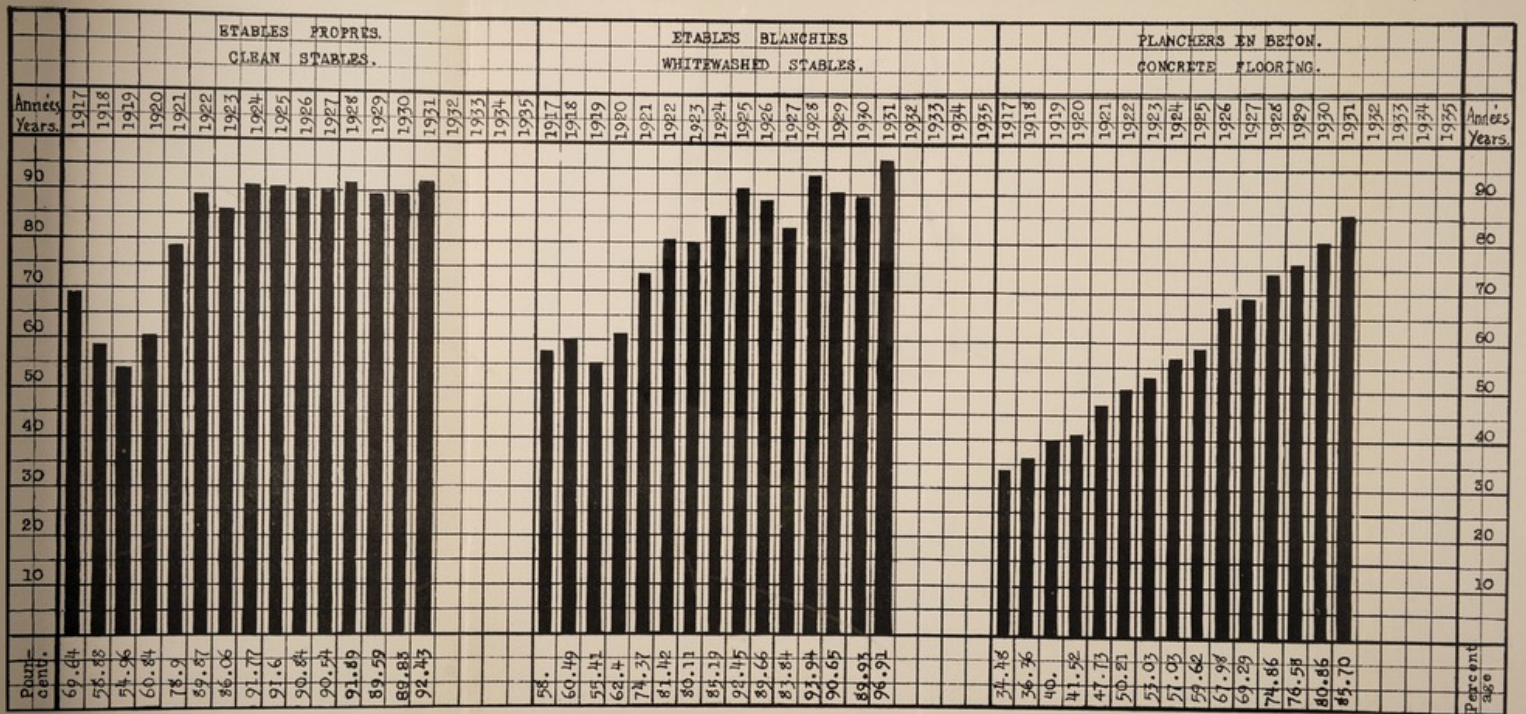
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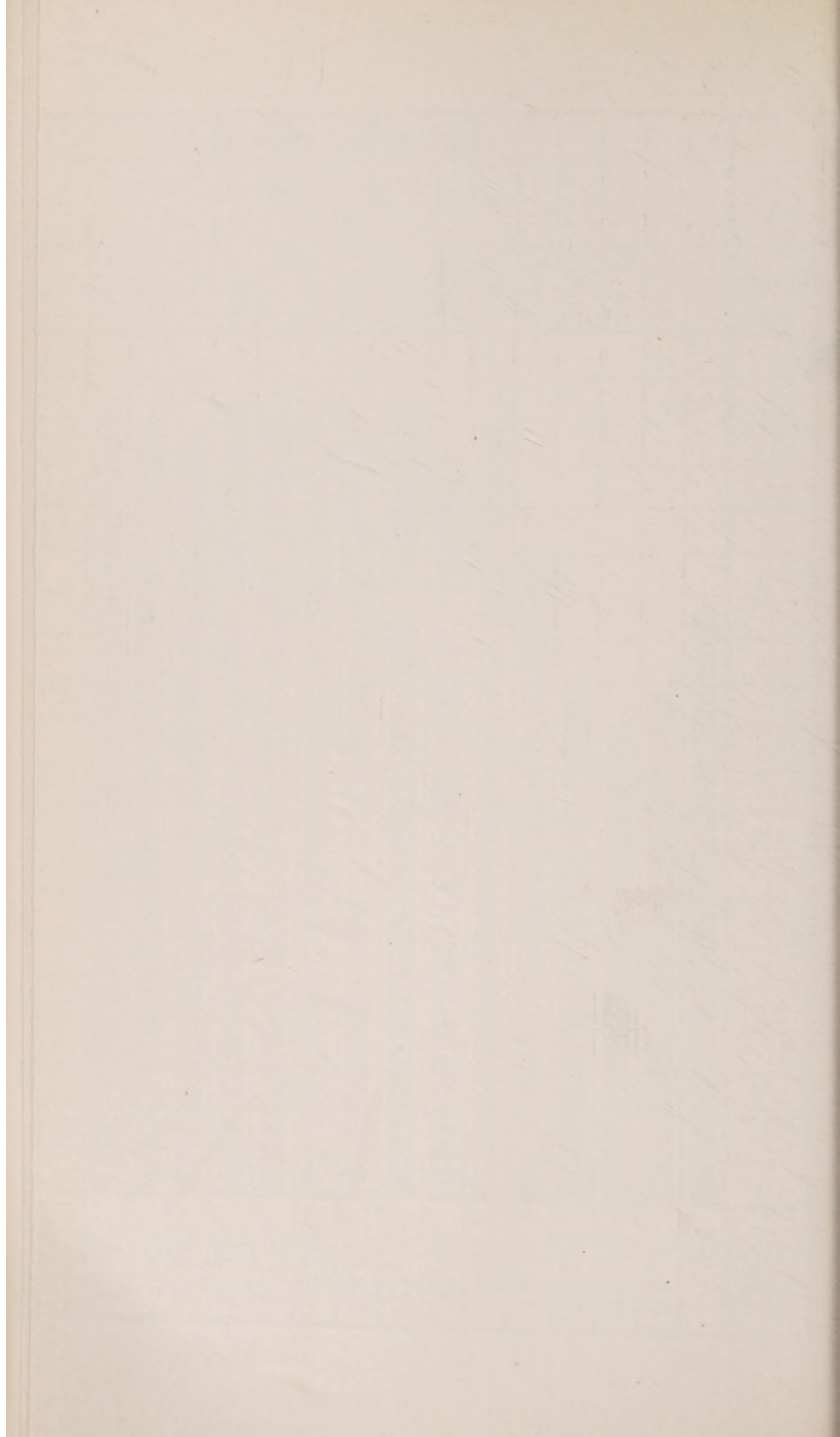




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Division of Municipal Assistance

STAFF OF THE DIVISION OF MUNICIPAL ASSISTANCE FOR THE YEAR 1931

ALBERT CHEVALIER	Superintendent.
C. J. GAUTHIER	Assistant Superintendent & Secretary.
G. LAPROTTE	Chief Clerk.
J. DEGUISE	Clerk.
P. E. GAGNE	"
EUG. ACHARD	"
Mrs C. SAURIOL	"
Miss G. CONTANT	"
Miss M. LEONARD	Stenographer-Typist.
Miss Y. LEBLANC	In charge of the Social Ser- vice Record.
Miss T. QUENNEVILLE	Clerk of the Social Service Record.
Miss R. BEAUPRE	" of the Social Service Record.
Z. BILODEAU	Bookkeeper.
J. A. DONATO	Chief Investigator.
P. E. PROVOST	Investigator.
A. BRABANT	"
D. LAVOIE	"
CHAS. ED. LEFEBVRE	"
ARMINI CHEVALIER	"
E. SANCHE	"
O. GIROUX	"
J. DESROCHERS	Supervisor of the Meurling Refuge.
J. M. LALIBERTE	Clerk.
A. HENUSET	Fireman
J. BRUNET	"
G. FILION	Launderer.
J. BURON	Cook.
N. LATRAVERSE	Watchman.
J. R. ROBITAILLE	"
A. GOUGEON	"
A. HINTON	"
L. PARISIEN	"

TWENTY-SEVENTH ANNUAL REPORT OF THE
DIVISION OF MUNICIPAL ASSISTANCE

For the year 1931

Dr. S. Boucher,

Director of the Department of Health.

Dear Sir: —

I beg to submit herewith the twenty-seventh Annual Report of the Division of Municipal Assistance for the year 1931.

This year our Division has dealt with 42,987 cases, which necessitated 28,956 investigations and the hospitalization of 33,990 persons at the expense of the City. These figures do not include the work done at the Municipal Mourning Refuge, which during the year 1931 has supplied 249,189 sleeping accommodations to 5,985 individuals and given 514,565 meals to the individuals lodged.

On the 31st of December, 1931, there remained 1,091 enquiries in abeyance, 26 of which for neglected children, 24 for current cases of insanity, 37 for juvenile delinquents, 7 for incurables, 2 for tuberculous, 7 for burial, 1 for street vendor, 134 for deportation and 858 for hospitalization under the Quebec Public Charities Act.

A better idea can be formed of the work done by this Division by referring to the report which follows herewith: —

The City of Montreal has spent in 1931 for assistance to its ratepayers a sum of \$2,589,868.21, as follows: —

Relief of various kinds	\$3,112,054.82	
Remittance of real estate tax to charitable institutions	454,459.68	
		<hr/>
Total	\$3,566,514.50	
Less the money collected for maintenance	\$ 35,535.86	
Less the money collected for amusement tax	431,277.09	
Less the reimbursement for unemployment by the Federal and Provincial Governments	509,833.34	
		<hr/>
Total	976,646.29	\$ 976,646.29
		<hr/>
		\$2,589,868.21

Or: \$880,212.22 more than in 1930.

FOR THE YEAR 1931

Items	Hospitalized at City's cost	Number of investigations	Number of cases	Expenditure	Sums collected
Neglected children.....	822	1,440	1,466	\$ 88,575.67	\$ 1,001.35
Juvenile Delinquents and Juvenile Court.....	974	963	974	40,686.32	238.84
Insane.....	805	1,036	1,060	324,456.92	19,329.76
Incurable.....	88	300	301	74,228.80	
Tuberculous.....	179	242	244	73,000.00	667.87
St. Luke's Hospital.....	44	37	44	10,950.00	
Refuge Notre-Dame de la Mer.....	93	130	130	30,420.00	
Assistance to the poor.....		1,556	1,556		
Street vendors.....		287	288		
Special cases.....		142	142		
Burial of paupers.....		344	351	4,370.90	113.26
Deportation of immigrants.....		598	598		
Repatriation of strangers.....		297	297	1,622.69	63.08
Pensions and annuities.....		84	84	234,888.30	105.90
Charitable institutions having registered (By-Law 626).....		187	187		
Persons authorized to collect gifts for said institutions (By-Law 626).....		36	36		
Tag-Days.....		34	34		
Quebec Public Charities Act.....	30,985	21,243	35,195	945,051.79	431,277.09
Grants.....				318,964.55	
Total.....	33,990	28,956	42,987		
In 1930.....	29,143	23,887	37,432		
Mourling Municipal Refuge—Free night lodgings: 249,189; free meals given: 514,565.....				37,955.88	14,015.80
Administration expenditure of general office.....				29,383.00	
Unemployment crisis (\$3,782.97 included for miscellaneous expenditures).....				897,500.00	509,833.34
Total money disbursed for assistance purposes.....				3,112,054.82	
To be added: Exemption of taxes to charitable institutions: \$33,663,680.00 at 1.35%.....				454,459.68	
Grand total.....				3,566,514.50	976,646.29
In 1930.....				\$2,216,108.09	\$ 506,452.10

A. CHEVALIER, Superintendent of the Municipal Assistance Division.

The following particulars show how the divers sums of money mentioned in the preceding page have been spent: —

Placing of neglected children in schools of industry.

1,466 applications for placing or discharging neglected children had to be settled during 1931. These applications necessitated 1,440 investigations; 26 of which remained in abeyance on the 31st of December, 1931.

The result of said investigations was as follows:

Accepted cases	779
Refused cases	220
Procedures discontinued	251
Applications for release granted	123
Special cases	50
Placed in families	17
Total	1,440

Children were placed as follows:

Children in schools of industry on the 1st of January, 1931	1,180
-----------------------------------------------------------------------	-------

Admitted during the year:

At "Maison Ste-Domitille"	257
At "Notre-Dame de Montfort"	172
At "Orphelinat d'Huberdeau"	129

Total	558
Readmitted during the year	264
Total	822

Total	2,002
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Discharged or set free	495
Internments terminated	305
Total	800

On the 31st of December, 1931	1,202
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Distributed as follows:

Maison Ste-Domitille, Laval-des-Rapides	598
Notre-Dame de Montfort	358
Orphelinat d'Huberdeau	246

All these children are placed at joint expenses with the Provincial Government.

On December 31st, 1931, 18 boys and 7 girls were waiting for their admission. The cost of maintenance of these children was \$88,575.67 in 1931 (paid by the City for transportation \$991.63 and to the Provincial Government \$87,584.04).

The parents of certain children found able to pay for the maintenance of said children were called upon to refund to the City the amount of \$1,001.35.

Juvenile delinquents

974 cases of juvenile delinquents were reported in the following Institutions' monthly report:

St-Vincent-de-Paul Reform School	752
Bon-Pasteur	190
Shawbridge	23
Girls' Cottage	9

936 investigations were completed during the year with the following results:

Investigations closed	895
Objections to payment	38
Parents having to reimburse	30
Under investigation on December 31st, 1931	37

The sum of \$238.84 was collected in 1931 from responsible parties.

On the 31st of December, 1931, there were, in the Reform Schools, at the City's expense, 351 juvenile delinquents, as follows:

At St-Vincent-de-Paul	158
At Bon-Pasteur	102
At Shawbridge	69
At Girls' Cottage	22

The City of Montreal paid to the Provincial Government in the year 1931, for the maintenance of the Juvenile Court, the sum of \$6,500.00.

Another sum of \$34,094.32 was paid by the City for maintenance expenses and \$92.00 for transportation expenses in the year 1931, making a total of \$34,186.32.

Insane.

There were in the asylums for the insane, at the City's expense, on the first of January, 1931, 3,114 patients. During the year 805 of these patients were admitted: at St-Jean-de-Dieu, 530; at Verdun, 102; at l'Hospice Ste-Anne-de-la-Baie St-Paul, 40; at l'Asile de Bordeaux (for the criminal insane), 98; and at LaJemmerais School, 35.

623 of these patients were either discharged from these asylums or died during the year; consequently, there were left 3,296 patients on the 31st of December, 1931, distributed as follows:

Institutions	Patients
St-Jean-de-Dieu	2,096
Verdun	451
L'Hospice Ste-Anne de la Baie St-Paul	254
Bordeaux (Criminal Insane)	202
Ecole de LaJemmerais	165
St-Ferdinand d'Halifax	19
Beauport (St-Michel-Archange and Hospice Du-frost	109
Total	3,296

There was a decrease of 50 admissions in the year 1931 over the year 1930.

Mental cases in 1931 required 1,036 investigations, the results of which have been as follows:

Investigations closed	702
Parents having to reimburse the City	108
Special investigations for the Quebec Government	47
Objections to payment	62
Procedures discontinued	101
Insane persons deported	16

On the 31st of December, 1931, there remained 24 investigations to be made. 745 commitment papers were prepared in 1931 by our Division.

The City of Montreal has received for the board of the insane patients, from the latter's parents, during the year 1931, the sum of \$19,329.76.

The maintenance of the insane patients in the asylums in the year 1931 has cost the City:

For the repatriation and transportation of	
insane persons	\$ 2,538.21
For the maintenance of patients in hospitals	321,918.71
	<hr/>
Total	\$324,456.92

INCURABLES AND TUBERCULOUS

Incurables

Applications for the hospitalization of incurable patients during the year 1931 amounted to 301, or 40 less than the preceding year. These applications necessitated 301 investigations, the result of which has been as follows:

Recommendable cases	127
Cases not recommendable	124
Parents having to refund cost of maintenance to the City	0
Procedures discontinued	48
Deported	1
Under investigation on the 31st of December, 1931	1

There were 88 patients hospitalized during the year 1931: —

At l'Hôpital du Sacré-Coeur	70
At the Grey Nuns', St. Mathieu street	18

The total number of patients at the City's expense on the 31st of December, 1931, was 139, located as follows:

At l'Hôpital du Sacré-Coeur	99
At the Grey Nuns'	40

On the 31st of December, 1931, there was one vacant place at l'Hôpital du Sacré-Coeur; 7 patients were waiting their admission on the same date.

The amount paid for the maintenance of the incurables during the year 1931 was \$74,228.80, as follows:

To l'Hôpital du Sacré-Coeur	\$59,628.80
To the Grey Nuns'	14,600.00

At the Grey Nuns', the number of beds available was increased from 30 to 40, in virtue of a new decree passed in the course of the year.

Tuberculous

There were 244 applications for hospitalization of indigent tuberculous during the year 1931. These 244 applications necessitated 242 investigations, the result of which has been as follows: —

Recommendable cases	188
Cases not recommendable	10
Procedures discontinued	37
Parents having to refund cost of maintenance . .	3
Deported	4
Under investigation on December 31st, 1931 . . .	2

The number of tuberculous hospitalized during the year was 179.

91 tuberculous patients were at the Sacred Heart's Hospital on the 31st of December, 1931, at the City's expense; there were 9 vacant places and 7 patients were waiting for their admission on the same date.

The amount paid for the maintenance of the tuberculous during the year 1931 was of \$73,000.00.

The sum of \$667.87 has been reimbursed to the City by the parents of the incurables or of the tuberculous.

St. Luke's Hospital

Ten beds are at the disposition of the City, in virtue of a contract agreed to between the City of Montreal

and the above mentioned Institution for the hospitalization of sick vagrants picked up in the streets by the police, or of other persons that may have to be put under observation. In the course of the year 1931, 44 persons were hospitalized and the sum spent for this purpose amounted to \$10,950.00. These hospitalizations have necessitated 37 investigations and one deportation.

Refuge Notre-Dame-de-la-Merci

At the Refuge Notre-Dame-de-la-Merci, there are at our disposal, according to a contract agreed to between the City and the above mentioned Institution, 75 beds for the hospitalization of vagrants or of other persons, sick or homeless, picked up by the police and who cannot be placed in the existing institutions; such as paralytics, old men of all categories, undisciplined, crippled.

During the year 1931, 130 applications were made and after investigation 104 of these applications were accepted; one deported and 25 refused or discontinued; 93 were hospitalized and the sum paid by the City for this purpose amounted to \$30,420.00.

Assistance to the indigents

During the year 1931, 1,556 applications for relief of various kinds were filed with our Division. Most of these cases were referred to the charitable institutions.

Mendicants and street vendors

288 applications for street vendor licenses were made at our office in the course of the year. These applications have necessitated 287 investigations with the following result: —

Applications recommended upon payment of the	
\$10.00 license fee	55
Applications recommended free of charge	116
Applications not recommended or discontinued	116
Under investigation on the 31st of December, 1931	1

Special cases

142 requests for research or information were made through this Division during the year 1931. These researches were of a particular nature and we are pleased to state that they were attended to satisfactorily.

Burial of indigents

351 requests for burial of poor persons at the City's expense were made in 1931. These have necessitated 344 investigations, with the following results: —

Persons buried at the City's expense	326
Responsible parties having been called upon for reimbursement of whole or part of expenses incurred	6
Requests refused or discontinued	12
Under investigation on the 31st of December, 1931	7

The amount collected in 1931, from responsible parties for burial expenses, was \$113.26.

The amount paid by the City for burial expenses during the year 1931 was \$4,370.90.

Deportation

The cases of deportation of immigrants figured at 598 in 1931. After investigation these cases were disposed of as follows: —

Immigrants deported	317
Procedures discontinued	134
Cases refused by the Department of Immigration	13
Under investigation at Ottawa on the 31st of December, 1931	134

Repatriation

297 requests for repatriation came before this office in 1931. The amount spent by the City for this purpose was \$1,622.69.

The above mentioned requests were disposed of as follows: —

Persons repatriated at the City's expense	218
Requests refused or discontinued after investigation	79

The sum of \$63.08 was reimbursed to the City by an indigent person who was repatriated.

Pensions and annuities

During the year 1931, 84 cases of pensions and annuities for the City employees were dealt with, as follows:

Employees who have been granted pensions	74
Pensioners deceased	10

On the 31st of December, 1931, there were 409 persons (352 adults and 57 children) drawing a pension or annuity from the City.

The expenses incurred for this purpose in

1931 amounted to	\$234,888.30
Amount reimbursed	105.90

Registration of charitable institutions and of persons authorized to solicit gifts or alms on behalf of said institutions

In conformity with the municipal By-law No. 626, 187 institutions soliciting or collecting gifts or alms have registered in 1931 (in 1930, 182), and 36 persons were authorized to solicit such gifts or alms (in 1930, 43).

Tag-Days

His Worship the Mayor received, during the year 1931, 34 applications for permission to hold Tag-Days, in compliance with the above mentioned by-law. These applications were handed to this Department for attention and we reported as follows:—

Favourable recommendations for Tag-Days	25
Favourable recommendations for Guignolées	6
Not recommended (Tag-Days)	3

22 associations have held "Tag-Days" on the dates and with the detailed results which will be found in the table on the following page.

TAG-DAYS IN 1931

No.	Date	Associations	Receipts	Expenses	Surplus	% of expenses
1	April 4	Colonie Ste-Thérèse de l'Enfant-Jésus.....	\$ 1,404.79	\$ 278.00	\$ 1,126.70	19.77
2	" 11	Hervey Institute.....	908.34	85.60	822.74	9.42
3	" 18	School for Crippled Children.....	4,613.94	357.48	4,256.46	7.74
4	May 2	Hellenic Ladies' Philanthropic League.....	889.50	136.83	752.67	15.38
5	" 9	Union Nationale Française.....	630.30	84.84	545.46	13.46
6	" 16	Salvation Army.....	2,921.15	136.70	2,784.45	4.67
7	" 30	Association du Bien-Etre de la Jeunesse.....	3,035.34	381.88	2,653.46	12.58
8	June 6	St. Joseph Italian Orphanage.....	1,570.00	250.00	1,320.00	15.92
9	" 13	Franciscaines Missionnaires de Marie.....	1,117.51	304.14	813.37	27.21
10	" 17	Hebrew Consumptive Aid Association.....	2,351.10	352.29	1,998.81	14.55
11	" 27	Vétérans Français de la Grande Guerre.....	559.91	180.43	379.48	30.43
12	" 29	Laurentian Fresh Air Camp.....	2,500.00	420.15	2,079.85	16.80
13	Aug. 24	Montefiore Hebrew Orphans Home.....	3,508.28	395.00	3,113.28	11.25
14	" 31	Young Hebrew Malbish Arumim Society.....	2,090.54	277.38	1,813.16	13.26
15	Sept. 5	Greek Ladies' Benevolent Society.....	876.59	114.40	762.19	13.05
16	" 12	Montreal Humane Society.....	808.99	196.06	622.93	22.99
17	" 19	Foyer Notre-Dame-de-la-Garde.....	1,746.41	478.15	1,268.26	27.37
18	" 26	St. John Ambulance Brigade.....	864.29	153.75	710.54	17.78
19	Oct. 10	L'A. C. J. C.....	3,405.12	1,772.79	1,632.33	52.08
20	" 17	Salve Regina Protectorate for Boys.....	1,236.02	205.72	1,030.30	16.64
21	Nov. 7	Women's Labour League of Montreal.....	409.36	134.69	274.67	32.90
22	" 11	Greater Montreal Poppy Day Relief Fund.....	9,173.31	361.43	8,811.88	3.94
Totals.....			\$46,620.70	\$ 7,047.71	\$39,572.99	Average 15.11%

Quebec Public Charities Act.

The proceeds from the "Amusement Tax" applied to the working of the Quebec Public Charities Act, during the year 1931 were as follows: —

Amounts received from January 1st to December 31st, 1931	\$918,426.87
After paying the Provincial Government's share and the expenses for the collection of said tax, the nett amount left to the City was	431,277.09
The expenses incurred by the City for the application of said by-law amounted to	27,936.34

The above expenses were at the City's charge exclusively.

The City disposed of its share of the said proceeds as follows: —

For transportation of patients	\$ 543.60
To the Maternities, Crèches and Infants' Homes	145,335.57
To the Provincial Government for the maintenance of patients in the Hospitals, Hospices, Orphanages, Asylums, etc. . .	* 771,136.28
To include the expenses of collection of the tax	27,936.34
Grand total	<u>\$944,951.79</u>

The City has consequently spent \$216,523.43 more than last year.

The number of requests for hospitalization under the

* At the presentation of this report, this account was not as yet verified.

Quebec Public Charities Act, sent to our Division during the year 1931 were as follows: —

Applications for hospitalization in Hospitals, Sanatoria, Homes and Orphanages	18,927
Cases reconsidered	1,191
Under investigation on the first of January, 1931	1,230
Transferred to other institutions	752
<hr/>	
Total	22,100
Investigations made during the year	21,243
Under investigation on the 31st of December, 1931	857

The result of these investigations has been as follows:

Accepted cases	17,890
Cases refused	3,353

To these 17,890 cases accepted after investigation, we must include or add 13,095 cases accepted in the Maternities, Crèches, Homes for the children, and School for crippled children, without investigations, making a total of 30,985 hospitalized persons and of 35,195 cases (refused, 3,353; under investigation, 857).

Meurling Municipal Refuge

The expenses incurred by the City for the service of the Meurling Municipal Refuge during the year 1931 were as follows: —

Salaries	\$14,551.25
Heating	3,291.00
Lighting	865.82
Gas	123.97
Food	12,321.48
Repairs of the buildings (\$839.38) and main- tenance of the building (\$4,225.03)	5,064.41
Laundering	1,737.95
<hr/>	
Total	\$37,955.88

During the year 1930, the total cost amounted to \$38,965.99, or a decrease of \$ 1,010.11

The City of Montreal was reimbursed by the Provincial and Federal Governments of a sum of \$14,015.80, from the funds of direct relief voted by the above mentioned Governments to come to the aid of indigents and more particularly so for the homeless, so that the expenses incurred by the Meurling Municipal Refuge during the year 1931 have really amounted to \$23,940.08.

During the year 1931, there were 249,438 entries for lodging accommodations in the Meurling Municipal Refuge. Of this number, 249 individuals were refused admission for good cause, so that the nett number of lodgings given was 249,189. These lodgings were given to 5,985 individuals, or an average of 41.7 times each individual.

The number of refugees who have been supplied with work or with situations amounted to 16,033; the average age of the persons lodged was 44.5 years. The refugees lodged at this institution represented 36 different nationalities.

The number of refugees found sick by our physician, after examination, was of 36,823 and the number of diseases was 54.

514,565 free meals were given and the cost of each of these meals amounted to .0221.

683,778 pieces of linen were washed in the Refuge's Laundry. Of this number, 3,510 pieces belonged to the various departments of the City Hall, 5,997 pieces to the refugees and 674,271 pieces to the Meurling Refuge.

Administration expenses of the General Office.

The expenses incurred for the administration of the General Office, to the exclusion of the Refuge, in the course of the year 1931, were as follows:—

Salaries	\$27,298.97
Transportation	1,616.82
Incidentals	182.76
Furniture	34.45
Social Service Exchange	250.00
Total	<hr/> \$29,383.00

SUBSIDIES

Subsidies and grants accorded by the City of Montreal in 1931 amounted to \$318,964.55, distributed as follows:—

Hospital Ambulance Service:

Notre-Dame Hospital	\$ 1,500.00
Montreal General Hospital	1,500.00
Royal Victoria Hospital	1,500.00
Hôtel-Dieu	500.00
Hôpital Ste-Justine	500.00
Western Hospital	500.00
Hôpital Ste-Jeanne-d'Arc	500.00
Hôpital St-Luc	500.00

Education and Assistance:

Royal Life Saving Society	300.00
St. John Ambulance Brigade	200.00

Patronages and Homes:

St-Vincent-de-Paul Patronage	500.00
Maison d'Oeuvres Jean-le-Prévost	200.00
Montreal Boys' Home	200.00
Salve Regina Boys' Home	500.00

Fraternal Societies:

Conseil fédéré du Travail	200.00
Union mutuelle des Employés civiques	100.00
Montreal Sailors' Institute	200.00
Catholic Sailors' Club	400.00
Syndicat catholique et national des fonctionnaires municipaux	100.00
Syndicats catholiques et nationaux	200.00

Children's Welfare:

Colonie de vacances des Grèves	1,800.00
Colonie de vacances Jeanne-d'Arc	500.00
Summer Camp for Girls (Bruchési Institute)	1,800.00

Summer Camp for Boys	1,800.00
Colonie de vacances de Ste-Thérèse de l'Enfant-Jésus	500.00
Colonie de vacances de l'Aide aux En- fants Infirmes	300.00
Colonie de vacances de l'Aide aux En- fants Infirmes (Installation)	1,000.00
Diocesan Camp Corporation of Montreal	500.00
Parks and Playgrounds Association. . .	1,100.00
Association du Bien-Etre de la Jeunesse	1,200.00

Educational:

Victorian Order of Nurses	850.00
University Settlement	300.00
Fédération St-Jean-Baptiste	400.00
Ecoles ménagères provinciales	4,000.00
Ecole des Arts et Métiers	3,000.00
Ecole d'Hygiène sociale appliquée	5,000.00
Child Welfare Association	3,000.00
Fédération d'Hygiène Infantile	3,000.00
Art Association	1,200.00
Société d'Archéologie et Numismatique de Montréal	2,500.00

Educational Campaign:

Montreal Tourist and Convention Bu- reau	5,000.00
Ligue de Sécurité de la Province de Québec	2,000.00
Ligue de Sécurité de la Province de Québec	500.00
Ligue de Sécurité de la Province de Québec	459.55
Ligue du Progrès Civique	2,000.00

Protection of Animals:

Society for the Prevention of Cruelty to Animals	2,500.00
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General Clinics:

Montreal Dispensary	500.00
Herzl Dispensary and Hospital	500.00
Dispensaire de l'Hospice St-Henri	3,000.00

Dental Clinics:

Montreal General Hospital	1,000.00
Hôpital dentaire Laval	2,200.00

Diet Clinic:

Montreal Diet Dispensary	200.00
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Anti-tuberculosis Clinics:

Institut Bruchési	8,000.00
Institut Bruchési, dispensaire St-Denis	1,900.00
Royal Edward Institute	8,000.00
Royal Edward Institute, Rosemount Dis- pensary	1,900.00

Homes, Orphanages and Asylums:

Assistance publique	6,000.00
Orphelinat St-Arsène	1,500.00
Asile de la Providence (for old men)	1,500.00
Asile des Vieillards des Petites Soeurs des Pauvres	1,500.00
Hospice Auclair	200.00
Bon-Pasteur (Penitents)	500.00
Sheltering Home (Temporary Home for Women)	250.00

Home Relief:

Protestant Relief Committee	500.00
Baron de Hirsch Institute	3,000.00
Catholic Welfare Bureau	1,000.00

Assistance (Women and Children):

Maternal Assistance	4,000.00
St. Ann's Day Nursery	100.00
Grey Nuns (Bureau of Adoption)	3,000.00

General Assistance:

Salvation Army	1,500.00
Family Welfare Association	2,000.00
Société catholique de Protection et de Renseignements	2,000.00

Education and Assistance:

Institut des Aveugles "Nazareth"	1,500.00
Montreal Association for the Blind	500.00
Institution des Sourdes-Muettes	500.00
Association Canadienne-française des Aveugles	500.00
Radium Institute	5,000.00

Night Refuges, Shelters:

Protestant House of Industry and Refuge	1,500.00
Union Nationale Française	600.00
Old Brewery Mission	700.00
L'Oeuvre des Sans-Foyer (Soeur Bon- neau)	500.00

Society for the Protection of Women and Children:

Society for the Protection of Women and Children	800.00
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Special Grants:

Société St-Jean-Baptiste	3,000.00
McGill University (for Standard Time)	150.00
French-Canadian Boy Scouts	3,000.00
Boys Scouts Association	2,000.00
Catholic Community \$1,000.00	} 5,000.00
St-Vincent-de-Paul. 1,000.00	
Boys Scouts Association 1,000.00	
Financial Federation 1,500.00	
Boys' Farm Training School.. 500.00	
McGill University	10,000.00
Monument aux Français de Montréal, etc.	2,000.00
Greater Montreal Poppy Day Relief Fund	55.00
Institut Bruchési and Royal Edward (Timbres de Noël)	2,000.00
Ecole Technique de Montréal (Provided by the Charter)	75,000.00
Notre-Dame Hospital	12,500.00
Children's Memorial Hospital.. . . .	15,000.00
St. Luke's Hospital	25,100.00
Montreal General Hospital.. . . .	25,000.00
Hospice St-Henri	15,000.00
Total	\$318,964.55

The value of the real estate owned by charitable institutions and exempted from taxation, in 1931, was \$33,663,680.00. The real estate tax at \$1.35% amounts to \$454,459.68.

Social Service Exchange

Since the 21st of September, 1931, the Social Service Exchange is in full operation.

The number of Record-cards on the 31st of December, 1931, amounted to 99,442, i.e. 97,174 individual records and 2,248 cards for lodging.

This Department, as explained in the 1929 annual report, the year on which it was organized, is an immense index, having a record of each individual who has received help from the City, in any shape or form, or in any institution whatever, since the foundation of the Municipal Assistance; the different occasions on which he received relief are recorded with full particulars on the same card, which constitutes in itself a regular record to which we can readily refer for any information required concerning the individual interested. This organism constitutes then an efficient means of verification, as well as a protection, not only for the City of Montreal, but also for the institutions or organizations concerned, and abolishes the unjust multiplication of relief given to the same persons, an exploitation which ceases of itself in consequence thereof.

As soon as applications for relief are made at the Municipal Assistance, they are referred to the Social Service Exchange; the records already entered are then looked through in order to trace back the persons who have been relieved in the past.

It happens often enough that the same person makes two applications of a different nature but at close dates, in which case, an investigation and a visit at the domicile will be sufficient, and this procedure of check-up avoids a considerable loss of time in making the investigations. In a few words: the usefulness of the Social Service Records Department has been fully and convincingly demonstrated from the first day of its operation.

Unemployment crisis

The crisis of unemployment which we have experienced for some time past, has aggravated itself in the course of the year 1931, so that the public authorities had to intervene, as they did in the year 1930, in order to relieve the affected population. Unemployment works had to be initiated and direct relief distributed as well.

The first Dominion Unemployment Relief Act having expired, the Federal Government had to pass a new law on the 3rd of August, 1931, entitled: "Dominion Unemployment Relief and Farmers Act, 1931". I will mention here only the direct relief, as the unemployment relief works do not come under our jurisdiction.

As in 1930, the direct relief has been distributed to the charitable organizations interested in the distribution of relief to the unemployed, in the following proportions: 75% to the Catholics, 19% to the Protestants and 6% to the Hebrews. These charitable organizations are: The St-Vincent-de-Paul Society, the Montreal Council of Social Agencies and the Federation of Jewish Philanthropies of Montreal. One-third of the money spent for this purpose is reimbursed by the Federal Government and the same proportion, i.e. one-third, by the Provincial Government.

During the course of the year 1931 we had to open a special refuge for the homeless men, under the direction of a committee of citizens and controlled by the Canadian Red Cross Society. The expenses incurred for the maintenance of said Refuge have been reimbursed to the City of Montreal in the proportion of 50% by the Federal Government and 25% by the Provincial Government.

The Advisory Relief Board, appointed in the year 1930, continued to operate in the course of the year 1931 and, as in the preceding year, was composed of the same representatives.

The total amount spent by the City of Montreal for direct relief purposes, during the year 1931, was \$897,500.00. The City was reimbursed by the Provincial and Federal Governments, in 1931, of a sum of \$509,833.34; therefore, the City was obliged to disburse from its ordinary budget, the sum of \$387,666.66.

Attached herewith, please find a table showing the direct relief distributed monthly to the families affected by the unemployment crisis, in the City of Montreal.

Year 1931 Months	Number of heads of families relieved	Depend- ants of heads of families	Indivi- duals relieved	Total number of persons relieved	Total number of meals distrib- uted	Total number of lodgings given
January.....	12,099	44,603	2,543	59,245	242,799	45,776
February.....	12,741	46,489	3,446	62,676	271,231	48,252
March.....	4,786	23,705	3,390	31,881	256,732	47,754
April.....	3,369	17,439	2,873	23,681	151,659	40,233
May.....	1,980	10,551	1,886	14,417	108,362	26,407
June.....	2,672	11,450	2,037	16,159	108,646	24,446
July.....	2,545	11,674	2,143	16,362	186,072	25,716
August.....	3,047	14,593	2,448	20,088	202,874	29,382
September.....	4,574	22,360	3,627	30,561	288,684	43,530
October.....	6,462	31,256	4,735	42,453	324,794	61,559
November.....	8,931	39,772	5,407	54,110	395,088	73,543
December.....	12,215	55,364	5,789	73,368	420,469	83,044
Total.....	75,421	329,256	40,324	445,001	2,957,410	550,342

In addition to the sum of \$387,666.66 which the City of Montreal has disbursed, from its ordinary budget, as above mentioned, for direct relief, there is a further amount of \$3,782.97 covering the expenses incurred for the census of the unemployed as well as for the administration of the above mentioned Board.

Co-operation with the Police Department

During the year 1931, the Department of Police, through its representatives connected with our Bureau — Detective-Sergeant Finel and constable Pleau — looked after the following cases: —

The cases reported before the Recorders' Court and the Police Court are as follows:—

Prisoners remanded for mental examination	184
Prisoners committed at the Bordeaux Hospital	75
Prisoners committed at St-Jean-de-Dieu	20
Prisoners committed at the Verdun Asylum . .	6
Prisoners deceased during mental examination:—	
At the Bordeaux Jail	2
At the Fullum street Jail	1
Declared not insane after examination	80

184

Retarded or idiot children transported under escort	82
Interned at the Hospice Ste-Anne, Baie St-Paul, Charlevoix County	46
Interned at the Ecole La Jemmerais, Mastai, Q.	36

82

Children handed over to their parents:—

Brought back from Hospice Ste-Anne, Baie St-Paul	16
Brought back from Ecole La Jemmerais, Mastai, Que.	15
Transferred from La Jemmerais School to St-Jean-de-Dieu	1

32

Insane evaded, found and taken back to St-Michel-Archange	1
Insane prisoners transferred from St-Vincent-de-Paul Penitentiary to the Bordeaux Hospital	2

Cases submitted to the Ministry of Immigration at Ottawa and undesirable persons deported to different countries as follows:—

To England	77	
“ Czecho-Slovakia	46	
“ Poland	37	
“ Germany	22	
“ Rumania	19	
“ Finland	34	
“ Ireland	14	
“ Scotland	18	
“ Hungary	8	
“ Danemark	6	
“ France	5	
“ Belgium	4	
“ Switzerland	4	
“ Sweden	4	
“ Jugo-Slovakia	4	
“ Norway	2	
“ Esthonia	1	
“ Lithuania	1	
“ Greece	1	
“ Russia	1	
“ United States	1	
“ Haiti, Antilles	1	
	<hr/>	
	310	310

Cases of deportation submitted but not decided: —

Undesirable or public charges	119	
Insane	14	
	<hr/>	
	133	133

Cases of deportation discontinued 64 64

Persons escorted to the different railway stations to be repatriated	220	
Persons escorted to the wharf	4	
Insane discharged from Bordeaux Asylum and repatriated to Toronto, Ont.	1	
	<hr/>	
	225	225

Cases of repatriation refused after investigation	57	57
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Special cases of repatriation under escort: —

Family to Quebec	1	
Family to Sydney, N.S.	1	
Women to Quebec	4	
Woman to Dalhousie, N.B.	1	
Woman to Siegas, N.B.	1	
Men to Quebec	2	
Man to St. John, N.B.	1	
	<hr/>	
	11	11

Insane repatriated under escort: —

Woman to Provincial Hospital, Fairville, N.B.	1	
Woman to Ontario Hospital, Brockville, Ont...	1	
	<hr/>	
	2	2

Young children escorted to their families at Quebec		2
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Persons transported to divers institutions using
the Police Department cars: —

Patients transferred from the Sacred Heart, Cartierville, to St-Jean-de-Dieu	14	
Patient transferred from the Bordeaux Hos- pital to the Sacred-Heart	1	
Patients taken to the Sacred-Heart (incur- ables)	6	
Insane patients taken to St-Jean-de-Dieu	3	
Patients transferred from the St. Luke's Hos- pital to the Refuge of Notre-Dame-de-la- Merci	2	
Patients taken to the St. Luke's Hospital	16	
Old men taken to the Refuge de la Merci	7	
	<hr/>	
	49	49

Number of investigations and visits necessitated at domicile, before the Recorders' Court, or for children having to be placed and divers other causes for repatriation, etc.	856	856
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Special investigations attended to during the year 1931: —

At the request of Sub-Chief Bigaouette, of the City of Quebec, concerning the cases of young babies abandoned specially at the Crèche of Quebec, after investigation we have traced the person who had committed these offences on several occasions and all the particulars have been communicated to the Police authorities of Quebec.

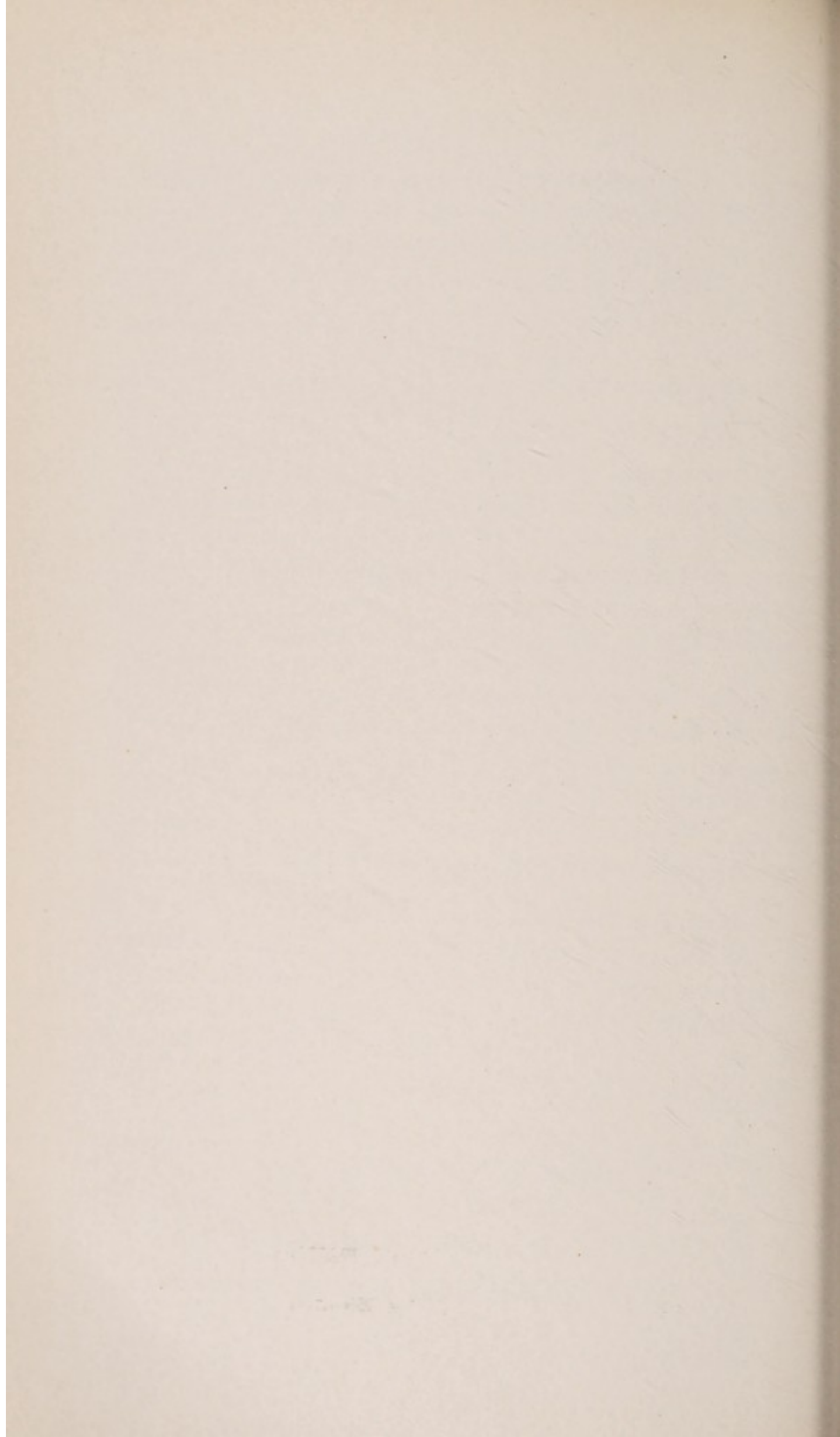
At the request of the private Secretary of His Excellency the Governor-General of Canada, by the intervention of the Royal Mounted Police Commissary at Ottawa, we have investigated the case of an individual by the name of Benjamin Fineman, following the sending of several anonymous letters which were annoying His Excellency.

And also in the case of Mrs. Mary Gibbs, residing at No. 620 Bridge street, who had equally written several threatening letters to His Excellency, after several visits, this woman's husband was legally notified to watch his wife and to see to it that this state of affairs must cease. They are presently under observation.

Respectfully submitted,

ALBERT CHEVALIER,

Superintendent of the Municipal Assistance.



Division of Medical Control

DIVISION OF MEDICAL CONTROL

Doctor S. Boucher,

Director, Department of Health,
City Hall.

Sir,

I beg to transmit the report of the work done by the DIVISION OF MEDICAL CONTROL in 1931, which is as follows: —

Municipal Employees

Sick referred for examination	2,143
Candidates applying for a position referred for examination	66
Special reports	94
	2,303

The number of the sick referred for examination in 1931, exceeds by 495 the number of 1930. This difference is due to an epidemic of grippe of a mild character which affected a great number of municipal employees especially during March 1931.

The City of Montreal had undertaken in 1931, considerable works of excavation for the drainage of the Rivière St. Pierre, and a main collective sewer. On the request of the Department of Public Works, we have

specially examined many employees who desired to work in cofferdam. This examination bore especially on blood pressure, the heart, the lungs and the kidneys, the integrity of which had to be perfect. No wonder then, that about one third ($1/3$) of the candidates who suffered with a certain weakness or slight lesion of these organs were refused. Thanks to this precaution, no accident occurred amongst the workmen and engineers who did compressed air work.

Neglected Children under the Law of the Public Assistance

Referred for examination before being sent	
to industrial schools	498
Referred after coming out of industrial	
schools	369
	867

These children are placed at Laval-des-Rapides, Montfort and Huberdeau at the charge of the City.

Their examination takes place once a week before their departure and when they return.

The examination consists to ascertain that the child has been vaccinated with success against small-pox, that he does not suffer from any contagious disease such as: tuberculosis. Skin diseases: impetigo, tinea capitis. Parasitary diseases: pediculosis, scabies. Physical blemishes: defects of the sight or hearing, enlarged tonsils and adenoids. The departure of children suffering with contagious diseases is postponed until they are perfectly cured. The parents are requested to have surgical operations performed on children affected with adenoidal tumors, or enlarged tonsils which could prevent them from deriving the full benefit from their sejour in the Country and retard their physical development. As may be expected, most of these children being born and raised in anti-hygienic conditions, suffer from malnutrition.

I believe that it would be opportune to demand the anti-diphtheric vaccination with Ramon anatoxin of all the children before their departure.

Incurables

Referred for examination who were disposed of as follows: —

Suffering from incurable diseases	111
Suffering from tuberculosis	244
Suffering from cancerous diseases	70
Suffering from acute diseases for hospitals treatment	29
Suffering from chronic diseases for treatment in homes	86
Dead before examination	7
Application withdrawn	2
Refused to be hospitalized in the Sacred-Heart Hospital	0
Placed in Notre-Dame-de-la-Merci Home	37

586

Housing of Incurables

Under the Law of Public Assistance

In this category of sick persons are classed: —

A — Tuberculous.

B — Cancerous cases.

All these sick persons must pass an examination by one of the physicians of the Medical Control who after verification approves the diagnosis made by the family physician on the application form.

The persons suffering with the diseases classed A and B are sent to the Sacred-Heart Hospital at Cartierville, where the City controls a certain number of beds. The other invalid persons who do not demand special care are placed in one of the charitable institutions under the Law of the Public Assistance.

Food establishments

Number of certificates issued during the year 1931		21,745
Number of certificates refused: —		
Pyorrhea	27	
Tuberculosis	12	
Cancer of nose	1	
Skin diseases	40	
Venereal diseases	48	128
Number of vaccinations during the year 1931		5,000
Number of verifications during the year 1931		4,622

Medical Examination of Food Handlers

About three (3) years ago, Dr. S. Boucher, Director of the Department of Health, gave to the Medical control the duty to see to the application of By-Law No. 926, in so far as it concerns the control of Health Certificates.

There are in the City of Montreal, about five thousand (5,000) food establishments, including: hotels, restaurants, dairies, bakeries, manufactures of biscuits, candies, preserves, jams, butchers shops and groceries stores, etc., etc.

These various establishments employ between twenty (20,000) and twenty-five thousand (25,000) persons of both sexes and of all ages. That is to say that there is a tremendous amount of work to be done in this department. All these employees having to pass every six (6) months a medical examination showing that they are free from contagious or infectious diseases and that they have been vaccinated within seven (7) years. This examination is made free of charge at the Medical Control for all those who choose to present themselves there.

Vaccination is also done free of charge at the Contagious diseases Division. When, there are more than twenty (20) employees in one place, the examination and the vaccination are done there by our physicians. I must say that all the interested persons willingly submit themselves to this procedure, with the understanding that it is in the interest of all concerned, and that it equally protects the employer, the employees and the public at large. Therefore we do not find any difficulty in enforcing this By-Law, and at each period of six (6) months, the interested persons, come of their own free will to be examined and have their certificates renewed.

The causes for which the Health Certificates are refused, by order of frequency are: venereal diseases, skin diseases, pyorrhea, tuberculosis, diseases of the face or the hands showing a repulsive appearance such as: eczema of the hands or of the face, cancer of the nose or any other part of the face, etc.

While going through the examination of the food handlers, one notices right away that a great number of them ignore completely the most elementary rules of hygiene, as far as cleanliness is concerned. They neglect to wash their hands, clean their finger-nails and brush their teeth.

An education should be made along these lines, and cleanliness, the most important of all hygiene laws, should be taught to all. To keep clean is the best way to immunise one-self from the contagion of infectious diseases brought by germs. To be clean is also the best means to regulate the good action of all the organs.

A great number of people have, regarding cleanliness, queer ideas and prejudices; these for the greater physical welfare of all, should be destroyed by an intelligent hygienic education.

The mouth and more particularly the teeth should be looked after, much more carefully than they are generally. One cannot take too much care in the practices intended for the disinfection of the mouth; it is a hobby which

deserves to be encouraged. The practices of physical cleanliness, doubtless, require some time, but it is a well spent time. One is immediately rewarded by the sensation of welfare, which proves the happy result that health derives therefrom, and the increase of energy that one thereby gains.

MEURLING MUNICIPAL REFUGE

Number of refugees examined during the year	
1931	233,208
Number of sick refugees during the year 1931	36,867

The medical examination of the Meurling refugees is taking, in this age of unemployment, an extraordinary importance amongst the numerous activities of the department of Medical Control.

A short while ago, the Meurling Refuge was taxed at its full capacity only during the winter months, but now there is never any vacancy at the Refuge whatever the season may be.

The dispensaries of the hospitals being more and more crowded every day, the conditions of life showing no improvement throw on the doctors of the Department of Health, who look after the Medical Bureau of the Refuge, the obligation to give the refugees over and above the careful examination of each one and the urgent treatments, the cares which formerly they could obtain in the clinics.

About one hundred and twenty-five (125) to one hundred and sixty (160) men out of seven hundred and eight (708) who every night line up at the door of the Municipal Assistance require a very special attention. Of course, each season brings along its own diseases, but now, together with these, the actual lack of food, the exposure in the open air through all kinds of weather, the scarcity of clothes and shoes, the drinking of counterfeited spirits, bring along with them, new diseases to be looked after by the physicians.

Queer to say, the diseases proper to the old age have almost disappeared: formerly the old men were in greater number, to-day it seems that the City takes a greater care of its old citizens and see to place them in the numerous institutions intended for them. The few patriarches who still come regularly are those who recently arrived in the Metropolis are still waiting to be placed in some institution.

The assiduous refugees are mostly in the group of the thirty (30) to fifty (50) years of age; the average age is 44.5.

Classed by nationalities, none has the monopoly of any diseases: thirty-eight (38) countries have representatives here and it is easier to notice the least represented one than to enumerate all those present.

Amongst the least represented we see the Jews, the Chinese, the Indus, the Africans, the Bulgarians, the Japanese, etc. All are accepted without distinction, all are given the same welcome.

Here follows a few particulars regarding the state of health of our refugees, Accustomed as they are to all the inclemencies of the weather, they are but very little affected by atmospheric changes. The refugees are more fussy about their own health than the average people are; although, in some instances, the most elementary cares of hygiene are somewhat painful to them; quite often the officials of the Refuge are obliged to force them to take a second shower-bath, the first being very insufficient; they also neglect the care of their hair. They are always very pleased when doctors look after their least wounds with the same attention as they would for a dangerous disease.

Quite a few suffer from hernia and varicosis veins, and in most cases it is the result of long walks, or the efforts demanded by same hard work that they sometime perform as lumbermen and laborers; in some other cases, it is only the result of some accidents suffered in a street

brawl. Some very grave digestive troubles are caused by under nourishment or improper food such as: constipation, dyspepsia and even although more seldom, diabetes, etc.

The venereal diseases affect but very few, although we see a few suffering with general paralysis. To avoid any danger of possible contagion in such a crowd, skin diseases are immediately looked after very carefully. The refugees suffering with tuberculosis, are looked for and placed in institutions as soon as the complexed administration of our large city and the overcrowded institutions will allow. Boils are seen very often, and are immediately looked after.

The careful examination, the prompt treatment, the intelligent care given in all circumstances to the refugees have lessened the death rate so much that it may be ignored.

Also thus is avoided all danger of epidemic which could originate in such a crowd.

TABLE OF MUNICIPAL EMPLOYEES DEAD DURING YEAR 1931

Department of Public Works..... 13

Name	Age	Date	Illness
P. Richard.....	31	17-2-31	Bilateral pneumonia.
P. deCarufel.....	38	30-3-31	Pulmonary tuberculosis.
G. S. Patterson....	41	6-5-31	Acute bronchitis.
A. O'Neil.....	52	30-6-31	Acute nephritis.
E. Pépin.....	60	17-8-31	Hemiplegia.
J. Dansereau.....	52	19-8-31	Pleurisy.
P. Moore.....	51	22-8-31	Cancer of prostate.
W. Brunet.....	47	1-10-31	Heart and kidney diseases.
A. Marchand.....	84	3-10-31	Cancer of liver.
J. Carroll.....	61	28-10-31	Acute nephritis.
J. Potvin.....	63	29-10-31	Angina pectoris.
P. Turgeon.....	51	15-11-31	Gall stones.
G. R. Vincent.....	60	22-11-31	Prostatectomy.

Department of Finances..... 7

Name	Age	Date	Illness
J. P. Lamontagne..	21	26-1-31	Pulmonary tuberculosis.
L. Selby.....	67	29-1-31	Cancer of left maxillary.
N. Couvrette.....	71	21-3-31	Angina pectoris.
J. A. Prud'homme..	69	4-6-31	Cirrhosis of liver.
J. Desjardins.....	61	9-12-31	Heart and kidney diseases.
A. Leblanc.....	73	12-12-31	Congestion of liver with jaundice.
R. Tardy.....	19	22-12-31	Typhoid fever.

Department of Health..... 4

Name	Age	Date	Illness
S. Boily.....	54	Jan. 31	Pulmonary tuberculosis.
P. St-Jean.....	74	18-4-31	Chronic myocarditis.
A. C. Théorêt.....	53	27-4-31	Chronic nephritis.
J. A. Lauzon, V. S..	46	7-5-31	Pulmonary tuberculosis.

Assessor's Office..... 2

Name	Age	Date	Illness
L. Bélanger.....	19	8-8-31	Operat. ulcerated appendix.
M. Gahan.....	58	10-6-31	Acute bronchitis.

City Clerk's Office..... 1

Name	Age	Date	Illness
A. Beauvais.....	52	9-8-31	Tubercular enteritis and peritonitis.

City Attorney's Office..... 1

Name	Age	Date	Illness
E. Fafard.....	66	12-12-31	Apoplexy.

Yours respectfully,

J. A. BRIEN, M.D.,

Superintendent of the Division of
Medical Control.

Division of Laboratories

DIVISION OF LABORATORIES

Doctor S. Boucher,

Director of the Department of Health,
City Hall Annex.

Dear Sir,

I beg to submit to you the annual report of the Division of Laboratories for the year ending 31, 1931.

The number of analyses performed during the year was 39,338, of which 16,989 for the Division of Food Inspection, 1,007 for the Division of Sanitation, 4,682 for the Division of Contagious Diseases, 169 for the Divisions of Medical Control and Child Hygiene, 4,290 for the Police Department and 12,201 for the physicians of the City.

A slight increase over 1930 is shown, when routine examinations totalled 36,400.

Yours truly,

A. BOLDUC, M.D.,

Superintendent, Division of Laboratories.

ANNUAL REPORT, 1931

Division of Food Inspection:

Blood (Widal's Test) (*)	276
Bread	2
Cabbages	1
Carbonated beverages and spruce beers (bacteriological analysis)	402
Cheese	1
Chopped meats (research of adultera- tions)	68
Corn (canned)	2
Foie-gras paste	1
Ham (bacteriological and chemical ana- lysis)	4
Ketchup	1
Leaf lard	1
Meat: pathological examination	4
examination for tubercle bacilli	4
Milk : Bacteriological analysis	11,436
Complete analysis (specific gravi- ty, fat, dry extract, defatted ex- tract, water)	31
Summary analysis (specific gravity by "Quevenne" lacto-densimeter, butter fat by "Babcock" test)	1,922
Acidity test	9
Examination for pus	10
Preservative test	575
Milk and cream brought by citizens (spe- cific gravity, butter fat)	275
Mustard	1
Phenolphthaleine (solutions of)	2
Pineapples (canned)	2
Sausages (research of adulterations) . . .	92

Stools (agglutination test for Typhosus bacillus and Paratyphoid A & B bacilli) (*)	530	
Throat culture (diphtheria)	1	
Tomatoes (canned)	2	
Urines (agglutination test for Typhosus bacillus and Paratyphoid A & B bacilli) (*)	530	
Washing powders (dairies)	1	
Water: from the Montreal Aqueduct (bacteriological analysis)	578	
From various sources (bacteriological analysis)	221	
From various sources (chemical analysis)	4	
	<hr/>	
	16,989	16,989

Division of Sanitation:

Water from public swimming pools (bacteriological and chemical analysis) . .	1,004	
Water from various sources (chemical analysis)	3	
	<hr/>	
	1,007	1,007

Division of Contagious Diseases:

Blood (Widal's test)	4
Diphtheria (examination after culture) . .	4,488
Disinfectants (Standardization)	3
Rabies	5

(*) These tests are carried out for the detection of "germ carriers" among the employees of dairies and other food handlers.

Stools (agglutination test for Typhosus bacillus and Paratyphoid A & B bacilli)	97		
Urines (agglutination test for Typhosus bacillus and Paratyphoid A & B bacilli)	85		
	<hr/>		
	4,682	4,682	

Division of Child Hygiene:

Diphtheria (examination after culture) ..	1		
Drinking water (chemical analysis)	1		
	<hr/>		
	2	2	

Division of Medical Control:

Blood (Widal's test)	1		
Diphtheria (examination after culture) ..	2		
Pus (gonococcus)	75		
Sputum (tuberculosis)	4		
Urines (chemical and microscopic analysis)	85		
	<hr/>		
	167	167	

Police Department:

Ice cream (research of poisons)	1		
Narcotic drugs	144		
Pus (gonococcus)	4,142		
Sputum (tuberculosis)	3		
	<hr/>		
	4,290	4,290	

Specimens analysed for Physicians:

Ambard's Constant	5	
Ascitic fluid	1	
Blood: Botelho's test (cancer)	1	
Culture	3	
Red and white blood cells count	13	
Test for cholesterol	1	
Test for creatinine	1	
Test for sugar	115	
Test for urea	97	
Widal's test	251	
Cerebro-spinal fluid	2	
Conjunctival secretion (gonococcus)	4	
Diphtheria (examination after culture)	109	
Liquid soaps	2	
Maternal milk	23	
Pleural fluid	7	
Pus (gonococcus)	400	
Sputum (tuberculosis)	1,049	
Stools: (agglutination test for typhosus bacillus and Paratyphoid A & B bacilli)	53	
Bacteriological examination (tubercle bacillus, Ameba, worms, blood, etc.)	17	
Urines: (agglutination test for typhosus bacillus and Paratyphoid A & B bacilli)	23	
Bacteriological examination (gonococcus, tubercle bacillus, B. coli, etc.)	105	
Chemical and microscopic analysis	9,871	
Urinary calculi (identification)	1	
Vincent's angina	33	
Wounds pus	14	
	<hr/>	
	12,201	12,201
Total		<hr/>
		39,338

CONTAGIOUS DISEASES — YEAR 1931

Diseases	Number of spe- cimens	Positive	Negative	Suspi- cious	Unsatis- factory	Percentage		
						Positive	Negative	Suspi- cious
Diphtheria.....	4602	510	4087	1	4	11.10	88.80	0.02
Rabies.....	5	0	5	0	0	0.00	100.00	0.00
Tuberculosis.....	1100	215	885	0	0	19.54	80.46	0.00
Typhoid: Clinic.....	503	36	465	1	1	7.15	92.45	0.20
Detection of "germ carriers" (food handlers).....	1211	5*	1206	0	0	0.41	99.59	0.00
Gonorrhea: Clinic.....	421	126	294	0	1	29.94	69.82	0.24
Food handlers.....	75	11	64	0	0	14.66	85.34	0.00
Prostitutes †.....	4142	441	3701	0	0	10.65	89.35	0.00

* These five positive results are Widal's Tests in convalescents from typhoid fever.

† Women arrested in disorderly houses.

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Bacteriological analysis of milk, cream, ice cream,
water, etc.

Quantitative analysis (Standard plate count):

Pasteurized milk (samples taken on delivery wagons)	2,032	
Special milk (samples taken on delivery wagons)	1,372	
Cream	4	
Ice cream	24	
Controls in pasteurizing plants and special milk establishments	1,670	
Tests on washing of utensils	615	
Water from various sources, eggs, oysters, etc.	128	
Water from the Montreal Aqueduct	298	
Water from public swimming pools	326	
Carbonated beverages and spruce beers.	199	6,668
		<hr/>

Qualitative analysis (Fermentation test for the detection of bacteria of the B. coli group, in the above samples

	6,668	6,668
	<hr/>	<hr/>
Total		13,336

BACTERIOLOGICAL ANALYSIS — YEAR 1931

Pasteurized Milk — Plate count

Number of samples	Numeration			Percentage		
	Not more than 100,000 bacteria per c.c.	More than 100,000 bacteria per c.c.	Samples void	Not more than 100,000 bacteria per c.c.	More than 100,000 bacteria per c.c.	Samples void
From January to May (incl.): 876	854	19	3	97.5	2.2	0.3
From June to September (incl.): 617	567	50	0	91.9	8.1	0.0
From October to December (incl.): 539	520	14	5	96.5	2.6	0.9
For the year: 2032	1941	83	8	95.5	4.1	0.4

BACTERIOLOGICAL ANALYSIS — YEAR 1931—(Cont.)
Pasteurized Milk — B. coli group

Number of samples	Fermentation Test					Percentage				
	B. Coli Group					B. Coli Group				
	Present			Absent		Present			Absent	
	0.01 c.c.	0.1 c.c.	1 c.c.	1 c.c.	Samples void	0.01 c.c.	0.1 c.c.	1 c.c.	1 c.c.	Samples void
From January to May (incl.):	14	41	125	748	3	1.6	4.7	14.3	85.4	0.3
From June to September (incl.):	102	193	320	297	0	16.5	31.3	51.9	48.1	0.0
From October to December (incl.):	15	36	116	420	3	2.7	6.7	21.5	77.9	0.6
For the year:	131	270	561	1465	6	6.4	13.2	27.6	72.1	0.3

BACTERIOLOGICAL ANALYSIS — YEAR 1931 — (Cont.)

Special Milk — Plate count

Number of samples	Numeration			Percentage		
	Not more than 25,000 bacteria per c.c.	More than 25,000 bacteria per c.c.	Samples void	Not more than 25,000 bacteria per c.c.	More than 25,000 bacteria per c.c.	Samples void
From January to May (incl.):						
608	529	75	4	87.0	12.4	0.6
From June to September (incl.):						
438	(*)	(†)		(*)	(†)	
	351	87	0	80.1	19.9	0.0
From October to December (incl.):						
326	279	45	2	85.6	13.8	0.6
For the year:						
1372	1159	207	6	84.5	15.1	0.4

(*) Not more than 50,000.

(†) More than 50,000.

BACTERIOLOGICAL ANALYSIS — YEAR 1931 — (Cont.)
Special Milk — B. coli group

Number of samples	Fermentation Test					Percentage				
	B. Coli Group					B. Coli Group				
	Present			Absent		Present			Absent	
	0.01 c.c.	0.1 c.c.	1 c.c.	1 c.c.	Samples void	0.01 c.c.	0.1 c.c.	1 c.c.	1 c.c.	Samples void
From January to May (incl.):	15	57	181	424	3	2.5	9.4	29.8	69.7	0.5
From June to September (incl.):	105	220	349	89	0	24.0	50.2	79.7	20.3	0.0
From October to December (incl.):	18	66	148	176	2	5.5	20.2	45.4	54.0	0.6
For the year:	138	343	678	689	5	10.1	25.0	49.4	50.2	0.4

Division of Statistics

DIVISION OF VITAL STATISTICS

Doctor S. Boucher,

Director, Department of Health,
City Hall, Montreal.

Dear Doctor: —

I have the honor of transmitting to you the report of the Division of Vital Statistics for year 1931.

I am glad to state at once that at a sanitary point of view, last year has been the best we ever had. The mortality rate has still decreased although it had been considered as relatively low the years previous. Our figures, however, continue to differ with those published by the Dominion and Provincial Bureaus of vital statistics, because we have not as yet been able to reach an agreement as to the reallocation of the deaths of non residents. In my previous reports, I have already said that we are counting only the deaths of the persons having their legal or ordinary residence in Montreal, whatever be the place where they died, while the Dominion and Provincial Bureaus are counting all deaths occurring in one municipality even if they have their ordinary domicile elsewhere. As the care given by the hospitals of Montreal is yearly more appreciated, an increasing number of patients, from all over the province and elsewhere, are admitted each year and many of them die. We believe that the inclusion of these deaths with those of our residents would not be showing the real statistical rates of death for the City of Montreal.

In making this statement we keep in mind the fact that the Dominion census, on which our estimate of the population is based, is taken on the "de jure", as distinguished from the "de facto" principle. The difference between these two kinds of census consists in that on the "de facto" principle every individual is counted as belonging to the locality where found on the census date, whereas, on the "de jure" principle, each person is counted as belonging to the locality in which he or she is regularly domiciled, irrespective of the locality of residence at the date of the enumeration. Temporary absentees from a locality are included, and temporary residents are excluded.

The great cities have always a big floating population which may vary to a more or less extent, and it is our opinion that counting the population on the "de jure" principle is more liable to produce the real facts. But on the other hand, the population is the basis of natality and mortality rates, and if we are counting births and deaths at the place of their occurrence, that is to say from the "de facto" population, it seems illogical to compute the rates in taking as one factor the "de facto" and as the other the "de jure" population.

We hope that in the near future, the provinces and municipalities will come to an agreement in this matter and that a better concordance between the rates published will be obtained.

Population.

The Dominion Bureau of statistics has enumerated the population of Canada as existing on June 1st, 1931. According to a preliminary report published to date, Montreal has then a population of 810,925, constituting an increase of 31% since the 1921 census and a mean yearly increase of 3.1%. If we take this mean rate of 3.1% as a basis in calculating the increase for the next 10 years, we find that the yearly increase should be 25,139 per an-

num or a monthly average of 2,095. Adding this last number to 810,925, we obtain 813,020 as the population on July 1st, and 825,590 on December 31st.

The Federal census has been a confirmation of the exactness of the basis on which our estimation of the population since the last census has been calculated.

We had estimated that on July 1st, Montreal population would have been 812,500, but in the fear of being too optimistic, in a time where pessimism was more prevalent, we have thought it better to stay behind rather than ahead of our estimation, and we published in round figures 810,000 as the population on July 1st, 1931.

I do not want to enter into details on the ways of making our estimates. It will suffice to recall that they were based, for the one part, on the annual census made each year by the Parish Priests of the French-Canadian parishes; and, for the second part, on the assumption that the proportion of the French-Canadian population as established by the census of 1921 had not changed. Therefore, the 1931 census seems to prove two things: first that the proportion of the French population is quite stable, and secondly that the parochial censuses are very accurate. I am glad to be given this opportunity to praise the good work done by the Parish Priests and to thank the Diocesan authorities who have so kindly during the last five years, given me access to this valuable documentation .

We also believe that the Federal census has been accurately done and that errors, if there is any, are only those inherent to any human enterprise, and that it would be impossible to obtain a better result either by a municipal or by a provincial census.

This assertion is made while considering the fact that the assessors of the city of Toronto do an annual enumeration of the population; in 1931, the difference between the city and the Federal census was only 250, both censuses

corroborating each other. On the other hand, between the last two Dominion censuses, the population of Toronto has only increased by 20% as compared to 31% for Montreal. Moreover, if the population of the neighboring municipalities is added to Montreal, the rate of increase is as high as 36.4% as shown in the following table:

Cities	Population		Increase	Rate of increase
	1931	1921		
Lachine.....	18,642	15,404	3,238	21.0%
Montreal.....	810,925	618,506	192,419	31.1%
Westmount.....	23,267	17,593	5,674	32.3%
Outremont.....	27,784	13,249	14,533	109.7%
Verdun.....	60,378	25,001	35,377	141.5%
Total.....	940,994	689,753	251,241	36.4%

Births.

Registration of births by all religious denominations other than Roman catholics is very defective. Baptism, in many protestant churches, is postponed indefinitely and as registration of birth is made at the time of baptism, late registration impairs the value of our birth statistics. In order to alleviate the inconvenience of late registration, we have counted, from the registrations made in 1931, not only the children born in that year, but also those born in 1930 and registered only during the following year. As regards registration in 1931 of children born before 1930, they are not counted in our birth statistics; we are making a separate computation for such births and in 1931 we counted in that list 1,039 protestants and 504 jews, making a total of 1,623 compared to 707 — 681 and 1,388 respectively as obtained for the previous year. This shows a notable increase in late registrations for protestants and a decrease among the jews. We should not conclude,

however, that the registration is more defective than in previous years, but rather that our campaign for birth registration has been effective and the law of birth registration, being better understood, a greater number of people has complied with it, although tardily.

Stillbirths.

The Physicians' Pocket Reference to the international list of causes of death published by the Dominion Bureau of statistics makes the following recommendations as regards stillbirths:

1. "Stillbirths should be registered as both births and deaths. They should be compiled, in statistical tables, neither as births nor deaths, but separately as stillbirths.

2. "In the case of stillborn children or of children living a very short period, the following two facts are of special importance for proper statistical classification:

- a) Period of gestation.
- b) Did the child breathe after complete birth.

These instructions to the physicians, from the Dominion Bureau of statistics, are given with the purpose of obtaining the information necessary to reach a uniform classification of births for all the provinces.

As a consequence of the study made by this office in 1930 on the question of stillbirths, a definition sponsored by the Health Committee of the League of Nations has been adopted in Canada, which may be outlined thus:

"A stillbirth is a child born after 28 weeks or 6½ months of pregnancy and which has not breathed after complete expulsion. Consequently, a live birth is a child born after 28 weeks of gestation and which has breathed, even for a few moments only, after complete expulsion."

"Foetuses born before the expiration of 28 weeks of gestation are considered non viable; they are not counted neither as births, nor as stillbirths, notwithstanding the fact that some of them may have breathed; they must be classified separately."

These definitions are very simple and should be a great help towards the uniform classification of births, provided that the statistician receives from the physician the necessary information regarding the foetal age of the new born, and the existence or absence of spontaneous respiration after complete expulsion.

According to our experience, this information is practically never given because, with the forms already in use, there is no specific question to that effect.

For all non viable premature births, for stillbirths and for live births when death occur within 24 hours and before any registration of the birth has been made, we suggest the use of a special form with specific question concerning breathing and duration of gestation which would permit a proper classification according to the answers given and hope that the provinces will finally adopt this idea.

In 1931 we have registered 753 stillbirths, an increase of 69 over 1930 and 159 over 1929. The rate per 1,000 births is 3.5.

Deaths.

The number of deaths among the residents of Montreal who died either in Montreal or elsewhere has been 9,886, which is a decrease of 370 from the previous year and 754 if comparison is made with 1929. This is a very satisfactory result if one considers that very few deaths escape our control, and that since 1921 the number of deaths has remained practically the same, while the population has increased by 31 per cent. The death rate per 1,000 population has also decreased from 15.74 in 1921 to 12.16 in 1931. The following table showing the number

of deaths each month since 1926 and the average of the five years 1926-1930 gives a good idea of the progress made.

NUMBER OF DEATHS PER MONTHS FROM 1926 TO 1931

and comparison of 1931 with the five preceding years.

Month	1926	1927	1928	1929	1930	Mean 5 years	1931
January.....	768	865	886	1079	979	915.4	966
February.....	721	723	837	853	837	794.2	894
March.....	983	881	898	901	1001	932.8	927
April.....	1146	987	1010	961	1005	1021.8	859
May.....	887	1027	914	1001	895	944.8	801
June.....	681	901	791	759	771	780.6	694
July.....	691	773	772	819	706	752.2	832
August.....	803	848	981	865	856	870.6	820
September.....	783	770	899	823	831	821.2	785
October.....	720	730	800	862	772	776.8	767
November.....	713	730	777	781	762	752.6	729
December.....	764	756	1396	900	841	931.4	812
Total.....	9660	9991	10961	10604	10256	10294.4	9886
Monthly mean.....	805.0	832.6	913.4	883.7	854.7	957.9	823.8
Rate per 1,000.....	14.1	14.6	14.8	13.9	13.0	14.0	12.2

In the above table it can be seen that with the exception of January, February and July, the number of deaths in each month of 1931 has been lower than the average for the previous five years.

In the following table, a comparison for years 1929, 1930 and 1931 is made between the causes of death divided in groups according to the international classification, and the rate per 1,000 population is also given for each disease or group of diseases. From this table, one may see at a glance what part of the general death rate can be attributed to each cause.

DEATHS BY VARIOUS GROUPS OF DISEASES

Causes	Years			Per 1,000 of population		
	1929	1930	1931	1929	1930	1931
—Epidemic diseases:						
Typhoid.....	27	40	31	0.04	0.05	0.04
Diphtheria.....	115	83	71	0.15	0.10	0.09
Influenza.....	204	131	164	0.27	0.17	0.20
Tuberculosis (pulmonary).....	823	806	766	1.08	1.02	0.94
Other infectious diseases.....	566	501	395	0.74	0.63	0.49
Total.....	1735	1561	1430	2.28	1.97	1.76
II to V—General diseases:						
Cancer.....	749	806	808	0.98	1.02	0.99
Other general diseases.....	290	334	356	0.39	0.42	0.44
Total.....	1039	1140	1164	1.37	1.44	1.43
VI—Diseases of the nervous system.....	988	840	629	1.30	1.06	0.77
VII—Diseases of the circulatory system..	1394	1466	1554	1.83	1.86	1.91
VIII—Diseases of the respiratory system..	1077	1037	983	1.41	1.31	1.21
IX—Diseases of the digestive organs:						
Diarrhoea, 0 to 2 years.....	958	966	877	1.26	1.22	1.08
Other diseases of the digestive system..	553	592	637	0.73	0.75	0.78
Total.....	1511	1558	1514	1.99	1.97	1.86
X—Diseases of the genito-urinary system..	940	829	931	1.23	1.05	1.14
XI—Puerperal state.....	85	109	90	0.11	0.14	0.11
XII—Diseases of the skin.....	58	39	48	0.07	0.05	0.06
XIII—Diseases of the bones.....	6	3	9	0.01	0.004	0.01
XIV—Congenital malformation.....	110	131	136	0.14	0.17	0.17
XV—Diseases of early infancy:						
Debility, etc.....	434	368	298	0.57	0.47	0.37
Premature birth.....	457	452	424	0.60	0.57	0.52
Other diseases of early infancy.....	40	8	8	0.05	0.01	0.01
Total.....	931	828	730	1.22	1.05	0.90
XVI—Senility.....	83	77	76	0.11	0.10	0.09
XVII—External causes:						
Suicides.....	50	58	52	0.07	0.07	0.06
Homicides.....	11	24	29	0.01	0.03	0.03
Other violent deaths.....	434	407	416	0.57	0.51	0.52
Total.....	495	489	497	0.65	0.61	0.61
XVIII—Ill-defined causes.....	152	149	95	0.20	0.19	0.12
Grand total.....	10604	10256	9886	13.92	12.98	12.16

We have also begun to make a comparative study of the general death rate between the greatest cities of the civilized world. This comparison, very interesting in itself, must not be made without restrictions.

Let us first mention that the climate, the ethnical composition of the population, the social and economic conditions, may have a great influence on the rate of mortality. These factors vary from one city to another.

One must also take into consideration that the age may affect the rate of mortality. A study of deaths according to ages in Montreal (see table XIV of the appendix) shows that out of 100 deaths, 23 occur amongst children under 1 year of age; from 1 to 20 years, we have twelve, which is half the number occurring during the first year only; from 20 to 50 years, we have about the same number as during the first year, and 43 occur over 50 years of age.

It is also an obvious fact that a high birth rate is almost always coincident with a high infant mortality rate, because it is often impossible that the mother of many young children gives the nursling all the care he may require. Moreover, with our present social laws, no special advantage as regards salary is granted to the father of a numerous family; consequently, his living resources are limited and he has to economize on food, housing, fuel, and all the necessities of life. Often forced to dwell in too small premises, children of such family live in conditions eminently favourable to the spread of contagious diseases and tuberculosis. The consequence is a higher infantile mortality and also an increased proportion of deaths in other ages of childhood.

However, in a city where birth rate is high, the number of surviving children is as a rule proportionately greater than in another where the birth rate is low, and it follows that the mean age of the whole population is lower in the former than in the latter and when the population is older it is more affected by organic degeneration.

As a matter of fact, cancer is seldom encountered under 40 years; chronic diseases of the heart, the blood vessels and the kidney play an important part in the mortality rate after 50. Therefore, a city with 20 per cent of its population over 50 years of age will show more deaths from organic degeneration than another with only 15 per cent of the population having that age.

The Dominion Bureau of census does not publish the population of cities divided into age groups, but does it for the provinces. This tabulation for the census of 1931 is not yet available, but a study of the three previous censuses gives a good idea of the differences which may presently exist in that respect between the provinces.

The following table shows for the Dominion and each of the provinces the per cent of the total population pertaining to age groups 0 to 20 years, 20 to 50 years and over 50 years.

Ages.....	0 to 20 years			20 to 50 years			Over 50 years		
	1901	1911	1921	1901	1911	1921	1901	1911	1921
Census year.....									
Canada.....	44.93	42.57	43.58	40.50	43.55	41.57	14.57	14.08	14.85
Prince Edward Island...	47.21	43.99	42.33	35.11	35.79	35.97	17.68	20.22	21.70
Nova Scotia.....	44.65	43.97	43.83	37.78	38.23	38.17	17.57	17.80	18.00
New Brunswick.....	46.74	45.86	46.11	37.36	37.66	37.40	15.90	16.48	16.49
Quebec.....	49.05	48.57	48.54	37.34	37.90	37.95	13.61	13.53	13.51
Ontario.....	41.94	38.90	38.89	42.35	44.54	43.30	15.71	16.56	17.81
Manitoba.....	48.59	44.08	45.69	42.17	46.19	42.69	9.24	9.73	11.62
Saskatchewan.....	50.04	42.62	48.12	40.58	49.21	42.58	9.38	8.14	9.30
Alberta.....	48.60	40.95	44.62	43.14	50.54	44.93	8.26	8.51	10.45
British Columbia.....	33.08	30.36	35.71	56.27	59.26	49.17	10.65	10.38	15.12

From the table, one may find out that the provinces, which during the twenty years preceding the 1921 census have derived the benefit of a great influx of immigration, have a greater proportion of their population in the group 20 to 50, because as a rule, old people do not migrate, but rather young families and unmarried people in the prime of manhood.

These conditions have existed in the prairie provinces where also can be found a high proportion of population in the group 0 to 20 years. If the trend of birth statistics is observed in those provinces, one will find a somewhat high birth rate with a rather low infantile mortality. The high birth rate does not necessarily indicate a great number of children in each family, but may be the result of the fact that a larger proportion of the population is found in the procreative age. For the number of children in families, see Table 16, page 55, Volume III of the 1921 census. Moreover, the rural population predominates to a very large extent in those provinces and it is known that rural, compared to urban population, enjoys a higher birth rate and a relatively lower infantile mortality rate.

The low proportion of the population in the group over 50 years, hence lesser number of deaths due to degenerative causes, must also be taken into account while explaining the exceptionally low rate of general mortality in those provinces, which may be attributed to three factors: prevalence of rural population, low rate of infantile mortality and younger average population.

The following table published by the Dominion Bureau of vital statistics for year 1929 shows death and birth rates, the natural increase of population, the infantile mortality and the proportion of deaths from diarrhoea per 1,000 births.

Provinces	Mortality	Nativity	Natural increase of popula- tion	Infantile mortality	Diarrhoea per 1,000 births
Canada.....	11.6	24.1	12.5	92.1	15.76
Prince Edward Island.....	13.0	19.4	6.4	89.8	10.78
Nova Scotia.....	12.1	19.4	7.3	89.8	10.85
New Brunswick.....	12.5	24.4	11.9	106.5	12.60
Quebec.....	13.8	30.3	16.5	120.5	29.76
Ontario.....	11.7	20.9	9.2	76.0	9.51
Manitoba.....	8.8	21.5	12.7	70.6	6.11
Saskatchewan.....	7.7	24.4	16.7	73.3	6.11
Alberta.....	9.7	26.2	16.5	77.4	7.21
British Columbia.....	10.8	17.6	6.8	55.4	3.18

Other things being equal, it may be said that for a stated population normally balanced according to age, if the birth rate is high, one must expect that infant and general death rate will be relatively high and that the general death rate will decrease in proportion with the diminution of the two other factors. When, however, the birth rate has reached a low lever (under 20 per 1,000 population) one must expect that, after a certain number of years have elapsed, the lowering trend of the general mortality will not only be stopped, but on the contrary that it will grow up again, because the median age of the population being gradually increased the degenerative factors will exert a more marked influence.

This can only be corrected by a great influx of migrating population between the ages of 20 to 50 compensating the lowering of the natural increase.

The following table prepared from a report of the Health section of the League of Nations published November 15th, 1931, gives us for the principal cities of the civilized world, data upon the various points we have just discussed.

We have classified these cities according to the mean birth rate for the four years 1927-30 and have divided them into five groups.

- I. Cities where birth rate is very high (over 30 per 1,000 population).
- II. Cities where birth rate is high (between 25 to 30 per 1,000 population).
- III. Cities with a median birth rate (between 20 to 25 per 1,000 population).
- IV. Cities with low birth rate (between 15 to 20 per 1,000 population).
- V. Cities with very low birth rate (under 15 per 1,000 population).

It can be seen that Montreal, notwithstanding a high birth rate, has the lowest general death rates of all the cities in her group and that the rate in Montreal does not exceeds the average of the next group.

As far as infantile mortality is concerned, it is seen that a third of infant deaths in Montreal is due to diarrhoea; this is a much too high proportion and all efforts must be made to reduce it by half. It is also remarkable that, when excepting the cities situated in a very warm climate, where enteritis is more liable to be encountered, we generally find a higher rate of infantile mortality in the cities in which the population is from latin or slavonic origin, than in those where anglo-saxon, german or scandinavian races predominate.

Comparative statistics for cities of more than 400,000 population.

Names of cities	Popula- tion in thousands	Death rate	Birth rate	Natural increase	Infant mortality	Diarrhoea rate per 1,000 births
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I — Birth rate Very High (over 30 per 1,000 population) 4 cities.

1. Cairo (Egypte).....	1161	29.60	45.77	16.17	222.2	163.9
2. Alexandria (Egypte)...	630	26.35	44.15	17.80	204.7	114.0
3. Yokohama (Japan).....	620	19.17	31.90	12.73	135.7	.....
4. Nagoya (Japan).....	907	18.85	31.42	12.57	151.0	.....

II — Birth rate high (between 21 and 30 per 1,000 population) 7 cities.

5. Santiago (Chili).....	655	21.32	29.60	8.28	190.0	74.1
6. Osaka (Japan).....	2454	17.55	28.12	10.57	150.7	.....
7. Montreal (Canada)....	790	14.00	27.60	13.60	129.5	43.1
8. Kobe (Japan).....	788	19.00	27.12	8.12	142.2	37.4
9. Madrid (Spain).....	834	18.65	25.92	7.27	110.0	35.6
10. Kioto (Japan).....	765	17.37	25.72	8.35	137.7	.....
11. Dublin (Ireland).....	412	15.62	25.20	9.58	101.5	18.0

Names of cities	Popula- tion in thousands	Death rate	Birth rate	Natural increase	Infant mortality	Diarrhoea rate per 1,000 births
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**III — Median birth rate (between 20 and 25 per 1,000 population)
15 cities.**

12. Naples (Italy).....	843	14.40	23.70	9.30	118.0	45.1
13. Barcelona (Spain).....	783	19.12	23.50	4.38	86.0	36.9
14. Detroit (U. S. A.).....	1574	10.62	23.12	12.50	70.2	.....
15. Tokio (Japan).....	2070	13.50	23.05	9.55	109.2	30.1
16. Buenos-Ayres.....	2166	13.15	22.80	9.65	73.3	20.3
17. Leningrad (Russia).....	2260	15.37	22.67	7.30	149.0	33.1
18. Lisbonne (Port.).....	587	21.65	22.70	1.05	.....	70.0
19. Rome (Italy).....	946	11.40	22.70	11.30	81.0	29.5
20. Glasgow (Scotland).....	1088	15.02	21.85	6.83	105.5	10.5
21. Liverpool (England).....	862	13.80	21.82	8.02	92.0	16.6
22. Belfast (Ireland).....	415	14.00	21.95	7.95	100.2	16.9
23. Rotterdam (Holland)...	586	8.55	20.32	11.77	44.0	3.9
24. Rio de Janeiro.....	1730	14.40	20.17	5.77	161.0	95.5
25. Buffalo (U. S. A.).....	580	13.32	20.63	7.31	69.7	.....
26. New York (U. S. A.)...	7090	12.10	20.17	8.07	59.5	6.0

IV — Low birth rate (between 15 and 20 per 1,000 population) 23 cities.

27. Toronto (Canada).....	691	10.82	19.67	8.85	.....	.....
28. Warsaw (Pol.).....	1132	13.55	19.07	5.52	130.0	31.2
29. Baltimore (U. S. A.)....	807	14.22	18.91	4.69	75.5	9.3
30. Boston (U. S. A.).....	782	14.40	18.59	4.19	73.0	9.1
31. Chicago (U. S. A.).....	3393	11.40	18.57	7.17	60.0	.....
32. Lodz (Pol.).....	606	13.35	18.20	4.85	178.2	.....
33. Sydney (Aust.).....	1256	9.45	18.45	9.00	53.0	10.0
34. Amsterdam (Holl.).....	756	9.10	18.00	8.90	40.0	2.8
35. Essen (Germany).....	846	9.57	17.27	7.70	102.2	.....
36. Melbourne (Aust.).....	1015	9.65	17.37	7.72	55.5	8.8
37. Cleveland (U. S. A.)....	903	10.80	17.22	6.98	57.7	6.7
38. Birmingham (Eng.)....	1011	11.80	17.75	5.95	69.5	17.1
39. Dortmund (Germany)...	532	10.02	17.32	7.30	98.2	.....
40. Manchester (Eng.).....	773	14.00	17.22	3.22	87.7	14.5
41. Edinburg (Scot.).....	439	14.22	17.25	3.03	79.2	5.9
42. Budapest (Hung.).....	1005	13.15	16.95	3.80	100.7	20.4
43. Copenhagen (Dan.).....	616	11.55	15.92	4.37	67.0	3.5
44. Marseille (France).....	803	16.45	16.03	*0.42	110.3	28.6
45. Sheffield (Eng.).....	517	12.07	15.77	3.70	79.5	7.4
46. Cologne (Germany)....	738	10.47	15.47	5.00	92.2	5.3
47. Genoa (Italy).....	612	13.05	15.10	2.05	80.3	21.4
48. Paris (France).....	2891	13.87	15.00	1.13	93.0	25.5
49. London (Eng.).....	4377	12.50	15.98	3.47	64.0	10.4

V — Very low birth rate (under 15 per 1,000 population) 12 cities.

50. Milan (Italy).....	960	12.97	14.65	1.68	98.0	33.4
51. Turin (Italy).....	574	12.27	13.97	1.70	92.3	15.3
52. Breslau (Germany).....	614	12.17	13.87	1.70	107.7	12.0
53. Lyon (France).....	580	12.10	13.07	0.97	93.2	40.6
54. Leipsick (Germany)....	715	10.92	12.45	1.53	98.0	13.2
55. Munich (Germany)....	730	11.50	12.42	0.92	83.0	5.6
56. Hambourg (Germany)...	1138	10.80	12.40	1.60	76.0	7.3
57. Bruxella (B.).....	858	10.12	11.95	1.83	74.7	14.7
58. Prague (C.).....	840	11.80	11.82	0.02	94.2	10.7
59. Vienne (Aut.).....	1840	13.92	10.47	*3.45	81.7	9.4
60. Stockholm (S.).....	502	11.60	10.75	*0.85	51.5	0.7
61. Berlin (Germany).....	4289	11.42	9.70	*1.72	80.7	8.5

*Decrease

It is to be noted that 35 or 57% of the cities are classified with the low and very low birth rate cities of the last two groups. The birth rate in most European cities has been considerably lowered since the great war which is demonstrated by a retrospective study of their statistics.

Montreal is a city mostly populated by Canadians of French origin (62%) to which is added an important group of Anglo-Saxons (23%), and the remaining part is composed of 7% of Jews and 8% of other nationalities, the major part being of Italian and Slavonic origin. The birth rate (see Table II of the appendix) is high amongst French-Canadians, but is rather low for the other part of the population.

The French-Canadian general mortality (Table III) is also high, but it decreases rapidly with the lowering of birth and infantile mortality rates. Owing to the diversity of ethnical groups and the high birth in Montreal, comparisons with other Canadian and American cities are more or less accurate. At a statistical point of view, it would be interesting to have besides the total number of inhabitants distributed into age groups, the same information for each ethnical group. We hope that the Dominion census Bureau will be able to make this classification not only for Montreal, but also for the other important cities of the Dominion.

This would allow the calculation of specific rates between the cities, based on the number of deaths at different ages, and the number of people living at these ages.

Since this report has been written and the rates calculated for the following tables, we have received a final report of the census Bureau establishing the population of Montreal at 818,577, which is 7,652 more than the total published in the preliminary report.

The difference is only slight and would not alter the rates to any great extent. We have, therefore, decided not to make any change to our previous calculations and to wait until next year to make the necessary readjustment.

This last report of the Census Bureau also gives the population of each municipal ward which is as follows:

DOMINION CENSUS — 1931.

Municipal Ward	Popula- tion	Federal Division
1. Ahuntsic-Bordeaux.....	19,490	Jacques-Cartier and Maisonneuve.
2. Bourget.....	23,774	St. Mary.
3. Cremazie.....	17,234	Cartier.
4. Delorimier.....	42,800	Hochelaga and St. Denis.
5. Hochelaga.....	22,009	Hochelaga and Maisonneuve.
6. Lafontaine.....	13,113	St. James.
7. Laurier.....	16,078	Laurier-Outremont.
8. Maisonneuve.....	29,713	Maisonneuve.
9. Mercier.....	20,397	Maisonneuve.
10. Montcalm.....	16,458	Hochelaga and St-Denis.
11. Mount Royal.....	11,898	Mount Royal.
12. Notre-Dame de Grâces.	46,850	Jacques Cartier and Mount Royal.
13. Papineau.....	15,770	St. Mary.
14. Préfontaine.....	19,898	Hochelaga and Maisonneuve.
15. Rosemount.....	44,534	Maisonneuve and St. Denis.
16. St. Andrew.....	23,670	St. Antony & St. Lawrence-St. Georges
17. St. Ann.....	16,860	St. Ann.
18. St. Cunegonde.....	18,617	St. Antony and St. Henry.
19. St. Denis.....	24,774	St. Denis.
20. St. Edward.....	33,434	St. Denis.
21. St. Eusebe.....	20,671	Hochelaga and St. Mary.
22. St. Gabriel.....	19,873	St. Ann.
23. St. Georges.....	13,481	St. Lawrence-St. George.
24. St. Henry.....	29,824	Jacques Cartier and St. Henry.
25. St. James.....	22,004	St. James.
26. St. John.....	18,278	Laurier-Outremont.
27. St. Jean Baptiste.....	29,812	Cartier and Hochelaga and St. James.
28. St. Joseph.....	10,855	St. Antony.
29. St. Lawrence.....	19,496	St. Lawrence-St. George.
30. St. Louis.....	17,966	Cartier and St. Lawrence-St. George.
31. St. Mary.....	15,135	Hochelaga and St. Mary.
32. St. Michael.....	25,582	Laurier-Outremont.
33. St. Paul.....	27,840	Jacques Cartier and St. Ann.
34. Ville-Marie.....	10,039	St. James.
35. Villeray.....	60,350	Maisonneuve & Mt. Royal & St. Denis
Total.....	818,577	

Respectfully submitted,

EUGENE GAGNON, M.D.,

Superintendent,
Division of Vital Statistics.

DIVISION OF STATISTICS.

TABLE I.

POPULATION (EVALUATED)

	Number	Proportion per 1,000
French-Canadians	504,100	62.00
British Canadians	185,400	22.80
Jews	56,900	7.00
Other nationalities	66,600	8.2
<hr/>		
Total	813,000	100.00%

TABLE II.

BIRTHS.

(Still-born not included)

	Sex		Total	Proportion per 1,000 Population
	M	F		
French Canadians	7,747	7,604	15,351	30.45%
British Canadians	1,630	1,555	3,185	17.18%
Jews	462	453	915	16.08%
Other nationalities	667	581	1,248	18.74%
<hr/>				
Total	10,506	10,193	20,699	25.46%

TABLE III.

DEATHS.

(Still-born not included.)

	Sexe		Total	Proportion per 1,000
	M	F		
French Canadians	3,458	3,380	6,838	13.56%
British Canadians	1,019	933	1,952	10.53%
Jews	186	186	372	6.54%
Other nationalities	413	254	667	10.01%
Unknown	30	27	57	0.07%
<hr/>				
Total	5,106	4,780	9,886	12.16%

TABLE IV.

MARIAGES.

	Total	Proportion per 1,000
French Canadians	3,431	6.81%
British Canadians	1,653	8.92%
Jews	547	9.61%
Other nationalities	565	8.48%
<hr/>		<hr/>
Total	6,196	7.62%

TABLE V.

BIRTHS AND MARRIAGES.

(By place of registration.)

Catholic churches:		Births		Total	Marriages
		M	F		
French Canadians		7,747	7,604	15,351	3,431
Others		980	966	1,946	724
Total		8,727	8,570	17,297	4,155
Protestant churches:		Births		Total	Marriages
		M	F		
Anglicans		475	428	908	443
Presbyterians		126	124	250	188
United Churches		428	365	793	610
Baptists		12	23	35	20
Other protestants		99	73	172	150
Total		1,140	1,018	2,158	1,420
Other denominations:		Births		Total	Marriages
		M	F		
Synagogues		458	402	860	547
Orthodox churches		89	63	152	74
Births registered at the City Hall		92	140	232	...
Total		639	605	1,244	621
Grand total		10,506	10,193	20,699	6,196

TABLE VI.

DEATH BY CIVIL STATUS.

	Number	Per cent
Married	3,320	33.58%
Single	1,493	15.11%
Widowers	613	6.21%
Widows	1,087	10.99%
Unknown	46	0.47%
Children under 15 years	3,327	33.64%
Total	9,886	100.00%

TABLE VII.

COMPARATIVE TABLE OF BIRTHS AND DEATHS.

	Births	Deaths	Excess of births over deaths	Natural increase per 1,000
French Canadians	15,351	6,838	8,513	16.89%
British Canadians	3,185	1,952	1,233	6.65%
Jews	915	372	543	9.54%
Other nationalities or unknown	1,248	724	524	7.87%
Total	20,699	9,886	10,813	13.30%

TABLE VIII.

DEATHS OF CHILDREN UNDER 1 YEAR.

	Births	Deaths from 0 to 1 year	Proportion per 1,000
French Canadians	15,351	1,863	121.4%
British Canadians	3,185	210	65.9%
Jews	915	39	42.6%
Other nationalities	1,248	186	149.0%
Unknown . . . . .	.....	47	.....
Total	20,699	2,345	113.3%

TABLE

DEATHS FROM 0

By different causes, by

DISEASES	January			February			March			April			May		
	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total
Measles.....							2	2		1	1		2	2	
Whooping cough.....	1		1	2	2	4	1	2	3	1		1	1		1
Influenza.....	4	3	7	6	8	14	3	7	10	2	4	6	1	2	3
Tuberculosis.....	4	1	5	1	1	2	2		2				1	1	2
Syphilis.....	2		2	5		5	3	1	4	2		2	4		4
Other epidemic diseases.....	3	1	4	2		2	2	2	4	3		3	2		2
General diseases (Nos. 45 to 77).....	4	1	5				1		1	2		2	2	1	3
Meningitis.....		3	3	2	2	4	3	1	4	2		2		1	1
Convulsions.....	1		1	1		1	1	1	2	2	2	4		1	1
Other diseases of the nervous system.....	1	1	2	1	2	3	3	1	4	1	1	2	3	1	4
Diseases of the circulatory system.....	1		1							1	1		1		1
Bronchitis.....	2		2	2		2	1	1	2	1		1			
Broncho-pneumonia.....	21	11	32	23	20	43	13	20	33	13	17	30	10	9	19
Pneumonia.....	6	3	9	8	4	12	5	3	8	4	2	6	2	1	3
Other diseases of the respiratory system.....	4	1	5	2	1	3				1	1		4	2	6
Diseases of the stomach.....	2		2		1	1	1		1	1	1		2		2
Diarrhoea.....	36	5	41	25	7	32	29	11	40	39	8	47	30	9	39
Other diseases of the digestive system.....	1	2	3				2	2	4				1		1
Diseases of the genito-urinary system.....	1	2	3	1		1	1		1						
Diseases of the skin, etc., (Nos. 151 to 156).....	1		1	1		1	1		1	3		3	1		1
Malformations.....	13		13	7	1	8	12	3	15	13		13	9		9
Debility, congenital.....	13		13	12	1	13	13	1	14	9	1	10	8		8
Premature birth.....	41		41	34		34	39		39	51		51	41		41
Result of confinement.....	5		5	5		5	11		11	7		7	5		5
Other diseases peculiar to early infancy.....	13		13	9		9	7		7	12		12	12		12
External causes.....				1		1	3		3	6		6		1	1
Ill-defined causes.....	2		2												
Total.....	182	34	216	148	50	198	157	58	215	173	39	212	139	32	171

IX

TO 1 YEAR, IN 1931

months and by groups of ages

June			July			August			September			October			November			December			Grand total		
0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total
...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	...	7	7
...	1	1	...	1	1	2	2	...	2	...	1	...	1	...	1	...	1	1	2	3	11	8	19
...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	2	...	2	...	1	1	19	25	44
2	...	2	...	1	1	...	1	1	1	...	1	...	...	...	1	2	3	1	1	2	13	8	21
1	...	1	1	...	1	2	...	2	3	...	3	3	...	3	9	...	9	5	1	6	40	2	42
1	...	1	2	...	2	...	1	1	1	...	1	3	1	4	1	1	2	...	1	1	20	7	27
1	...	1	1	...	1	...	...	...	1	1	2	1	1	2	1	1	2	1	...	1	15	5	20
2	...	2	4	1	5	1	1	2	1	...	1	...	...	...	1	1	2	1	...	1	17	10	27
...	...	...	...	...	...	...	...	...	1	1	2	1	3	...	1	1	2	2	1	3	10	8	18
1	1	2	...	1	1	...	...	...	2	...	2	...	...	...	1	...	1	3	2	5	16	10	26
...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	1	...	1	1	...	1	3	4	7
1	...	1	1	1	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	9	2	11
3	2	5	6	3	9	5	2	7	7	2	9	9	5	14	8	6	14	17	9	26	135	106	241
1	...	1	...	...	...	1	1	2	1	...	1	1	1	2	1	2	3	4	5	9	34	22	56
...	1	1	...	...	...	...	...	...	1	1	...	...	...	...	2	2	...	1	...	1	11	9	20
1	1	2	...	...	...	2	1	3	2	...	2	1	...	1	3	...	3	...	...	...	14	4	18
33	8	41	85	26	111	107	55	162	83	37	120	59	18	77	43	19	62	38	7	45	607	210	817
...	...	...	2	2	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...	6	6	12
...	...	...	1	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	4	3	7
2	...	2	4	...	4	1	...	1	3	...	3	2	...	2	...	2	2	2	1	3	21	3	24
7	...	7	14	1	15	9	...	9	6	...	6	12	...	12	8	...	8	12	...	12	122	5	127
9	...	9	9	...	9	11	1	12	3	...	3	6	...	6	2	...	2	3	...	3	98	4	102
31	...	31	26	...	26	28	...	28	29	...	29	36	...	36	30	...	30	38	...	38	424	...	424
8	...	8	14	...	14	6	...	6	9	...	9	9	...	9	4	...	4	7	...	7	90	...	90
11	...	11	7	...	7	8	...	8	16	...	16	9	...	9	6	...	6	4	...	4	114	...	114
1	...	1	1	...	1	2	...	2	1	1	2	...	2	2	...	...	...	...	...	...	15	4	19
...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	1	...	1	...	...	...	5	...	5
116	14	130	177	37	214	187	64	251	173	45	218	155	30	185	125	37	162	141	32	173	1873	472	2345

TABLE X

TOTAL OF DEATHS FROM 0 TO 1 YEAR, FROM
DIFFERENT CAUSES, IN 1930 AND 1931

Diseases	1930			1931		
	0 to 6 months	6 to 12 months	Total	0 to 6 months	6 to 12 months	Total
Measles	2	8	10	.....	7	7
Whooping cough	30	27	57	11	8	19
Influenza	22	16	38	19	25	44
Tuberculosis	11	17	28	13	8	21
Syphilis	57	7	64	40	2	42
Other epidemic diseases	30	10	40	20	7	27
Other general diseases (Nos. 45 to 77)	12	4	16	15	5	20
Meningitis	32	27	59	17	10	27
Convulsions	14	6	20	10	8	18
Other diseases of the nervous system	20	12	32	16	10	26
Diseases of the circulatory system	8	.....	8	3	4	7
Bronchitis	6	5	11	9	2	11
Broncho-pneumonia	142	88	230	135	106	241
Pneumonia	55	26	81	34	22	56
Other diseases of the respiratory system	21	6	27	11	9	20
Diseases of the stomach	5	3	8	14	4	18
Diarrhoea	633	244	877	607	210	817
Other diseases of the digestive system	12	5	17	6	6	12
Diseases of the genito-urinary system	8	2	10	4	3	7
Diseases of the skin (Nos. 151 to 156)	16	3	19	21	3	24
Malformation (No. 157)	113	9	122	122	5	127
Debility, icterus, etc. (Nos. 158 to 161)	221	3	224	212	4	216
Premature birth (No. 159)	452	.....	452	424	.....	424
Result of confinement (No. 160)	148	.....	148	90	.....	90
External causes	11	4	15	15	4	19
Ill-defined causes	6	1	7	5	.....	5
Total	2087	533	2620	1873	472	2345

TABLE XI
ILLEGITIMATE BIRTHS

Classified according to sex of child, mother's residence and age

Residence of mother	Montreal			Province of Quebec			Province of Ontario			Other provinces			United States			Not specified			Total		
Age of mother	Montreal			Province of Quebec			Province of Ontario			Other provinces			United States			Not specified			Total		
	M	F	Tt.	M	F	Tt.	M	F	Tt.	M	F	Tt.	M	F	Tt.	M	F	Tt.	M	F	Tt.
Under 15 years.....	3	2	5	4	1	5	1	1	2	1	1	2	1	1	2	1	1	2	8	3	11
15 years.....	6	5	11	3	4	7	1	1	2	1	1	2	1	1	2	1	1	2	9	9	18
16 ".....	7	6	13	5	9	14	1	1	2	1	1	2	1	1	2	1	1	2	12	15	27
17 ".....	19	14	33	8	25	33	1	1	2	1	1	2	1	1	2	1	1	2	28	24	52
18 ".....	26	28	54	16	25	41	1	1	2	1	1	2	1	1	2	1	1	2	42	55	97
19 ".....	29	20	49	11	13	24	1	1	2	1	1	2	1	1	2	1	1	2	41	34	75
20 ".....	21	27	48	13	23	36	1	1	2	1	1	2	1	1	2	1	1	2	34	50	84
21 ".....	25	23	48	10	7	17	2	1	3	1	1	2	1	1	2	1	1	2	37	31	68
22 ".....	28	21	49	8	10	18	1	1	2	1	1	2	1	1	2	1	1	2	37	32	69
23 ".....	17	11	28	4	7	11	1	1	2	1	1	2	1	1	2	1	1	2	21	18	39
24 ".....	11	11	22	5	5	10	1	1	2	1	1	2	1	1	2	1	1	2	16	16	32
25 ".....	17	10	27	6	2	8	1	1	2	1	1	2	1	1	2	1	1	2	23	12	35
26 ".....	5	6	11	1	2	3	1	1	2	1	1	2	1	1	2	1	1	2	7	9	16
27 ".....	2	2	4	2	2	4	1	1	2	1	1	2	1	1	2	1	1	2	4	2	6
28 ".....	4	2	6	1	3	4	1	1	2	1	1	2	1	1	2	1	1	2	4	2	6
29 ".....	2	2	4	1	3	4	1	1	2	1	1	2	1	1	2	1	1	2	3	5	8
30 ".....	2	2	4	4	2	6	1	1	2	1	1	2	1	1	2	1	1	2	6	4	10
31 ".....	3	3	6	1	2	3	1	1	2	1	1	2	1	1	2	1	1	2	4	6	10
32 ".....	2	1	3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	3	2	5
33 ".....	5	1	6	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	5	1	6
34 ".....	1	4	5	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	2	4	6
35 ".....	2	1	3	2	1	3	1	1	2	1	1	2	1	1	2	1	1	2	4	4	8
36 ".....	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
37 ".....	2	1	3	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	2	2	4
38 ".....	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
39 ".....	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
40 ".....	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
Over 40 years.....	1	1	2	2	2	4	1	1	2	1	1	2	1	1	2	1	1	2	4	4	8
Not specified.....	1	1	2	3	3	6	1	1	2	1	1	2	1	1	2	1	1	2	202	162	364
Total.....	244	205	449	111	129	240	6	5	11	1	1	2	3	3	6	198	163	361	560	505	1065
Percent.....	42.2%	42.2%	42.2%	22.5%	22.5%	22.5%	1.0%	1.0%	1.0%	0.1%	0.1%	0.1%	0.3%	0.3%	0.3%	33.9%	33.9%	33.9%	100.0%	100.0%	100.0%

TABLE
DEATHS OF ILLEGITIMATE
By causes, ages

Place of death	Crèche de la Miséricorde					Crèche St. Paul					Protestant		
Causes	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year	Over 1 year	Total	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year	Over 1 year	Total	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year
Whooping-cough.....													
Diphtheria.....													
Grippe.....	3	3	6	1	13			1	11	12			
Syphilis.....	17	2	2		21	1	2		7	10	1		
Tuberculosis (all forms)...	1				1		6	1	4	11			
Meningitis.....						2	3	2	3	10			
Bronchitis.....	1				1								
Broncho-pneumonia.....	6	4	2		12						2		
Pneumonia.....	1	2	1		4								
Diarrhoea.....	93	40	15		148	29	10	3	5	47	1	3	
Malformation.....	8				8						2		2
Premature birth.....	13				13	1				1			
Congenital debility.....	1				1	16	4	1		21		1	
Other diseases of early infancy.....	12				12						1		
Infanticide.....													
Other causes.....	21	6	4	2	33			1	7	8			
Total.....	177	57	30	3	267	49	25	9	37	120	7	4	2
Per cent.....	66.3	21.4	11.2	1.1	100.0	40.8	20.8	7.5	30.9	100.0	53.9	30.8	15.3

Number of births at "Misericordia"..... 618
Deaths at "Misericordia" and St. Paul..... 387
Proportion per 1,000 births..... 626.2

Institutions		Private boarding houses and maternities					Other places					Grand total				
Over 1 year	Total	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year	Over 1 year	Total	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year	Over 1 year	Total	0 to 3 mos.	3 mos. to 6 mos.	6 mos. to 1 year	Over 1 year	Total
								2			2	3	5	7	12	27
	1	2				2	1	1			2	22	5	2	7	36
			1			1		1			1	1	8	1	4	14
		1	1			2		1			1	3	5	2	3	13
												1				1
	2	1	1	1		3	3			1	4	12	5	3	1	21
										1	1	1	2	1	1	5
	6	33	4	4		41	15	8	3	1	27	171	65	27	6	269
	2	1		1		2	1				1	12		1		13
		3				3	15				15	32				32
	1	5				5	3				3	25	5	1		31
	1	11				11	12				12	36				36
							14				14	14				14
		5	4			9	1		1	3	5	27	10	6	12	55
	13	62	11	6		79	65	13	4	6	88	360	110	51	46	567
	100.0	78.5	13.9	7.6		100.0	73.9	14.8	4.5	6.8	100.0	63.5	19.4	9.0	8.1	100.0%

TABLE XII
BIRTHS, MARRIAGES AND DEATHS

From 1872 to 1931 inclusively

Years	Populations	Deaths	Proportion per 1000	Births	Proportion per 1000	Marriages	Proportion per 1000
Average from:							
1872 to 1883.....	134,505	4,131	30.71	6,057	45.29	1,327	9.88
1884 to 1888.....	180,951	5,589	30.88	7,653	42.29	1,826	10.09
1889 to 1893.....	219,802	5,527	25.14	9,292	42.27	2,143	9.75
1894 to 1898.....	244,794	6,010	24.55	9,796	40.05	2,033	8.30
1899 to 1903.....	272,603	6,873	25.21	9,925	36.41	2,483	9.11
1904 to 1908.....	339,158	7,782	22.94	12,481	36.80	3,503	10.33
1909 to 1913.....	459,281	9,937	21.63	17,705	38.50	4,930	10.73
1914 to 1918.....	533,501	11,103	20.81	20,373	38.18	5,128	9.61
1919 to 1923.....	618,561	10,477	16.96	20,704	33.48	6,864	10.12
1924 to 1928.....	690,300	9,983	14.46	21,124	30.60	6,287	9.11
1929.....	762,000	10,604	13.91	20,415	26.79	7,332	9.62
1930.....	790,000	10,256	12.98	20,993	26.57	6,643	8.40
1931.....	813,000	9,886	12.16	20,699	25.46	6,196	7.62

TABLE XIII
STILLBIRTHS, LEGITIMATE AND ILLEGITIMATE IN 1931
Causes of deaths, period of gestation and sex

Causes of mortality	6 months			7 months			8 months			At full term			Grand total		
	M		Tt.	M		Tt.	M		Tt.	M		Tt.	M		Tt.
	F			F			F			F			F		
I — Foetal mortality during "gestation":															
Syphilis and other chronic diseases.....	1	1	2	2	1	3	2	1	3	6	6	12	9	9	18
Toxaemia of pregnancy.....	6	12	16	12	5	10	28	39	65	26	26	52	66	49	115
Malformation incompatible with life.....	3	3	3	7	2	6	10	23	49	26	26	52	28	40	68
Other causes and causes not specified.....			1	1			1	4	5	1	1	2	5	1	6
II — Mortality from premature birth:															
Maternal exertion (over-work).....	1	1	1	1			1	2	3	1	1	2	4	1	5
Traumatism causing premature birth.....															
Abnormal placental insertion.....	2	3	3	3	4	6	6	6	10	4	4	8	15	10	25
Acute diseases and infections.....	4	10	9	5		14	14	18	31	13	13	26	31	24	55
Chronic infection (syphilis).....	5	6	8	7	6	9	15	1	3	4	4	8	20	15	35
Other causes and causes not specified.....	18	31	21	22	16	24	43		1					1	1
III — Foetal mortality during "parturition":															
Abnormal presentation and prolapsed cord.....			2	1	1	1	3	38	41	24	24	62	41	25	66
Obstacles to parturition.....		1	4	1	2	3	5	101	167	66	66	167	107	71	178
Other causes and causes not specified.....		1			1			42	77	35	35	77	43	36	79
Total.....	36	33	69	70	38	66	128	280	488	208	208	488	424	327	751

TABLE XIII a
PREMATURE, BORN UNDER SIX MONTHS GESTATION AND NOT INCLUDED IN
STILLBIRTHS STATISTICS.

Causes of mortinatality	Under 4 months				4 months				5 months				Grand total			
	Under 4 months				4 months				5 months				Grand total			
	M	F	Un.	Tt.	M	F	Tt.	M	F	Tt.	M	F	Un.	Tt.		
I — Foetal mortinatality during "gestation":																
Syphilis and other chronic diseases	1	.....	.....	1	2	.....	2	1	3	4	4	3	.....	7
Toxaemia of pregnancy	6	1	3	10	7	6	13	17	8	25	30	15	3	48		
Malformation incompatible with life	.....	1	2	3	.....	.....	.....	1	.....	1	1	1	2	4
Other causes and causes not specified	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	1
II — Mortinatality from premature birth:																
Maternal exertion (overwork-)	5	1	2	8	6	.....	6	6	5	11	17	6	2	25	
Traumatism causing premature birth	7	.....	1	8	6	6	12	8	7	15	21	13	1	35	
Abnormal placenta insertion	1	3	.....	4	7	1	8	7	5	12	15	9	.....	24
Acute diseases and infections	18	1	1	20	18	6	24	13	10	23	49	17	1	67		
Chronic infection (syphilis)	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	1
Other causes and causes not specified	9	2	11	22	12	8	20	16	15	31	37	25	11	73		
III — Foetal mortinatality during "parturition":																
Abnormal presentation and prolapsed cord	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	1
Obstacles to parturition	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	1
Other causes and causes not specified	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	47	9	20	76	58	27	85	71	55	126	176	91	20	287		

TABLE XIV
DEATHS BY AGES — YEAR 1931

AGES	Legitimates				Illegitimates				Sex		Grand total	Percentage of total deaths					
	French-Canadians	British-Canadians	Jews	Other nationalities	Unknown	Total	French-Canadians	British-Canadians	Jews	Other nationalities			Unknown	Total	Male	Female	
Premature children.....	321	53	10	36	1	421	35	1	.....	.....	1	3	40	262	199	461	4.67%
From 0 to 1 month.....	305	48	8	40	1	402	80	10	.....	.....	3	16	109	298	213	511	5.17%
From 1 month to 6 months.....	446	57	16	61	.....	580	286	9	.....	.....	2	24	321	483	418	901	9.11%
From 6 months to 1 year.....	341	31	5	43	1	421	49	1	.....	.....	.....	1	51	244	228	472	4.77%
Total under 1 year.....	1413	189	39	180	3	1824	450	21	.....	.....	6	44	521	1287	1058	2345	23.72%
From 1 year to 2 years.....	245	30	3	16	.....	294	37	.....	.....	.....	.....	.....	37	177	154	331	3.35%
From 2 years to 3 years.....	101	18	2	16	.....	137	6	1	.....	.....	.....	1	8	81	64	145	1.47%
From 3 years to 4 years.....	89	10	3	6	.....	108	1	.....	.....	.....	.....	.....	1	59	50	109	1.10%
From 4 years to 5 years.....	42	8	.....	12	.....	62	.....	.....	.....	.....	.....	.....	.....	28	34	62	0.63%
Total under 5 years.....	1890	255	47	230	3	2425	494	22	.....	.....	6	45	567	1632	1360	2992	30.27%
From 5 years to 9 years.....	169	23	5	21	.....	218	.....	.....	.....	.....	.....	.....	.....	113	105	218	2.20%
From 10 years to 14 years.....	82	18	6	11	.....	117	.....	.....	.....	.....	.....	.....	.....	62	55	117	1.19%
From 15 years to 19 years.....	164	40	11	25	.....	240	.....	.....	.....	.....	.....	.....	.....	110	130	240	2.43%
From 20 years to 30 years.....	426	104	24	59	1	613	.....	.....	.....	.....	.....	.....	.....	281	332	613	6.21%
From 30 years to 40 years.....	419	127	22	63	1	632	.....	.....	.....	.....	.....	.....	.....	306	326	632	6.38%
From 40 years to 50 years.....	518	205	31	83	6	843	.....	.....	.....	.....	.....	.....	.....	479	364	843	8.53%
From 50 years to 60 years.....	628	295	65	72	2	1062	.....	.....	.....	.....	.....	.....	.....	613	449	1062	10.74%
From 60 years to 70 years.....	765	360	106	50	.....	1281	.....	.....	.....	.....	.....	.....	.....	655	626	1281	12.96%
From 70 years to 80 years.....	820	315	42	31	.....	1208	.....	.....	.....	.....	.....	.....	.....	592	616	1208	12.21%
From 80 years to 90 years.....	413	166	10	13	.....	592	.....	.....	.....	.....	.....	.....	.....	236	356	592	5.99%
From 90 years to 100 years.....	48	30	2	3	.....	83	.....	.....	.....	.....	.....	.....	.....	26	57	83	0.84%
From 100 years and over.....	2	2	1	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	1	4	5	0.05%
Total over 5 years.....	4454	1675	325	430	10	6894	.....	.....	.....	.....	.....	.....	.....	3474	3420	6894	69.73%
Grand total.....	6344	1930	372	660	13	9319	494	22	.....	.....	6	45	567	5106	4780	9886	100.00%

TABLE XV
DEATHS BY AGES, NATIONALITIES AND MONTHS, FOR 1931

Nationalities:	French-Canadians		British-Canadians		Jews		Other nationalities		Unknown		Grand total	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
January:												
Under 5 years.....	237	34.90%	26	12.76%	4	10.81%	19	32.20%	2	100.00%	288	29.81%
Over 5 years.....	442	65.10%	163	86.24%	33	89.19%	40	67.80%	.....	.....	678	70.19%
Total.....	679	100.00%	189	100.00%	37	100.00%	59	100.00%	2	100.00%	966	100.00%
February:												
Under 5 years.....	212	34.08%	31	17.32%	4	11.76%	20	33.90%	.....	.....	267	29.87%
Over 5 years.....	410	65.92%	148	82.68%	30	88.24%	39	66.10%	.....	.....	627	70.13%
Total.....	622	100.00%	179	100.00%	34	100.00%	59	100.00%	.....	.....	894	100.00%
March:												
Under 5 years.....	213	33.33%	23	12.50%	1	3.12%	22	34.38%	8	100.00%	267	28.80%
Over 5 years.....	426	66.67%	161	87.50%	31	96.88%	42	65.62%	.....	.....	660	71.20%
Total.....	639	100.00%	184	100.00%	32	100.00%	64	100.00%	8	100.00%	927	100.00%
April:												
Under 5 years.....	210	34.65%	19	11.95%	6	24.00%	19	30.65%	6	85.71%	260	30.27%
Over 5 years.....	396	65.35%	140	88.05%	19	76.00%	43	69.35%	1	14.29%	599	69.73%
Total.....	606	100.00%	159	100.00%	25	100.00%	62	100.00%	7	100.00%	859	100.00%
May:												
Under 5 years.....	190	34.42%	18	11.11%	4	11.76%	17	32.08%	.....	.....	229	28.59%
Over 5 years.....	362	65.58%	144	88.89%	30	88.24%	36	67.92%	.....	.....	572	71.41%
Total.....	552	100.00%	162	100.00%	34	100.00%	53	100.00%	.....	.....	801	100.00%
June:												
Under 5 years.....	129	27.86%	15	10.64%	.....	.....	13	23.64%	3	33.33%	160	23.05%
Over 5 years.....	334	72.14%	126	89.36%	26	100.00%	42	76.36%	6	66.67%	534	76.95%
Total.....	463	100.00%	141	100.00%	26	100.00%	55	100.00%	9	100.00%	694	100.00%
July:												
Under 5 years.....	206	36.65%	31	18.02%	1	3.85%	25	36.76%	3	75.00%	266	31.97%
Over 5 years.....	356	63.35%	141	81.98%	25	96.15%	43	63.24%	1	25.00%	566	68.03%
Total.....	562	100.00%	172	100.00%	26	100.00%	68	100.00%	4	100.00%	832	100.00%

TABLE XV
DEATHS BY AGES, NATIONALITIES AND MONTHS, FOR 1931—(Continued)

Nationalities:	French-Canadians		British-Canadians		Jews		Other nationalities		Unknown		Grand total	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
August:												
Under 5 years.....	250	43.25%	19	13.87%	6	15.79%	27	44.26%	6	100.00%	308	37.56%
Over 5 years.....	328	56.75%	118	86.13%	32	84.21%	34	55.74%	.....	.....	512	62.44%
Total.....	578	100.00%	137	100.00%	38	100.00%	61	100.00%	6	100.00%	820	100.00%
September:												
Under 5 years.....	220	39.57%	31	21.09%	5	18.52%	18	40.91%	10	100.00%	284	36.18%
Over 5 years.....	336	60.43%	117	78.91%	22	81.48%	26	59.09	.....	.....	501	63.82%
Total.....	556	100.00%	148	100.00%	27	100.00%	44	100.00%	10	100.00%	785	100.00%
October:												
Under 5 years.....	185	35.24%	27	16.56%	3	11.11%	16	35.56%	6	100.00%	237	30.93%
Over 5 years.....	340	64.76%	137	83.44%	24	88.89%	29	64.44%	.....	.....	530	69.07%
Total.....	525	100.00%	164	100.00%	27	100.00%	45	100.00%	6	100.00%	767	100.00%
November:												
Under 5 years.....	162	31.40%	16	11.59%	7	20.59%	18	46.15%	1	50.00%	204	27.98%
Over 5 years.....	354	68.60%	122	88.41%	27	79.41%	21	53.85%	1	50.00%	525	72.02%
Total.....	516	100.00%	138	100.00%	34	100.00%	39	100.00%	2	100.00%	729	100.00%
December:												
Under 5 years.....	170	31.48%	21	11.73%	6	18.75%	22	37.93%	3	75.00%	222	27.34%
Over 5 years.....	370	68.52%	158	88.27%	26	81.25%	35	62.07%	1	25.00%	590	72.66%
Total.....	540	100.00%	179	100.00%	32	100.00%	57	100.00%	4	100.00%	812	100.00%
Total:												
Under 5 years.....	2384	34.86%	277	14.19%	47	12.63%	236	35.38%	48	84.21%	2992	30.27%
Over 5 years.....	4454	65.14%	1675	85.81%	325	87.37%	430	64.62%	10	15.79%	6894	69.73%
Grand total.....	6838	100.00%	1952	100.00%	372	100.00%	666	100.00%	58	100.00%	9886	100.00%

TABLE

DEATHS BY CIVIL STATUS

WARDS	0 to 6 months	6 months to 1 year	1 year to 4 years	5 years to 14 years	15 to 49 years			
					Married	Widowed	Single	Unknown
Ahuntsic-Bordeaux.....	13	7	6	8	28	1	15	.....
Bourget.....	61	22	20	9	44	4	27	.....
Crémazie.....	25	8	3	.....	24	3	21	.....
Delorimier.....	82	12	26	21	67	3	60	.....
Hochelaga.....	52	31	25	15	36	2	34	.....
Lafontaine.....	11	3	6	2	14	.....	15	.....
Laurier.....	15	4	5	3	22	2	18	.....
Maisonneuve.....	59	12	28	10	45	2	27	.....
Mercier.....	48	11	18	6	29	.....	19	.....
Montcalm.....	40	16	20	5	16	.....	15	.....
Mount Royal.....	14	1	6	2	12	.....	7	.....
Notre-Dame de Grâces.....	42	2	7	4	55	1	34	.....
Papineau.....	32	18	12	6	21	3	30	.....
Préfontaine.....	47	15	24	17	26	3	18	.....
Rosemount.....	104	23	50	29	82	1	36	.....
St. Andrew.....	17	1	5	6	23	3	24	1
St. Ann.....	30	8	10	2	28	2	14	1
Ste. Cunégonde.....	42	13	19	4	23	2	29	.....
St. Denis.....	45	12	14	13	39	4	30	.....
St. Edward.....	58	23	36	18	62	3	39	.....
St. Eusèbe.....	37	17	26	13	37	4	19	.....
St. Gabriel.....	36	16	18	11	33	4	22	.....
St. George.....	13	1	3	3	19	2	26	2
St. Henry.....	75	21	41	15	34	3	41	.....
St. James.....	52	17	13	9	40	9	57	.....
St. John.....	51	22	25	21	37	4	24	.....
St. Jean Baptiste.....	67	12	11	5	44	2	30	.....
St. Joseph.....	14	9	13	1	20	.....	26	2
St. Lawrence.....	21	7	4	4	38	4	28	2
St. Louis.....	32	3	7	8	42	2	28	1
St. Mary.....	47	17	25	3	21	2	13	.....
St. Michael.....	17	3	4	3	27	1	20	.....
St. Paul.....	69	15	23	16	44	2	21	.....
Ville Marie.....	9	8	4	4	12	2	13	.....
Villeray.....	111	19	48	39	84	1	55	1
Unknown.....	70	3	1	.....	6	3	13	9
Institutions.....	315	40	41	.....	5	3	33	1
Total.....	1873	472	647	335	1239	87	981	20

XVI

AND BY WARDS, IN 1931

50 to 69 years				70 years and over				Total				Grand total
Married	Widowed	Single	Unknown	Married	Widowed	Single	Unknown	Married	Widowed	Single	Unknown	
29	8	1	.....	16	17	.....	.....	73	26	50	.....	149
42	11	1	.....	21	43	2	.....	107	58	142	.....	307
21	8	3	.....	5	13	3	.....	50	24	63	.....	137
88	26	12	.....	25	55	4	.....	180	84	217	.....	481
47	16	2	.....	25	21	1	.....	108	39	160	.....	307
23	7	3	.....	9	20	2	.....	46	27	42	.....	115
56	19	3	.....	10	15	2	.....	88	36	50	.....	174
54	20	1	.....	18	36	6	.....	117	58	143	.....	318
25	5	2	.....	12	15	1	.....	66	20	105	.....	191
30	7	1	.....	10	15	2	.....	56	22	99	.....	177
20	10	4	1	6	10	4	.....	38	20	38	1	97
58	24	11	.....	33	51	5	2	146	76	105	2	329
28	19	8	.....	13	24	2	.....	62	46	108	.....	216
30	11	3	1	7	17	1	.....	63	31	125	1	220
62	18	4	.....	22	26	3	.....	166	45	249	.....	460
46	18	12	.....	20	32	13	.....	89	53	78	1	221
29	13	14	2	16	13	4	.....	73	28	82	3	186
31	14	10	.....	17	36	1	.....	71	52	118	.....	241
38	13	2	.....	15	37	4	.....	92	54	120	.....	266
56	18	9	1	26	50	2	1	144	71	185	2	402
26	9	3	.....	12	20	.....	.....	75	33	115	.....	223
40	10	9	.....	20	16	5	.....	93	30	117	.....	240
32	5	23	2	7	12	7	1	58	19	76	5	158
48	14	6	.....	21	48	3	.....	103	65	202	.....	370
40	20	20	.....	20	43	7	.....	100	72	165	.....	337
42	21	4	.....	13	24	2	.....	92	49	149	.....	290
61	23	14	1	28	47	7	.....	133	72	146	1	352
31	12	6	.....	13	18	4	1	64	30	73	3	170
30	21	14	1	7	9	1	.....	75	34	79	3	191
57	31	17	2	22	42	7	.....	121	75	102	3	301
26	11	3	.....	8	16	4	.....	55	29	112	.....	196
42	21	15	.....	17	21	2	.....	86	43	64	.....	193
37	16	2	.....	11	27	2	.....	92	45	148	.....	285
24	5	6	.....	3	14	6	.....	39	21	50	.....	110
100	22	5	.....	45	47	4	.....	229	70	281	1	581
5	4	7	6	.....	3	2	1	11	10	96	16	133
22	19	51	1	32	111	86	2	59	133	566	4	762
1476	549	301	18	605	1064	211	8	3320	1700	4820	46	9886

TABLE

DEATHS OF CHILDREN UNDER FIVE YEARS,
BY SEXES AND BY

WARDS	DEATHS						
	Grand total	0 to 1 year		Total from 0 to 1 year	Per- centage of total deaths	1 to 5 years	
		M	F			M	F
Ahuntsic-Bordeaux.....	149	13	7	20	13.4	4	2
Bourget.....	307	38	45	83	27.0	9	11
Crémazie.....	137	15	18	33	24.1	2	1
Delorimier.....	481	54	40	94	19.5	13	13
Hochelaga.....	307	48	35	83	27.1	15	10
Lafontaine.....	115	10	4	14	12.2	2	4
Laurier.....	174	10	9	19	10.9	2	3
Maisonneuve.....	318	37	34	71	22.3	16	12
Mercier.....	191	30	29	59	30.9	6	12
Montcalm.....	177	38	18	56	31.6	8	12
Mount Royal.....	97	11	4	15	15.5	2	4
Notre-Dame de Grâces.....	329	24	20	44	13.4	5	2
Papineau.....	216	32	18	50	23.2	9	3
Préfontaine.....	220	28	34	62	28.2	14	10
Rosemount.....	460	68	59	127	27.6	26	24
St. Andrew.....	221	12	6	18	8.1	5	.....
St. Ann.....	186	19	19	38	20.4	8	2
Ste. Cunégonde.....	241	31	24	55	22.8	6	13
St. Denis.....	266	34	23	57	21.4	8	6
St. Edward.....	402	46	35	81	20.2	18	18
St. Eusèbe.....	223	29	25	54	24.2	14	12
St. Gabriel.....	240	29	23	52	21.6	9	9
St. George.....	158	10	4	14	8.9	2	1
St. Henry.....	370	52	44	96	25.9	21	20
St. James.....	337	35	34	69	20.5	5	8
St. John.....	290	47	26	73	25.1	14	11
St. Jean Baptiste.....	352	42	37	79	22.4	2	9
St. Joseph.....	170	16	7	23	13.5	7	6
St. Lawrence.....	191	11	17	28	14.7	2	2
St. Louis.....	301	18	17	35	11.6	3	4
St. Mary.....	196	38	26	64	32.7	17	8
St. Michael.....	193	13	7	20	10.4	4	.....
St. Paul.....	285	49	35	84	29.5	12	11
Ville Marie.....	110	10	7	17	15.5	2	2
Villeray.....	581	68	62	130	22.4	35	13
Unknown.....	133	43	29	72	54.1	1	.....
Institutions.....	762	179	177	356	46.5	17	24
Total.....	9886	1287	1058	2345	23.79	345	302

XVII

COMPARED TO THE TOTAL OF DEATHS

WARDS, IN 1931

DEATHS									
Total from 1 to 5 years	Per- centage of total deaths	0 to 5 years		Total from 0 to 5 years	Per- centage of total deaths	Over 5 years		Total over 5 years	Per- centage of total deaths
		M	F			M	F		
6	4.0	17	9	26	17.4	63	60	123	82.6
20	6.5	47	56	103	33.5	98	106	204	66.5
3	2.2	17	19	36	26.3	57	44	101	73.7
26	5.4	67	53	120	24.9	159	202	361	75.1
25	8.1	63	45	108	35.2	104	95	199	64.8
6	5.2	12	8	20	17.4	44	51	95	82.6
5	2.9	12	12	24	13.8	70	80	150	86.2
28	8.8	53	46	99	31.1	109	110	219	68.9
18	9.4	36	41	77	40.3	54	60	114	59.7
20	11.3	46	30	76	42.9	55	46	101	57.1
6	6.2	13	8	21	21.6	35	41	76	78.4
7	2.1	29	22	51	15.5	140	138	278	84.5
12	5.6	41	21	62	28.7	75	79	154	71.3
24	10.9	42	44	86	39.1	69	65	134	60.9
50	10.9	94	83	177	38.5	130	153	283	61.5
5	2.3	17	6	23	10.4	90	108	198	89.5
10	5.4	27	21	48	25.8	88	50	138	74.2
19	8.0	37	37	74	30.8	78	89	167	69.2
14	5.3	42	29	71	26.7	89	106	195	73.3
36	8.9	64	53	117	29.1	138	147	285	70.9
26	11.7	43	37	80	35.9	81	62	143	64.1
18	7.5	38	32	70	29.2	92	78	170	70.8
3	1.9	12	5	17	10.7	86	55	141	89.3
41	11.0	73	64	137	37.0	119	114	233	62.9
13	3.9	40	42	82	24.4	113	142	255	75.6
25	8.6	61	37	98	33.8	91	101	192	66.2
11	3.1	44	46	90	25.6	112	150	262	74.4
13	7.6	23	13	36	21.1	87	47	134	78.8
4	2.1	13	19	32	16.8	105	54	159	83.2
7	2.3	21	21	42	13.9	140	119	259	86.0
25	12.8	55	34	89	45.4	61	46	107	54.6
4	2.1	17	7	24	12.4	86	83	169	87.6
23	8.0	61	46	107	37.5	93	85	178	62.5
4	3.7	12	9	21	19.1	53	36	89	80.9
48	8.3	103	75	178	30.7	207	196	403	69.3
1	0.7	44	29	73	54.9	50	10	60	45.1
41	5.4	196	201	397	51.8	153	212	365	48.2
647	6.5	1632	1350	2992	30.2	3474	3420	6894	69.1

TABLE

DEATHS BY CERTAIN

WARDS	Typhoid fever	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Tuberculosis, pulmonary	Tuberculosis, other forms	Other contagious diseases	Cancer
Ahuntsic-Bordeaux.....	1				1	1	12	6	1	13
Bourget.....	1				3	8	31	1	6	27
Crémazie.....	1			1	1	1	13	1	2	10
Delorimier.....	2	4	1		1	10	37	6	7	48
Hochelaga.....	2				1	6	30	7	10	16
Lafontaine.....			1			1	8	2	2	10
Laurier.....	1						16	1	1	25
Maisonneuve.....	1	2				5	26	3	8	24
Mercier.....	2				3	5	12	4	6	10
Montealm.....		1		1		3	15	1	3	6
Mount Royal.....	2						5			10
Notre-Dame de Grâces.....					1	1	19	2	4	31
Papineau.....		1		2	1	3	15	1		16
Préfontaine.....	1		1	4	3	6	9	2	12	13
Rosemount.....	2		3	1	4	10	45	8	11	31
St. Andrew.....			1			2	18	1	2	26
St. Ann.....		1	1		1	1	7		1	19
Ste. Cunégonde.....	1	1		4	3	4	23	1	2	21
St. Denis.....			1	2	3	4	19	2		21
St. Edward.....		3	2		10	6	30	7	7	24
St. Eusèbe.....	1	2	1	1	4	3	23	3	6	14
St. Gabriel.....	2			3		1	20	4	3	18
St. George.....			2		1		15	3	4	23
St. Henry.....		1	1	1	2	8	28	6	3	24
St. James.....	1	1	1	1		3	44	4	7	32
St. John.....		5		1	10	9	20	7	2	22
St. Jean Baptiste.....				1	2	11	25	2	4	41
St. Joseph.....	2	2		2			14	1	1	12
St. Lawrence.....	1	1				4	25	3	6	14
St. Louis.....	2	1		1		1	22	1	4	38
St. Mary.....		1	1		2	5	12	5	4	15
St. Michael.....					1	4	7	1	1	23
St. Paul.....	2		1	2		3	20	66	3	25
Ville Marie.....	1			1			12		1	9
Villeray.....	3	3	2		13	6	40	12	12	50
Unknown.....							5		2	4
Institutions.....	2					29	43	7	47	43
Total.....	34	30	20	29	71	164	766	121	195	808

XVIII

DISEASES, BY WARDS, IN 1931

Diabetes	Cerebral hemorrhage	Endocarditis and myocarditis	Pneumonia	Enteritis	Nephritis	Puerperal state	Diseases of early infancy	Deaths by violence			Other diseases	Total
								Suicide	Homicide	Others		
2	5	24	6	10	15	1	5	.....	.....	5	41	149
5	8	26	6	37	25	3	26	.....	.....	13	81	307
1	2	15	4	11	10	.....	9	4	1	4	46	137
8	5	51	18	35	52	3	51	2	1	17	122	481
5	6	31	6	33	28	.....	26	.....	.....	14	86	307
3	6	10	2	6	19	2	4	.....	.....	3	36	115
1	6	24	5	13	17	.....	6	1	.....	8	49	174
5	9	35	8	26	37	1	23	1	.....	9	95	318
6	4	15	4	23	12	3	23	.....	.....	10	49	191
3	.....	15	9	25	10	1	23	.....	.....	12	49	177
2	3	10	6	3	5	.....	7	1	1	9	33	97
13	13	43	17	6	30	3	25	4	1	11	105	329
1	2	28	5	32	22	2	10	.....	.....	14	61	216
3	3	25	5	30	12	6	25	1	.....	13	46	220
6	6	36	18	44	23	6	44	.....	1	21	139	460
5	11	29	10	5	17	2	7	4	.....	15	66	221
1	5	24	13	17	9	2	8	1	1	10	64	186
4	4	24	6	15	27	4	18	2	1	12	64	241
1	4	33	9	19	28	5	25	2	.....	14	74	266
6	7	33	10	35	45	6	23	1	.....	16	131	402
2	4	21	6	21	21	1	16	.....	1	5	67	223
1	5	28	8	22	22	2	15	1	.....	12	73	240
4	7	15	6	4	6	.....	5	7	.....	10	46	158
8	10	18	17	50	33	4	35	1	.....	17	103	370
7	9	33	6	27	28	3	27	1	3	19	80	337
5	8	30	7	27	12	8	19	.....	.....	12	86	290
5	7	43	8	26	35	4	23	.....	.....	6	109	352
3	5	20	11	8	19	1	9	4	.....	6	50	170
.....	2	20	10	12	11	1	3	1	.....	10	67	191
6	6	49	11	14	18	3	12	3	2	22	85	301
2	6	13	9	30	7	1	20	.....	.....	7	56	196
5	9	27	8	8	12	.....	8	4	.....	8	67	193
3	3	21	17	20	21	4	34	1	1	8	90	285
.....	1	15	3	13	9	1	.....	2	.....	5	37	110
11	7	58	18	30	49	6	51	2	1	23	184	581
.....	2	5	1	33	7	.....	15	1	14	12	32	133
10	7	93	15	204	46	1	50	.....	.....	4	161	762
153	207	1040	328	974	799	90	730	52	29	416	2830	9886

TABLE XX

DEATHS FROM CONTAGIOUS AND PARASITIC DISEASES, BY MONTHS, YEAR 1931

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid fever.....	2	4	.....	2	.....	.....	5	2	6	5	4	4	34
Small-pox.....	1	3	3	2	7	1	1	1	.....	1	3	7	30
Measles.....	5	1	2	.....	.....	3	1	1	1	1	1	4	20
Scarlet fever.....	8	5	4	2	5	2	7	2	12	6	11	7	71
Diphtheria.....	3	2	3	1	2	1	3	3	3	2	2	4	29
Whooping cough.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	3
Meningitis C. S.....	3	1	4	4	3	2	.....	.....	2	.....	1	.....	20
Erysipelas.....	.....	.....	.....	.....	1	.....	1	6	32	27	4	3	74
Poliomyelitis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mumps.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Varicella.....	1	.....	.....	.....	1	.....	2	.....	.....	.....	1	.....	5
German measles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis of the lungs.....	76	77	78	68	69	59	71	60	61	44	39	64	766
Tuberculosis, other forms.....	7	14	9	10	15	13	11	12	4	5	8	13	121
Enteritis.....	49	43	53	60	47	46	133	188	141	89	74	51	974
Influenza.....	26	55	28	22	6	4	1	4	3	4	6	5	164
Total.....	182	205	184	171	156	131	236	279	265	184	155	163	2311

TABLE XXI

DEATHS FROM CERTAIN DISEASES

Average number and proportion per 100,000 population
for each period of 5 years, from 1876 to 1931

Periods of years	(*)	Typhoid	Smallpox	Whooping cough	Scarlet fever	Diphtheria	Tuberculosis		Cancer	Diarrhoea	Bright's disease
							Pulmo- nary	Other forms			
1876-1880	No	81	510	30	35	173	417	.....	46	492	.....
	Rate	59.7	376.1	22.1	25.8	127.6	307.5	.....	33.3	362.8	.....
1881-1885	No	95	634	42	38	214	434	.....	58	523	.....
	Rate	61.9	413.1	27.4	24.7	139.4	282.7	.....	40.7	340.7	.....
1886-1890	No	82	15	59	15	304	513	.....	84	699	.....
	Rate	41.0	7.5	29.5	7.5	151.9	256.3	.....	42.4	349.3	.....
1891-1895	No	50	.....	40	155	114	547	.....	106	806	.....
	Rate	21.8	.....	17.4	67.6	49.7	238.5	.....	46.2	351.4	.....
1896-1900	No	68	5	47	62	182	680	.....	163	663	.....
	Rate	26.6	1.9	18.4	24.3	71.3	266.3	.....	63.5	359.6	.....
1901-1905	No	91	3	68	70	89	616	168	181	1070	126
	Rate	31.7	1.0	23.7	24.4	31.0	214.7	57.0	63.1	373.0	42.7
1906-1910	No	156	.....	85	67	114	683	186	247	1822	232
	Rate	40.0	.....	21.8	17.2	29.3	175.3	47.7	63.4	467.6	59.5
1911-1915	No	108	1	66	90	157	969	183	341	2249	402
	Rate	21.9	0.2	13.4	18.2	31.8	176.2	37.1	69.1	455.9	81.5
1916-1920	No	89	1	63	69	174	929	194	422	1844	509
	Rate	16.1	0.2	11.4	12.5	31.5	168.4	35.2	76.5	334.3	92.2
1921-1925	No	55	.....	45	78	134	785	165	532	1382	612
	Rate	8.5	.....	6.9	12.1	20.8	122.0	25.6	82.6	214.7	95.2
1926-1930	No	139	.....	37	46	143	798	157	681	1028	726
	Rate	18.9	.....	5.1	6.3	19.4	108.4	21.3	92.5	139.7	98.7
1930	No	41	.....	21	41	83	806	177	806	1065	664
	Rate	5.2	.....	2.7	5.2	10.5	102.0	22.4	102.0	134.8	84.1
1931	No	32	.....	30	20	71	766	121	852	974	732
	Rate	3.9	.....	3.7	2.5	8.7	94.2	14.8	104.8	119.8	90.0

(*) In this column, "No" indicates the average number and "Rate" the proportion per 100,000 of population for each of the diseases.

TABLE XXII
DEATHS FROM CERTAIN DISEASES BY NATIONALITIES, IN 1931

Population	504,100—62%	185,400—22.8%	56,900—7%	66,600—8.2%	813,000
Causes of death	French- Canadians	English- Canadians	Jews	Other nationalities or Unknown	Total
Typhoid.....	24—70.6%	4—11.8%	2—5.8%	4—11.8%	34—100.0%
Measles.....	20—66.7%	6—20.0%	.....	4—13.3%	30—100.0%
Scarlatina.....	13—65.0%	7—35.0%	.....	.....	20—100.0%
Whooping cough.....	24—82.7%	3—10.3%	1—3.5%	1—3.5%	29—100.0%
Diphtheria.....	52—73.2%	7—9.9%	1—1.4%	11—15.5%	71—100.0%
Influenza.....	144—87.8%	11—6.8%	2—1.2%	7—4.2%	164—100.0%
Tuberculosis, pulmonary.....	525—68.5%	128—16.7%	31—4.1%	82—10.7%	766—100.0%
Tuberculosis, other forms.....	89—73.6%	17—14.0%	1—0.8%	14—11.6%	121—100.0%
Other contagious diseases.....	137—70.3%	36—18.4%	4—2.1%	18—9.2%	195—100.0%
Cancer.....	482—59.7%	244—30.2%	46—5.6%	36—4.5%	808—100.0%
Diabetis.....	91—59.5%	42—27.5%	15—9.8%	5—3.2%	153—100.0%
Cerebral hemorrhage.....	202—63.1%	86—26.9%	20—6.2%	12—3.8%	320—100.0%
Endocarditis and myocarditis, acute and chronic.....	824—62.3%	373—28.2%	71—5.4%	54—4.1%	1322—100.0%
Pneumonia.....	522—66.9%	147—18.8%	26—3.3%	85—11.0%	780—100.0%
Enteritis.....	806—82.8%	65—6.7%	15—1.5%	88—9.0%	974—100.0%
Nephritis.....	590—73.8%	156—19.5%	21—2.6%	32—4.1%	799—100.0%
Diseases of early infancy.....	685—79.1%	103—11.9%	13—1.5%	65—7.5%	866—100.0%
Accidents.....	299—60.2%	106—21.3%	23—4.6%	69—13.9%	497—100.0%
Total.....	5529—69.6%	1541—19.4%	292—3.6%	587—7.4%	7949—100.0%
Other causes of death.....	1309—67.4%	411—21.3%	80—4.2%	137—7.1%	1937—100.0%
Grand total.....	6838—69.1%	1952—19.8%	372—3.8%	724—7.3%	9886—100.0%

TABLE

DEATHS OF NON-RESIDENTS

Causes of death	French-Canadians						British-Canadians					
	0 to 1 year		1 to 5 years		Over 5 years		0 to 1 year		1 to 5 years		Over 5 years	
	M	F	M	F	M	F	M	F	M	F	M	F
I—Infectious and parasitic diseases.....					7	10					1	.....
Tuberculosis of the lungs....		1			17	25					11	7
Tuberculosis, other forms....			1	2	8	8					1	2
Other infectious and parasitic diseases.....		1	1	2	6	1	2		1	1	5	.....
II—Cancers and other tumors.....				1	33	29					38	18
III-IV-V—Other general diseases.....					14	12				1	7	8
VI—Diseases of the nervous system.....					10	20					12	7
VII—Diseases of the circulatory system.....			1		31	22					37	26
VIII—Diseases of the respiratory system.....	1	1	2	2	5	15	3	1		1	8	4
IX—Diseases of the digestive system.....	13	5	3	3	24	39	3				8	8
X—Diseases of the genito-urinary system.....					23	25					11	12
XI—The puerperal state.....						11						3
XII-XIII—Diseases of the skin, bones, etc.....					1	1	2		1		1	.....
XIV-XV—Congenital malformation and early infancy.....	5	10			1	.....	11	7	1	.....		.....
XVI—Old age.....					1						1	.....
XVII—Violent and accidental deaths.....			1		27	7	1		3		20	5
XVIII—Ill-defined causes of deaths.....					3	1					1	3
Total.....	19	18	9	10	211	226	22	8	6	3	162	103

Number of permits issued for the removal out of the City, of the bodies of persons dying in the City.

Men..... 829

Women..... 791

Total..... 1620

861 permits to enter Montreal were also issued for persons residing and having died outside of the City.

XXIII

OF MONTREAL, IN 1931

Jews						Other nationalities or unknown						Total		
0 to 1 year		1 to 5 years		Over 5 years		0 to 1 year		1 to 5 years		Over 5 years		M	F	Grand total
M	F	M	F	M	F	M	F	M	F	M	F			
										1		9	10	19
				2						4	1	32	36	68
				1						1	1	12	13	25
										1		16	5	21
				4	2					1		76	50	126
					1						1	21	23	44
					1							22	28	50
				5	3					5		79	51	130
						1				2		22	24	46
					1	1				7		59	56	115
					1					3		37	38	75
													14	14
												5	1	6
						1	2					19	19	38
												2		2
				4	1					7	1	63	14	77
				2		1						7	4	11
				16	12	4	2			32	4	481	386	867

TABLE

CLASSIFICATION OF DEATHS BY CAUSES,

Causes of death	French-Canadians						British-Canadians					
	0 to 1 year		1 to 5 years		Over 5 years		0 to 1 year		1 to 5 years		Over 5 years	
	M	F	M	F	M	F	M	F	M	F	M	F
Typhoid and paratyphoid fevers.....					11	13					2	2
Measles.....	3	2	6	6	1	2			2	3	1	1
Scarlet fever.....	2		4	3	4				5		1	1
Whooping-cough.....	9	7	4	4			1	2				
Diphtheria.....			13	18	7	14	1	1		1	2	2
Grippe and influenza.....	9	31	12	22	39	31					4	7
Tuberculosis, all forms.....	8	9	13	9	259	316	2		1	2	84	56
Syphilis.....	18	15	6	3	6	2	1	1			11	3
Other infectuous and paratyphoid diseases.....	12	7	22	14	17	15	1	2	3	4	5	5
Cancer and malignant tumors.....			1		221	260					120	124
Diabetes.....					40	51			1		17	24
Other tumors and other general diseases.....	5	4	8	5	50	55	4	2	4	4	10	25
Diseases of the nervous system.....	31	27	18	22	164	167	5	2		2	62	63
Diseases of the circulatory system.....	3	3	1	3	431	503					224	239
Diseases of the respiratory system.....	143	100	75	82	144	127	20	13	9	7	70	60
Diseases of the digestive system.....	375	326	59	40	189	196	27	24	7	4	58	48
Diseases of the genito-urinary system.....	4	2	2	2	303	374					84	91
The puerperal state.....						66						15
Diseases of the skin and cellular tissue.....	14	5	2	1	6	5	1				6	6
Congenital malformation and early infancy.....	388	294	1	1	1		55	44	3			1
Old age.....					18	35					7	10
Violent deaths and accidental.....	2	2	27	11	200	57			2	2	75	27
Ill-defined causes of deaths.....	3		2		42	9	1	1			21	3
Total.....	1029	834	276	246	2153	2298	119	92	37	29	864	812

XXIII a

AGES, SEX AND NATIONALITIES, IN 1931

Jews						Other nationalities or unknown						Total		
0 to 1 year		1 to 5 years		Over 5 years		0 to 1 year		1 to 5 years		Over 5 years		M	F	Grand total
M	F	M	F	M	F	M	F	M	F	M	F			
				1	1					3	1	17	17	34
						2	2					15	15	30
												16	4	20
		1								1		15	14	29
				1		2	4	3		2		28	43	71
	1			1		1	2	3	1			67	97	164
			1	18	13	2	2	1	60	31		447	440	887
				2		3	4	1	2	1		49	30	79
				1	1			6		1		68	48	116
				24	22					22	14	388	420	808
				4	11					3	2	65	88	153
1				5	6	1	2			8	4	96	107	203
3				14	18	3			2	17	9	317	312	629
				39	45	1				38	24	737	817	1554
4	3		2	16	8	25	20	7	4	32	12	545	438	983
6	7			10	9	42	40	5	3	31	8	809	705	1514
	1			15	11					22	20	430	501	931
											9		90	90
				1	3	1	3		1		2	31	26	57
7	5		1			29	35			1		485	381	866
				1	3					2		28	48	76
	1	1	2	10	9	12	2	4	2	41	8	374	123	497
					2					10	1	79	16	95
21	18	2	6	163	162	118	114	30	21	294	148	5106	4780	9886

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
sex and ages.

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929
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	
4	1	3	2	...	1	1	2	3	...	...	...	1	2	1	...	...	...	...	...	...	...	...	...	...	...	1
...	1	...	...	...	...	...	...	...	...	...	...	...	...	2
...	3
...	4
...	5
...	6
...	a)
...	b)
...	c)
...	7
...	8
...	9
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
...	11
1	...	2	...	...	...	...	1	5	3	4	...	1	2	4	...	3	2	1	1	3	8	6	5	...	2	a)
1	1	...	...	...	...	1	2	1	1	1	...	2	2	...	2	1	1	1	2	1	...	...	1	b)
...	12
...	13
...	a)
...	b)
...	c)
...	a)
...	b)
...	c)
...	d)
...	1	...	...	...	...	1	...	...	1	...	...	...	...	2	1	...	...	2	...	1	...	...	...	15
...	16
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	17
...	18
...	19
...	20
...	21
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
46	74	43	67	31	40	43	28	37	23	41	20	33	14	28	10	14	11	10	6	8	3	2	...	...	...	23
1	1	1	...	1	...	1	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	24
1	2	...	2	...	1	...	...	1	...	1	2	1	...	...	1	...	1	...	1	...	...	...	...	...	...	25
1	...	1	1	1	...	...	1	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	26
2	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	27
1	28

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929
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	
					1																					29
		1				1		1		1		1				1										30
																										31
	1	1	1	1	1	1	1		1	1											1	1				32
		2												1		1										a)
																										b)
																										c)
																										33
																										34
																										a)
																										b)
																										c)
																										35
																										36
																										a)
																										b)
																										c)
																										37
																										38
																										a)
																										b)
																										39
																										40
																										41
																										a)
																										b)
																										42
																										43
																										44
59	81	54	77	37	45	47	35	52	32	52	28	42	20	42	13	25	18	15	10	14	14	12	5		3	
						1		3		5	1	9	1	6		9		9		8	1	5			1	45
																										46
				1	1	1	4		5	4	6	2	11	8	21	4	18	11	9	18	21	13		1		a)
			1		1					1	1		3	3	4	1		3	5	1	3	4		4		b)
1					2				1	2	4	4	3	3	3	9	4	3	2	3	9	16	1	1		c)
		1							1	1		2		2	1	1		1		1				1		d)
									1	1																e)
																										f)
	2					1	2	2	3	3	1	8	3		6	6	6	7	7	9	10	3	6			g)
			1	2							2		5	2	8	1	5	1	4	2	6			1		47

TABLE

CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
					M	F	M	F	M	F	M	F	M	F	M	F
48	Cancer and malignant tumor of the uterus.....	93		93												
49	Cancer and malignant tumor: other female genital organs...	9		9												
50	Cancer and malignant tumor of the breast.....	83		83												
51	Cancer and malignant tumor of male genito-urinary organs...	59	59								1					
52	Cancer and malignant tumor of the skin.....	17	9	8							1					
53	Cancer and malignant tumor of other organs not stated.....	58	29	29				1		1	1		1	1		
54	Tumors (non-malignant): a) female genital organs..... b) other organs.....	16 15		16 6		1	1							1		
55	Tumors whose character is not specified: a) female genital organs..... b) other organs.....	1 12		1 5				1	2		2	1		1		
	Total.....	852	404	448	1	1	1	3		6	2		3	1		
III.—Rhumatic Diseases, Diseases of the Nutrition of Endocrin Glands and other General Diseases.																
56	Acute articular rhumatic fever.....	24	13	11					1	1	1	3	3		1	
57	Chronic rhumatism, osteoarthritis.....	15	9	6											1	
58	Gout.....															
59	Diabetes mellitus.....	153	65	88				1		1				2		
60	Scurvy: a) infantile scurvy (Barlow's disease)..... b) scurvy.....	1	1					1								
61	Beriberi.....															
62	Pellagra.....	1		1												
63	Rickets.....	6	4	2	1		1	3	1							
64	Osteomalacie.....															
65	Disease of the pituitary gland (hypophysis).....															
66	Disease of the thyroid gland and parathyroid glands: a) goitre..... b) exophthalmic goitre..... c) myxoedema and cretinism..... d) tetany..... e) others.....	2 11 3 3		2 9 3 1												
67	Diseases of the thymus.....	13	8	5	5	3	2	1	1	1						

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

[illegible]

TABLE

CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
					M	F	M	F	M	F	M	F	M	F	M	F
68	Diseases of adrenals, Addison's disease (not tubercular).....	4	2	2												
69	Other general diseases.....	1	1													
	Total.....	237	107	130	7	3	2	2	8	5	2	3	3	2	2	2
IV.—Diseases of the Blood and of the Hematopoietic Organs.																
70	Haemorrhage:															
	a) primitive purpuras.....	8	3	5							1				1	1
	b) haemophilia.....	4	2	2		1										
71	Anaemia:															
	a) pernicious progressive anaemia.....	22	10	12					1			1				
	b) others.....	5	4	1					2	1						
72	Leukaemia:															
	a) leucocythaemia.....	15	6	9		1				3		2				1
	b) lymphadenoma.....	9	5	4	1											
73	Diseases of the spleen.....	1		1												
74	Other diseases of the blood and of the hematopoietic organs..															
	Total.....	64	30	34	1	2			3	4	1	3			1	2
V.—Chronic Poisoning and Intoxication.																
75	Chronic or acute alcoholism.....	9	6	3												
76	Other chronic poisoning by organic substances:															
	a) professional.....															
	b) others.....	1	1													
77	Chronic poisoning by mineral substances:															
	a) professional.....															
	b) others.....	1	1													
	Total.....	11	8	3												
VI.—Diseases of the Nervous System and Sense Organs.																
78	Encephalitis (non epidemic):															
	a) abscess of brain.....	4	2	2		1										
	b) others.....	5	3	2												
79	Meningitis simple.....	84	41	43	11	6	6	4	10	18	3	7	3	1	2	1
80	Progressive locomotor ataxy....	9	6	3												
81	Other diseases of the spinal cord.....	23	12	11	1							1		1		

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929
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	
...	2	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	68
...	69
3	...	2	3	7	1	7	3	2	5	5	9	10	15	4	14	9	11	11	16	18	29	5	7	...	...
...	1	...	1	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...	1	...	...	70
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	a)
...	1	...	1	...	2	...	1	2	1	2	...	2	1	...	2	...	2	2	1	...	...	...	...	b)
...	2	...	...	...	...	...	...	...	...	72
...	1	1	...	...	...	1	...	1	...	1	2	1	...	...	1	...	1	...	1	...	1	...	...	...	...	a)
...	1	...	...	...	...	...	...	...	...	...	...	b)
...	73
...	74
1	2	1	2	1	1	1	3	1	2	5	4	3	...	2	3	1	2	4	...	3	3	1	1	...	...
...	...	1	1	...	1	1	...	...	...	1	1	...	...	2	...	1	...	...	...	...	...	...	...	...	...	75
...	76
1	a)
...	b)
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	77
1	...	1	1	...	1	1	...	...	...	2	1	...	...	2	...	1	...	...	...	...	...	...	...	...	...	a)
...	b)
...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	78
...	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
1	2	2	2	1	...	2	2	1	...	1	...	...	...	1	1	...	1	1	...	1	1	...	...	...	...	b)
...	79
...	80
...	1	...	...	1	...	1	1	1	...	1	1	1	...	1	...	...	1	4	...	1	4	...	1	...	...	81

TABLE

CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
					M	F	M	F	M	F	M	F	M	F	M	F
82	Cerebral haemorrhage, embolism, cerebral thrombosis:															
	a) cerebral haemorrhage.....	207	109	98				1								
	b) embolism or cerebral thrombosis.....	29	12	17				1								
	c) hemiplegia and causes not specified.....	84	31	53												
83	General paralysis.....	55	37	18												
84	Dementia praecox and other psychosis:															
	a) dementia praecox.....	2	1	1												
	b) other psychosis.....	21	6	15												
85	Epilepsy.....	18	9	9							1			2	1	
86	Infantile convulsions (under 5 years of age).....	26	16	10	8	2	5	3	3	5						
87	Other diseases of the nervous system:															
	a) chorea.....	1		1												1
	b) neuritis.....															
	c) paralysis agitans.....	4	2	2												
	d) insular sclerosis.....	2		2												
	e) others.....	7	2	5				2								
88	Diseases of the eye and annexa.....	2	1	1	1											
89	Diseases of the ear and of the mastoid sinus:															
	a) otitis.....	31	15	16	5	7	4	2	1	2		3	2	1	1	
	b) others.....	15	12	3	1				3	1	1			1	2	1
	Total.....	629	317	312	27	16	15	13	18	26	5	11	5	6	7	3
VII.—Diseases of the Circulatory System.																
90	Pericarditis.....	8	5	3	2		1				1					
91	Acute endocarditis.....	30	12	18				2		2			1	1		5
92	Chronic endocarditis, including valvular disease.....	336	141	195					1		4	4	3	3	4	5
93	Diseases of the myocardium:															
	a) acute myocarditis.....	33	8	25						1		2				2
	b) chronic myocarditis and degeneration of myocardium.....	637	299	338												
	c) unstated.....	4	1	3							2					1
94	Diseases of the coronary arteries and angina pectoris.....	128	87	41												1
95	Other diseases of the heart:															
	a) functional diseases of the heart.....	42	11	31												
	b) others and unstated.....	104	58	46		1								1		
96	Aneurism, except aneurism of the heart.....	9	5	4												
97	Arteriosclerosis, except diseases of the coronary arteries.....	190	90	100												
98	Gangrene:															
	a) senile.....	5	3	2												
	b) others.....	5	2	3												
99	Other diseases of the arteries.....	16	11	5							1					

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929	
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		
		1		3		3	2	6	4	11	5	10	11	12	6	18	15	13	17	19	19	10	17		1	82 a)	
	1						1	1				3	2		1	1	1	2	2	4	6	1	1		1	82 b)	
	2			1		1			1	1	2	2	4	3	4	3	8	3	5	11	11	6	15		1	83 c)	
1						2		3		3		6	2	7	1	1		2	4	10	10	2	1			83	
									1											1						84 a)	
	4	1	1		1	1	1	1			2	1	2		1		1			1				1		84 b)	
1	1	2	1	1			3			1				1		1				1	2					85	
																										86	
																										87 a)	
				1															2	1						87 b)	
															1						1					87 c)	
						1	2			1							1									88 d)	
																							1			88 e)	
																										88	
1	1					1					2															89 a)	
1				1																1						89 b)	
5	12	6	5	10	1	14	14	14	6	24	10	24	21	25	15	24	28	25	31	50	54	19	37		3		
		1															2			1						90 a)	
2	2	2		1	1		1	4	1		1				2	1				1						90 b)	
1	4	7	9	4	6	7	7	5	14	11	12	9	11	11	15	15	23	11	19	34	41	14	19		3	92 a)	
			1		2	3			1				2	2	3		2		1	1	6	2	2			93 a)	
3	2		2	2	4	5	5	9	9	11	11	22	20	17	15	32	35	42	43	105	96	43	78	6	17	94 b)	
					1										1		1									94 c)	
		1				3	1	6	1	9	2	6	3	19	5	6	9	18	5	16	11	3	4			94 d)	
																										95 a)	
				1	2				1	2	3		3	1		1	2	4	2	2	2	7		7	2	1	95 b)
1			1	1	1	6	6	4	3	3	2		3	2	4	1	9	7	5	7	17	11	4	4		1	96 a)
												1				2		2	2		1		1			96 b)	
					1				2	4	1	2	2	8	4	13	11	8	17	33	33	20	22	1	8	97 a)	
													1				1				1		1			97 b)	
											1									1			1			98 a)	
											3	1	2						2	1	3	3				98 b)	
								1																		99 a)	
																										99 b)	

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929
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	
	1									2								1								100
																										101
																		1		1						102
																										103
7	9	11	13	9	16	26	20	29	32	45	34	46	42	61	47	81	96	90	97	216	210	86	139	9	30	
		1																1								104
																										105
										1																106
				1		1				1		1					1	2	1	2	6	2	2	1		a)
											1									1						b)
																										c)
1	2	2	1	4	1	3	4	5	...	4	1	4	2	5	2	4	4	5	3	8	9	5	7	1	1	107
6	1	...	1	2	...	5	3	7	5	7	3	12	5	6	3	8	...	3	5	15	22	4	7	1	1	108
2	...	2	2	1	1	1	3	...	1	2	2	5	3	2	2	4	...	6	4	8	6	5	12	...	...	109
1	1	...	...	...	...	2	1	...	...	2	2	2	3	...	1	...	2	...	1	1	...	...	...	...	...	110 a)
2	...	2	...	...	1	2	...	1	...	2	2	2	...	...	...	...	...	...	1	...	...	...	...	...	...	b)
			1			3	2		1	2	2	2	4	2	...	4	2	2	...	2	5	2	3	...	1	111
									1			3					1	2	2	1	2		2			112
																										113
																										114
		1																								a)
			1		2					1				3		1		1		2						b)
12	4	8	6	8	5	17	13	13	9	19	11	29	17	18	7	22	9	23	16	42	53	20	36	3	3	
1	...	1	2	...	...	2	1	...	3	1	...	1	1	...	...	2	...	2	...	...	...	...	1	...	...	115
																										116
			2	...	1	...	1	5	3	4	2	4	2	7	...	4	1	3	2	2	2	...	...	...	...	117
								1	...	1	...	5	...	2	...	1	...	1	...	...	...	...	...	...	...	a)
																										b)

XXIV.

TO THE INTERNATIONAL NOMENCLATURE

and ages—(Continued)

[illegible]

TABLE

CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
					M	F	M	F	M	F	M	F	M	F	M	F
139	Non-venereal diseases of the female genital organs:															
	a) fallopian tube and parametrium.....	30		30												1
	b) uterus.....	6		6												
	c) mammae.....															
	d) others.....															
	Total.....	931	430	501	2	2	2	1	2	2	5	2	4	3	5	
	XI.—The Puerperal State.															
140	Abortion, with septic conditions.....	5		5												
141	Abortion, without mention of septic conditions, including haemorrhages.....	5		5												
142	Ectopic gestation.....	4		4												
143	Other accidents of gestation (haemorrhages not included)...	2		2												
144	Puerperal haemorrhage:															
	a) placenta proevia.....	8		8												
	b) other haemorrhages.....	5		5												
145	Septicaemia and puerperal sepsis (not returned as result of abortion):															
	a) Puerperal septicaemia and puerperal pyaemia.....	29		29												
	b) puerperal tetanus.....															
146	Puerperal albuminuria and eclampsia.....	15		15												2
147	Other forms of toxæmia of pregnancy.....	3		3												1
148	Phlegmasia alba dolens, embolism or sudden death (not returned as septic):															
	a) phlegmasia alba dolens and thrombosis.....															
	b) embolism and sudden death.....	4		4												1
149	Other accidents of pregnancy...	9		9												
150	Other stated diseases or conditions not mentioned (puerperal state).....	1		1												1
	Total.....	90		90												5
	XII.—Diseases of the Skin and Cellular Tissue.															
151	Furunculosis.....	8	3	5	2	3										
152	Phlegmon.....	31	21	10	10	4	2		2	1					1	
153	Other diseases of the skin, annæxa, and of the cellular tissue.....	9	1	8	1		1									
	Total.....	48	25	23	13	7	2	1	2	1					1	

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1929
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	
...	6	...	4	...	9	...	4	...	3	...	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	139
...	2	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
2	15	6	14	5	25	16	21	24	26	16	29	40	36	39	40	50	54	60	63	105	107	46	48	7	7	
...	2	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140
...	2	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	141
...	1	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	142
...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	143
...	2	...	2	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	2	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	4	...	9	...	8	...	5	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	145
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	3	...	3	...	3	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146
...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	148
...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	3	...	2	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	149
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150
...	17	...	18	...	25	...	16	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	
...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	151
...	...	1	1	...	...	1	...	1	1	...	1	1	1	1	...	...	...	...	...	1	1	...	...	...	...	152
...	...	...	...	...	...	1	...	1	...	1	...	1	...	2	...	...	...	...	...	...	1	...	...	...	...	153
...	
...	2	1	...	...	1	2	1	2	...	2	1	2	1	3	...	...	...	...	...	1	2	...	...	...	...

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

[illegible]

TABLE

CLASSIFICATION OF DEATHS ACCORDING

By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years*	
					M	F	M	F	M	F	M	F	M	F	M	F
	XVII.—Violent Deaths and Accidental.															
163	Suicide by solid or liquid poisons and corrosive substances.....	7	5	2												
164	Suicide by poisonous gases.....	9	6	3												
165	Suicide by hanging or strangula- tion.....	10	8	2												1
166	Suicide by drowning.....	8	4	4												
167	Suicide by firearms.....	7	7													
168	Suicide by cutting or piercing instruments.....	9	9													
169	Suicide by jumping from high places.....	2		2												
170	Suicide by crushing.....															
171	Suicides by other means.....															
172	Infanticide (under one year): a) immediately after birth....	13	12	1	12	1										
	b) others, under one year.....	1		1		1										
173	Homicide by firearms (one year and over).....	5	4	1												
174	Homicide by cutting and piercing instruments (one year and over).....	5	4	1												1
175	Other homicides of persons of one year and over.....	5	4	1												
176	Poisoning by venomous animals.....								1							
177	Poisoning by food.....															
178	Accidental absorption of poison- ous gas.....	12	8	4			1				1					
179	Other acute accidental poisoning (not by gas).....	12	5	7					1	2						
180	Conflagration.....	4	4													
181	Accidental burns (conflagration excepted).....	35	23	12		1	1	1	11	4	1		1		1	
182	Accidental mechanical suffoca- tion.....															
183	Accidental drowning.....	80	71	9					2		2		5	1	15	2
184	Accidental injury by firearms, except combatants in battle..	10	10												2	
185	Accidental injury by cutting or piercing instruments, except combatants in battle.....	2	1	1												
186	Accidental injury by fall, crush- ing, land slide.....	89	63	26			1	9	2	2	1	3	1		2	
186	1) Accidental injury in mining and quarrying.....	1	1													
	2) Accidental injury by machine- ry.....	8	8												1	
	3a) Railway accidents.....	8	7	1						1						
	3b) Tramway accidents.....	5	4	1											1	
	3c) Automobile and motorcycle accidents.....	128	86	42				8	7	11	5	5	1	6	2	
	3d) Accidents by other means of transportation by land...	3	3					1		1						

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

[illegible]

TABLE

CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

No. of 1929	International Classification	Total	M	F	0 to 5 months		6 m. to 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
					M	F	M	F	M	F	M	F	M	F	M	F
	3e) Accidents by water transportation.....															
	3f) Accidental injury by aerial transportation.....	4	4													
187	Cataclysm.....															
188	Injury by animals.....															
189	Hunger or thirst.....															
190	Excessive cold.....															
191	Excessive heat.....	5	3	2												
192	Lightning.....															
193	Accidental injury by electric currents (lightning excepted)...	3	3													
194	Other accidents:															
	a) foreign body.....	1	1													
	b) others.....	6	6						1							
195	Violent death of unstated nature or unknown cause.....															
196	War injuries.....															
197	Execution of civilians by belligerent armies.....															
198	Execution (sentence of death)...															
	Total.....	497	374	123	12	3	2	2	34	17	17	7	14	3	31	
	XVIII.—Ill-defined Causes of Death.															
199	Sudden death.....	92	79	16	3	1			1						1	
200	Cause of death unstated or not specified.....	3	3		1				1							
	Total.....	95	79	16	4	1			2						1	
	Total M.....		5106		1043		244		345		113		62		110	
	Total F.....			4780		830		228		302		105		55		133
	Grand total.....	9886	9886		1873		472		647		218		117		240	

XXIV.

TO THE INTERNATIONAL NOMENCLATURE
and ages—(Continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years	No. of 1929	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
																									3e)	
		1		3																						3f)
																										187
																										188
																										189
		1											1						1	1			1			190
																										191
																										192
						2		1																		193
																1										194
		1						2					1									1				a)
																										b)
																										195
																										196
																										197
																										198
38	7	31	8	23	7	31	6	37	7	26	5	21	7	16	7	12	4	10	7	13	13	6	9			
			1	2		2		9	1	10	2	10	2	9	1	7	4	7	2	12	2	2		1		199
						1																				200
			1	2		3		9	1	10	2	10	2	9	1	7	4	7	2	12	2	2		1		
140		141		123		183		220		259		307		306		321		334		592		236		27		
	164		168		163		163		180		184		230		219		307		319		616		356		61	
304		309		286		346		400		443		537		525		628		653		1208		592		88		

METEOROLOGICAL SERVICE OF CANADA,
Observations made at McGill Observatory,
Long. 75° 35' W.

Month	Thermometer					*Barometer			
	† Mean	(a) Deviation from years means	Maximum	Minimum	Mean daily range	† Mean	Maximum	Minimum	Mean daily range
January.....	14.91	+1.83	37.6	-7.4	13.27	29.932	30.50	29.18	.309
February.....	19.02	+3.87	36.0	-4.5	14.30	30.023	30.57	29.60	.240
March.....	34.37	+8.36	51.2	14.2	10.20	29.936	30.49	29.32	.175
April.....	46.59	+5.63	79.4	26.3	17.05	29.940	30.46	29.06	.326
May.....	56.92	+2.11	87.0	32.8	18.70	29.869	30.18	29.49	.179
June.....	66.46	-2.02	89.0	49.0	18.35	29.923	30.26	29.39	.173
July.....	72.55	+3.34	97.0	56.5	18.19	29.841	30.10	29.47	.139
August.....	68.41	+1.86	89.8	53.0	16.71	29.986	30.29	29.67	.127
September.....	61.99	+3.37	90.0	42.2	15.05	29.927	30.42	29.45	.237
October.....	51.94	+5.25	76.3	34.7	13.59	29.950	30.43	29.22	.235
November.....	41.57	+8.21	67.0	22.3	12.25	30.057	30.54	29.45	.313
December.....	24.83	+5.02	46.0	-1.3	13.67	30.027	30.63	29.49	.400
Sums for 1931.....	559.36					11.411			
Means for 1931.....	44.61	+4.33	70.52	26.48	15.19	29.951	30.406	29.399	.238
Means for 57 years ending Dec. 31st, 1931.....	42.38		66.41	19.18		29.981			.232

* Barometer readings reduced to sea level and 32° F. † The monthly thermometer and barometer means are from bi-hourly readings from self-recording instruments. (a) "+" indicates that the temperature has been higher; "-" that it has been lower than the average for 57 years. ‡ Humidity relative, saturation being 100. Means of readings every four hours from recording hygrometer. ¶ For 50 years only. § For 50 years only. The anemometer and wind vane are exposed at the summit of Mount Royal, 54 feet above the ground and 807 feet above sea level.

The greatest heat was 97.0 (Fah.) above zero, on July 1st., the greatest cold was -7.4 below zero on Jan. 25th. The extreme range of temperature was therefore 104.4 degrees.

ABSTRACT FOR YEAR 1931

Montreal, Can. — Lat. 45° 30' N.

Height above the sea level 187'.

† Mean relative humidity	Wind		Per cent possible sunshine	Precipitation						
	Resultant direction	Mean velocity M. P. H.		Inches rain	No. of days on which rain or sleet fell	Inches snow	Inches of rain and melted snow	No. of days on which snow fell	No. of days on which rain and snow fell	No. of days on which rain or snow fell
78.1			36.74	.02	1	31.8	2.84	13	1	14
75.8			32.60	.75	1	23.7	2.92	19	1	20
73.0			29.98	.78	4	8.3	1.69	10	2	12
61.6			51.17	2.82	10	T	2.85	T		10
69.4			46.00	2.74	12		2.74			12
68.3			65.76	3.81	10		3.81			10
74.3			55.26	4.23	15		4.23			15
70.5			58.20	1.75	10		1.75			10
75.7			46.93	7.44	16		7.44			16
74.4			45.71	3.91	13		3.91			13
77.7			26.22	2.52	12	1.6	2.93	3	3	12
77.1			27.30	1.17	7	20.0	3.36	11	2	16
			521.87	31.94	111	85.4	40.47	56	9	160
74.7			43.50							
74.2			43.79	29.39	110	115.3	41.23	79	15	175

The greatest temperature range in one day was 33.0 on April 13th; the least range was 2.5° on Dec. 22nd. The warmest day was July 1st., when the mean temperature was 83.4 above zero. The coldest day was Jan. 24th., when the mean temperature was -4.3 below zero. The minimum relative humidity was 30 on April 8th. Hail on — days. Fog on 4 days. Thunderstorms on 24 days. Auroras observed on nights. Lunar halos on 10 nights. Solar halos on 1 day. First trace of snow on Nov. 5th. First appreciable snowfall on Nov. 5th. First sleighing on Dec. 3rd. First zero weather on Dec. 8th. The greatest rainfall in one day was 1.47 inches on April 26th. The heaviest snowfall was on Jan. 6th., when 9.5 inches fell in 25 hours. **Note.**—Yearly means are averages of monthly means.









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