

Report of the Department of Health / City of Montreal.

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Report of the Department of Health

of

MONTREAL, P.Q., (Canada)

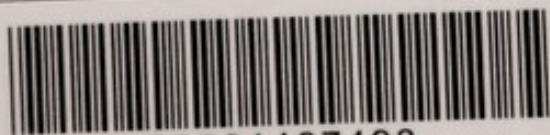
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Year 1933

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Report of the Department of Health
of

MONTREAL, P.Q., (Canada)

•
Year 1933
•

By DOCTOR S. BOUCHER, D.P.H.
DIRECTOR.

CITY OF MONTREAL

MAYOR :

His Worship The Honourable FERNAND RINFRET, M.P.

EXECUTIVE COMMITTEE :

Alderman J. M. GABIAS, M.P.P., President; Aldermen A. LEGAULT, A. A. DesROCHES, J. MONETTE, L. O. BELLI, Members.

HEALTH COMMISSION :

Alderman J. M. GABIAS, M.P.P., President ;
Aldermen H. A. QUINTAL, M.D., Z. H. LESAGE, M.D., F.L.
DEMERS, M.D., and Dr. S. BOUCHER, D.P.H., Dr. L. de L.
HARWOD, Dr. E. G. ASSELIN, Dr. A. GRANT FLEMING, Dr.
FRANK G. PEDLEY, members.

HEALTH DEPARTMENT :

S. BOUCHER, M.D., D.P.H., Director.
L. de G. SYLVESTRE, Secretary.

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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.
- 2 Asst.-analysts.
- 1 Technician.
- 2 Laboratory helpers.
- 1 Junior typist clerk.

DIVISION OF STATISTICS :

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

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.
- 1 Physician.
- Mr. J. DESROCHERS, Supervisor, Meurling Refuge.
- 1 Senior clerk.
- 2 Furnacemen.
- 1 Head laundryman.
- 1 Head cook.
- 5 Guards.



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ANNUAL REPORT

1933

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 1933.

Expenses.

The total expenditure for 1933, in the Department of Health amounted at \$3,427,433.66, distributed as follows:

Hygiene	\$ 562,542.52
Municipal Assistance	2,537,200.62
Pensions and annuities (pensioners)	307,690.52
Allocations to Universities.	20,000.00

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

The City's population for 1933 having been estimated at 847,000, the expenditure for the section of Hygiene is distributed at the rate of \$0.664 per capita of population; the rate for the Municipal Assistance being \$2.995; the decrease of expenditure over the year 1932 was for Hygiene properly speaking \$0.014 cent per head of population.

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

Hygiene.

GENERAL ADMINISTRATION EXPENSES :

Library : books and re-views	\$ 273.22	
Lecture to the public and to the staff	20.00	
Auto service (Director's office) . . . . .	.....
Illustrated publications on hygiene	2,949.98	
Baby clinics, subsidies.. .	8,500.00	
Collection of birth records.	1,973.78	
Laurier Clinic.	551.15	
Health Commission.. . . .	1,150.00	
	<hr/>	\$ 15,418.13

DIRECTOR'S OFFICE :

Salaries	\$ 13,640.00	
Employees' transportation allocation	360.00	
Supplies	190.38	
Congress	149.66	
Casual	183.91	
	<hr/>	\$ 14,523.95

SANITATION :

Salaries	\$ 73,459.66	
Employees' transportation allocation	4,732.92	
Supplies for plumbing tests, etc.	92.65	
Supplies for: Plumbers' examinations.. . . .	30.16	
Fees: Plumbers' examiners	400.00	
Uniforms	1,715.01	
Congress	150.00	
Supplies	122.77	
Casual	203.00	
	<hr/>	\$ 80,906.17

CONTAGIOUS DISEASES :

Salaries	\$ 33,386.63	
Employees' transportation allocation	3,032.34	
Disinfectants	114.00	
Supplies	423.50	
Vaccine	1,600.00	
Maintenance of smallpox hospital	950.64	
Transportation of patients		
Houses quarantined.		
Clinic for the treatment of scabies	6.17	
Uniforms	517.15	
Stamped envelopes	264.00	
Casual	190.10	
Refrigerator	300.00	
	<hr/>	\$ 40,784.53

CHILD HYGIENE :

Salaries	212,083.12	
Employees' transportation allocation	1,898.04	
Municipal baby clinics and maternal clinics	17,104.25	
Baby camps	90.07	
Supplies	3,556.56	
Stamped envelopes	1,084.00	
Diphtheria immunization	11,134.01	
Measuring scales	287.27	
Uniforms	4,202.61	
Scholarship	1,200.00	
Purchase of serum re: Polio-myelitis	1,250.99	
Dental clinics	1,386.50	
Dental clinics	203.00	
	<hr/>	\$ 255,480.42

FOOD INSPECTION :

Salaries	\$ 90,836.33	
Employees' transportation allocation	4,775.10	
Special inspection	27.38	
Samples of food	3.70	
Supplies	1,107.58	
Auto service (superinten- dent)	220.93	
Travelling expenses (milk inspectors in the country)	14,005.50	
Medical examination of dairy employees	224.63	
Rental of Butchers' stalls Nos. 51 and 53, Bonse- cours Market	678.36	
Casual	212.81	
	<hr/>	\$ 112,092.32

MEDICAL CONTROL :

Salaries	\$ 14,585.26	
Employees' transportation allocation	405.55	
Supplies, casual, interpreter	139.42	
Scholarship	600.00	
	<hr/>	\$ 15,730.23

STATISTICS :

Salaries	\$ 9,960.00	
Supplies	3.08	
Congress	84.55	
Casual	200.00	
	<hr/>	\$ 10,247.63

LABORATORIES :

Salaries	\$ 15,180.00	
Material, apparatus, instru-		
instruments	630.49	
Supplies	589.14	
Milk analysis	775.83	
Casual	183.68	
	<hr/>	\$ 17,359.14
Total		<hr/>
		\$ 562,542.52

Municipal assistance.

Salaries	\$ 30,169.56	
Employees' transportation		
allocation	1,553.58	
	<hr/>	\$ 31,723.14

ADMINISTRATION :

Supplies	162.51	
Congress .. . . . . . . . . . .	.....
Casual	184.24	
Adding machine	277.00	
	<hr/>	\$ 623.75

SOCIAL SERVICE EXCHANGE

GE	\$ 95.60	95.60
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ASSISTANCE :

Burial of poor and unknown		
people	\$ 4,317.19	
Repatriation of strangers	3,495.09	
	<hr/>	\$ 7,812.28

SUBSIDIES AND ALLOCATIONS TO CHARITABLE INSTITUTIONS :

Art. 338a of the Charter	\$ 67,300.00	
Art. 351b of the Charter	385,558.50	
	<hr/>	\$ 452,858.50

CONTRACTS, STATUTORY OBLIGATIONS AND
OTHERS :

Maintenance of insane	\$367,458.85	
Destitute children in Industrial schools	90,548.15	
Juvenile Court	6,500.00	
Maintenance of children in Reform schools	37,624.29	
Hospitalization of incurables	59,943.82	
Hospitalization of tuberculous	73,000.00	
Grey Nuns (Home)	14,600.00	
Oeuvres de Notre-Dame de la Merci (Home)	34,218.75	
St. Luke Hospital (vagrants, etc.)	10,950.00	
Hospitalization of indigents (Quebec Public Charities Act): Paid to institutions	1,218,238.35	
x Government's account	112,722.11	
	<hr/>	\$2,025,804.32

MEURLING REFUGE :

Salaries	\$ 14,820.00	
Food	} 3,220.94	
Maintenance		
Linen		
Uniforms	242.09	
	<hr/>	\$ 18,283.03

Total \$2,537,200.62

(x) 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 the City of Montreal computed by the Superintendent of the Division of Statistics of the Department of Health, was evaluated to 847,000 inhabitants, on July 1st, 1933.

It is an increase of 14,000 on the year 1932.

The natural increase of the population being 9,456, a number of 4,544 was added to this figure to cover the surplus of immigration over emigration.

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

BIRTH RATE.

The number of births in 1933 was 19,431; in 1932 it had been 19,997, showing therefore a decrease of 1,566 compared with the preceding year and of 2,268 over the year 1931.

The proportion of births per 1,000 inhabitants for 1933, based on the valuation of the population at 847,000 is 21.76, showing a slight decrease of 2.25 over 1932 and being 3.98 per thousand below the average for the five years from 1928 to 1932, and of 6.20 below the average for the ten preceding years.

Table I compares the number and the rate of births for the year 1933 with the ten preceding years, taken separately and in groups of five and of ten years.

TABLE I

BIRTHS

Period 1923-1927 (5 years)

Years	Population	Number of births	Proportion per 1000 inhabitants
1923	655,700	20,527	31.31
1924	674,300	21,500	31.89
1925	693,500	21,976	31.69
1926	713,200	21,098	29.58
1927	733,460	20,740	28.28
Average	694,032	21,168	30.50

Period 1928-1932 (5 years)

1928	754,300	20,307	26.92
1929	775,800	20,415	26.32
1930	796,800	20,993	26.33
1931	818,577	20,699	25.29
1932	833,000	19,997	24.01
Average	795,695	20,482	25.74

Period 1923-1932 (10 years)

Average	744,863	20,825	27.96
-------------------	---------	--------	-------

Year 1933

Year 1933	847,000	18,431	21.76
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MARRIAGE RATE.

In 1933, there were 5,964 marriages, as against 5,780 in 1932, representing an increase of 184 over the year 1932.

The proportion per thousand of population is therefore 7.04, being 1.48 below the ten years average from 1923 to 1932.

Table II compares the rate and the number of marriages in 1933 with the preceding ten years taken separately and in groups of five and ten years.

TABLE II

MARRIAGES.

Period 1923-1927 (5 years)

Years	Population	Number of marriages	Proportion per 1000 inhabitants
1923	655,700	6,103	9.31
1924	674,300	6,058	8.98
1925	693,500	6,102	8.80
1926	713,200	6,133	8.60
1927	733,460	6,320	8.62
Average	694,032	6,143	8.85

Period 1928-1932 (5 years)

1928	754,300	6,825	9.45
1929	775,800	7,332	9.45
1930	796,800	6,643	8.34
1931	818,577	6,196	7.57
1932	833,000	5,780	6.93
Average	795,695	6,555	8.24

Period 1923-1932 (10 years)

Average	744,863	6,349	8.52
------------------	---------	-------	------

Year 1933

Year 1933	847,000	5,964	7.04
--------------------	---------	-------	------

DEATH RATE.

The number of deaths in 1933 rose to 8,975, as against 9,728 in 1932, showing in consequence a decrease of 753 deaths.

The proportion compared to the population is 10.60 per thousand as against 11.68 in 1932, or a decrease of 1.08 per thousand.

The 1933 death rate is 2.33 below the average for the five years from 1928 to 1932. It is 2.88 below the average of the ten preceding years.

Table III shows a statement of the mortality since 1923 for each year separately and by groups of five and ten years.

TABLE III.

DEATHS

Period 1923-1927 (5 years)

Years	Population	Number of deaths	Proportion per 1000 inhabitants
1923	655,700	10,074	15.36
1924	674,300	9,752	14.46
1925	693,500	9,549	13.77
1926	713,200	9,660	13.54
1927	733,460	9,991	13.63
Average	694,032	9,805	14.13

Period 1928-1932 (5 years)

1928	754,300	10,961	14.53
1929	775,800	10,604	13.67
1930	796,800	10,256	12.87
1931	818,577	9,886	12.08
1932	833,000	9,728	11.68
Average	795,695	10,287	12.93

Period 1923-1932 (10 years)

Average	744,863	10,045	13.48
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Year 1933

Year 1933	847,000	8,975	10.60
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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 1933 the excess of births over deaths was 9,456 while for the ten years from 1923 to 1932 it was 10,789 which shows a decrease of 1,333.

The natural increase of the population shows for the year 1933 a rate of 11.16 per thousand of population.

TABLE IV.**NATURAL INCREASE OF THE POPULATION.**

Years	Births	Deaths	Excess of Births over deaths
1923-1927	105,841	49,022	56,819
1928-1932	102,411	51,435	50,976
Average (10 years) .	20,825	10,046	10,789
Year 1933	18,431	8,975	9,456

INFANT MORTALITY.

The registered number of deaths in 1933 of children under 1 year is 1,817 as against 1,979 in 1932, showing therefore a decrease of 162.

The proportion per 1,000 births is 98.6 in 1933, as against 98.9 in 1932, representing a decrease of 00.3 per thousand. It is the lowest death rate ever recorded for Montreal. If the proportion of deaths had been as high as the average rate of the past ten years, 525 more deaths would have been recorded.

Table V indicates the variations in infant mortality since 1923, 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 1923-1927 (5 years)

Years	Births	Deaths under one year	Proportion per 1,000 births
1923	20,527	3,057	148.9
1924	21,500	3,151	146.5
1925	21,976	2,690	122.4
1926	21,098	2,521	119.5
1927	20,740	2,424	116.9
Average	21,168	2,769	130.8

Period 1928-32 (5 years)

1928	20,307	2,929	143.7
1929	20,415	2,701	132.3
1930	20,993	2,620	124.8
1931	20,699	2,345	113.3
1932	19,997	1,979	98.9
Average	20,482	2,513	122.7

Period 1923-1932 (10 years)

Average	20,825	2,641	127.1
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Year 1933

Year 1933	18,431	1,817	98.6
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**DEATHS FROM 0 TO 1 YEAR PER 1,000 BIRTHS,
BY PERIODS OF TEN YEARS.**

Table VI shows the average of deaths from 0 to 1 year, in periods of ten years since 1907 to 1932 and the mortality for the year 1933.

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 1933; 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 6.3 per thousand births.

TABLE VI.

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

Years	Rate	Decrease
1907-1916	221.2	
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
1922-1931	132.7	4.3
1923-1932	126.4	6.3
1933	98.6	

INFANT DIARRHOEA.

Table VII 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 1923 and the averages for the five years and ten years periods.

The percentage of deaths from diarrhoea is 26.8 per thousand, in 1933, while the average for the ten years from 1923 to 1932 is 34.1, which indicates a decrease of 7.3 per thousand births, in favour of the year 1933.

TABLE VII.

DEATHS FROM DIARRHOEA, FROM 0 TO 1 YEAR.

Period 1923-1927 (5 years)			
Years	Total of deaths 0 to 1 year	Deaths by diarrhoea 0 to 1 year	Percentage of deaths by diarrhoea
1923	3,057	1,158	37.9
1924	3,151	1,086	34.5
1925	2,690	1,014	37.7
1926	2,521	817	32.4
1927	2,424	799	32.0
Average	2,769	975	35.2
Period 1928-32 (5 years)			
1928	2,919	971	33.3
1929	2,701	865	32.0
1930	2,620	877	33.5
1931	2,345	817	34.8
1932	1,979	614	31.0
Average	2,513	829	33.0
Period 1923-1932 (10 years)			
Average	2,632	902	34.1
Year 1933			
Year 1933 .. .	1,817	487	26.8

DEATHS FROM DIARRHOEA, FROM 0 TO 2 YEARS.

Table VIII indicates the mortality from diarrhoea of children from 0 to 2 years. The percentage of deaths from these diseases in 1933 is 25.5 against 29.3 in 1932, which shows a decrease of 3.8 per cent; the average for the ten preceding years from 1923 to 1932 is 31.4; 1933 indicates a decrease of 5.9%, compared to this average.

TABLE VIII

DEATHS FROM DIARRHOEA, FROM 0 TO 2 YEARS

Period 1923-1927 (5 years)			
Years	Total 0 to 2 years of deaths	Deaths by 0 to 2 years diarrhoea	Percentage by diarrhoea of deaths
1923	3,682	1,249	33.9
1924	3,615	1,172	32.4
1925	3,202	1,098	34.3
1926	2,952	877	29.7
1927	2,846	870	30.6
Average	3,259	1,033	31.7
Period 1928-32 (5 years)			
1928	3,434	1,061	30.9
1929	3,165	958	30.3
1930	2,985	966	32.4
1931	2,676	877	32.8
1932	2,267	664	29.3
Average	2,905	905	31.1
Period 1923-1932 (10 years)			
Average	3,082	969	31.4
Year 1933			
Year 1933 .. .	2,022	516	25.5

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 20.25 in 1933; it is a decrease of 0.09 per cent on the figure for the year 1932 and a decrease of 4.17 per cent from the average for the five years from 1928 to 1932.

TABLE IX.

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

Period 1923-1927 (5 years)			
Years	Total deaths	Deaths from 0 to 1 year	Per- centage
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
1927	9,991	2,424	24.26
Average (5 years)	9,805	2,769	28.24
Period 1928-1932 (5 years)			
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
1932	9,728	1,979	20.34
Average (5 years)	10,287	2,513	24.42
Period 1923-1932 (10 years)			
Average (10 years)	10,046	2,641	26.33
Year 1933			
Year 1933	8,975	1,817	20.25

**PERCENTAGE BY GROUPS OF AGES, OF DEATHS
UNDER 1 YEAR, COMPARED TO THE TOTAL
OF DEATHS FROM 0 TO 1 YEAR.**

Table X allows to compare the percentage, by groups of ages, of deaths under 1 year compared to the total of deaths from 0 to 1 year, since the year 1928.

This table shows, besides, the average for the five years 1928 to 1932, and the percentage for 1933.

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 1923 to 1927 and from 1928 to 1932, the average of these five years, as well as the average for ten years and comparative figures for the year 1933.

TABLE XII.

Period 1923-1927 (5 years)

Years		Diph- theria	Scarlet fever	Meas- les	Whoop- ing cough	Erysi- pelas	Chick- en-pox	Small- pox	Ty- phoid fever
1923	Cases	1195	2035	1995	599	130	669	—	165
	Deaths	160	71	55	142	18	1	—	47
1924	Cases	753	3037	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	164	792	—	105
	Deaths	139	48	27	129	31	1	—	34
1927	Cases	1826	2006	2607	749	166	662	10	5132)*
	Deaths	219	38	47	106	42	3	—	553)
Average (5 years)	Cases	1156	2313	2134	644	145	767	3	1138
	Deaths	144	62	45	111	25	3	—	147

Period 1928-1932 (5 years)

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	706	1730	7333	964	170	2501	—	129
	Deaths	71	20	30	29	20	5	—	34
1932	Cases	607	1840	3655	2219	216	2070	—	166
	Deaths	53	24	47	91	27	1	—	37
Average (5 years)	Cases	1025	2272	3976	1693	203	2075	30	152
	Deaths	95	37	37	64	28	4	—	35

Period 1923-1932 (10 years)

Average (10 years)	Cases	1091	2292	3055	1068	174	1421	17	645
	Deaths	119	50	41	87	23	3	—	91

Year 1933

1933	Cases	297	1300	472	3271	183	4135	—	117
	Deaths	18	26	2	71	32	4	—	31

* Epidemic.

YEAR 1933 — DEATHS FROM 0 TO 1 YEAR CL

Table XII indicates that deaths

1° Amongst babies from 1 to

2° During the months of M

TABLE

Month		Under 24 hours		1 day to 1 week		1 week to 1 month	
		Sex	Total	Sex	Total	Sex	Total
January.....	M	21		13		19	
	F	12	33	11	24	11	
February.....	M	19		11		8	
	F	16	35	13	24	12	
March.....	M	17		9		16	
	F	14	31	14	23	11	
April.....	M	17		7		9	
	F	12	29	6	13	6	
May.....	M	23		13		12	
	F	14	37	6	19	2	
June.....	M	33		9		10	
	F	11	38	9	18	8	
July.....	M	18		8		11	
	F	7	25	10	18	3	
August.....	M	13		16		6	
	F	11	24	3	19	3	
September.....	M	16		9		15	
	F	9	25	7	16	4	
October.....	M	11		8		8	
	F	16	27	8	16	7	
November.....	M	9		10		11	
	F	13	22	11	21	9	
December.....	M	12		14		9	
	F	8	20	5	19	2	
Total.....	M	203		127		134	
	F	143	346	103	230	78	
Average.....		28.8		19.1		17.6	
Per cent.....		19.1%		12.6%		11.6%	

FIED BY MONTHS, SEX AND AGE CATEGORIES.

rslings have been more numerous :
 onths and from those under 24 hours.
 ne and September.

II.

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
14 16	30	8 14	22	4 5	9	9 6	15	88 75	163
18 8	26	9 10	19	10 7	17	8 6	14	83 72	155
15 15	30	13 10	23	6 6	12	7 5	12	83 75	158
18 20	38	12 10	22	13 17	30	8 8	16	84 79	163
25 17	42	14 13	27	12 11	23	8 6	14	107 69	176
27 21	48	11 19	30	7 7	14	6 4	10	97 79	176
22 6	28	8 10	18	5 3	8	4 2	6	66 51	117
27 22	29	15 10	25	11 11	22	10 2	12	88 52	140
25 11	46	27 18	45	3 7	10	6 6	12	101 72	173
26 0	36	24 12	36	7 4	11	6 6	12	80 73	153
0 1	21	9 5	14	3 6	9	4 8	12	56 63	119
1 6	27	21 8	29	3 6	9	4 5	9	74 50	124
3 3	401	171 139	310	84 90	174	80 64	144	1007 810	1817
33.4		25.8		14.5		12.0		151.4	
2.1%		17.1%		9.6%		7.9%		100.0%	

A FEW PRINCIPAL CAUSES OF GENERAL MORTALITY.

Deaths from 1923-1933

Table XIV shows the number of deaths from certain principal causes, from 1923 to 1927, the average for these five years; the number of deaths for 1928 to 1932 from the same causes and the average for these five years. It shows besides, the averages of deaths from the same causes, for the 10 years 1923-1932, and deaths during the year 1933.

TABLE XIV
A FEW PRINCIPAL CAUSES OF GENERAL MORTALITY.

Deaths from 1923 to 1933.

Period 1923-1927 (5 years)

Years	Cancer	Bright's disease	Organic diseases of the heart	Brocho Pneu- monia	Pneu- monia
1923	539	618	687	580	542
1924	546	655	696	485	407
1925	605	676	719	482	583
1926	609	738	727	507	454
1927	601	762	821	431	351
Average ..	580	690	730	497	465

Period 1928-1932 (5 years)

1928	611	674	867	666	500
1929	749	794	1204	465	346
1930	806	664	1235	540	500
1931	808	741	1322	452	328
1932	823	889	1326	411	360
Average ..	765	752	1191	507	407

Period 1923-1932 (10 years)

Average ..	672	721	955	502	436
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Year 1933

Year 1933	931	787	1362	339	305
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PROPORTION OF DEATHS FROM DISEASES MENTIONED IN TABLE XIV COMPARED TO THE TOTAL OF DEATHS.

Period 1923-1933.

Table XV shows the proportion of deaths in periods of 5 years, the average for the five years from 1923 to 1927 and from 1928 to 1932 from the diseases mentioned in Table XIV, compared to the total of deaths, and deaths from the same diseases for the year 1933.

This table indicates for 1933 compared to 1932 an increase of 2.2%, in the proportion of deaths from cancer, a decrease of 0.3% in deaths from Bright's disease and an increase of 1.6% in deaths from organic diseases of the heart.

There was a decrease of 0.4% in the proportion of deaths from pneumonia, and also a decrease of 0.3% in the proportion of deaths from broncho-pneumonia.

TABLE XV.

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

Period 1923-1927 (5 years)

Years	Total of deaths	Cancer	Bright's disease	Organic diseases of the heart	Broncho- pneu- monia	Pneu- monia
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%
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%
Average ..	9,805	5.9%	7.0%	7.4%	5.0%	4.8%

Period 1928-1932 (5 years)

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%
1931	9,886	8.2%	7.5%	13.5%	4.6%	3.3%
1932	9,728	8.5%	9.1%	13.6%	4.2%	3.7%
Average .	10,287	7.5%	7.3%	11.7%	4.7%	3.6%

Period 1923-1932 (10 years)

Average ..	10,046	6.7%	7.2%	9.5%	4.9%	4.2%
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Year 1933

Year 1933 .	8,975	10.7%	8.8%	15.2%	3.8%	3.4%
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**DEATHS PER 100,000 POPULATION, FROM DISEASES
MENTIONED IN TABLE XIV FROM
1923 TO 1933.**

Table XVI indicates the proportion of deaths per 100,000 population, from diseases mentioned in Table XIV for the years 1923 to 1932, in periods of 5 years, the average for five years, from 1923 to 1927 and from 1928 to 1932, the average for ten years from 1923 to 1932, as well as the average of deaths for the year 1933.

A study of this table shows that in 1933 the proportion of deaths from cancer has increased of 11.1%, compared to 1932; it is 26.7 higher than the average for the five years 1923-1927, 13.9 higher than the average for the five years 1928-1932 and 20.3 higher than the average for the ten years 1923-1932. 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 889 in 1932 have decreased to 787 in 1933. If we consider these deaths

compared with the population, we arrive at an average of 99.2 per 100,000 inhabitants for the period of 1923 to 1927, an average of 94.4 for the five following years; of 96.8 for the 10 years and 92.9 for 1933.

It is therefore a decrease of 13.8 for 1933 over 1932, of 6.3 for the period 1923-1927 and also a decrease of 1.5 for the 5 years 1928-1932. For the 10 years period the decrease is 3.9.

Deaths from organic diseases of the heart have still increased in 1933; since a few years they are one of highest causes of deaths.

On the other hand, broncho-pneumonia and pneumonia are decreasing to quite an extent and the rates for 1933 are the lowest ever recorded in this City.

TABLE XVI.

DEATHS PER 100,000 POPULATION, FROM DISEASES
MENTIONED IN TABLE XIV FROM
1923 TO 1933.

Period 1923-1927 (5 years)

Years	Population	Cancer	Bright's disease	Organic diseases of the heart	Broncho pneumonia	Pneumonia
1923	655,700	82.2	94.2	104.8	88.4	82.7
1924	674,300	81.0	97.1	103.2	71.9	60.4
1925	693,500	87.2	97.5	103.7	69.4	84.1
1926	713,200	85.4	103.5	101.9	71.1	63.6
1927	733,500	80.0	103.9	111.9	58.8	47.9
Average	694,032	83.2	99.2	105.1	71.9	67.7

Period 1928-1932 (5 years)

1928	754,300	84.9	89.3	114.9	88.3	66.3
1929	775,800	96.5	102.3	155.2	59.9	44.6
1930	796,800	101.2	83.3	155.0	67.8	62.7
1931	818,577	98.7	90.5	161.5	55.2	40.1
1932	833,000	98.8	106.7	159.2	49.3	43.2
Average	795,695	96.0	94.4	149.2	64.1	51.4

Period 1923-1932 (10 years)

Average	744,863	89.6	96.8	127.1	68.0	59.5
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Year 1933

Year 1933 ..	847,000	109.9	92.9	160.8	40.0	36.0
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MORTALITY FROM TUBERCULOSIS.

The number of deaths from tuberculosis, in all its forms, was 811 in 1933, having been 834 during the previous year; it shows consequently a decrease of 23 on the whole number. The proportion per 100,000 population which in 1932 was 100.1 is of 95.8 for 1933, showing a decrease of 4.3, and the average of the ten preceding years which was 126.9 shows a decrease of 30.9 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 period of five years, the average for ten years and also the number of deaths for the year 1933.

TABLE XVII.
DEATHS FROM TUBERCULOSIS.

Period 1923-1927 (5 years)

Years	Popula- tion	Pulmo- nary	Other forms	Total	Proportion per 100,000 inhabitants
1923.. . . .	655,700	813	167	980	149.5
1924.. . . .	674,300	807	171	978	145.0
1925.. . . .	693,500	805	131	936	135.0
1926.. . . .	713,200	796	158	954	133.8
1927.. . . .	733,500	763	123	886	120.8
Average	694,032	797	150	947	136.5

Period 1928-1932 (5 years)

1928.. . . .	754,300	801	137	938	124.4
1929.. . . .	775,800	823	190	1,013	130.6
1930.. . . .	796,800	806	177	983	123.4
1931.. . . .	818,577	766	121	887	108.3
1932.. . . .	833,000	722	112	834	100.1
Average	795,695	784	147	931	117.0

Period 1923-1932 (10 years)

Average	744,863	790	149	939	126.7
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Year 1933

Year 1933	847,000	670	141	811	95.8
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TABLE 1

DEATHS FROM TUBERCULOSIS

PERIOD 1910-1912 (5 years)

Age	Male	Female	Total
Under 15	10	15	25
15-24	120	80	200
25-34	180	120	300
35-44	220	150	370
45-54	250	180	430
55-64	280	200	480
65-74	300	220	520
75-84	320	240	560
85 and over	340	260	600
Total	1,710	1,230	2,940

PERIOD 1913-1915 (3 years)

Age	Male	Female	Total
Under 15	12	18	30
15-24	130	90	220
25-34	190	130	320
35-44	230	160	390
45-54	260	190	450
55-64	290	210	500
65-74	310	230	540
75-84	330	250	580
85 and over	350	270	620
Total	1,794	1,310	3,104

PERIOD 1916-1918 (3 years)

Age	Male	Female	Total
Under 15	15	20	35
15-24	140	100	240
25-34	200	140	340
35-44	240	170	410
45-54	270	200	470
55-64	300	220	520
65-74	320	240	560
75-84	340	260	600
85 and over	360	280	640
Total	1,845	1,370	3,215

COMMENTS

SMALLPOX.

There was not a single case of smallpox in Montreal during the year 1933; it is to be noted that the last case reported occurred in the month of January 1930, this is to say nearly 4 years ago.

All the children in the schools are vaccinated, without a single exception, and the population at large is sufficiently well protected against this disease by vaccination and re-vaccination.

The periodic health examination of the food handlers, performed by the officers of the Division of Medical Control, in compliance with the City By-Law No. 926, gives the opportunity of controlling the vaccination of about 35,000 persons working in restaurants, grocery stores, dairies, etc., and in all other food establishments.

A total number of 22,646 vaccinations were made by the employees of the Department of Health during 1933.

DIPHTHERIA

A campaign in support of diphtheria immunization, the programme of which has already been published in the 1932 Annual Report, has been inaugurated at the beginning of 1933 and carried on during the whole year.

Approved and supported by the administrators of the City, it endorsed the cooperation of the members of the medical profession, that of the Clergy, of the School Commissions, of the Press, of radio-stations and of the theatres; all of them, each one in its sphere of action, was willing to contribute to its success.

On the other hand the citizens did well respond to the invitation extended to them and did bring their children to be immunized with such eagerness that on December 31st the number of those having received during the year the first of the three doses of the immunizing agent, totaled 52,063.

The figures published in the following table, show the number of the 1st, 2nd and 3rd doses performed:

IMMUNIZATION AGAINST DIPHTHERIA DURING THE YEAR 1933.

By the Department of Health.

	1st dose	2nd dose	3rd dose
In Municipal Well-Baby Clinics.....	12,057	10,879	9,773
In the schools.....	31,953	31,303	29,176
Total.....	44,010	42,182	38,949

By Independent Organizations and Physicians in
private practice.

	1st dose	2nd dose	3rd dose
Fédération d'Hygiène Infantile.....	3138	2138	2124
Child Welfare Association*.....	2079	2122*	1966*
Montreal Children Hospital.....	12	12	12
Crèche St-Paul.....	212	209	202
Crèche d'Youville.....	344	258	258
Montefiore Orphan's Home.....	17	17	17
Women's General Hospital.....	34	24	24
Shriner's Hospital.....	43	22	22
Aide à la Femme.....	47	47	47
Physicians in private practice.....	2127	668	668
Total.....	8053	5510	5340

* These figures include 2nd and 3rd doses given to children registered in 1932.

The agent used was the Ramon Anatoxine (Toxoid) in three sub-cutaneous injections at three weeks intervals, in the following doses :

1st—0.5 c.c. 2nd—0.1 c.c. 3rd—1.5 c.c.

The anterior Schick Test was practised only for children of ten years and over; as to the posterior Schick Test which has been generally used previously to the year 1933 it was discontinued because it has been proven that when the said test had been performed six months after the last dose, children were effectively immune in the proportion of 99.6 per cent.

Consequently, the posteror Schick Test, being of almost no usefulness and, on the other hand, the nurses of the Department of Health could employ their time in a more practical manner in making recruiting to have new children immunized, rather than to solicit those who had received the three doses to go to the clinic to undergo this last test.

Some Associations engaged in child welfare work and physicians in private practice were willing to cooperate with the Department of Health and to spread around them the procedure of immunization; a few institutions of assistance: creches, orphans homes, children hospitals, also have immunized a certain number of children under their care.

In all cases the Toxoid (Anatoxine Ramon) was supplied free of charge by the City.

The total number of children immunized in Montreal since 1928 lightly exceeds 85,000; it has been impossible to divide by ages the children immunized by the independent associations.

Those immunized by the Department of Health in 1933, are divided by ages, in the following manner :

6 months to 6 years (nurslings and pre-school age)	12,057
6 years and over (school-age)	31,953

The population of children of 0 to 9 years inclusively, in Montreal, is estimated by the Division of Statistics of the Department of Health to 169,400 children and the num-

ber of those who, since 1928, have received the three doses of Toxoid being of 85,000 the proportion of immune children on December 31st 1933 was consequently 50.1%.

It is to be noted that this proportion will be increased when those who began their immunization in 1933 will complete them only in 1934.

It is interesting to study the course of diphtheria in Montreal and to examine its movement, which as elsewhere, presents some variation in the number of cases and deaths, with periods of relative calm, separated by some of more or less intensity and forming cycles of a duration of about 5 years.

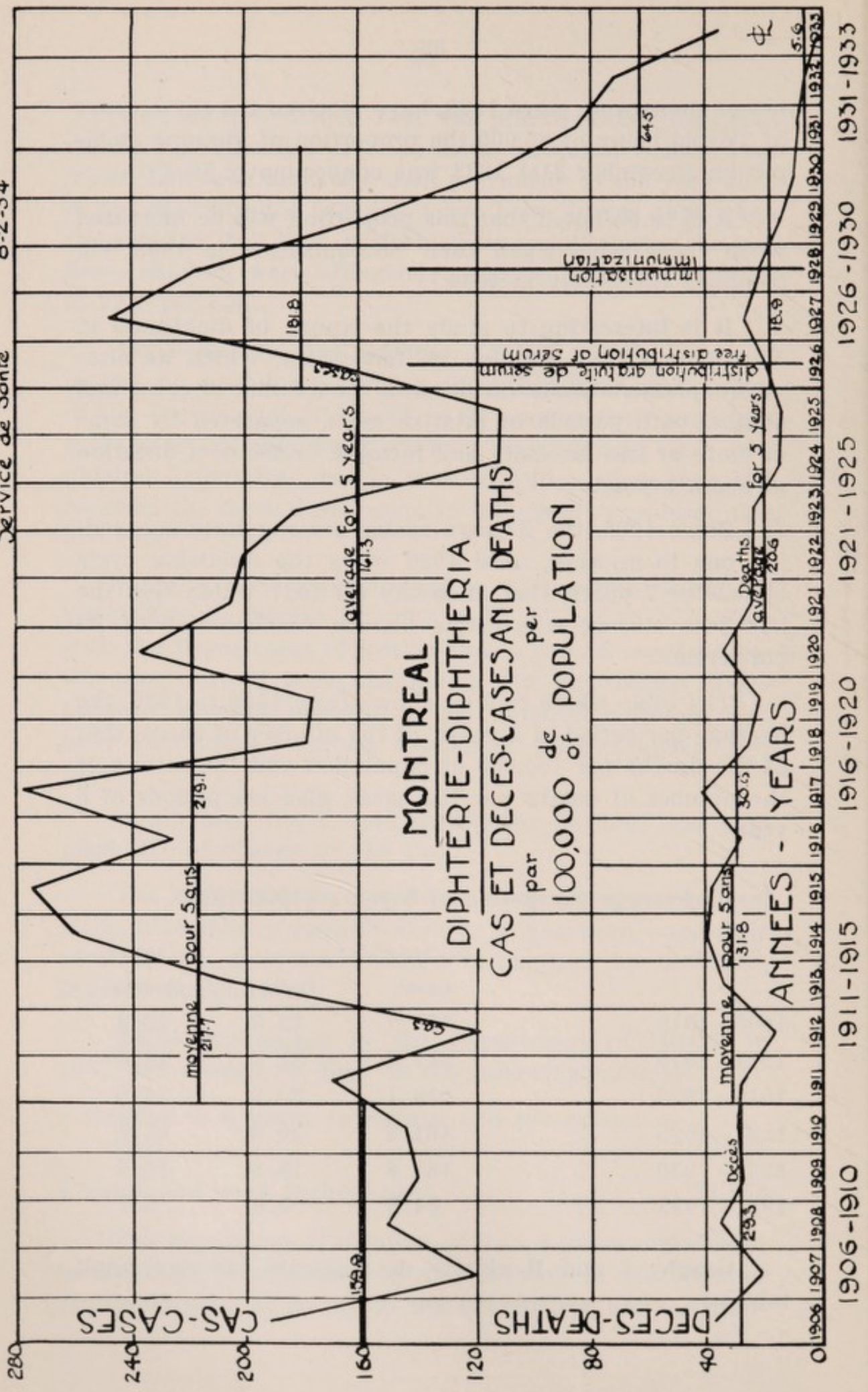
Since 1906, the 5 years cycles are regularly succeeding one to another, until 1920 when the following cycle lasted for 7 years, that is to say till 1927 which was the last year during which this disease reached one of its paroxysm.

The table which follows shows from 1906 to 1933, the average per period of 5 years, of the number of cases, that of the deaths per 100,000 of population and the means of the number of deaths per 100 cases, also per periods of 5 years.

Average per period of 5 years (1906-1933).

Years	Per 100,000 of population		Per 100 cases
	Cases	Deaths	Deaths
1906 - 1910	159.9	29.3	12.3
1911 - 1915	217.7	31.8	14.6
1916 - 1920	219.1	30.6	14.0
1921 - 1925	161.3	20.6	12.8
1926 - 1930	181.8	18.9	10.4
1931 - 1933	64.5	5.6	8.7

Graphs I and II clearly demonstrate the preceding tables :



MONTREAL

DIPHTHERIE-DIPHTHERIA

DECES
par
100 CAS

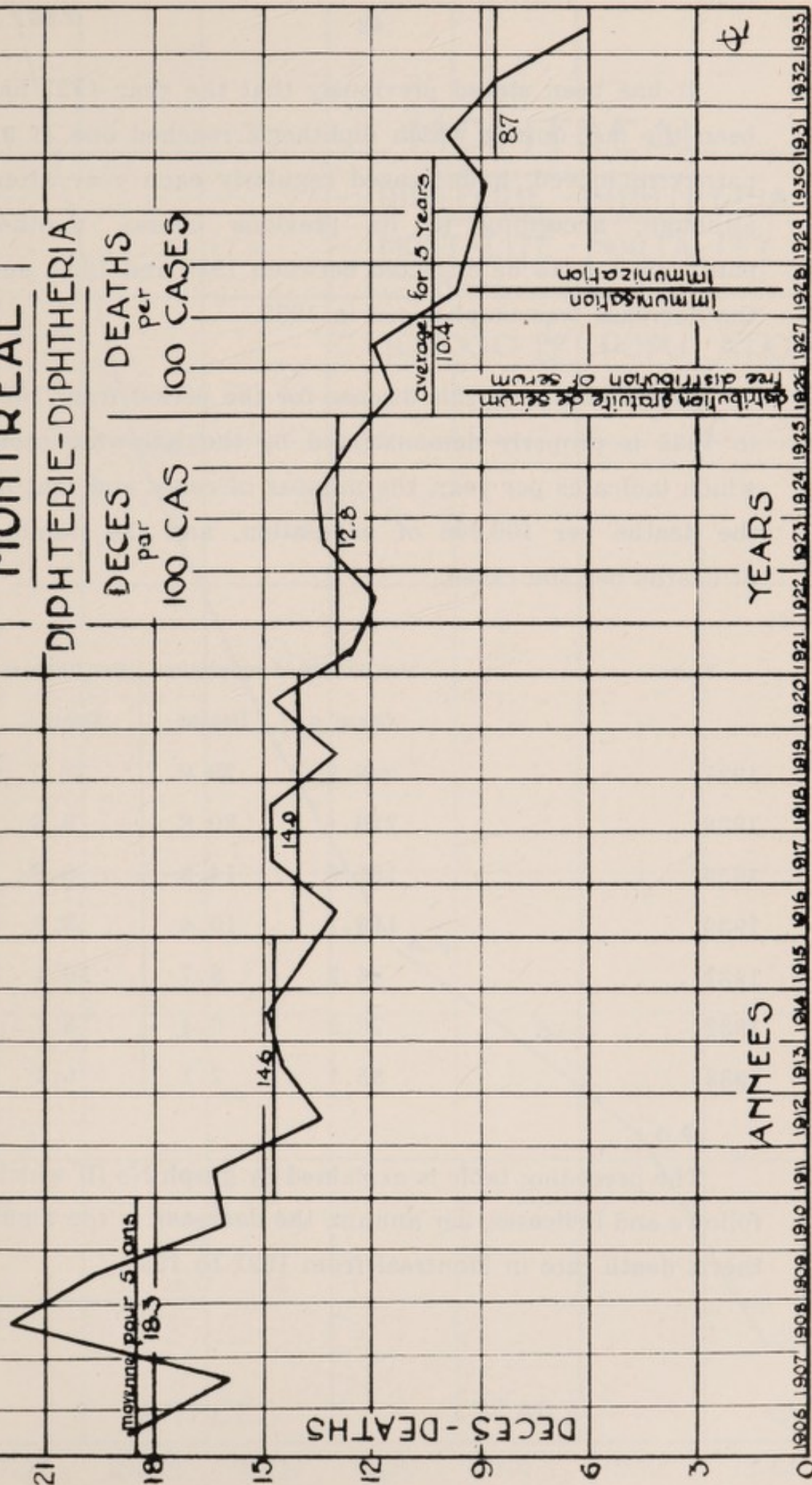
DEATHS
per
100 CASES

DECES - DEATHS

ANNEES

YEARS

Φ



1906-1910

1911-1915

1916-1920

1921-1925

1926-1930

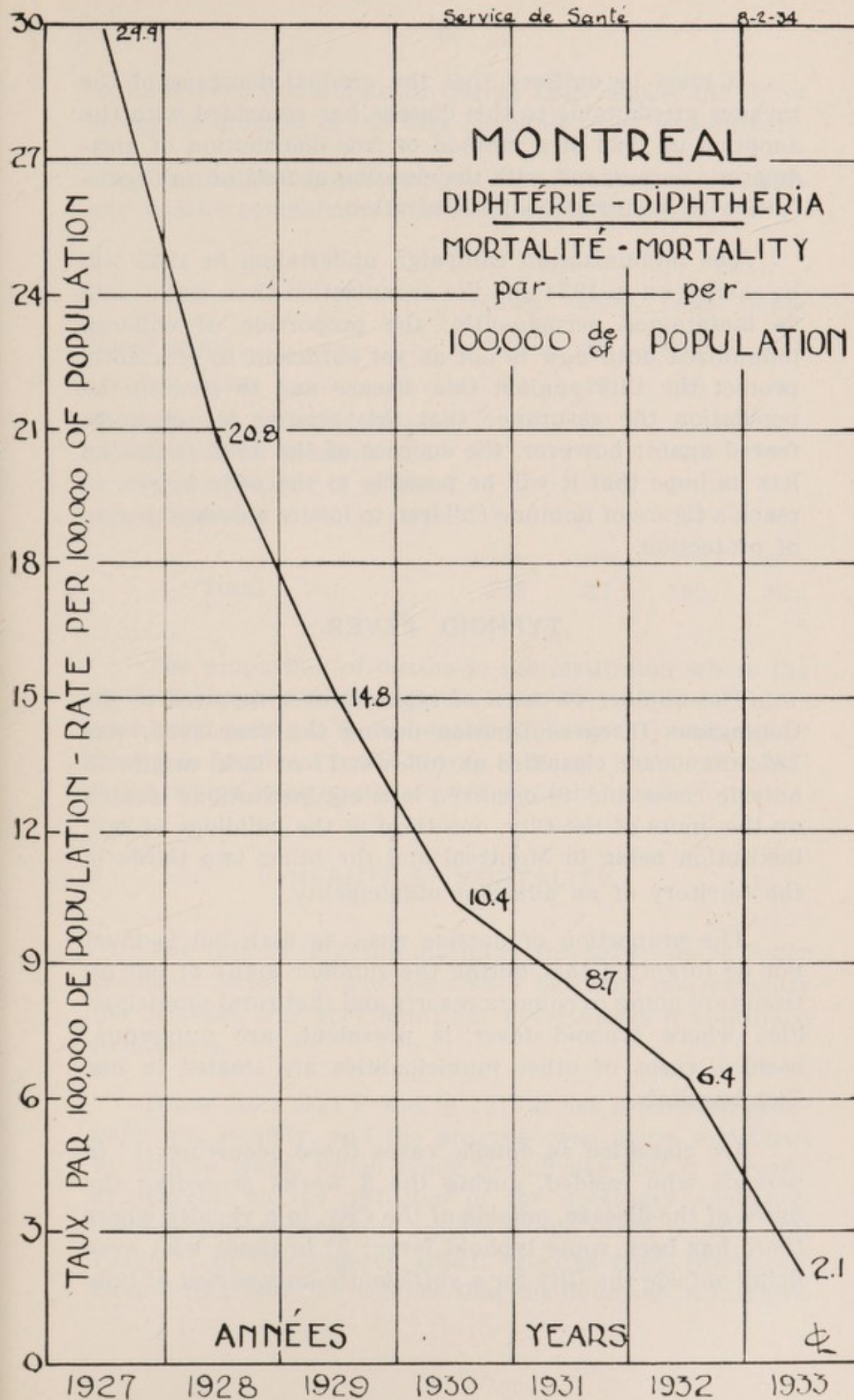
1931-1935

It has been stated previously that the year 1927 has been the last during which diphtheria reached one of its paroxysm indeed, it decreased regularly each year after, although, according to its previous course, another paroxysm was to be expected between 1930 and 1932, and the decrease was emphasized in 1933.

The decrease of this disease for the period from 1927 to 1933 is properly demonstrated by the following table which indicates per year, the number of cases and that of the deaths per 100,000 of population, and the number of deaths per 100 cases.

Years	Per 100,000 of population		Per 100 cases
	Cases	Deaths	Deaths
1927	248.9	29.9	12.0
1928	216.4	20.8	9.6
1929	161.6	14.8	9.2
1930	116.7	10.4	8.9
1931	86.2	8.7	10.1
1932	72.9	6.4	8.7
1933	35.1	2.1	6.1

The preceding table is explained by graph No III which follows and indicates, per annum, the decrease in the diphtheria death rate in Montreal from 1927 to 1933.



It must be outlined that the gradual decrease of the ravages attributable to this disease has coincided with the adoption in 1926 of a method of free distribution of anti-diphtheric serum, and with the creation in 1928 of an organization to perform the immunization.

The immunization campaign undertaken in 1933 will be carried on in 1934 and the organization then made shall be maintained permanently; the proportion of children immunized until now is not as yet sufficient to efficiently protect the City against this disease and to give to the population the assurance that this scourge is not to be feared again; however, the success of the 1933 campaign lets us hope that it will be possible in the near future, to reach a figure of immune children to insure a decent degree of protection.

TYPHOID FEVER.

The number of cases of typhoid fever reported to the Contagious Diseases Division during the year 1933, was 192; they were classified as follows: 77 of local origin, 75 outside cases and 40 occurred in a big institutions located on the limits of the City, one third of the buildings of said institution being in Montreal and the other two thirds in the territory of an adjacent municipality.

The proportion of outside cases is high but it must not be forgotten that during the summer many of our citizens are going to country resorts and that rural municipalities where typhoid fever is prevalent, are numerous; besides, cases of other municipalities are treated in our City hospitals.

Are classified as outside cases those occurring: 1° in persons who resided, during the 3 weeks preceding the onset of the disease, outside of the City, in a vicinity where there has been some typhoid fever; 2° in those who were living outside the City for a sufficiently long period of time

to have been contaminated during their abode and 3° in strangers brought in the City hospitals to be treated here.

The following table shows the distribution of cases and deaths comparatively with the preceding years:

	1932		1933	
	Cases	Deaths	Cases	Deaths
Local origin	166	25	77	11
Outside cases	61	12	75	9
An epidemic occurred in an institution located: 1/3 in Montreal, 2/3 in another city			40	16
Total	227	37	192	36

The proportion of deaths in the institution where the epidemic happened is excessive, viz : 40% of cases ; however, in imputing it to the statistics of the City, the rate of deaths in Montreal for 1933 was, 4.25 per 100,000 of population which is estimated to 847,000 inhabitants.

INFANTILE MORTALITY.

The rate of infantile mortality for 1933 was 98.5 per thousand births ; it had been 98.9 in 1932 ; consequently the decrease was very light, but nevertheless it continued to diminish.

From 215.2 that it was in 1913 it has decreased gradually but steadily, and the progress was never registered by sudden leaps, which tends to indicate that it is really attributable to the diffusion of the necessary education amongst the population; besides if one turns to table VII (page 21 of this report), titled: "Deaths from Diarrhoea, from 0 to 1 year" he will see that the decrease in infantile

mortality has coincided with that of the percentage of deaths from diarrhoea.

However, it is still too high, and if this marked decrease is very encouraging for us, it must however be considered that it is necessary to continue, with the greatest activity, the intensive work undertaken twenty years ago.

The past is a promise for the future and we can look forward to it with confidence.

It is a fact that in Montreal the rate of births has always been very high, that it decreased slowly and that it is still higher in general, compared to those of other large centres, which is the reason why this problem is so difficult to resolve; I think I should reproduce here what I published elsewhere in 1929, viz: "a large family of 6, 8 or 10 children of which the oldest is frequently not over 12 years, as it is often the case, does not help the father's revenue which remains the same; each new birth increases the overcrowding of the home, overtaxes the mother and compels her to divide her efforts".

Besides there is another reason to explain the high rate of infantile mortality in Montreal; it consists in the excessive mortality of illegitimates; new-born illegitimates which are placed in the "crèches", in spite of the good cares shown them, can only be saved with difficulty and for this reason the rate of the mortality amongst them for 1933 was 480.3 per thousand births.

In tabulating separately the mortality rate of legitimate children it will be found that in 1933, it was only 75.7; this figure obviously approaches a rate that could be considered as rather satisfactorily.

It is in a large measure the death of a too high a number of illegitimates that spoil the statistic of the infantile mortality in Montreal.

For a long time this question has attracted our attention as well as that of the authorities to whom the administration of these institutions is devolved; it is for this reason that during the year 1933 a commission composed of outstanding specialists had been appointed to study the matter and to make recommendation as to what measure should be taken to rectify the situation; the report of the said Commission will be submitted at the beginning of next year (1934).

MATERNAL MORTALITY.

The maternity which is a normal function of the organism is not without dangers that too frequently bring fatal results.

In Montreal the maternal mortality rate is rather low, however, it is still high enough to attract the attention and to search what means should be taken to stamp it out, within the bounds of possibility.

Prenatal clinics have already been established since a few years, but in spite of repeated invitations they have not been sufficiently attended; it seems that the expecting mother is much indifferent and does not give sufficient attention to the necessity of preventing the appearance in her organism, of disorders that are always serious once they exist and which indicate that one of the vital organs is attacked.

The following table shows per 1000 living births from 1929 to 1933 :

1° The proportion of deaths in cases of abortion and ectopic gestation ;

2° The proportion of deaths in cases of abortion, from 6½ months till confinement ;

3° The proportion of deaths in both preceding cases.

MATERNAL MORTALITY IN MONTREAL, 1929-1933.

Classification by causes.

No Int. List	Cause	Number of deaths					Deaths by 1000 births				
		1929	1930	1931	1932	1933	1929	1930	1931	1932	1933
140- 141- 142	Abortion..... Ectopic gestation.....	11 4	12 7	10 4	17 8	17 2	0.54 0.20	0.57 0.33	0.48 0.19	0.85 0.40	0.92 0.11
	Total.....	15	19	14	25	19	0.74	0.90	0.67	1.25	1.03
144	Puerperal Haemorrhage.....	9	15	13	14	18	0.44	0.72	0.63	0.70	0.98
145	Puerperal septicaemia.....	26	31	29	28	22	1.27	1.48	1.40	1.40	1.19
146- 147	Albuminuria and convulsions.....	19	20	18	22	22	0.93	0.95	0.87	1.10	1.19
148	Phlegmasia alba dolens.....	5	9	4	4	5	0.24	0.42	0.19	0.20	0.26
143 149 150	Others.....	11	15	12	6	6	0.54	0.72	0.58	0.30	0.32
	Total.....	70	90	76	74	73	3.42	4.29	3.67	3.70	3.94
	Grand total.....	85	109	90	99	92	4.16	5.19	4.34	4.95	4.97

The study of the preceding table also demonstrates that there are two principal causes of maternal mortality (classified according to the international nomenclature of causes of deaths) which are : puerperal septicaemia, albuminuria and toxæmia ; these two diseases cause the death of a greater number of mothers than all the others combined.

However, they are precisely the diseases that could be prevented by a careful observation of the expecting woman ; consequently there must be found a means to convince the mother to be, of the necessity to confide herself to her physician and to follow his advice carefully.

It must be noted that there are in the City of Montreal besides the municipal pre-natal clinics two other organizations : the first French and Catholic, the other English and Protestant the work of which consists in the protection of the mother from the beginning of the gestation until the birth of the child ; these associations give not only the material assistance and the medical care requested at the time of confinement, but they also maintain pre-natal clinics and oblige the mother during her gestation to be under the observation of competent physicians who direct her and see that their advice is followed.

MORTALITY FROM TUBERCULOSIS.

In referring to Table XVII, page 33 of this report, it will be seen that the mortality from tuberculosis has decreased regularly each year since 1923, with the exception of 1928 and 1929, when there occur a slight increase ; the rate which was 149.5 in 1923 has decreased to 95.8 in 1933.

It is interesting to compare this mortality in Montreal with that of the Province of Quebec, during the same period of time.

Mortality from tuberculosis per 100,000 inhabitants.

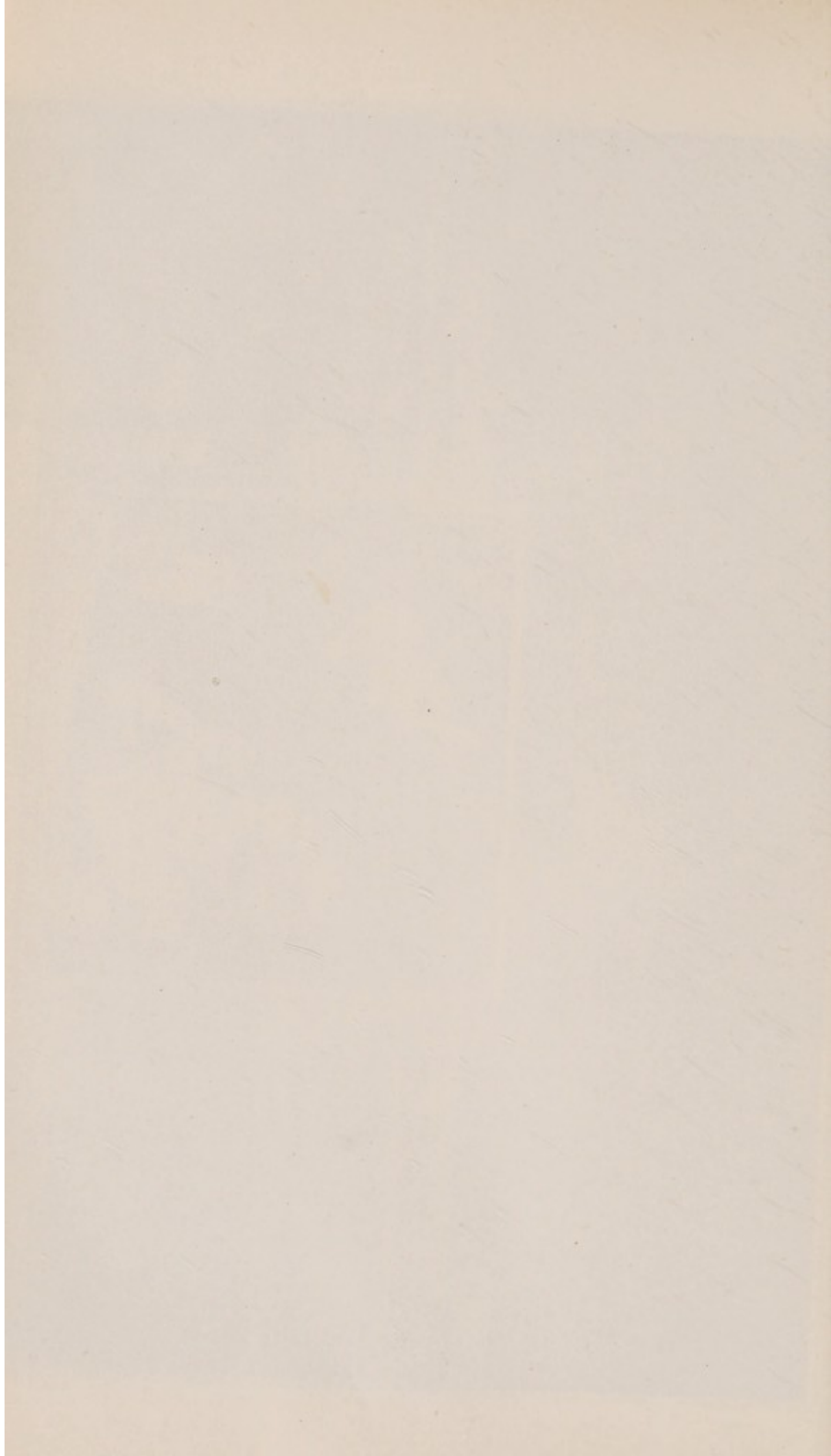
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Montreal . .	149.5	145.0	135.0	133.8	120.8	124.4	130.6	123.4	108.3	100.1	95.8
Prov. of Q. .	118.	116.	111.	125.2	117.2	117.8	118.6	118.7	110.1	101.9	95.5

Durng the economic crisis of the last few years, the decrease in the rate of mortality from tuberculosis was emphasized instead of increasing ; this indicates that the population has not suffered from too great privations. On the other hand is it not that the uniformity nearly regular from year to year of this decrease, is an indication that it should be attributed to the diffusion in families of the necessary knowledge to prevent the spreading of this disease?

It must be remembered that since 1925 two big institutions were organized to hospitalize tuberculous patients of the Montreal district, the majority of the beds occupied being by patients of the City of Montreal, other institutions in the same case also increased their capacity so that the number of beds for tuberculous persons which was in 1923 of only 185 is at the present time of 945 divided as follows:

		Number of beds :	
		1923	1933
In the City :			
Sacred Heart Hospital		50	415
Grace Dart Home		33	116
Hospital Bruchési Institute			50
" Royal Edward Institute			22
Ste-Agathe :			
Laurentian Sanatorium			250
(Opened during the year 1925.)			
Val David :			
Mount Sinai Sanatorium		42	90

It is an acknowledged true fact that the number of beds that could be disposed of for tuberculous patients increases the possibility of stamping out this disease; this opinion is based on observations collected in the different countries of the world and furthermore it is absolutely rational. For this reason we hope that it will be possible to increase the number of those we already have, as, up to the present time, they are still insufficient for the needs of the population.



DENTAL HYGIENE CAMPAIGNS IN SCHOOLS.

The campaign organized in 1932 by the Department of Health in the schools of the City, to promote oral hygiene amongst school children, has been continued in 1933.

It consists in making in all the schools of the City, each in its turn, a complete examination of the mouth of all children : general inspection, removal of decayed teeth not good enough to be conserved, necessary dressings and application of prophylaxis measures.

Eighteen schools were visited during the year 1932 and nineteen in 1933, the result was most encouraging for as a whole the percentage of pupils whose teeth were put in good condition reached the rate of ninety-eight per cent (98%).

A very small number of parents refused to benefit by the opportunity offered them to have their sick children treated.

The Directors of schools and the teachers continued to grant their wholehearted co-operation to the personnel of dental inspectors and, in many instances, they anticipated on their intervention in claiming for their schools, the privilege of being the first to be visited.

At the end of the year 1933, there are still on our lists, half a score of Principals of schools to whom we promised to go as soon as possible in 1934, during which year this campaign will be continued with the greatest activity.

In the course of the year an illustrated poster titled: "SAFEGUARD YOUR HEALTH BY CARING FOR YOUR TEETH" has been published and distributed to be posted everywhere it could be read with benefit ; each of the two school Commissions: Catholic and Protestant, asked for 500 copies to be placed in their schools.

This poster has been well appreciated and its reproduction will surely be found interesting.

MEDICAL EXAMINATION OF SCHOOLS PERSONNEL.

In the month of June 1933, an agreement was concluded between the Catholic Schools Commission and the Department of Health concerning the medical examination of Schools personnel including : teachers, male and females and other employees in the schools.

The following conditions were agreed upon between the two parties :

1. — The Department of Health shall make without charge and at its convenience, the medical examination of all lay principals (male and female), lay teachers, male and female, and of all janitors and other employees of the Commission who are generally working in the schools ; the examination shall be **compulsory** to all lay employees ;

2. — The Department of Health will make report of its observations on two approved forms, similar to those actually deposited in the Archives, one will be entitled "**Report of the first medical examination**", and the other "**Report of the Annual Examination**" (or routine examination) ;

3. — Copies of these reports, classified by schools, will be transmitted to the Commission, the original being kept in the files of the Department of Health for reference ;

4. — The said reports shall be strictly confidential. The Department of Health will not derive any conclusion or recommendation that may cause the discharge of a member of the personnel of the Commission — except evidently, in the contagious disease cases which are governed by the law.

However the Commission could submit these reports to the approval of its own medical advisers, and then decide on its sole responsibility, what measures should be taken towards its employees.

Consequently, there will be two kinds of examination : the first one more detailed, of all lay teachers and other employees of the Commission or of aspirants seeking employment ; each year afterwards another examination will be performed, called "routine examination".

The forms used will be the following :

1° First examination.

No. 95

City of Montreal
—
DEPARTMENT OF
HEALTH
Division of Child
Hygiene



Catholic School
Commission of
Montreal

Medical examination of personnel of the
Catholic School Commission of Montreal
and aspirants seeking employment.

First examination of Mr.

Occupation since
(date)

Aspirant seeking employment as

Declarations from person to be examined :

1. Name and Surnames Age
2. Address Actual occupation
3. Aspirant for position of Service
4. Married, widower or single
5. Have you been successfully vaccinated ?
When ?
6. Are you now in good health ?
7. What illnesses, diseases, surgical operations or accidents have you had since childhood ?

Disease	Date	Duration	Result
•			
8. Have you lost or gained weight in the past two years ?			
9. Have you ever been refused by an assurance company or mutual society ? When ?			
10. Are you deaf ?			
11. Have you any orthopedic defect ?			
12. Have you a hernia ? What kind ?			
13. FAMILY HISTORY :			
14. Have you or your parents — brothers, sisters, uncles, aunts or grand-parents, suffered from tuberculosis of the lungs, glands or bones ?			

15. Have you lived for the past two years in a house
where T. B. was present ?
If yes, when and how long ?

Montreal, 19

I certify that the above answers given to the medical
examiner are correct.

Signature

Witness

Medical examiner

REPORT OF MEDICAL EXAMINER

1. General appearance Age apparent
2. Weight ? lb. Height ? feet inches.
3. Number of respirations per minute ?
4. Does percussion of the chest indicate a normal
state ?
5. Does auscultation of the chest indicate a normal
state ?

6. Are the heart sounds normal ?
7. Is the rhythm of the heart regular ?
8. Is the pulse well maintained ?
9. Number of pulsations per minute ?
10. Is there any signs of disease of the blood vessels ?
11. Blood pressure :
 - Systolic
 - Dyastolic
12. Is there any indication of liver disease ?
 Stomach or any other part of digestive tract ?
13. Is dental caries presents ? Pyorrhoea ?
14. Any evidence of eye disease ?
15. Is the vision normal ?
16. What is the visual acuity of each eye by Snellen test ?
- Details :
 - A — Without glasses. R. E. L. E.
 - B — With glasses R. E. L. E.
17. Is examination by an oculist necessary ?
18. Any indication of ear disease ?

19. Is the hearing normal ?
20. What is the auditory acuity by the audiometer ?
 Details : R. E. L. E.
21. Is there sign of kidney disease ? of bladder ?
22. Any evidence of diseases of nervous system ?
23. URINALYSIS :
 Reaction Specific gravity
 Color Albumen Sugar

Signature
 Medical examiner

Date 193

2° Routine examination.

No. 96

City of Montreal
 —
 DEPARTMENT OF
 HEALTH
 Division of Child
 Hygiene



Catholic School
 Commission of
 Montreal

ANNUAL EXAMINATION OF PERSONNEL OF THE
 CATHOLIC SCHOOL COMMISSION
 OF MONTREAL.

School

School year

Examination of Mr.

Occupation since
(date)

Date of previous examination

REPORT OF THE MEDICAL EXAMINER :

1. Name and Surnames Age
2. Address
3. Vaccinated, yes or no ? When ?
4. Are you now in good health ?
5. Illnesses since last examination ?
.....

ACTUAL STATE OF HEALTH :

6. General appearance Weight : last
examination lb.; actual lb.
7. Number of respirations per minute ?
8. Does percussion of the chest indicate a normal
state ?
9. Does auscultation of the chest indicate a normal
state ?
10. Are the heart-sounds normal ?

11. Is the rhythm of the heart regular ?
 Irregular? Intermittent ?
12. Is the pulse intermittent or irregular ?
 Pulse rate per minute ?
13. Is there any signs of disease of the blood ves-
 sels ?
14. Is there any indication of liver disease ?
 Stomach ? or any other part of digestive
 tract ?
15. Is there any sign of kidney disease ?;
 of bladder ?
16. Any evidence of disease of nervous system ?
17. Visual acuity :
 A — Without glasses. R. E. L. E.
 B — With glasses. R. E. L. E.
18. Is there any indication of eye disease ?
19. Auditory acuity : R. E. L. E.
20. Is there any indication of ear disease ?

21. URINALYSIS : Reaction; Specific gravity; Aspect; Albumen.....; Sugar; Microscopic examination
22. Give details of any disease found

Signature

Medical examiner

Date 193

The school medical examination should always comprise in addition to medical examination of pupils and of schools premises that of the teaching staff, and we consider as a marked progress the aforementioned decision taken by the Catholic Schools Commission; we understand that the congregational teaching staff will pass the same examination before the physicians of the various congregations ; these latter submitting their reports to the Commission.

We are convinced that the teachers will see that this measure is in their own interest and if there is some objection from a few at the beginning, it will soon be followed by the general desire of undergoing it.

The medical examination in the schools is considered as necessary and it is now claimed not only in primary schools, but in high schools and even superior schools. It is becoming of general practice in all educational institutions.

NEW BY-LAWS

I. — CONCERNING PUBLIC BATHS AND BATHING.

There are at the present time, in this City, 28 public baths amongst which there are 18 municipal swimming pools attached to private institutions: clubs, societies of young men, etc., and one open air pool located in an amusement park and operated by a private company during the summer only.

The following table shows their distribution, and the system used for the purification of water.

	Filtration	Disinfection			Total
		Automatic		Intermittent	
		Chlorination	U.V.R.	Sodium of hypochlorite	
Municipal baths:—					
Permanent.....	16	6	—	11	17
Summer baths.....	—	—	—	1	1
Baths in institutions.....	8	3	1	5	9
Open air public pool.....	—	—	—	1	1
Total.....		9	1	18	28

These baths were usually well taken care of and kept in a good state of sanitation although there was no by-law governing them..

However, a regulation was much needed because of the constant increase in the number of bathers and especially because of the difficulty of prohibiting bathing in the rivers bordering the city territory on the south and north shores, for the reason that these waters are polluted by the pouring of the sewers.

The new by-law was adopted by the Municipal Council on September 22nd 1933 ; the text of which is published below :

No. 1252

By-law concerning public baths and bathing.

(Adopted by the Executive Committee on the 20th July 1933 and, by the Council, on the 22nd September 1933).

At a meeting of the Executive Committee of the City of Montreal, held at the City Hall, on the 20th day of July 1933, in the manner, and after the observance of the formalities prescribed by law, at which meeting were present : Aldermen Gabias, Chairman, Legault and Monette, members of said Committee,

It was ordained and enacted by the said Committee as follows :

CHAPTER I.**Definitions.**

ARTICLE 1. — Whenever the following words occur in this by-law, they shall, unless the context otherwise requires, be understood as follows :—

City.

(a) The word "City" shall mean the City of Montreal ;

Health Department.

(b) The words "Health Department" shall mean the City Health Department ;

Police Department.

(c) The words "Police Department" shall mean the City Police Department ;

Person.

(d) The word "person" shall mean the owner or owners of a public bath, as defined in paragraph (e) of this article, as well as the president, the manager, the caretaker, the representative or the authorized agent of any company, firm, corporation, association, institution or club, keeping or operating such public bath ;

Public bath.

(e) The words "public bath" shall mean any swimming pool used by one or more persons, or any stream used for bathing purposes, or any establishment containing individual baths or steam and other baths, placed at the disposal of the public, as well as the buildings fitted up and occupied for the above purposes ;

Swimming pool.

(f) The words "swimming pool" shall mean any natural or artificial basin in the open air or constructed in a building, especially fitted up for swimming purposes, as well as the apparatus and other accessories connected therewith ;

Stream.

(g) The word "stream" shall mean the St. Lawrence river, the DesPrairies river, the Lachine canal and any other area of water, whether natural or artificial, included in the territory of the City or bordering on the same or being adjacent thereto, including ponds, lakes, creeks, wells, excavations, quarries, etc. ;

Permit.

(h) The word "permit" shall mean the written authorization given by the Health and Police Departments for the issuing, by the City, of a license authorizing the operation of a public bath ;

License.

(i) The word "license" shall mean the written authorization given by the City to any person, as defined in paragraph (d) of this article, to open, keep or operate a public bath.

CHAPTER II.**Permit and License.****License required.**

ARTICLE 2. — No person shall open, keep or operate a public bath, as defined in paragraph (e) of Article 1 of

this by-law, without having previously obtained from the City a license to that effect.

**Formalities for obtaining
a license.**

ARTICLE 3. — Such license shall be granted by the Director of Finance of the City, on presentation of a permit from the Health Department and of a permit from the Police Department and upon payment to the said Director of Finance, except as regards municipal public baths, of the sum specified in By-law No. 432, as now amended or as the same may hereafter be amended.

**License untransferable
and renewable.**

ARTICLE 4. — Such license shall be personal and untransferable ; the same shall be renewed, each year, on or before the first day of the month of May.

Posting of the license.

ARTICLE 5. — The license shall be posted in a conspicuous place in the public bath for which the same shall have been granted.

**Permit and licence required
for each public bath.**

ARTICLE 6 — A permit and a license shall be required for each public bath located within the City limits.

**Information to be furnished
with application.**

ARTICLE 7. — The applications made to the Health Department and to the Police Department for permits shall be drawn up on special forms indicating the name, forenames and, as the case may be, the business name of any person, as defined in paragraph (d) of Article 1 of this by-law, the location of the bath, etc., as well as, in the case of a company, etc., its name and head office, together

with the names and forenames of its president and its manager, and containing any other information required in connection with such public bath.

The applicant for a permit shall furnish to the Health Department complete and detailed plans in duplicate, showing all conditions relating to the situation and installation of the public bath in question. Such plans shall not be necessary at the time of the renewal of a permit, unless they be required by the said Health Department.

Observance of by-laws.

ARTICLE 8. — No permit shall be granted by the Health Department and by the Police Department until all the provisions of this by-law or of any other by-law of the City applicable in the premises have been complied with.

Refusal to grant a permit.

ARTICLE 9. — The Health and Police Departments shall refuse to grant a permit to any person who fails to comply with the provisions of this by-law, who makes a false declaration in his application for a permit, who refuses or fails to furnish, within a delay of three days, the information asked for by the said departments or who refuses to allow, at any time, his establishment to be inspected.

CHAPTER III.

Places where bathing is lawful or unlawful.

License for public baths.

ARTICLE 10. — It is forbidden to bathe or to allow anyone to bathe in any public bath, as defined in paragraph (e) of Article 1 of this by-law, for which a license has not been duly granted by the City, in accordance with Article 2 of said by-law.

Posting of the license.

ARTICLE 11. — It is also forbidden to bathe or to allow anyone to bathe in a public bath where the license required by Article 2 of this by-law shall not have been posted, as provided by Article 5 of said by-law.

Bathing prohibited.

ARTICLE 12. — The Health Department may prohibit bathing in any public bath where water, in the opinion of the said department, is injurious to the health of bathers.

Public streams.

ARTICLE 13. — The Health Department may prohibit bathing in any stream or swimming pool which has not been licensed as a public bath if, in its opinion, the said stream or swimming pool is dangerous to the health of bathers.

CHAPTER IV.**Quality of water.****Quality of water.**

ARTICLE 14. — The physical, chemical and bacteriological qualities of the water used in public baths shall meet the requirements of the Health Department.

Purification.

ARTICLE 15. — Every swimming pool constructed in any building shall be equipped with a water purification system, including filters and automatic disinfection apparatus; this purification system may be required for open air swimming pools.

Disinfection.

The disinfection of any stream used for bathing purposes may be required, whenever the Health Department deems it advisable.

**Refusal or revocation
of permits.**

ARTICLE 16. — The Health Department may, at any time, refuse an application for a permit or revoke any permit already granted when, in its opinion, the water of any public bath is injurious to public health.

Water to be renewed.

ARTICLE 17. — The water in swimming pools shall be renewed from time to time and as often as the Health Department shall so require and it shall be kept free from any apparent deposit.

**Washing, etc., of lining
of pools, etc.**

ARTICLE 18. — Before renewing the water in a swimming pool, the whole of the inner lining, as well as the scum gutters, the space surrounding the swimming pool, etc., shall be carefully washed and scrubbed.

**Approval of purification
system, etc.**

ARTICLE 19. — The water purification system in every public bath must be approved by the Health Department and kept in perfect working order by competent operators.

CHAPTER V.

**Plan, mode of construction, lighting, heating,
ventilation, dressing rooms, etc.**

Plan, materials, etc.

ARTICLE 20. — The plan of a public bath, the execution of such plan, the materials, the piping, the fixtures of such bath and the accessories used therein shall afford bathers such protection, both as regards sanitation and safety, as may be required by the Health Department.

The dressing rooms, shower-baths, water-closets, etc., shall be arranged in accordance with the provisions of Article 30 of this by-law.

Apparatus, etc., to be accessible.

ARTICLE 21. — The apparatus, piping, valves and other accessories of every purification system shall be accessible, so as to permit of the same being inspected and repaired.

Lining of swimming pools.

ARTICLE 22. — The lining of every swimming pool shall be made of light shade materials, so that the bottom of such swimming pool may be perfectly visible throughout its whole area.

Natural lighting.

ARTICLE 23. — All the rooms of a building used as a public bath shall be provided with such natural lighting as may be required by the Health Department.

Artificial lighting.

ARTICLE 24. — All the rooms, more particularly the swimming pool, of a building used as a public bath shall be provided with an adequate electric lighting system.

Heating.

ARTICLE 25. — The temperature of the air in all the rooms of a building used as a public bath shall be maintained between 70° and 75° F., whenever the conditions of outside temperature permit; the temperature of the water in the interior swimming pools shall be about 5° F. below that of the circumambient air.

Ventilation.

ARTICLE 26. — In every building used as a public bath, the dressing rooms, water-closets, shower-baths,

swimming pool, etc., shall be provided with natural ventilation such as will meet the requirements of the Health Department which may, whenever it deems it advisable, require the addition of artificial ventilation.

Dressing rooms.

ARTICLE 27. — Every public bath shall be provided with suitable dressing rooms, preferably with individual cabinets or lockers, the whole to be vermin-proof and to be kept in a perfect state of cleanliness.

**Arrangement of shower-baths
and water-closets.**

ARTICLE 28. — Every public bath installed in a building shall be provided with a sufficient number of shower-baths, and the rooms of such bath shall be so arranged as to enable the bather to pass through the water-closet to reach the shower-bath, where he shall wash himself with soap before entering the swimming pool.

**Water-closets,
wash-basins, etc.**

ARTICLE 29. — A sufficient number of water-closets, urinals, sanitary fountains and wash-basins shall be installed in every public bath.

**Separate entrances and exits
for men and women.**

ARTICLE 30. — The public baths opened separately to persons of both sexes shall be so arranged that there shall be no communication between the rooms reserved for men and those reserved for women.

**Separate water-closets, etc.,
for men and women.**

ARTICLE 31. — In every public bath opened simultaneously to persons of both sexes, the water-closets, dressing-rooms, shower-baths, wash-basins, etc., used by women shall be completely separate from those used by men.

Materials, etc.

ARTICLE 32. — The materials, apparatus, furniture and accessories used in any public bath shall be such as to permit of the same being easily washed.

CHAPTER VI.

Accessories for bathers.

Clothing.

ARTICLE 33. — Every person who bathes in a stream or in an open air swimming pool shall be properly clothed.

Individual suits and towels.

ARTICLE 34. — Each bather must be provided with an individual towel, as well as with an individual bathing suit.

Washing, etc., of bathing suits, etc.

ARTICLE 35. — The bathing suits, towels, etc., after having been used once, shall not be rented, lent or used again, unless the same have been previously washed with soap and disinfected.

Mode of washing, etc.

ARTICLE 36. — The bathing suits, towels, etc., shall be washed, dried, etc., in accordance with the provisions of By-law No. 1009 concerning laundries.

Cups, combs, brushes, etc.

ARTICLE 37. — No cup, brush, comb or other article for personal use shall be placed at the disposal of bathers for common use.

Life-saving devices and emergency dressings.

ARTICLE 38. — Public baths shall be provided with adequate life-saving devices and whatever may be required to make emergency dressings.

CHAPTER VII.

Prophylaxy.

Water not to be polluted.

ARTICLE 39. — Bathers are forbidden to spit in or otherwise pollute the water and it shall be unlawful for visitors to enter the rooms reserved for bathers.

Diseased persons excluded.

ARTICLE 40. — No person affected with a contagious disease or skin lesions shall bathe in a public bath, and it is also forbidden to allow any person so affected to bath therein.

Disinfection of floors, etc.

ARTICLE 41. — The Health Department may require the daily disinfection of the floors of the rooms in any public bath to which bathers have access while barefooted, as well as of the accessories therein, by means of a hypochlorite solution or of any other approved process; the Health Department may also require that bathers disinfect their feet with a hypochlorite solution, etc., before entering the swimming pool or before dressing.

Every person, as defined in paragraph (d) of Article 1 of this by-law, shall facilitate the disinfection mentioned in this article, whenever required to do so by the Health Department.

CHAPTER VIII.

Enforcement.

Enforcement.

ARTICLE 42. — The Health Department and the Police Department shall be entrusted with the enforcement of this by-law, which shall come into force immediately after its adoption.

Application.

ARTICLE 43. — This by-law shall apply to all public baths, whether now existing or to be hereafter opened; in the case of public baths already existing, the Health Department may grant to the interested parties reasonable delays within which they shall have to comply with the provisions of said by-law.

Supervision.

ARTICLE 44. — A supervisor shall be constantly stationed at the shower-bath room exit or at the swimming pool entrance or at any other suitable place in a public bath, in order to ensure the observance of the provisions of this by-law. Such supervisor must be a skilled swimmer and diver and must be conversant with the artificials respiration process and first aid to victims of accidents.

Authorization to visit, etc.

ARTICLE 45. — The officers of the Health Department and the members of the Police Department are authorized to enter, at any time, any public bath and to remain therein as long as may be required to enable them to make a thorough inspection thereof and, in the latter case, all the assistance required must be given to them.

Samples of water.

ARTICLE 46. — The officers of the Health Department are authorized to collect samples, from time to time, in order to ascertain the quality of the water in any swimming pool or stream or the working condition of any purification apparatus.

Register.

ARTICLE 47. — Every person, as defined in paragraph (d) of Article 1 of this by-law, shall keep and place at the

disposal of the Health and Police Departments, whenever required to do so by the said departments, a register showing the number of bathers who have frequented his establishment, each day, the dates when the water was renewed, the data relating to the working of the purification apparatus, etc.

Repeal.

ARTICLE 48. — Article 5 of By-law No. 36 and the provisions of all other by-laws of the City inconsistent with this by-law are repealed.

By-law No. 1203.

ARTICLE 49. — The provisions of By-law No. 1203, concerning the water supply of establishments situated in the City, shall apply to public baths.

French and English versions.

ARTICLE 50. — In case the English and French versions of any clause of this by-law should not agree, the French text shall prevail.

CHAPTER IX.

Penal clause.

Penalty.

ARTICLE 51. — Every person offending against any of the provisions of this by-law shall be liable to a fine, with or without costs, and, in default of immediate payment of said fine, as the case may be, to an imprisonment, the amount of said fine and the term of imprisonment to be fixed by the Recorder's Court of the City of Montreal, at its discretion; but such fine shall not exceed forty dollars and the imprisonment shall not be for a longer period than sixty days, the said imprisonment however, to

cease at any time before the expiration of the term fixed by the said Recorder's Court upon payment of the said fine, or fine and costs, as the case may be, and, if the infringement of this by-law continues, the offender shall be liable to the fine and penalty above mentioned for each day during which the infringement is continued.

At the special meeting of the City Council of Montreal, held at the City Hall, on the 22nd September 1933, in the manner and after the observance of the formalities prescribed in and by the act of incorporation of the said City, at which meeting were present: His Worship the Mayor, Honourable Fernand Rinfret, in the Chair, Aldermen O'Connell, DesRoches, Quintal, Gabias, Trépanier, Lallancette, Angrignon, Savard, Legault, Monette, Weldon, Fortin, Dupéré, Biggar, Lesage, Auger, Dupuis, Deguire, Taillefer, Côté, Arcand, Bell, Caron, Goyette, Demers, Fillion, Dubreuil, Brien and Papineau.

The above by-law was adopted without any amendment.

II. — DESTRUCTION OF VERMIN THROUGH FUMIGATION.

For the last few years the fumigation of houses for the destruction of vermin is done through hydrocyanic acid; this procedure is more and more resorted to and there are, at the present time in the City of Montreal, half a score of establishments specialized in this industry.

Up to this date, fumigation was done according to a contract passed between the proprietor of housing habitation and the fumigator to whom was devolved the responsibility of taking the necessary precautions to prevent any danger of poisoning, but without submitting him to any regulation; in fact there is no such provincial by-law nor was there any municipal ordinance.

Two accidents occurred in 1932 and 1933, causing the death of three persons, demonstrating the necessity of taking some measures of prevention.

On the other hand, the Charter does not confer to the City the power of enacting such a By-Law.

For this reason a request has been made to the Legislature of Quebec, during its session at the beginning of 1933, in order to obtain the necessary power which was granted.

A draft of By-Law was then prepared and presented to the Executive Committee of the City who adopted it during the month of December; it was later on definitively passed by the City Council and is now in vigour.

It is hereafter published:

No. 1275

By-law concerning the use of fumigants for the destruction or control of vermin.

(Adopted by the Executive Committee on the 14th December 1933 and, by the Council, on the 12th February 1934).

At a meeting of the Executive Committee of the City of Montreal, held at the City Hall, on the 14th day of December 1933, in the manner and after the observance of the formalities prescribed by law, at which meeting were present: Aldermen Gabias, Chairman, DesRoches, Monette and Bell, members of said Committee.

It was ordained and enacted by the said Committee as follows:—

CHAPTER I.

Definitions.

ARTICLE 1. — Wherever the following words occur in this by-laws, they shall, unless the context otherwise requires, be understood as follows:—

(a) The word "City" shall mean the City of Montreal;

(b) The words "Health Department" shall mean the City Health Department;

(c) The word "person" shall mean the proprietor or proprietors, the president, the manager, the authorized agent or the employee of any firm, company or corporation, keeping or operating any establishment or place of business within the City limits for the purpose of carrying on the operations covered by this by-law;

(d) The word "building" shall mean any house, or structure, or dependency, or enclosed space, and adjoining ground;

(e) The words "Board of Examiners" shall mean the Board of Examiners appointed by the Director of the Health Department: 1° to ascertain the training, experience and fitness of applicants for permits and licenses hereinafter defined, and the knowledge of the requirements of this by-law; 2° to investigate any matter involving its application as may be required by the said Director of the Health Department;

(f) The words "certificate of competency" shall mean the written recommendation to the Health Department, made by the Board of Examiners, for the issuance of the permits and licenses hereinafter defined;

(g) The word "permit" shall mean the written authorization given by the Health Department for the granting of a license as hereinafter defined;

(h) The word "license" shall mean the written authorization given by the Director of Finance, in conformity to the present by-law, to engage in or work at the business of destroying or controlling vermin by means of fumigants;

(i) The word "fumigant" shall mean hydrocyanic acid in any form whatsoever, or any other substance as

may be specified by the Director of the Health Department, generated in a building or supplied ready prepared as a liquid, or in a solid form, and which, by itself or in combination with other substances, emits or liberates a gas or gases, fumes or vapors liable to cause a nuisance;

(j) The word "fumigation" shall mean any work or operation in connection with the use of fumigants;

(k) The word "vermin" shall mean any insect and other animal pest found in or about a building, which attacks human beings, or domestic animals, or food-stuffs, or organic refuse, or clothing, or bedding, or furniture, etc., namely: flies, bed-bugs, fleas, lice, rats, mice, cockroaches, ants, moths, worms, mosquitoes, spiders, crickets, bats, wasps, ticks, etc.;

(l) The words "danger zone" shall mean all rooms within the walls of a building, from cellar or basement to the roof level, as well as the adjoining ground and any contiguous room in adjoining buildings, or any building the occupants whereof are exposed to suffer a nuisance from fumigation;

(m) The word "nuisance" shall mean any act or omission which may endanger the life, safety, health, property or comfort of the public or of an individual or individuals, or by which the public or any individual or individuals are obstructed in the exercise or enjoyment of any right common to all His Majesty's subjects.

CHAPTER II.

Certificates of competency, permits and licenses.

General provisions.

ARTICLE 2. — The provisions of this by-law concerning permits and licenses shall apply: 1° to any person, as defined in paragraph (c) of Article 1, keeping or operating

a place of business as master-fumigator, within the City limits; 2° to the operators entrusted with fumigation work in the employ of such person.

Exception.

No permit or license shall be required from owners or occupants of commercial or industrial establishments using fumigants on their own premises or in connection with the material contained therein, provided, however, that the operators entrusted with fumigation work in such establishment have obtained from the Board of Examiners a certificate of competency, countersigned by the Director of the Health Department, and that all operations be carried on without causing any nuisance.

Special fumigation vaults and chambers.

ARTICLE 3. — No fumigation chamber or vault shall be installed in any building within the City limits, until the plans and specifications thereof have been submitted to the Health Department, nor until an authorization to that effect has been obtained from the said Department.

License.

ARTICLE 4. — In order to engage, as employer or employee, in fumigation work in any building within the City limits, and before advertising to that effect, it shall be necessary to have previously obtained one of the following types of licenses, with the exception of the employees of the Federal and Provincial Governments and of the City, duly authorized to engage in fumigation work, in the performance of their regular duties, and of the operators entrusted with fumigation work exempted from such obligation by Article 2 of this by-law:—

Master-fumigator.

(a) The master-fumigator's license entitles the holder thereof, if duly qualified as fumigator, as herein-

after defined, or having in his employ at least one operator qualified as such, to keep or operate a bona fide place of business and to conduct fumigation operations in any building within the City limits.

A duly registered firm, company or corporation may obtain a master-fumigator's license, provided one of the members thereof or its manager or one of its permanent employees, has obtained a fumigator's license, as defined in paragraph (b) of this article;

Fumigator.

(b) The fumigator's license entitles the holder thereof, after at least 6 months' training, after passing a successful examination before the Board of Examiners appointed to that effect and obtaining a certificate of competency from the said Board, to conduct fumigation operations for a master-fumigator;

Journeyman-fumigator.

(c) The journeyman-fumigator's license entitles the holder thereof, after having passed a successful examination before the Board of Examiners appointed to that effect, or having obtained a written recommendation from at least two licensed fumigators, to engage in fumigation work under the supervision of a licensed fumigator.

Permits, etc.

ARTICLE 5. — No license required by Article 4 of this by-law shall be issued by the City Director of Finance, unless a permit be first obtained from the Health Department, and the sum specified in By-law No. 432, as amended, be previously paid to the said Director of Finance, and, if issued to a master-fumigator, unless a real estate bond, or indemnity bond, or public liability insurance policy, in the sum of not less than \$10,000.00, be furnished by the

applicant for the benefit of any one, who may suffer injury, etc., as a result of the use of fumigants by such master-fumigator or his employees.

Any license issued in accordance with this article shall become null and void whenever the insurance policy or bond is cancelled or becomes inoperative.

Certificate of competency.

ARTICLE 6. — The permits required to obtain licenses from the City Director of Finance shall only be issued by the Health Department, upon presentation of a certificate of competency from the Board of Examiners appointed under Article 7 of this by-law.

Board of Examiners.

ARTICLE 7. — The Board of Examiners shall be composed of three members chosen by the Director of the Health Department, one of whom to be the Sanitary Engineer of said Department.

Examination.

ARTICLE 8. — The Director of the Health Department shall designate the time and place for examinations; who-soever desires to pass such examination shall make an application, in writing, on a special blank form to be supplied by the Health Department, as least 24 hours before the day and hour which shall have been set for the same.

The examination required to obtain a certificate of competency shall consist of oral and written tests, to ascertain the training, experience and fitness of the applicant, as well as his acquaintance with the provisions of this by-law and his knowledge with regard to the performance of fumigation, the methods of resuscitation, the toxic action of fumigants and the use of appropriate antidotes.

Each time a candidate presents himself for examination, he shall pay to the City Director of Finance an amount of \$5.00, if he is a candidate for a fumigator's license, and of \$2.00, if he is candidate for a journeyman-fumigator's license.

Medical certificate.

ARTICLE 9. — A medical certificate shall be required of every applicant for fumigator's or journeyman-fumigator's license, showing that he is in good health.

**License untransferable
and renewable.**

ARTICLE 10. — Licenses shall be personal and untransferable and must be renewed, each year, on or before the first day of the month of May.

**Licenses to be
posted, etc.**

ARTICLE 11. — Every master-fumigator's license shall be posted in a conspicuous place, in the place of business of the licensee, and every operator and watchman shall wear a badge, to be supplied to them by the City, and shall exhibit the same whenever required to do so.

Permits refused.

ARTICLE 12. — The Health Department shall refuse to grant or renew a permit in the case of whomsoever fails to comply with any of the provisions of this by-law, or makes a false declaration in his application for the same, or refuses or fails to furnish, within a delay of 3 days, the information asked for by the said Department, or refuses, at any time, to allow his work or place of business to be inspected, or does not conform to the provisions of this by-law and other by-laws concerning public health and public safety.

Licenses revoked.

ARTICLE 13. — The Executive Committee of the City, upon the recommendation of the Director of the Health Department, may revoke any license issued under this by-law for any infraction of any of its provisions, which license shall not be renewed for a period of at least one year after such revocation.

In case any license holder should be convicted for a third time, before the Recorder's Court, of any infraction of any of the provisions of this by-law, or, for the first time before a higher court, of criminal neglect, the permit and license granted to such license holder shall ipso facto be revoked and shall not be renewed.

**Obligations of
master-fumigators.**

ARTICLE 14. — Master-fumigators:—

(a) Shall be responsible for all the acts of their agents or employees;

(b) shall be held to furnish, without delay, to the Health Department, the name and address of each of their employees and, when any of them leaves his employ, to give immediate notice thereof to the said Department;

(c) shall be bound to give notice to the Health Department in case of removal of their place of business or when discontinuing their business;

(d) shall employ only licensed fumigators and journeymen-fumigators;

(e) shall be held to provide all their operators with gas masks of an approved type, with cannisters protecting against hydrocyanic acid gas or other gases used in fumigation, with suitable gloves, etc.;

(f) shall be bound to provide all their operators with the necessary antidotes and furnish to them written

instructions for emergency treatment or resuscitation of anyone who is overcome by fumigants;

(g) shall be held to keep a record of the buildings in which fumigants have been applied and to allow the said record to be examined, at any time, by the officers of the Health Department.

Liability of master-fumigators.

ARTICLE 15. — The certificate of competency issued by the Board of Examiners, the permit granted by the Health Department and the license issued by the Director of Finance do not bind the City, its employees or members of the Board of Examiners, or place upon them any liability in regard to the processes used in fumigation or their application, and the licensees alone shall assume the entire liability, criminal or civil, to which they may be subject by reason of general laws, in case of death, personal injury, illness, or property damage by fire or otherwise.

CHAPTER III.

Materials and mode of proceeding.

Warning gas.

ARTICLE 16. — The use of fumigants derived from hydrocyanic acid or its compounds is prohibited in every building or establishment whatsoever, unless such fumigants be associated with a warning tear-gas, such as cyanogen chloride in the proportion of at least 30%; it shall, however, be lawful to use such fumigants, without warning gas, in any commercial or industrial establishment using special fumigation chambers or vault and any establishment exempted from the obligation of obtaining the license required by Article 2 of this by-law, and in such other cases as the Director of the Health Department may specially authorize.

Cyanogen chloride or any other warning gas, in sufficient proportion, as may be approved by the Director of the Health Department, shall give, in non-dangerous concentrations, a sufficient and non-equivocal warning and render the stay unbearable in the dangerous zone; moreover, the fumigants shall not be left to pocket at any point of the fumigated premises, after the same have been aired.

Analysis of fumigants.

ARTICLE 17. — —A report of analysis, signed by a recognized chemist, of the substances used for fumigation purposes shall be furnished to the Director of the Health Department; the latter may himself, if he deems it advisable, cause to be analysed, at any time, at the expense of the master-fumigator, the fumigants which the latter proposes to utilize or which he actually utilizes.

Information to be furnished.

ARTICLE 18. — The master-fumigator shall, before fumigating any building whatever within the City limits, give to the Health Department and to the police and fire stations nearest to the building to be fumigated, on a special form supplied for such purpose, at least 16 hours in advance, the following information :the location, character and cubic content of the building to be fumigated, the date and hour when the proposed fumigation is to be performed, the name of the fumigator in charge, as well as the names of the other operators and employees under his control, etc., together with a written declaration to the effect that he has obtained the authorization in writing of the proprietor and of all the responsible occupants of the building to be fumigated, and that he has warned all other responsible occupants of the premises situated within the dangerous zone of the nature of the operations which he is to perform on the day and at the time designated.

Between the 3rd and 6th day following the fumigation, the master-fumigator shall make to the Health De-

partment, on a special form supplied by the said Department, a report on the operations carried on.

In the event of the master-fumigator being unable to perform the fumigation work on the day and at the hour mentioned in his notice, he shall notify the Health Department and all the interested parties, at least 3 hours before the hour set, of the changes made.

**Fumigation forbidden
in certain cases.**

ARTICLE 19. — No fumigation shall be performed unless atmospheric conditions be favorable, unless it be in charge of a licensed fumigator, assisted by another licensed operator and unless the Health, Police and Fire Departments have been first duly notified, as required by the preceding article, and whenever an order prohibiting the same is issued by the Director of one of the said departments.

**Notification to occupants
and vacating of premises.**

ARTICLE 20. — No room within a building under fumigation and for at least 3 hours after, shall be occupied by human beings or domestic animals, and no other room within the danger zone shall be occupied, unless it be sufficiently ventilated.

In hotels, apartment-houses, rooming-houses, public buildings and other large buildings, fumigation may be conducted in a part of the building affected, provided the rooms or compartments on all sides, above, below, and contiguous to the part to be fumigated, be vacated during the period of fumigation and subsequent ventilation, and that all the provisions of this by-law be strictly complied with.

It is strictly forbidden to begin fumigation operations before the conditions set forth in this by-law have been

fulfilled and all precautions required for such purpose have been taken; the fumigator shall personally inspect all rooms in the danger zone and warn all responsible occupants thereof verbally and over his signature, in French or in English, as the case may be, that fumigation is to be proceeded with.

Sealing of rooms and generating of gas.

ARTICLE 21. — Before fumigation, the operator shall securely seal all cracks, holes, crevices, openings and apertures in walls, ceilings and floors, as well as the space around piping and ventilators, in such a way as to confine the gas to the premises intended to be fumigated. Closets, furniture, drawers, trunks, boxes, etc., shall be opened, to facilitate the penetration of the gas; mattresses, blankets, pillows and other articles of bedding, carpets, rugs, etc., shall be raised off from their location to allow efficient ventilation after fumigation has been completed.

Before generating the gas, the fumigator and his assistant shall wear gas masks and afterwards, they shall lock, seal and placard the door through which they leave.

If a fire outbreak, etc., occurs in a building under fumigation or in its immediate vicinity, the fumigated building shall immediately be ventilated; ventilation shall take place at points farthest from the fire etc.

Exposure and concentrations.

ARTICLE 22. — The duration of the exposure may be varied in accordance with the concentrations and the fumigants used; but the manufacturers' directions shall

be adhered to, and no other quantity than that recommended shall be used to obtain the desired results.

Warning card.

ARTICLE 23. — Prior to releasing the gas, suitable conspicuous warning signs, illuminated at night, shall be posted on all accessible doors of the fumigated buildings. Such signs shall be of a model approved by the Health Department.

Guards.

ARTICLE 24. — There shall be stationed, around the building, during the whole period of fumigation and ventilation, at least one alert and capable watchman, holder of a license under this by-law, under the immediate orders and responsibility of the fumigator in charge of the operations carried out.

Removal of food.

ARTICLE 25. — All food and drink in the building or room to be fumigated shall be removed, except by special exemption of the Health Department, or when packed in sealed containers or intended to be cooked or boiled, or when fumigation is performed for the purpose of destroying vermin infesting the same.

Fires.

ARTICLE 26. — All fires within the building to be fumigated shall be put out, whenever an inflammable gas is to be used, and only electric lighting shall be permitted.

Opening of rooms after fumigation.

ARTICLE 27. — At the conclusion of the fumigation process, the fumigator and his assistant, wearing gas masks, shall be the first to enter the buildings or rooms fumigated and shall open all the doors and windows.

Re-occupancy and ventilation.

ARTICLE 28. — The fumigator shall see that no one enters the buildings or the rooms fumigated until a sufficient period of time has been allowed for the ventilation of such buildings or rooms; in order to prevent any danger, such period shall not be less than 3 hours, during which the temperature of the fumigated premises shall be sufficiently high to assure the complete dispersion of the gases.

All mattresses, pillows, cushions, and all bedding articles, must be shaken or beaten, and particular attention shall be given to bedding and clothing of children.

Care must be taken, during the ventilation, that the gases are not allowed to enter into adjoining buildings.

Cyanic crystals.

ARTICLE 29. — No cyanic crystals etc. shall be dropped on the floor or left exposed where people or domestic animals may come in contact with them.

Acid containers.

ARTICLE 30. — Every container used for fumigants shall be impermeable to acids and of such construction, material and thickness to prevent a nuisance in its handling.

Residue.

ARTICLE 31. — The operator, wearing his gas mask, shall pour the residue left in the jars and containers and the water used for cleaning such jars or containers in the

water-closet bowl, which shall be flushed thoroughly to remove all traces of chemicals.

It is forbidden to leave, in the inhabited premises, after fumigation, any materials or substances used for such purposes, as well as any refuse resulting from the operations.

Sale of fumigants etc.

ARTICLE 32. — It is forbidden to sell or give away fumigants except to master-fumigators licensed under this by-law and to whomsoever benefits from an exemption as provided for in Article 2 of this by-law, unless a signed statement be obtained from the recipient of such fumigants, to the effect that the same will not be used for the purpose of fumigation in any building used for human habitation or otherwise in contravention of the provisions of this by-law.

CHAPTER IV.

Enforcement.

Enforcement.

ARTICLE 33. — The Health Department is entrusted with the enforcement of this by-law, which shall come into force immediately after its adoption.

Certificate or badge.

ARTICLE — 34. — The officers of the Health Department shall carry about them a certificate signed by the Director of the said Department or wear a badge, showing on what authority they are acting, and shall exhibit such certificate or badge whenever required to do so.

Authorization to inspect.

ARTICLE 35. — The officers of the Health Department are authorized to enter, at any time, any building or

private property in the City, and to remain in the same as long as may be required to see that the provisions of this by-law are being complied with.

Interference.

ARTICLE 36. — It shall be unlawful to interfere with the duties of the officers of the Health Department, and every licensee shall give to said officials all the necessary assistance when required to do so.

Arrests in certain cases.

ARTICLE 37. — The officers of the Health Department are authorized to arrest any person who infringes any of the provisions of this by-law.

Liability.

ARTICLE 38. — Any one infringing any of the provisions of this by-law may be held responsible for such infringement and shall be liable to prosecution to the same extent as any licensee under this by-law.

Repeal.

ARTICLE 39. — Every provisions of any City by-law inconsistent with any of the provisions of this by-law is repealed.

French and English versions.

ARTICLE 40. — In case the French and English versions of any clause of this by-law should not agree, the French text shall prevail.

CHAPTER V.

Penalty.

Penal clause.

ARTICLE 41. — Every one offending against any of the provisions of this by-law shall be liable to a fine, with

or without costs, and, in default of immediate payment of said fine, with or without costs, as the case may be, to an imprisonment, the amount of said fine and the term of imprisonment to be fixed by the Recorder's Court of the City of Montreal, at its discretion; but such fine shall not exceed forty dollars and the imprisonment shall not be for a longer period than sixty days, the said imprisonment, however, to cease at any time before the expiration of the term fixed by the said Recorder's Court, upon payment of the said fine, or fine and costs, as the case may be, and, if the infringement of this by-law continues, the offender shall be liable to the fine and penalty above mentioned for each day during which the infringement is continued.

At the monthly meeting of the City Council of Montreal, held at the City Hall, on the 12th February 1934, in the manner and after the observance of the formalities prescribed in and by the Act of incorporation of the said City, at which meeting were present: Alderman Demers, Acting Mayor, in the Chair, Alderman O'Connell, Des-Roches, Quintal, Gabias, Trépanier, Lalancette, Savard, Hogan, Schubert, Legault, Monette, Weldon, Fortin, Dupéré, Biggar, Lesage, Auger, Dupuis, Deguire, Seigler, Schwartz, Taillefer, Côté, Arcand, Bell, Brunet, Caron, Goyette, Fillion, Dubreuil, Brien and Papineau.

The above by-law was adopted without any amendment.

HEALTH COMMISSION.

This Commission appointed by the City Council according to By-Law No: 1044 was composed for the year 1933, as follows:

Alderman J. M. Gabias, Chairman of the Executive Committee.

Alderman H. A. Quintal, M.D.

Alderman Z. H. Lesage, M.D.

Alderman F. L. Demers, 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, of the Université de Montréal.

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

Dr. A. Grant Fleming, Director of the Department of Public Health and Preventive Medicine, McGill University.

Dr. Frank G. Pedley, Assistant professor of Industrial Hygiene, McGill University.

During the year, this Commission studied the following questions:

Campaign of hygiene propaganda for the infant undertaken by the Lions Club.

Project for the organization of a municipal hygiene museum by the Health Department.

Project of renting the smallpox Hospital for the lodging of the chaplain and some members of the staff of the Pasteur Hospital (for contagious patients).

Preliminary report of the campaign undertaken by the Department of Health against diphtheria immunization.

Possibility of tolerating the presence of tuberculous children in a dwelling adjacent to a small restaurant (candy store) operated by the mother.

Regulation of quarantine and isolation in cases of contagious diseases.

Statistics of the infantile mortality in illegitimates.

Periodic health examination of food handlers.

Draft of By-Law prepared by the Department of Health concerning public baths and bathing.

Preparation by the Department of Health of a Poster concerning oral hygiene.

Draft of By-Law prepared by the Department of Health concerning fumigation.

LAURIER CLINIC.

A project formed for a long time has begun to receive its realization during the year 1933; it consists in creating centres of practical demonstration and training for the personnel of the Child Hygiene Division, for foreign staffs sent to us and for visitors, in grouping together, in the same building, the various activities of this Division of the Health Department.

The City being divided in 4 large districts for the needs of the medical school inspection we wished to secure from the Administrators the erection of a City building located in the centre of each district and specially equipped to meet our views.

The first of these buildings has been erected on Mount Royal Avenue, corner of Henri-Julien Avenue, and the Health Department took possession of same in the month of February.

It is made of solid building material and fireproof; its structure is of modern style, sober and nice; it presents a stately aspect.

It comprises of rooms for the various activities of the Child Hygiene Division: Well-baby clinics, pre-natal clinics, dental and psychological clinics for school children, stations of vaccination against smallpox and of immunization against diphtheria.

It is also used as a meetings place for the nurses of that district: these meetings are held twice a week and are presided over by the district supervisor.

There is another hall which will be employed later on only because it has been lend to the unemployment

Commission, for the opening of a temporary office; then, it will be used as an exhibition hall for apparatus, materials and samples concerning health. We have as yet gathered a certain amount of material and, on occasion we will continue to collect data, without deviating from our duties and without deviating any money needed for the administration of this Department.

However this exhibition Hall could be opened to the public and would contribute to create interest regarding Public Health questions; it will also serve to improve the knowledges of the personnel.

The furniture is well adapted, the equipment is complete and the functioning of this institution has been organized with care, so that it can serve as a model to each of the similar organizations which, under the direction of the Child Hygiene Division, are working-out separately and are spreading into all parts of our City.

HOSPITAL FOR CONTAGIOUS DISEASES.

The new hospital for contagious patients which is called "Pasteur Hospital" has been erected on Sherbrooke street, opposite Moreau street; it occupies a large piece of land, where presently stands, at a distance of about four hundred feet, the Smallpox hospital.

This latter is always kept ready to receive patients, although that there was not a single case of smallpox in Montreal since the month of January 1930; in the meantime it is used as a clinic for the treatment of scabies, for cases detected amongst school-children during the school-medical inspection.

The construction of the new hospital was ended during the autumn; it was furnished and equipped to receive patients at the beginning of the month of January 1934.

The building is of solid materials, sober and nice; its structure of modern style has a fine appearance and the

inside has a pleasant aspect which inspires a sensation of welfare.

The disposal of the various departments was specially studied and they were located in such a way to simplify their access and to facilitate the functioning of the hospital.

Efforts were made to utilize for its equipment the latest improvements in order to give to this institution a high degree of perfectness which will be an honor for the City of Montreal and the Province of Quebec.

Its capacity is of three hundred beds which, with the one hundred and fifty beds of the Alexandra Hospital, form a total of four hundred and fifty beds for contagious patients in this City, with a population for 1933 of 847,000 inhabitants.

CANADIAN SANITARY ORGANIZATION.

It frequently happens that one confuses himself in the attributions of the three kinds of sanitary organizations of this country: the federal, provincial and municipal organizations; for this reason I thought it advisable, in view of directing those who may wish to secure some information on this matter, to publish the following article:

BOARDS OF HEALTH :

FEDERAL, PROVINCIAL, MUNICIPAL.

Functions.

These three departments are filling distinct functions, which are not a duplication of one another and the activities of each of them are different from one another; however, they form an entity in view of meeting all needs.

To the Federal Government are relegated the public health questions of international interest, also those of national and interprovincial interests.

The Departments charged with the enforcement of the laws and regulations enacted by the Federal Government are: "The Department of Pensions and National Health" and "The Department of Agriculture" the respective duties of which are indicated below.

To the Provincial Government are attributed the questions of Health which are of provincial interest, the adoption of the necessary measures to oblige each municipality of this province to have its Board of Health and to supervise its functioning; furthermore to establish a system of direct sanitary control in territories not organized into municipalities.

The Departments charged with the enforcement of the laws and regulations enacted by the Provincial Government are: the Department of the Provincial Secretary and that of the Provincial Treasurer; the functions of each of them are indicated below.

The Public Health questions of local interest are attributed to the municipalities; each of them is obliged to organize a "Bureau of Hygiene" (Health Department) the duties of which are hereafter indicated.

THE FEDERAL DEPARTMENT OF PENSIONS AND NATIONAL HEALTH.

and

THE FEDERAL DEPARTMENT OF AGRICULTURE.

Functions.

1° The FEDERAL DEPARTMENT OF PENSIONS AND NATIONAL HEALTH,

Performs the following duties:

(a) Drafting and adoption of laws and regulations for the control of foods and drugs, and their enforcement.

This control consists in ascertaining the purity of the ingredients used in their preparation, to prevent their

falsification, and the apposition of fraudulent labels employed in view of misleading the public as to the character or quality of such products; this control is also exercised on all food-stuff and drugs in the whole country even if they have been imported, manufactured, offered in sale or sold to the consumers; this supervision also applies on imported goods when they are entering this country and on those intended for export.

(b) Control of narcotics import, in order that it be done only in compliance with the law and to avoid prohibited ingredients to be introduced in our country;

Control on the trade of these substances in the country to avoid an illegal traffic;

The enforcement of the laws and regulations pertaining to the trade, import and export of these substances;

(c) Control, making and trade of patent medicines;

(d) Control in a sanitary point of view of vessels navigating on rivers and lakes, of railroad trains and yards where federal public works are undertaken: sanitary conditions, sanitation of drinking-water and foods;

(e) Hospitalization and treatment of staffs of vessels coming from foreign countries; the hospitalization of which is usually done through contracts with existing general hospitals. In Montreal there is a small maritime hospital, the property of the Government;

(f) The maintenance of a control service to prevent the spreading of contagious diseases in the country, through passengers coming either by vessel or railroad trains; examination of sanitary registers kept on vessels, examination of vessels, personnel, passengers and especially of immigrants;

(g) The maintenance of quarantine stations to prevent the spreading through the country of contagious di-

seases having occurred during the passage, in immigrants or other passengers;

In these stations are made: the disinfection of the contaminated material found in the vessel and the hospitalization of sick passengers suffering from contagious diseases;

(h) Deratisation of ships through fumigation, to prevent the outbreak of plague;

(i) Maintenance of lazarets: (stations for the hospitalization and medical care of patients suffering from leprosy) and enforcement of the laws concerning the control of said disease;

(j) The maintenance of a medical service of Immigration: examination of immigrants in the old countries before they take passage on the boats and examination in Canada before their landing;

(k) Propaganda in support of the fight against venereal diseases, infantile mortality, maternal mortality, etc.;

(1) Maintenance of a Laboratory of hygiene comprising a Division charged to make the analyses for the control of biological products.

2° The FEDERAL DEPARTMENT OF AGRICULTURE,

Performs the following duties:

(a) Control of public abattoirs where the slaughtering is done of animals of which the meat is intended to be exported;

(b) The public abattoirs are submitted to federal laws regarding their equipment and functioning; the inspection of slaughtered animals is made under the supervision of inspectors who act under the jurisdiction of the Department of Agriculture;

(c) Control of canned goods establishments which comprises an inspection, in a sanitary point of view, of the

building itself, of all foodstuff to be preserved, of cans or containers which are used for preserving, of the labelling and lastly all that concerns the enforcement of the Meat and Canned Foods Act;

(d) The preparation and enforcement of laws and by-laws concerning the control of contagious diseases in animals and the prevention of entrance of sick animals into this country.

NOTE. — The enforcement of the "Law Deportation" is applied by the "Department of Immigration".

The tabulation and publication of the VITAL STATISTICS for Canada are made under the DEPARTMENT OF TRADE AND COMMERCE.

DEPARTMENT OF THE PROVINCIAL SECRETARY
(Provincial Bureau of Health)

and

THE DEPARTMENT OF FINANCES
(through its Revenue Bureau)

Functions.

3° Department of the PROVINCIAL SECRETARY,
Performs the following duties :

Through its PROVINCIAL BUREAU OF HEALTH :

(a) Tabulation and study of vital statistics which comprise the demographic movement of the population of the Province and that of the mortality;

(b) Sanitary inquiries in the various areas of the Province:

Study of the sanitary conditions to determine the repercussion they may have for the Health of the population;

Enquiries as to the causes of disease and especially of epidemics;

Investigation on the causes of mortality;

(c) Supervision of the municipalities to oblige them to have a Board of Health and to enforce the provincial By-Laws concerning sanitation and the means to be taken to limit the spreading of contagious diseases;

(d) Propaganda through Health Departments, Municipal Councils, Health officers, public schools, clergy, etc., to diffuse the practice of the necessary measures for the protection of Public Health;

(e) Organizations, in districts not yet formed in municipalities of a Board of Health directly placed under its jurisdiction;

(f) Organization in certain cases, of county sanitary districts or group of municipalities;

(g) Adoption of Health By-Laws which are to be applied in all the municipalities of the Province;

(h) Inspection of industrial establishments and enforcement of the provincial health By-Laws concerning them; control of the sanitation of water supplied by municipal aqueducts or others; control of the disposal of sewers water and refuse;

(i) Control of the installation, equipment and mode of operation of pasteurizing milk plants;

(j) Control of venereal diseases under the direction of the members of the Health Council who are appointed by the Lieutenant-Governor in Council.

Through its Service of PUBLIC ASSISTANCE :

(a) Controls the enforcement of the "Québec Public Charities Act", "Hospital Tax Act" and "Amusement Tax Act."

Through DIRECT ACTION :

(a) Controls the enforcement of the "Lunatic Asylum Act" and lunatic asylums which receive grants from the Government, reformatory schools, industrial schools and institutions for mentally defective children;

(b) Supervises the lunatic asylums that are not receiving grants from Government.

4° DEPARTMENT OF THE PROVINCIAL TREASURER,

Performs the following duties:

Through its REVENUES BUREAU (Hostelery Service):

(a) Inspection of hotels and restaurants, rooming houses, tourists camps and enforcement of the health by-laws governing them.

Through the QUEBEC LIQUORS COMMISSION:

(a) Examination and approval of plans and specifications concerning the arrangement or alterations of a building in view of taking benefit of a tavern permit.

NOTE : — The Department of Labour through the Commission appointed to this end, controls the enforcement of the "Quebec Workingmen's Act".

MUNICIPALITIES.

(THROUGH THEIR BOARDS OF HEALTH) or
(DEPARTMENTS OF HEALTH).

Functions.

5° EACH MUNICIPALITY,

Performs the following duties,

Through its "BUREAU OF HEALTH" (Department of Health):

(a) Enforcement of the Provincial Health By-laws and of special By-laws.

Large municipalities in need of special By-laws request from the Legislature the necessary power to enact and apply them.

Montreal, apart from enforcing the Provincial By-laws, has enacted many special ones applicable in its territory and enforced through its Department of Health.

The table published in this annual report (hors-texte) at the beginning of this book, indicates in detail the organization and functions of this Department.

S. BOUCHER,

M.D., D.P.H., LL.D., F.A.P.H.A., F.R. San. I. (E).

Division of Contagious Diseases

DIVISION OF CONTAGIOUS DISEASES.

Dr. S. Boucher,
Director, Department of Health,
City of Montreal.

Dear Sir: —

I have the honour to lay before you the detailed statement of the operations carried on by the Contagious Diseases Division during the year 1933.

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

SUMMARY.

Cases reported and confirmed	15,540
Number of deaths	1,161
Cases hospitalized	2,046
Cases visited by nurses (including subsequent visits)	22,086
Visits and special investigations by supervising nurse	628
Cases visited by epidemiologists	6,232
Houses placarded	2,196
Houses disinfected	3,797
Various visits by officers appointed to the fumigation	4,234
Various analyses submitted to the Laboratory:	
Expectorations	1
Rabies (research of Negri bodies)	21
Blood (test re-Brucella Abortus)	94
Blood (Widal's test)	451
Throat culture re-Diphtheria	2,382
Throat culture re-Hemolytic Streptococcus	48
Stools (agglutination test for Typhosus Bacillus and Paratyphosus A & B Bacilli)	468
Urines (agglutination test for Typhosus Bacillus and Paratyphosus A & B. Bacilli)	462
Total	3,927

Free distribution of antipoliomyelitic serum (vials)	11
Free distribution of antidiphtheric serum (vials):	
(a) Curative doses	244
(b) Preventive doses	281
Free distribution of Toxoid (anatoxine Ramon) against diphtheria (number of vials)	10,259
Free distribution of diphtheria toxin for Schick Test (number of vials)	1,470
Number of complete immunizations reported to this Division and done by:	
Child Hygiene Division	39,016
Child Welfare Assoc. of Montreal	1,956
Fédération des Oeuvres d'Hygiène Infantile	2,608
Montreal Children Hospital	12
Crèche St-Paul	202
Crèche d'Youville	258
Private physicians	1,017
Montefiore Orphan's Home	17
Woman General Hospital	24
Shriners' Hospital	22
Aide à la Femme	47
Total	45,179

The total amount of vaccinations made by physicians of:

(a) Contagious Diseases Division	7,822
(b) Child Hygiene Division	12,610
(c) Medical Control Division	2,939

Total	23,361
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On this total amount of vaccinations, 3,852 have been made in industrial establishments.

Number of dog bites cases reported	341
Number of researches for Negri bodies submitted to the Laboratory	21
Positive results of animal or human rabies	0
Number of clinic sittings for scabies treatment	15
Number of cases	110
Number of treatments	192
Number of families assisted	33
Number of houses disinfected	63

The mortality rate per 100,000 of population from communicable diseases, tuberculosis excepted, is 41.3 in 1933 compared to 73.7 in 1932.

The majority of cases must be attributed to chicken-pox (4,135), whooping-cough (3,271), mumps (2,924). These three diseases have gradually increased in number since the beginning of 1932 and there was still no sign of a decrease at the end of 1933.

It was different with measles which had developed rather highly in the winter of 1932 and had a marked decrease in the last six months of the year. In 1933, 472 cases only of this disease were registered.

Scarlet fever has also decreased; it was rated 1,840 in 1932 and has lessened to 1,300 in 1933.

We must mention here a striking decrease of diphtheria cases which amounted to 297 in 1933 in comparison with 607 in 1932. It is very comforting to notice the fact that immunizations against diphtheria are already giving effective results, and after the active campaign carried on in 1933, we are entitled to believe that this dreadful disease will figure on a very small scale in our future records.

The success obtained in this campaign of immunization is due to the considerable work performed by doctors and nurses of the Child Hygiene Division; we are also indebted to certain private organizations for their close co-operation.

Unfortunately, family physicians have not responded

in a great number to our appeal for their contribution to such a humanitarian campaign.

The Contagious Diseases Division keeps a complete record of all immunizations done since 1926 in the city of Montreal. The total amount reaches over 100,000. Whenever a case of diphtheria is reported to the Contagious Diseases Division, we refer to the individual cards to make sure if this case is not figuring among the immunized subjects.

In 1933 a general account of diphtheria cases among immunized people shows that 6 among the latter have suffered from that disease after having received 3 injections of Anatoxine Ramon. In one case the last injection went back to December 1931. In another case, the last injection was performed in January 1932. As for the 4 others, the injections were of a rather recent date as regards the outbreak of the disease.

A posteriori schick test had given a negative result after 3 months on the subject immunized in December 1931.

Moreover, 5 other cases occurred among patients who had not received a sufficient amount of injections to be considered as immunized subjects. Three of these children had received only 2 injections and the other two only 1 injection.

Since January 1930, not a single case of small-pox was reported to the Health Department.

The work of prevention against this disease is always carried on very actively, especially in schools and industrial establishments.

The Pasteur hospital has started to operate in January 1933 with 300 beds ready for occupation by contagious patients, according to a contract between the bureau of directors and the City of Montreal.

This event will enable us in the future to have a larger number of beds available for the treatment and maintenance of contagious cases; the capacity of beds was increased from 290 in 1932 to 460 in 1933.

TABLE No. 1
CASES OF TYPHOID FEVER
From January 1st to December 31st, 1933.

1933 Months	Number of cases	Repartition					
		Source of infection		Hospitalisation		Deaths	
		In Montreal	Outside cases	Residents	Outside cases	Residents	Outside cases
January.....	8	6	2	7	2	.....	.....
February.....	6	3	3	2	.....	.....	.....
March.....	7	4	3	4	1	1	.....
April.....	4	3	1	3	.....	.....	.....
May.....	3	1	2	2	7	.....	.....
June.....	21	13	8	8	3	3	.....
July.....	17	10	7	16	1	2	.....
August.....	58	38	20	18	2	9	2
September.....	43	25	18	18	4	8	.....
October.....	17	9	8	7	.....	3	1
November.....	7	5	2	1	2	2	2
December.....	1	.....	1	.....	.....	3	.....
Total.....	192	117	75	86	22	31	5

Percentage of deaths: 18.7%.

The preceding table shows that there have been in 1933, 192 cases of typhoid fever in Montreal reported to the Health Department together with 36 deaths, in comparison with 227 cases and 37 deaths in 1932.

Out of 192 cases reported, 75 are attributable to sources of infection situated outside the limits of Montreal in different places. From this latter group of outside infected cases, 22 must be deducted which came from other municipalities to be hospitalized in our city; among these, there were 5 deaths.

Concerning the 117 local cases, it is necessary to state that in the course of 1933 there has occurred in an institution of our city a typhoid epidemic of which we will state the principal facts.

The institution referred to, situated on the limits of the City, rather belongs to the suburban, therefore extraneous territory, but for sanitary control the Health Department of the City has precedence of jurisdiction over the latter.

During the month of July, there were in that institution 580 adults, divided into 3 separate groups, which we will designate as A, B and C. These three groups had no communication between each other, except through the refectory. The first group comprised 40 persons, the second 167 and the third 373; in addition to this, there were 17 servants for general housekeeping.

Besides, during July and August, 258 strangers stayed in the institutions as follows: 98 from July 5 to August 8 and the others from July 21 to August 8. None of those visitors has contracted typhoid and this has been confirmed up to date.

The infection first appeared in group A, then in group B, finally in group C. Number of cases in each group follows:

Group A	22 cases
Group B	7 "
Group C	11 "
<hr/>	
Total	40 "

The onset of the epidemic was in the last ten days of July; although it was not until the 4th of August that the Health Department was notified about the first 11 cases.

The agglutination reaction made on the 3rd of August having given for the first 6 cases a positive reaction, and their observation sheet indicating that they had reached the 2nd week of the disease, we figured the outbreak of infection back to the 15th of July.

Distribution of cases by dates of onset 1933.

July 25th	2 cases
July 26th	3 "
July 27th	3 "
July 28th	2 "
August 1st	4 "
August 4th	3 "
August 6th	3 "
August 8th	1 "
August 9th	2 "
August 10th	1 "
August 11th	4 "
August 12th	1 "
August 13th	2 "
August 14th	1 "
August 18th	2 "
August 19th	1 "
August 20th	2 "
August 27th	1 "
August 29th	1 "
August 30th	1 "
<hr/>	
Total	40 "

The date of onset of the last case was, as already seen in table, is August 30th.

This short duration of the epidemic coupled with the outburst of the first cases in only a few days would indicate a massive infection, which would have simultaneously struck only a small number of persons.

The other cases occurred subsequently are considered as contact cases.

The water supply of the institution comes from the aqueduct of the City of Montreal. At no time was there any reason to suspect the latter water of being contaminated.

The authorities of this institution own 4 farms for their own benefit and food supply. They receive from these farms an average of one hundred gallons of milk per day along with other miscellaneous products.

Milk consumed was unpasteurized, and could be suspected in as much analyses of water from three of these farms have demonstrated an abnormal quantity of B. Coli. No case of typhoid or typhoid carrier could be traced back among farm employees.

Every inmate of the institution consumed milk rather freely. This fact, for awhile, made us think of milk as the possible vehicle of infection, on account of the poor quality of water on those three farms; so also the method used for preserving milk at the institution as well as its distribution at refectory tables.

As a matter of fact, the milk was brought to the institution in cans, and was then decanted in pails, without being mixed; it was not kept in a refrigerator before direct distribution to consumers in pots, in which it was poured by means of a ladle; this might explain why only a few subjects would have been infected in the first place.

Nevertheless, up to now, no concluding evidence could be brought out on this point.

At the refectory there were 54 tables, arranged in 7 rows; 40 out of these tables were occupied by 12 persons each, 14 others by 8 persons each. Tables where cases developed were all tables of the former category (12 persons each).

The 11 primary cases were distributed among 5 tables, 4 of which were adjoining tables and 1 isolated.

On the adjoining tables, secondary cases occurred; 8 patients, 6 patients, 6 patients, finally 4 patients were counted respectively on 4 tables.

All these tables were forming a half circle around a common service table, on which were deposited alimentary products and out of which the persons helped themselves when they were late to come to refectory.

Among the latter were comprised the 5 patients of group C.

When meals were over, this same table was used for common washing of individual utensils such as knives, forks and spoons, of persons who were late.

This last detail is not worthy, as it might explain the occurrence of a few cases among persons of group C, occupying a somewhat isolated table at the refectory.

This particular grouping of most of the cases in one corner of the refectory is extremely important; in as much as it brings out the possible contamination of some food-stuff taken from the common service table.

Other particular facts were brought out by our epidemiological investigation, but these do not justify immediate comments. It would be rather premature to attempt an opinion about the real factor of contamination

in this epidemic. No typhoid carrier has been found, either in the institution itself or on the farms furnishing the milk, in spite of repeated researches.

Consequently the source of infection has been limited and has had a rather short duration. However, it has remained confused in spite of researches made in order to trace it out; and this might be explained by the impossibility of securing in such an institution all the necessary information, because its inmates are divided into many groups and also because many subjects make outside sojourning. On the other hand, the institution is also visited by people coming from different outside places.

Upon the whole, after establishing the above mentioned facts, one can conclude that: 1° the infection might have been propagated in the institution through the presence of a mild, hitherto unrecognized case; 2° the infection might have penetrated through milk, of which a small quantity would have been contaminated, or foodstuffs such as fruits uncooked vegetables, etc.; 3° contamination took place in the refectory.

Among measures taken to prevent spreading of the disease in the institution and to check its evolution, we must mention the fact that every inmate, including servants, was immunized with *per os* vaccine (Beresdka), 4 doses each; this vaccination was started on the 10, 11 and 12 of August.

Following this general statement of the activities of the Contagious Diseases Division, are in numerical order tables which show the particulars of these operations.

TABLE No. 5
CASES OF POLIOMYELITIS FROM JANUARY 1st TO DECEMBER 31st, 1933.

1933 Months	Number of cases	Montreal Cases			Outside Cases	
		Source of infection		Cases hospitalized	Number of deaths	Deaths
		In Montreal	In other localities			
January.....	3	2	1	.....	1	.....
February.....	.....	.....	.....	.....	.....	.....
March.....	.....	.....	.....	.....	.....	.....
April.....	.....	.....	.....	.....	.....	.....
May.....	.....	.....	.....	.....	.....	.....
June.....	1	1	.....	1	.....	.....
July.....	.....	.....	.....	1	.....	.....
August.....	7	7	.....	5	.....	.....
September.....	12	9	3	11	1	.....
October.....	11	9	2	17	.....	.....
November.....	7	7	.....	5	.....	.....
December.....	.....	.....	.....	.....	.....	.....
Total.....	41	35	6	40	4	6

CLASSIFICATION			
(a) Nationalities	(b) Sexe	(c) Age	
French-Canadians.....	M.....	From 0 to 1 year incl.....	3
English-Canadians.....	F.....	From 2 to 5 years incl.....	23
Jews.....	.....	From 6 to 10 years incl.....	9
Strangers.....	.....	From 11 to 15 years incl.....	6
Total.....	Total.....	Total.....	41

TABLE No. 6
CLASSIFICATION OF CONTAGIOUS DISEASES BY NATIONALITIES, 1933.

Diseases	French Canadians	English Canadians	Jews	Other nationalities	Total
Diphtheria.....	187	55	20	35	297
Scarlet fever.....	602	461	161	76	1300
Measles.....	299	131	13	29	472
German measles.....	66	24	4	2	96
Whooping cough.....	1902	1026	166	177	3271
Mumps.....	1609	810	254	251	2924
Chicken-pox.....	2048	1506	340	241	4135
Small-pox.....					
Erysipelas.....	112	44	8	19	183
Typhoid fever.....	135	28	10	19	192
C.S. meningitis.....	2	2			4
Poliomyelitis.....	26	6	2	1	35
Puerperal septicaemia.....	26	9	2	3	40
Purulent ophthalmia.....	4	1			5
Lethargic encephalitis.....	1				1
Trachoma.....	1				1
Dysentery.....		9	4	2	15
Epidemic influenza.....	98	21	3	9	131
Scabies.....	314	29	1	28	372
Total.....	7432	4162	988	892	13474
Pulmonary tuberculosis.....	1122	406	96	162	1786
Tuberculosis, other forms.....	178	70	10	22	280
Grand total.....					15540

TABLE No. 7

CONTROL OF CONTAGIOUS DISEASES, 1933.

Diseases	Control Visits			
	Diagnosis	Supervision of quaran- tined hou- ses	Desinfec- tions	Placards
Diphtheria.....	11	1191	315	61
Scarlet fever.....	157	2345	1155	371
Measles.....	111	555	63	240
Whooping-cough.....	1085	3890	298	1518
Mumps.....	1383	3372	40	.....
Chicken-pox.....	1370	4724	90	.....
Typhoid fever.....	135	312	76	.....
German measles.....	11	63	1	.....
Tuberculosis.....	7	915	1294	.....
Scabies.....	98	414	63	.....
Epidemic influenza.....	6	63	.....	.....
C.S. meningitis.....	.....	15	1	3
Erysipelas.....	7	159	99	.....
Poliomyelitis.....	31	72	29	3
Purulent ophthalmia.....	4	5	.....	.....
puerperal septicaemia.....	.....	21	.....	.....
Skin diseases.....	57	3	.....	.....
lethargic encephalitis.....	.....	1	.....	.....
No infection.....	894	.....	.....	.....
Under observation.....	222	.....	.....	.....
Dysentery.....	15	.....	.....	.....
Trachome.....	1	.....	.....	.....
Miscellaneous.....	.....	.....	273	.....
Miscellaneous visits.....	627	3966	.....	.....
Total.....	6232	22086	3797	2196

Besides their work, the epidemiologists vaccinated 7,332 persons and issued 6,998 verification certificates.

1,432 miscellaneous visits have been made by officers attending fumigation.

Visiting-nurses in their investigations in families have taken 1,432 cultures for laboratory analysis.

TABLE No. 8

St. Paul and Alexandra Hospitals.

DURATION OF SOJOURN OF PATIENTS.

Patients hospitalized	2,046
Number of days of hospitalization	69,720
Average sojourn for each patient	34
Maximum hospitalization by day	282
Minimum hospitalization by day	95
Average hospitalization by day	189

Mortality

		Per- centage
Deaths during the year 1933	83	4.05%
Deaths during the first 48 hours	33	1.61%
Number of deaths happened after the first 48 hours	50	2.44%
Proportion of deaths during the first 48 hours to the total of deaths		39.7%

Miscellaneous

Ambulance calls	1,309
Microscopical examinations	2,904
Urine analyses	6,996

Alexandra and St-Paul Hospitals

TABLE No. 9

INTUBATIONS AND RESULTS.

Ages	Intuba- tions	Cured	Deaths	Percentage of deaths
Under 1 year.....	3	2	1	33%
1 to 2 years.....	9	4	5	55%
2 to 3 years.....	3	3		
3 to 4 years.....	7	7		
4 to 5 years.....	3	3		
5 to 6 years.....	3	3		
6 to 7 years.....				
7 to 8 years.....				
8 to 9 years.....	3	3		
9 to 10 years.....				
Total.....	31	25	6	19%

TABLE No. 10

NATIONALITY AND RELIGION OF PATIENTS.

Nationalities	Total	Percentage	Religion	Total	Percentage
French-Canadians....	1142	59%	Roman Catholics.....	1209	63%
English-Canadians....	529	27%	Protestants.....	529	27%
Jews.....	159	8.3%	Jews.....	159	8.3%
Other nationalities....	86	4.5%	Other religions.....	19	.....
Total.....	1916		Total.....	1916	

St-Paul and Alexandra Hospitals

TABLE No. 11 — FLUCTUATION OF PATIENTS AND DEATH RATE.

Diseases	In hospital January 1st, 1933	Admitted	Total number of patients.	Percentage of cases	Results			In hospital December 31st, 1933	Total
					Cured	Dead	Percentage of deaths		
Diphtheria.....	26	287	313	14.3%	285	16	19.2%	12	313
Scarlet fever.....	186	975	1161	53.4%	1070	25	30.1%	66	1161
Measles.....	5	54	59	2.7%	57	1	1.2%	1	59
Erysipelas.....	8	131	139	6.3%	126	8	9.6%	5	139
Chicken-pox.....	5	70	75	3.4%	70	4	4.8%	1	75
Whooping-cough.....	27	312	339	15.5%	305	19	22.8%	15	339
Mumps.....	.....	42	42	1.9%	42	.....	.....	.....	42
Influenza.....	1	8	9	.41%	.....	1	1.0%	8	9
German measles.....	.....	1	1	.....	1	.....	.....	.....	1
Poliomyelitis.....	1	12	13	.59%	8	2	2.4%	3	13
Diffuse phlegmon.....	.....	4	4	.....	2	2	2.4%	.....	4
Peritonitis.....	.....	1	1	.....	1	.....	.....	.....	1
Agranulocytosis.....	.....	2	2	.....	.....	2	2.4%	.....	2
Abscess of cerebellum.....	.....	1	1	.....	.....	1	1.2%	.....	1
Retropharyngeal abscess.....	.....	1	1	.....	1	.....	.....	.....	1
Miscellaneous.....	.....	15	15	.69%	13	2	2.4%	.....	15
Total.....	259	1916	2175	.....	1981	83	5.79%	111	2175

In handling you over this report, I wish to express my keen appreciation to the staff of the Contagious Diseases Division as well as to other divisions for their efficient co-operation.

Respectfully yours,

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, Director,
Department of Health,
City Hall Annex.

Dear Sir: —

I have the honour to submit the following report of the Division of Child Hygiene for the year 1933.

To assure the efficiency of the personnel of the Department of Health, two scholarships have again been granted this year to the medical inspectors of the Child Hygiene Division, one from the Rockefeller Foundation of New York being awarded to Dr. J. A. Brien, and the other by the City of Montreal to Dr. Emile Lalande.

In the course of the year, Dr. J. Lafleur has been named medical-inspector of schools. With this appointment, the total number of medical-inspectors is now 22.

Four nurses who have left the department, have been replaced by Misses M. C. Brien, M. A. Marsolais, B. Mallette and E. Matheson, all registered nurses.

The report of the work of the Child Hygiene Division for the year 1933, is divided into three principal parts:

- 1st part — Medical Inspection of Schools, which includes Mental Hygiene and Dental Hygiene.
- 2nd part — Prenatal Hygiene, Baby and Preschool Hygiene.
- 3rd part — Immunization against Diphtheria and Vaccination against Small-pox.

First Part**MEDICAL INSPECTION OF SCHOOLS****1932-33**

Two very important additions have been made during the year to the work of the "Medical Inspection of Schools".

- 1° Weight and Measurement of pupils by the class teachers in the schools.
- 2° Medical Examination of Teachers.

Weight and Measurement.

The weighing and measuring of pupils are now definite additions to the functions of the teaching staff, in compliance with an agreement made in 1929 and which was passed by a resolution of the Pedagogical Commission of the Catholic School Board, on the recommendation of the Committee of Hygiene (Oct. 3, 1933) as follows:

"It is unanimously agreed that all class teachers
"take the heights and weights of all their pupils three
"times per year at least, at the beginning of the school
"year, towards the end of December and middle of
"April, and their findings are to be registered on a
"special form "C".

This decision of the school authorities is an important help in the medical examination of pupils and shows the hearty cordiality and sincere co-operation given by the Catholic School Commission regarding Medical Inspection of Schools, performed by the Department of Health.

Medical Examination of Teachers.

An agreement with the School Commissions, both Catholic and Protestant, made in 1929 (art. 3d — see annual report 1926, p. 31) had already provided for the part of the Medical-Inspector in regard to the teaching per-

sonnel in the prevention of the spread of contagious diseases in the schools.

In July 1933, regarding article 221-17° of Public Instruction Law of the Province of Quebec, which reads as follows:

"17°. To demand from all lay persons who intend to teach, a satisfactory medical certificate, and

"Whereas it is important to control also (Ped. Com. VI, 20 June 1933, Hyg. Com.) the health of all "male and female teachers actually employed",

an arrangement was therefore concluded between the Catholic School Commission of Montreal and the Department of Health and a **systematic examination of lay teachers has been established.**

In virtue of this aforesaid agreement, the medical examination is compulsory for all lay employees, principals, male and female teachers, janitors and all other lay employees of the Catholic School Commission.

This examination may be made by the physicians of the Department of Health or by the family physician.

The Department of Health places itself completely and entirely at the disposal of the Commission to make without charge and at their request the examination of their teaching staff.

The employees may be examined, if it is their will, by the medical staff, according to a list which is given by the principal of the school to the Superintendent of the Division of Child Hygiene.

Nevertheless, the Department does not force the teachers to take any medical examination. This duty is left to the school principals.

A report of the examination is made by means of two forms, one of which is entitled "**First Medical Examination**" (form No. 95), and the other "**Annual or Routine Examination**" (form No. 96).

These reports are made in duplicate form and copies grouped according to schools, are sent to the School Commission, the original being kept for reference in the archives of the Department of Health.

In the cases of teachers who want to be examined by doctors of their own choice, the doctor's fees are to be paid by the one concerned. The examination must be complete and reported in duplicate form composed and furnished, free of charge, by the Department of Health, which reports must be sent to the Department of Health by the school principals.

The agreement is that these reports are "**strictly confidential**". The Department of Health does not make "any conclusion or recommendation that could tend to dismiss a member of the staff of the Commission, except of course in the case of contagious diseases, which are governed by law."

The School Commission, on the other hand, may submit the reports to scrutiny by its own medical advisers and alone, may decide what measures are to be taken in regard to its employees.

The inauguration of this system of "Medical Examination for teachers" constitutes an improvement and a decided addition to the work of the Medical Inspection of Schools in Montreal.

Indeed, it is important to safeguard the health of the teaching staff who should have an identical protection as that received by the pupils.

This organization is formed in the interest of the teachers from whom we demand such effort and attention which necessitates that they be in a perfect physical condition.

The sick teacher suffers from low resistance and this does not allow him to give his best effort to a so strenuous work as teaching. On the other hand, certain infections which he may carry are a direct danger to the health of the pupils, for example, pulmonary tuberculosis. Certain

nervous conditions will prevent him from having sufficient self-control to resist the irritation from the pupils to which he is continually exposed. His nervousness will be reflected on the nervous system of the pupils.

Other physical defects of vision, hearing, speech, may also be a great impediment.

Certain statistics made in London (England) and in New York (United States) in particular, show that the following diseases called "Professional" are the most frequent causes of absences and also of deaths amongst the teaching body:

- 1° "Pulmonary infections — particularly T.B.";
- 2° "Diseases of phonetic and laryngeal organs";
- 3° "Nervous and mental diseases".

This examination will therefore give eminent services to the teachers suffering from physical defects or undiscovered sickness and if he is advised of poor health it will enable him to be treated and prevent grave consequences and serious complications, prolong his life and render him capable of fulfilling his duties satisfactorily to his family and society.

WORK OF MEDICAL INSPECTION OF SCHOOLS FOR 1932-33.

The work of the medical inspection of schools, primary, secondary, Catholic and Protestant, French and English, and of a certain number of independent schools, is shown below:

1° Number of French and English catholic schools	214
Number of protestant schools	49
Number of independent schools	19

2°	Number of pupils in the catholic schools, French and English	113,291
	Number of pupils in the protestant schools	33,994
	Number of pupils in the independent schools	2,715

		Average schools	Average number of pupils
3°	19 Medical-inspectors. 3 Medical-inspect. to re- place absent doctors.	15.9	7,895
4°	70 Visiting-nurses.. . . . 10 Visiting-nurses to re- place absent nurses.	4.0	2,143
5°	4 Dental-inspectors	70.5	37,500
6°	4 Nurses in psychiatry.. . . . (one of which is super- visor).	70.5	37,500
7°	1 Psychiatrist (full-time) (French and English catholic schools.)	116.0	58,003
8°	2 Psychiatrists (part- time) (French and English catholic schools.)	58.0	29,002
9°	1 Psychiatrist (part- time) (Protestant schools.)	49.0	33,994

RESULTS OF WORK BY PERSONNEL IN CHARGE OF MEDICAL INSPECTION OF SCHOOLS.

School year 1932-33.

TABLE I.

1°	Work of Chief-Medical-Inspector: (Studying in United States.)	
2°	Work of Medical Supervisor:	
	Visits to schools	635
	Visits to clinics	470
	Special visits and investigations	31
3°	Work of Head-Nurse:	
	Visits to schools	50
	Visits to clinics	79
	Special visits or investigations	88
	Attendances at meetings at City-Hall	60
	Attendances at meetings of district-nurses	14
4°	Work of Supervisors of nurses (5):	
	Visits to schools	1648
	Visits to clinics, V.A.D. or V.A.V.	1587
	Home visits	698
	Special visits and investigations	26
5°	Meetings of Personnel:	
	Meetings of supervisors (City Hall)	60
	Meetings of district nurses (at Centres)	23

Conferences given to the personnel during 1932-33:

- 1° "Medical Inspection of School" — Dr. Ad. Groulx, Superintendent.
- 2° "Control of Milk in Montreal" — Dr. Hood, Superintendent of Food Inspection Division.
- 3° "Inauguration of Campaign against Diphtheria" — outline of the program — Dr. S. Boucher, Director of the Department of Health.

- 4° "History of Diphtheria" — Dr. D. Longpré, Medical Superintendent at Crèche d'Youville and St. Luke's Hospital.
- 5° "Sanitary Control of Water and Milk" — Dr. A. Bolduc, Superintendent of Municipal Laboratories.
- 6° "Baby and Preschool Clinics" — Dr. Ad. Groulx.

TABLE II.

WORK OF MEDICAL INSPECTORS.

Generalities.

Number of schools to visit... ..	282	Percentage
Number of visits made to schools.	8,188	
Number of children registered in schools	150,000	
Number of children examined by Med.-Inspector: (special cases and regular exam.)	85,034	56.68% (1)
a) Special cases	28,358	18.77% (1)
b) Periodic Physical Examinations (complete)	56,676	37.78% (1)
Periodic physical examinations:		
Number of normal children	27,599	48.69% (2)
Number of defective children	29,077	51.30% (2)
Number of physical defects found.	46,996	
Number of pupils with dental defects	27,743	48.95% (2)
Number of notices given to parents	15,224	
Number of pupils found not vaccinated... .. .	643	

(1) The percentage of children seen by the medical-inspectors (85,034)—the number of special cases seen (28,358)—those who have been physically examined (56,676), is based on the total number of children attending school (150,000).

(2) The percentage of normal children (27,599), sick children (29,077), those with dental defects (27,743), is based on the number of children who have been examined physically (56,676).

TABLE III.
PHYSICAL EXAMINATIONS

(Complete)

Defects found:

Eyes	7,226	15.38%
Ears	1,437	3.06%
Nose	4,559	9.70%
Tonsils	9,503	20.22%
Glandular system	7,494	15.95%
Goitre	493	1.05%
Skin	2,439	5.20%
Lungs	1,917	4.08%
Heart	1,893	4.03%
Digestive system	569	1.21%
Genito-urinary system	209	0.44%
Orthopedic	1,403	2.98%
Nervous system	1,134	2.41%
Mental condition	360	0.76%
Malnutrition	6,360	13.53%
<hr/>		<hr/>
Total number of defects . .	46,996	100.00%

CONTROL EXAMINATIONS

The control examinations or re-examinations are made by the doctors and nurses in order to find out how many of those who have been given "notices to parents" with defects have had said defects corrected.

This re-examination is done each month by the school-nurses and the pupils who have been treated are shown to the school medical inspector who controls the treatment and correction of the defects.

The first re-examination was completed at the end of the school year 1932-33.

Following this, a new control was done after the opening of the schools in September and October (1933) for those pupils who had defects and did not have them corrected during the preceding school year.

The results of this control are shown in the following tables.

TABLE IV

Table IV shows the number of children whose parents have been advised by means of notice No. 13 and the results obtained.

Number of notices given	10,593	%
Number of children with defects, cured or corrected	3,663	34.57
Number of children under treatment (not cured)	2,725	25.72
Number of children, not treated	3,199	30.67
Number of children, not traced	1,006	9.04

TABLE V

The table which follows shows the number of children who were suffering from enlarged tonsils, adenoids and defective vision, and the number of above mentioned children who have had their defects corrected, either by operation or by obtaining glasses.

	Advised	Corrected	%
Number of children having en- larged tonsils (operated).. . .	3,790	1,080	28.40
Number of children having ade- noids (operated)	2,377	492	20.70
Number of children who have ob- tained glasses	3,336	1,384	41.48

TABLE VI

RESULTS OF CONTROL EXAMINATIONS.

Defects	Total	Not treated	Defects treated		
			Not cured	Corrected or cured	
				Number	%
Vision.....	3336	1528	2808	1648	49.37
Eyes.....	418	186	232	182	43.54
Hearing.....	409	180	229	156	38.14
Ear disease.....	576	274	302	239	41.49
Nasal obstruction.....	2377	1451	926	775	32.60
Tonsils.....	3790	2298	1492	1226	32.35
Glands.....	1467	776	691	562	38.31
Goitre.....	201	116	85	28	13.93
Skin.....	274	76	198	171	61.68
Lungs.....	244	75	169	127	52.05
Heart.....	345	180	165	64	18.55
Digestive system.....	94	51	43	31	32.98
Genito-urinary system.....	134	64	70	43	32.09
Orthopedic system.....	136	81	55	17	12.50
Nervous system.....	242	126	116	58	23.96
Malnutrition.....	1619	824	795	396	24.45
Total.....	15662	8286	7376	5723	36.54
Teeth.....	5337	2781	2556	2202	41.27

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

During the school year 1932-33, the medical inspectors and the visiting nurses have kept under observation 8,369 pupils examined in 1931-32 and given notice No. 13, whose defects had not been corrected. Of this number, 1,771 children have been treated and cured. This number, added to that of the year, 3,663, gives a total of 5,434 children whose physical defects have been treated or cured.

Furthermore, out of 9,138 physical defects not treated, 4,207 of those have been corrected. This number added to 6,699 corrections obtained in 1932-33, gives 10,906 defects treated and cured.

A certain number of operations for enlarged tonsils and adenoids and correction for defective vision by means of glasses, have been made during the year 1932-33 for those children found suffering with these defects during 1931-32.

The Table VIa which follows shows the complete results of corrections obtained for the year 1932-33 following operations for enlarged tonsils and adenoids, and the results of glasses obtained for defective vision.

In column "A" is shown the number of children advised by notice in 1931-32 and corrected during 1932-33. In the second column "B" (repetition of Table V) is shown the number of children given notices and corrected in 1932-33 and in column "C" the total number of corrections obtained in the school year of 1932-33.

TABLE VIa
SPECIAL CORRECTIONS.

Corrections for	A		B		C		
	Ad- vised	Cor- rected	Ad- vised	Cor- rected	Ad- vised	Cor- rected	%
Enlarged tonsils (operated).....	2909	404	3790	1080	6699	1484	22.1
Adenoids (operated).....	1600	201	2377	492	3977	693	17.4
Defective vision (glasses).....	2397	431	3336	1384	5733	1815	31.6

The medical inspectors, besides their school work, have spent the hours from 3 to 5 p.m. in the different Baby Health Centres.

These clinics are free centres where immunization against diphtheria and vaccination against small-pox are at the disposal of the public during the whole year.

DEFECTIVE VISION AND CANADIAN NATIONAL INSTITUTE FOR THE BLIND.

The search for children suffering from defective vision is being continued by the school-nurses this year.

It is important to note that a large number of pupils showing visual defects, have obtained free of charge glasses from the Canadian National Institute for the Blind, following special examinations made by oculists in the City hospitals.

WORK OF SCHOOL VISITING-NURSES, 1932-33.

TABLE VII

Generalities.

Number of schools	282
Number of school children	150,000
Number of visits to schools	29,926
Number of examinations made	184,064 (1)
Number of pupils referred to the doctor for examination (special cases)	28,358 (2)
Number of children excluded	3,954
Number of children readmitted	3,672
Number of sundry treatments	35,079
Number of visits to homes	35,667
Number of children taken to dispensaries..	3,829

NOTA: (1) This number shows that each pupil has been examined at least 5 times during the school year by the school nurses for cleanliness, pediculosis, skin disease, etc.

(2) This number includes a certain number of children who have been referred to the Medical-inspectors for special examination once, twice or more.

The following table shows the number of pupils who had defects and the number of defects found.

- 1° In column (a) for each of the ten months of the school year, and
- 2° In column (b) for each of the five general physical examinations undergone by the children.

TABLE VIII

	(a) Means per month	(b) Means per examina-	%
1. Children with defects.....	16,758	33,515	22*3
2. Defects found:—			
Uncleanliness.....	4098	8195	5.46
Pediculosis.....	4947	9894	6.60
Skin and contagious diseases.....	3798	7596	5.06
Teeth.....	2073	4146	2.76
Eyes.....	911	1822	1.21
Ears.....	372	744	0.50
Lymphatic system.....	669	1338	0.89
Nervous system.....	227	456	0.30
Malnutrition.....	2808	5615	3.74

* The ratio is based on the total number of school children (150,000) registered in the 282 schools visited.

HEARING AND AUDIOMETER.

Hearing tests on the children are done by means of a special machine, the "Audiometer No. 4-A", under the supervision of a nurse specially trained.

The following table shows the result of this examination.

TABLE IX

HEARING TESTS BY AUDIOMETER No. 4-A.

Number of schools visited	26	
School population in these schools	15,005	
Number of pupils examined	8,484	
Number of normal children	7,990	
Number of defective children	494	5.8 (1)

Classification of defective children:

Number of children deaf in both ears..	133	26.9 (2)
Number of children deaf in right ear only	214	43.3 (2)
Number of children deaf in left ear only	147	29.7 (2)

(1) Percentage of defective children based on the number of pupils examined (8,484).

(2) The ratio is based on the number of defective children (494).

MENTAL HYGIENE

1932-33

The staff in charge of the control and examination of abnormal pupils in the City schools is composed of four psychiatrists of which three work on part-time and one full-time, and four psychologists full-time. One of these nurses acts also as a supervisor of the group.

The survey of these abnormal pupils (backward and unstable) by a Canadian adaptation of the "Binet-Simon Mental Test" (revision of Stanford) is made in the classes of the 1st, 2nd and 3rd years in the schools visited for this

purpose. The following table shows the work of the psychiatrists and the psychologists and the results of this survey.

TABLE X
WORK OF PSYCHIATRISTS AND PSYCHOLOGIST-NURSES.

Number of schools visited.....	54
School population in schools visited.....	28231
School population in 1st, 2nd and 3rd grades.....	14527

	Classes 1st, 2nd 3rd year	Special cases		Total
		(a)	(b)	
Number of pupils reported.....	3175	755	247	4177
Number of pupils examined.....	2921	720	247	3888
Number of pupils normal:				
Total.....	1338	332	58	1728
Normal intelligence (I.Q. 90-110).....	520	170	19	709
Slow minded (I.Q. 80-90).....	818	162	39	1019
Number of abnormal pupils:				
Total.....	1583	388	189	2160
a) Unsteady.....	114	13	12	139
b) Backwards.....	1312	40	148	1500
c) Backwards and unsteady.....	157	335	29	521

Classification.

The backwards.....	1469	375	177	2021	Recommen- dations:
1—Border-line.....	862	206	69	1137	Auxi- liary classes.
2—Mental debility:					
superior.....	446	115	61	622	
inferior.....	122	44	32	198	La Jem- merais School.
3—Feeble minded.....	39	10	15	64	
4—Idiocy.....					Baie St. Paul

Number of visits and investigations by psychologist-nurses..... 162

(a) Cases of Preparatory classes and from the 4th grade up.

(b) Cases examined elsewhere than in the schools visited regularly.

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

MENTAL HYGIENE CLINIC.

A "Mental Hygiene Clinic" was opened in June 1933 at the "Laurier Centre", Mount-Royal Avenue East.

Its object is to make "psychometric tests" and psychiatric examinations of certain special cases which are referred by the Child Hygiene Division.

This clinic is open one day per week, Thursday, from 9 a.m. till noon for English speaking children, and in the afternoon, from 2 to 5 p.m., for French speaking children.

The consultations are given by appointments and after visits have been made to the homes.

Table XI which follows shows the amount of work done since the clinic was opened.

TABLE XI

Examined	37
Normal	3
Abnormal:	34
1. Unsteady	6
2. Backwards	21
3. Backwards and unsteady	7
Classification of backwards:	28
1. Border-line	2
2. Mental debility — superior	5
" " inferior	11
3. Feeble minded	8
4. Idiocy	2

Seven children have been sent to La Jemmerais school and 22 to St-Jean de Dieu asylum.

The other cases not confined were referred to the Neurological Clinics for treatment and others to the Clinic for Crippled Children because their cases were not related to Mental Hygiene.

DENTAL HYGIENE SECTION.

I. — Dental Inspection in the Schools.

In the course of the school year 1932-33, dental inspection in the schools was cared for by four inspecting dentists.

TABLE XII

RESULTS OF THE WORK OF THE INSPECTING-DENTISTS IN THE SCHOOLS.

1932-33.

A—Generalities :

Number of schools to be visited	282
Number of pupils in the schools	150,000
Number of visits to the schools	1,204
Number of lectures given	1,043
Number of pupils who attended lectures	139,201

B—Dental Examination :

Number of pupils examined	16,743	
Number of defects:		
Caries	13,391	49.09%
Pyorrhea alveolar.	22	0.09%
Gingivitis.	732	2.69%
Prophylaxis (urgent)	13,124	48.13%
Total defects	27,269	
Number of notices sent to parents . .	14,534	

N.B. — The ratio is based on the total number of defects found (27,269).

II. — Dental Hygiene Campaigns.

In the course of the school year 1932-33, the Dental Hygiene Campaigns inaugurated in 1932 and started in the following schools: Victor-Rousselot, Notre-Dame de Grâces, boys and girls, Lebrun-de-la-Vérendrye, St-Paul, Frontenac, Jacques-Viger, Champlain, Lartigue, Victor-Doré, were followed up and continued with success, due to the splendid co-operation that existed between the inspecting dentists, the school nurses, the directors or directresses and the teachers of the schools.

The results of this work are such, that about 95 to 98% of the pupils suffering dental caries were treated.

The success of the campaigns and excellence of the work accomplished by the dentists of the Department of Health, of the Child Hygiene Division, attracted the notice of the dental profession, and resulted in our receipt of a letter of appreciation expressed in the following manner by a "resolution adopted by the Provincial Board of Dental Surgeons, at a meeting held on May 30th, 1933".

"The Board has taken notice of a letter received from "Dr. J. Nolin, President of the Committee on Hygiene of "the Catholic School Commission of Montreal, calling the "attention of the Board to the interest shown by the Department of Health of the City of Montreal, and its "Director, Dr. Boucher, in mouth hygiene as a factor of "health."

"In the name of the College of Dental Surgeons of "the Province of Quebec, it wishes to declare how it highly "appreciates the progress made in the field of mouth "hygiene, and extends its congratulations to the Director "of the Department of Health, Dr. S. Boucher, also to Dr. "Ad. Groulx, Director of the Division of Child Hygiene and "to his assistants."

"The Board also wishes to express its appreciation
"for the excellent work that they have accomplished, to
"the dentists attached to the Municipal Health Service."

"The Registrar, C.D.S.P.Q.,

(Signed) DENIS FOREST, D.D.S."

Illustrated Poster :

To further the Dental Campaigns, an illustrated poster
entitled

"PROTECT YOUR HEALTH"

"By caring for your teeth"

was prepared and printed to the number of 15,000 copies
for distribution in the schools, in the Hygiene clinics, and
all public places.

III. — Municipal Dental Clinics.

There are two Municipal Dental Clinics; one, known
as the "Maisonneuve Clinic" is situated at No. 4301 Adam
St. (corner of Letourneux Street), and the other, known
as the "Laurier Clinic", is situated at No 4505 Henri-Julien
Avenue (corner of Mount-Royal Ave.). The clinics are
open to the public from 9.00 a.m. to 5.00 p.m. Dental
operations consist in the examination of the mouth, ex-
traction of infected teeth and phophylaxis. Children only
are treated, whose parents are unable to afford to pay for
the services of a dentist, if they bear a certificate showing
poverty, or after a searching investigation by the visiting-
nurses.

The functions of these clinics were described in full
in the report for the year 1932.

TABLE XIII

REPORT OF THE DENTAL CLINICS

1933.

Number of clinics	2
Number of children:	
Examined	8,931
Treated	8,691
Treatments for:	
Extractions	6,229
Prophylaxis	2,470
Dressings	390
Total	9,089
Number of teeth extracted	27,949

" DAILY VACATION BIBLE SCHOOLS "

During the months of July and August 1933, lasting a period of six weeks, an organization called "The Daily Vacation Bible Schools of Montreal" opened a certain number of classes in 8 schools in the City of Montreal, where the children received special training such as manual training work, singing, etc.

Four doctors and four visiting-nurses from the Child Hygiene Division have been put in charge of the medical examination of these classes and they have also made visits to the homes of children suffering from any physical defects.

Following table shows the result of this work.

TABLE XIV.

Number of schools visited	8
School population in these schools	819
Number of Pupils:	
Examined	819
Normal	562
With physical defects	257
Number of physical defects found	332
Number of dental defects	244
Number of pupils found not-vaccinated	76
Number of pupils vaccinated	73
Number of revaccinations	3
Number of verifications or certificates	48
Number of notices to parents	139
Number of visits to the homes	316

SECOND PART.

PRENATAL, INFANTILE AND PRESCHOOL HYGIENE.

PRENATAL CLINICS.

The two prenatal clinics known as St. Jean-Berchmans and Rosemount and the Notre-Dame des Neiges Clinic, which is under the joint direction of the Department of Health and the School of Social and Applied Hygiene, have continued their services.

The following table indicates the results obtained in 1933.

TABLE XV.

	Clinics			Total
	N.-D. des Neiges	Rose-mount	St-Jean Berchmans	
Total registration.....	32	84	83	199
Total discharged.....	26	77	91	194
Balance December 31st, 1933.	24	44	44	112
Consultations with doctor...	92	474	391	957
Blood pressures.....	117	440	385	942
Urinalysis.....	120	405	376	901
Home visits:				
Recruitment visits.....	168	126	113	407
To registered mothers.....	390	272	170	832
Post-partum visits.....	140	63	106	309
Notices to family physicians.	29	9	32	70
Number of sessions.....	38	56	51	145

WELL BABY CLINICS

The staff of the Division of Child Hygiene has worked devotedly and well; their work in the municipal Well Baby Clinics constitutes the most important feature of the fight undertaken in Montreal to reduce infantile mortality, and is the most efficacious means of educating mothers.

At the clinics or in the course of their visits to private homes, the doctors and the nurses stress the advantages and the importance of breast feeding and they render advice to mothers concerning artificial feeding and the necessary care of babies.

In the course of the year, the division of Child Hygiene has open five new Well Baby Clinics, the first was opened in March at the new Laurier Centre on Henri-Julien St., corner of Mount-Royal Ave., a second one was opened in June in the parish of Ste. Thérèse de l'Enfant-Jésus, and three others were opened in the parishes of Bordeaux, Cartierville and St. Paul de la Croix.

The number of municipal Well Baby Clinics in actual operation is exactly 42.

Comparison of the three years 1931-1932-1933 follows:

	Consulta- tions	Weighing	Home visits
1931.....	61,280	1,297	38,402
1932.....	68,244	976	43,147
1933.....	66,731	2,941	35,649

Besides these 42 municipal clinics, there are in Montreal 33 independent clinics, twenty of which are French and thirteen English. These clinics are under the control of two organizations "La Fédération d'Hygiène Infantile" and the "Child Welfare Association."

The three organizations work in perfect harmony. The independent organizations forward monthly reports to our department which are compiled.

Registration of Births and Visits to New-born.

A list of "Registered Births" in the Statistical Division is transmitted regularly to the visiting-nurses attached to the "Well Baby Clinics", and has permitted them to conform to a special organization as described in the 1932 report and visit the new mothers within the first fifteen days after the birth of child, also to present them with the appropriate public health literature of the Department of Health.

Table XVI gives the results of the work which has been accomplished in all the Well Baby Clinics of the City.

St-Louis de Gonzague.....	125	115	240	2	0.8	1541	58	1599	6.7	596	254	850
St-Marc.....	112	159	271	.....	.....	1534	330	1864	6.9	579	383	962
St-Clément.....	164	127	291	1	0.4	1534	.....	1534	5.3	900	222	1122
St-Barthélémy.....	81	114	195	3	1.6	1417	1	1418	7.3	586	244	830
Baril.....	102	154	256	2	0.8	1368	.....	1368	5.3	230	323	583
St-Denis.....	104	146	250	.....	.....	1309	6	1315	5.3	121	298	419
St-Sacrement.....	94	126	220	.....	.....	1289	30	1319	6.0	172	272	444
St-Bernard.....	96	93	189	.....	.....	1243	1	1244	5.6	248	100	348
St-Jean-Baptiste de Lasalle.....	71	137	208	.....	.....	1158	.....	1158	5.6	199	496	695
Laurier (1).....	.....	243	243	.....	.....	1156	4	1160	4.8	520	129	649
Notre-Dame des Victoires.....	64	95	159	3	1.9	1090	.....	1090	6.9	231	245	476
Ste-Clotilde.....	85	107	192	.....	.....	946	162	1108	5.7	133	284	471
St-François Solano.....	53	88	141	1	0.8	903	2	905	6.4	193	167	360
St-Jean de Matha.....	78	110	188	.....	.....	888	.....	888	4.7	512	135	647
Ste-Claire.....	52	78	130	2	1.5	841	2	843	6.5	237	142	379
Notre-Dame des Neiges.....	78	65	143	1	0.7	831	.....	831	5.8	338	242	580
Ste-Hélène.....	62	56	118	.....	.....	734	.....	734	6.2	582	213	795
St-Jean Vianney.....	68	60	128	3	2.3	634	.....	634	5.0	420	292	712
St-Paul de la Croix (2).....	.....	83	83	.....	.....	478	1	479	5.8	109	67	176
Ste-Thérèse (2).....	.....	82	82	.....	.....	451	1	452	5.5	91	123	214
Cartierville (2).....	.....	74	74	.....	.....	395	3	398	5.4	126	66	192
Bordeaux (2).....	.....	48	48	.....	.....	321	.....	321	6.7	97	80	177
St-Pascal Baylon.....	13	35	48	.....	.....	222	.....	222	6.3	126	143	269
Total—42.....	4916	6700	11616	58	0.5	66731	2941	69672	6.0	21914	13735	35649
Average.....	117.1	159.5	276.6	1.4	.....	1588.9	70.0	1658.9	.....	521.8	324.7	248.8

(1) Clinics have been opened since March 20th, 1933.

(2) Clinics have been opened since the first week of July 1933.

N.B.—For Municipal Baby Clinics, the percentage of mortalities is based on the number of deaths from birth to 2 years of age, of children who have been registered, that is to say the deaths that have occurred within a period of two months following the last visit to the Baby Clinic.

BABY CLINICS REPORT FOR THE YEAR 1933—(continued).

Name of Clinics	Registrations		Deaths		Total attendance				Home visits			
	Car-ried over	New	Total	Total	%	Consultations		Total	Aver-age	Child-ren entered	New entries	Total
						Doctors	Nurses					
English Independent Clinics												
(Child Welfare Association)												
Iverley & Coursol.....	595	228	823	1	0.1	2093	875	2968	3.6	.....	.....	988
Rosemount.....	653	281	934	3	0.3	1889	1921	3810	4.1	.....	.....	1521
Montreal Foundling.....	531	371	902	1	0.1	1688	702	2390	2.7	.....	.....	2182
Maisonneuve.....	716	194	910	2	0.2	1664	786	2450	2.7	.....	.....	2012
Montreal General Hospital.....	461	156	618	3	0.5	1577	714	2291	3.7	.....	.....	1872
Notre Dame de Graces.....	248	179	427	1	0.2	1171	399	1570	3.7	.....	.....	1577
St. Ann's.....	244	89	333	.....	.....	1133	330	1463	4.4	.....	.....	659
Pointe St. Charles.....	349	158	507	2	0.4	1121	2741	3862	7.6	.....	.....	1456
Amherst Park.....	454	173	627	.....	.....	999	505	1504	2.4	.....	.....	2034
Park Extension.....	511	154	665	.....	.....	943	334	1277	1.9	.....	.....	2213
St. Paul.....	349	112	461	2	0.5	836	270	1106	2.4	.....	.....	1474
Mount Royal.....	363	76	439	2	0.5	671	337	1008	2.1	.....	.....	1964
Cote des Neiges.....	88	82	170	1	0.6	499	116	615	3.7	.....	.....	226
Total.....	5562	2253	7815	16	0.2	16284	10030	26314	3.4	.....	.....	20178
Average.....	427.9	173.3	101.2	1.2	.....	1252.6	171.6	2024.1	.....	.....	.....	1552.2

French Independent Clinics (Fédération d'Hygiène Infantile)									
Stadacona.....	413	7	1.7	6941	.....	.....	.....	16.8	2588
St-Vincent de Paul.....	298	18	6.1	6759	.....	.....	.....	22.7	1812
St-Brigide.....	295	7	2.4	6214	.....	.....	.....	21.1	1164
St-Stanislas.....	292	5	1.7	5177	.....	.....	.....	17.7	1721
St-Cunégonde.....	204	2	1.0	4563	.....	.....	.....	22.8	873
Enfant-Jésus.....	215	1	0.5	4380	.....	.....	.....	20.4	1525
Sacré-Cœur.....	257	4	1.6	4155	.....	.....	.....	16.2	1117
Immaculée-Conception.....	275	3	1.1	4036	.....	.....	.....	14.7	1833
St-Jean-Baptiste.....	214	7	3.2	3966	.....	.....	.....	18.5	613
St-Joseph.....	143	2	1.4	3874	.....	.....	.....	27.4	1075
St-Catherine.....	213	6	2.8	3566	.....	.....	.....	13.7	1014
St-Eusèbe.....	239	2	0.8	2922	.....	.....	.....	12.2	1180
Notre-Dame du Perp. Secours.....	193	1	0.6	2919	.....	.....	.....	15.2	818
St-Alphonse d'Yeuville.....	214	1	0.5	2523	.....	.....	.....	11.8	840
St-Cécile.....	208	2	1.0	2379	.....	.....	.....	11.4	604
St-Jeanne d'Arc.....	172	1	0.6	2357	.....	.....	.....	13.8	1612
St-François d'Assises.....	109	4	3.7	2226	.....	.....	.....	20.4	859
St-Pierre.....	146	5	3.8	2198	.....	.....	.....	15.1	1121
St-Elisabeth.....	112	.....	.....	1469	.....	.....	.....	13.1	821
St-Victor.....	58	.....	.....	170	.....	.....	.....	2.9	75
Total.....	4270	78	1.8	72885	.....	.....	.....	17.1	23268
Average.....	213.5	3.9	.....	3644.3	.....	.....	.....	.....	1163.4
Grand total.....	23701	152	0.6	155900	.....	.....	.....	7.1	79095
Average.....	316.0	2.0	.....	2078.7	.....	.....	.....	.....	1354.6

N.B.—The percentage of deaths is based on the number of deaths (children registered) from birth to two years, in the independent english baby-clinics, and from birth to one year of age in the independent french clinics.

Table XVII shows a comparative statement of operations of baby clinics for last of the three years.

TABLE XVII.

Comparative statement of operations of Baby clinics for each of the three years.

	1931	1932	1933
Number of clinics.....	68	70	75
Children registered.....	13,159	13,849	23,701
Number of deaths.....	300	296	152
Proportion of deaths.....	4.4%	4.2%	0.6%
Number of consultations.....	166,313	171,839	155,900
Average per child.....	12.6	11.7	7.1
Home visits.....	93,569	94,013	79,095
Municipal grant to independent clinics..	\$8,500.00	\$8,500.00	\$8,500.00

PRESCHOOL CLINICS.

In July 1933, the Department of Health inaugurated the preschool clinics, extending all the activities of the forty-two municipal clinics to all children not old enough to attend school, that is, up to 6 years.

The preschool clinic is like the Baby-clinic, a means of preventing sickness and educating parents as to the care of the child between the ages of 2 and 6 years.

Its purpose is to control the diet and the normal physical development of these children, by taking their weight and height regularly at intervals of a month's time, to find the physical defects by a careful medical examination, and to correct any defects that are found, especially carious teeth, infected tonsils and adenoids, and malnutrition.

One must place great importance upon diet and the regularity of meals of these children.

Moreover, at the clinics and in the course of their visits to the homes, advice is given to the parents on this subject, as also on hygienic conditions and health rules, of advantages to their development, in the home.

TABLE XVIII.

Annual Report of Municipal Preschool Clinics
for 1933.

Municipal consultations	Registra- tions	Total attendance				Home visits
		Nurses	Doctors	Total	Average	
Rosemont	317	.....	814	814	2.6	639
St-Zotique	101	.....	522	522	5.2	100
St-Gabriel	129	.....	378	378	2.9	311
St-Irénée	110	.....	359	359	3.2	294
St-Paul de la Croix	92	.....	353	353	3.8	63
St-Jean-Berchmans	138	.....	334	334	2.4	336
St-Henri	105	.....	273	273	2.6	254
St-Etienne	97	.....	261	261	2.7	194
St-Vincent Ferrier	109	13	249	262	2.4	216
Delorimier	149	9	248	257	1.7	220
Ste-Claire	76	.....	223	223	2.9	55
St-Bernard	93	.....	216	216	2.3	125
St-Paul	59	.....	213	213	3.6	62
St-Arsène	78	1	212	213	2.7	188
Cartierville	68	.....	208	208	3.1	64
Bordeaux	65	2	199	201	3.1	44
Baril	102	.....	195	195	1.9	250
St-Michel	274	38	191	229	0.8	140
St-Edouard	83	42	174	216	2.6	289
St-Sacrement	66	7	172	179	2.7	81
St-Denis	70	.....	170	170	2.4	64
Maisonneuve	115	.....	159	159	1.4	133
St-Jean de la Croix	77	6	141	147	1.9	329
St-Jean de Matha	46	.....	139	139	3.0	61
Villeray	55	1	132	133	2.2	74
St-Jean Vianney	74	.....	132	132	1.8	207
Laurier	72	.....	132	132	1.8	46
Ste-Clotilde	65	33	124	157	2.4	159
St-Louis de Gonzague	68	.....	120	120	1.8	117
St-François Solano	64	.....	120	120	1.9	168
N.-Dame des Victoires	49	.....	116	116	2.4	63
St-Ambroise	61	27	111	138	2.3	121
N.-Dame des Neiges	45	.....	108	108	2.4	186
St-Anselme	63	.....	102	102	1.6	322
Ste-Hélène	33	.....	100	100	3.0	136
St-Marc	55	5	91	91	1.8	114
St-Pascal Baylon	29	.....	89	89	3.1	55
Ste-Thérèse	34	3	87	90	2.7	63
St-Clément	34	.....	71	71	2.1	7
St-Jacques	30	.....	66	66	2.2	115
St-J.-B. de Lasalle	36	.....	49	49	1.4	174
St-Barthélémy	77	101	39	140	1.8	187
Total	3563	288	8192	8480	2.4	6826
Average	84.8	6.9	195.1	201.9	.....	162.5

Children found with physical defects, who require assiduous medical or surgical treatment, are sent to their family physician, or if they are poor, to the hospital.

The preschool clinic is moreover a good method to control the spread of contagious diseases, and offers splendid opportunities to vaccinate children against smallpox and to immunize them against diphtheria, before they attend school.

LAURIER CLINIC

4505 Henri-Julien Avenue.

In March 1933, the Department of Health, Division of Child Hygiene, opened to the public a clinic of great importance for the furtherance and practice of hygiene, situated at 4505 Henri-Julien Avenue and also at 305 Mount-Royal Avenue East.

This municipal building, the first of the kind, was specially planned and built as a "Hygiene Centre", the establishment of which is a new activity of the Division.

The building consists of two stories, on the ground floor is situated the various rooms for the clinics (babies, preschool, prenatal), also the dental clinic, the dressing room and the room for weighing; the main entrance hall is used as a waiting room for patients attending the dental clinic, a small office is reserved for the clerk who is attached to the clinic.

On the first floor up, there are two rooms, one of which is used as the office of the mental hygiene clinic and the headquarters of the nurses of that section, and the other, which is very spacious, serves as a board-room for the nurses of the english speaking section, and also as an office for their supervisor.

The interior planning is modern and the equipment is adequate for the needs of an hygiene centre.

Organization.

The organization of the Laurier Hygiene Clinic consists of

- I — A general information bureau.
- II — The activities of an Hygiene clinic.
- III — A meeting Centre for the nurses.

I. — GENERAL OFFICE.

A general office is maintained which is open daily from 9.30 A.M. to 5.00 P.M. except during lunch time, which is from noon to 1.30 P.M.

An employee, who acts as an office clerk, is on full time duty, to reply to the visiting public and also to the telephone, to give information and reply to questions, to prepare the reports of the clinics, to make a compilation of the work of the nurses of the english speaking district, and of the personnel of the Mental Hygiene section (the psychiatrists and their assisting nurses), to attend to the correspondence and all other office work required by the superintendent.

II. — THE ACTIVITIES ARE :

- 1° A prenatal Clinic — open one day per week, Tuesday, from 3.00 P.M. to 5.00 P.M., for expectant mothers who cannot afford the services of a physician.
- 2° The Baby and Preschool clinics — open two days a week, Monday and Wednesday, from 3.00 P.M. to 5.00 P.M. for babies up to one year of age and children from one to six years of age respectively.
- 3° Vaccination against Smallpox — is done on the days of the Well-Baby and Preschool clinics, and at the same hours, for all children of all ages. During the summer, that is from the end of June to the second week of September, certain mornings are also reserved for this purpose.

- 4° **Immunization against Diphtheria** — for children from six months to twelve years old, is done one day a week, Thursday, from 3.00 P.M. to 5.00 P.M.

The service of the Prenatal, Well-Baby and Preschool clinics, vaccination and immunization at the Laurier Hygiene Centre, is done by an inspecting-physician, who is bilingual; he is assisted by a visiting nurse and her assistant, who are in full time service at these clinics.

- 5° **The Mental Hygiene Clinic** — is open one day a week, Thursday from 9.00 A.M. to noon for English speaking patients, and afternoon from 2.00 P.M. to 5.00 P.M. for French speaking patients.

The purpose of this clinic is to make psychometric tests of special referred cases. Examinations are given by appointments. The psychiatrists and their assisting-nurses of the Division of Child Hygiene are in charge of the work of this clinic.

- 6° **The Dental Clinic** — is open everyday from 9.00 A.M. to noon and from 2.00 P.M. to 5.00 P.M.

The work consists of examination of the mouth, extraction of infected teeth, prophylaxis, for children whose parents are poor, both of a preschool age and pupils attending school in the district designated as North and Centre and a part of the West and English districts.

A full-time dentist is in charge of the clinic in the morning, he is assisted by an inspecting-dentist. These in turn are aided in their work by a nurse and her assistant, both of whom work full-time.

III. — NURSES' CENTRE :

On the first floor up, two offices have been arranged as quarters for nurses.

- A— One, the larger, serves as the board room for meeting of the nurses of the English speaking district, and as the office of the Supervising nurse of this district.

Twice a week she assembles here, at 5.00 P.M. the nurses that are under her direction to communicate to them the orders of the superintendent, or to discuss problems that arise.

- B— The other office, which is smaller in size, is used as "Quarters" for the nurses attached to the Mental Hygiene Section and serves as an office for the supervising nurse of this group.

Once a week this group meets here to receive instructions, and discuss together their special problems. To this place they come to revise their reports or to compile statistics, when work in the schools is impossible for some reason. This office moreover is used as the special clinic for Mental Hygiene.

Next to these two offices just described, there is, for the use of both groups, a small room equipped with drawers and a table for the storage of school material, paper, tongue depressors, absorbent cotton, gauze, etc.

OPEN AIR CLINICS

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

They are provided with material necessary for urgent

dressings and are fitted up for the needs of the mothers with hammocks, ice and stove.

In the kiosk at Park Lafontaine, there is a baby clinic under the direction of a physician and graduate nurses, where the mothers can bring their babies during the months of July and August, every day except Saturday and Sunday from 9 A.M. to 5 P.M.

Furthermore, vaccination is performed here on all children who need it, free of charge.

TABLE XIX.

Work of Open Air Clinics.

	Lafontaine Park	St. Helen's Island	Total
Camp open for a period of.....	2 months	2 months	.....
Number of registrations.....	467	162	629
Number of consultations (doctor).....	925	.....	925
Weighings.....	1000	99	1099
Dressings.....	247	387	634
Number of vaccinations.....	1718	.....	1718
Number of revaccinations.....	79	.....	79
Number of certificates.....	871	.....	871

CHILD HYGIENE LEAGUES.

In order to spread the ideas of infant hygiene amongst families, the Child Hygiene division has formed the "Child Hygiene Leagues" amongst young school girls and certain feminine associations.

Young girls who take the course, follow a series of lectures in elementary hygiene from a program designed by the Department of Health.

These girls become precious agents of Hygiene in their families and surroundings.

TABLE XX.

CHILD HYGIENE LEAGUES.

	Groups	Members
Independent Associations:—		
Ecole d'Hygiène Sociale Appliquée.....	1	8
Total.....	1	8
By the medical staff:—		
Ville-Marie Group.....	1	48
St. Jacques Group { Marguerite Lemoyne } ..	1	5
{ Jeanne Mance } ..		10
{ Marchand } ..		8
{ Garneau } ..		5
St. Henri Group.....	1	20
Notre Dame de Grâces Group.....	1	17
St. Cunégonde Group.....	1	17
St. Zotique Group.....	1	17
St. Arsene Group.....	1	19
St. Cecile Group.....	1	21
St. Edouard Group.....	1	26
St. Ambroise Group { St. Ambroise } ..	1	9
{ St. Etienne } ..		6
{ St. Marc } ..		8
St. Jean de la Croix Group { Falconieri } ..	1	12
{ St. Jean de } ..		13
{ la Croix } ..		14
Hochelaga Group { Stadacona } ..	1	8
{ Ste. Marie } ..		2
{ Ste. Jeanne d'Arc } ..		6
Maisonneuve Group { St. Nom de Marie } ..	1	3
{ St. Nom de Jésus } ..		10
{ Exterior } ..		23
St. Michael Group.....	1	42
Lafontaine Park Group.....	1	
Total.....	15	369
Grand total.....	16	377

INSPECTION OF CHILDREN'S BOARDING-HOUSES AND PRIVATE HOSPITALS & MATERNITIES.

Homes for Children.

These establishments provide food and shelter for children under 12 years of age, and they come under Municipal By-Law No. 1096

Supervision was maintained over 42 homes, of which fifteen were discontinued in the course of the year, on December 31st 1933, there were 27 licensed homes.

The nurses also supervised 75 other houses, where in only one child was sheltered and fed, and as a consequence were not obliged to be licensed.

This inspection also is extended to 127 houses, where children are placed by certain charitable associations, such as the Children's Bureau, the Women's Directory and the Catholic Welfare.

Two other institutions "L'Aide à la Femme" and "Le Refuge St-Antoine", were also subject to the same supervision.

In these various establishments "L'Aide à la Femme" excepted), there were in the course of the year 676 children sustained, of whom 229 were legitimate and 347 illegitimate. On December 31st 1933, there were 382 children of whom 109 were legitimate and 273 illegitimate in these homes. In the course of the year, there were 27 deaths, 2 being legitimate and 25 illegitimate children.

Private Hospitals and Private Maternity Hospitals.

Private Hospitals and Private Maternity Hospitals are subject since 1932 to Municipal By-Law No. 1204.

The number of private hospitals and private maternity hospitals supervised was 17, of which 6 were discontinued and kept under supervision in the course of the year:

In these hospitals and private maternity hospitals there were 1,411 patients. The number of births in the private maternity hospitals was 505, of whom 252 were legitimate and 253 illegitimate.

Work of the Nurses.

The supervision of Homes and Private Hospitals is entrusted to two full-time nurses.

TABLE XXI.

	Number of visits	Number of investiga- tions	Number of actions taken
Children's boarding-houses	1746	532	.....
Private hospitals and maternity hospitals	310	158	.....
Total	2056	690	.....

The food inspectors, on their part, have supervised the homes, they have made about 100 visits and have taken 35 samples of milk, which were submitted to chemical and bacteriological analysis in the Municipal Laboratory.

As a result, a certain number of notices were sent to parties who were affected.

THIRD PART.

IMMUNIZATION AGAINST DIPHTHERIA.

Campaign of 1933.

The Division of Child Hygiene took an important part in the Campaign of Immunization against diphtheria undertaken in 1933 by the Department of Health.

The medical-inspectors and visiting-nurses responded enthusiastically to the Director's appeal, and worked with interest and devotion to assure the success of this Campaign, in the schools and municipal clinics.

During the course of this campaign, **14,504** children who more than ten years of age, submitted to an Anterior Schick test, and, **44,010** children registered and received the 1st. dose of Toxoid, of this number 42,182 received the 2nd. dose, and **38,949** received the three doses up to December 31st, 1933. The last two figures were increased

early in 1934, from which one can presume that more than 41,000 children of the 44,010 were entirely immunized.

The slight difference, to date, between the figures of the 2nd and 3rd doses and the figure of the 1st dose, shows the interest taken by the visiting nurses in following up the cases and bringing them back for the subsequent doses. On December 31st, 95.8% of the registered children received 2 doses and 88.5% the 3 doses.

These figures representing 20,008 intra-dermal injections for Schick tests, and 125,141 subcutaneous injections, means 122,611 c.c. of Toxoid injected.

The nurses made 11,528 home visits and the doctors in the service had to visit on our demand, at all hours, day and night and on holidays, those few children who had reactions due to the inoculations.

The work accomplished in the schools and clinics and during the course of home visits contributed also in directing a good number of cases to their family doctor for immunization.

PROGRAMME.

Radio — Newspapers — Movies.

Articles were prepared for the newspapers, and many doctors and nurses gave talks over the Radio. Our personnel besides, contributed to the preparation of a propaganda movie short, entitled "Wipe Out Diphtheria", which was presented in all the city theatres.

Circulars.

Distribution was made of a great number of the following circulars in the schools and municipal clinics:

- a) "Prevention of Diphtheria in our Homes", 140,000 copies.
- b) "Immunization against diphtheria", 50,000 copies.
- c) "Form of Invitation and Parents Authorization", 150,000 copies.

A special circular was prepared and distributed to the personnel and to practising physicians. It was entitled "The Technique of Immunization against Diphtheria."

Placards :

Two illustrated placards, prepared for distribution, one for public buildings, stores, etc., and the other for exhibition on street-cars, were posted in the schools and clinics.

- a) "Campaign to Eliminate Diphtheria by Immunization."
- b) "Prevent Diphtheria."

"Ward Weeks".

"Ward Weeks", inaugurated the 20th of March and continued to the 3rd of June, had the object of activating the Campaign and bringing the parents to immunize their children, either by their family doctors, in the schools, or in the municipal or independent clinics.

"Ward Weeks" was the organization each week of a certain number of the 35 municipal wards, three or four at the most, where intense propaganda was instituted, through communications to newspapers, special appeal by priests and ministers in the churches, talks to pupils in the schools by the medical inspectors and by visits to homes by nurses.

PROGRAMME OF "WARD WEEKS"

	Week (1933)	Wards	
1st week.....	March 20 to 25.....	St. Eusebe	
2nd week.....	March 27 to April 1st.....	Delorimier St. Henry	St. Edouard St. Mary
3rd week.....	April 3 to 8.....	Prefontaine St. Michael	St. John
4th week.....	April 10 to 15.....	Lafontaine St. Louis	St. Gabriel
5th week.....	April 17 to 22.....	Hochelaga St. Ann	Papineau St. Denis
6th week.....	April 24 to 29.....	Cremazie St. Lawrence	St. Jacques Ville-Marie
7th week.....	May 1st to 6.....	Bourget St. Andrew St. Joseph	Mongcalm St. Georges
8th week.....	May 8 to 13.....	Ahuntsic St. Jean Baptiste	St. Cunegonde
9th week.....	May 15 to 20.....	Maisonneuve St. Paul	Mount Royal
10th week.....	May 22 to 27.....	Laurier	Rosemount
11th week.....	May 29 to June 3.....	N. D. de Grâces Mercier	Villeray

Immunization Centres.

Immunization was practised one day a week in the 32 municipal clinics and in the 33 independent english and french clinics, altogether 75 immunization centres.

It was practised besides in the protestant and catholic schools.

Cooperation.

Necessary cooperation contributed to the success of

the Campaign in the schools and municipal clinics. The parish priests where the municipal clinics functioned, gave their entire support and aided the Campaign by repeated appeals from the pulpit.

The Catholic and Protestant School Boards, the principals of the schools and the teaching staff, did not lack in encouragement and aid. The success of Immunization in the schools was such that 31,953 children of school age, i.e. 6 years and more, of a total of 44,010 registered received the 1st dose of Toxoid.

Parents responded impressively to the invitation which was made them by the Department of Health, to have their children immunized.

The Division of Child Hygiene wishes to express its gratitude to the parish priests, to the members of the School Boards, to the principals of the schools and their teaching staff and to the parents of the children for their precious contribution given during the course of this Campaign, contribution which assured its success.

RESULTS

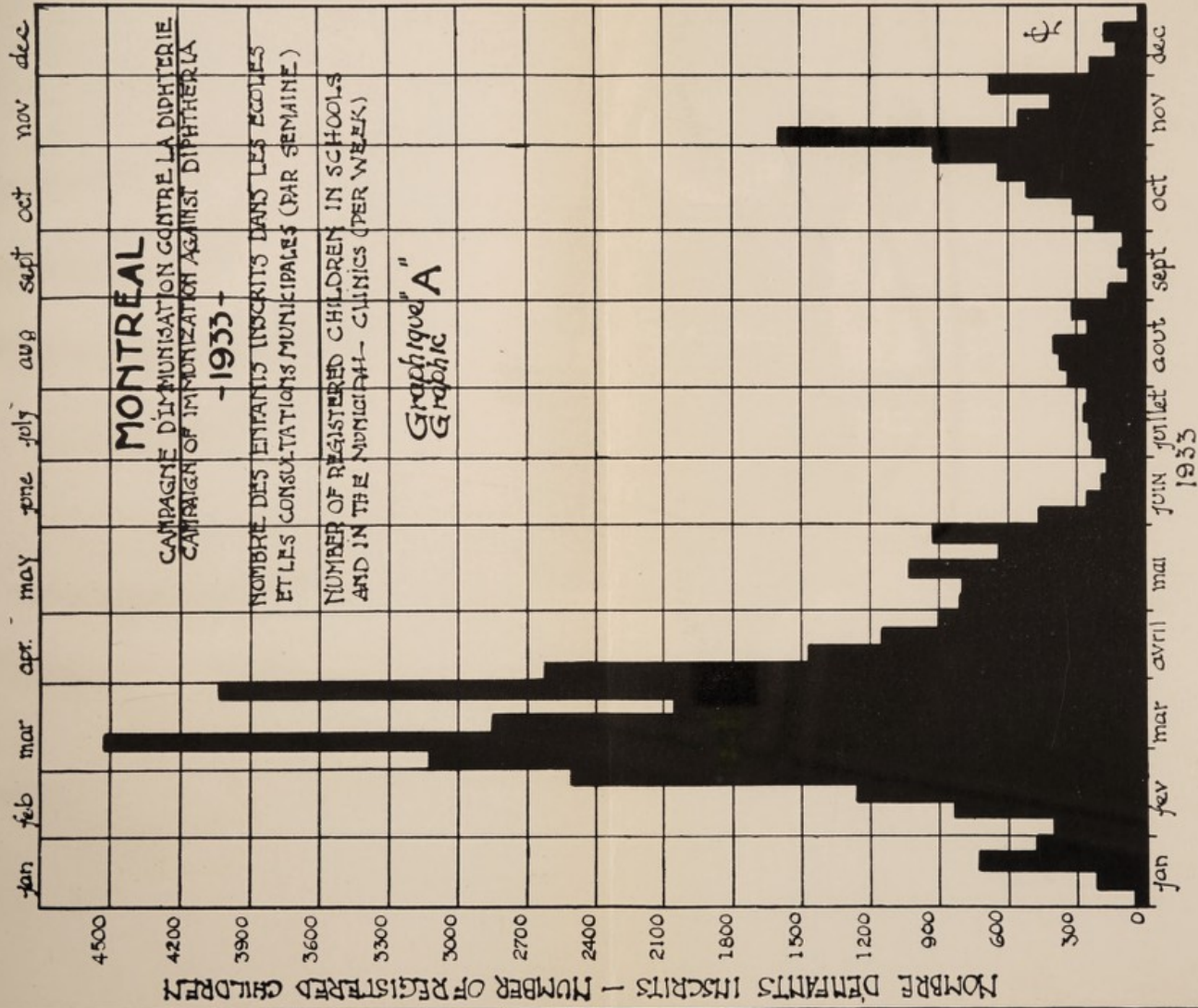
The results of the Campaign of Immunization in the schools and municipal clinics, appear in detail in Table XXII and are illustrated by the two graphs A & B. Graph A shows the registration each week and Graph B the accumulated number of children who received the three doses of toxoid compared to the total or registrations.

TABLE XXII.

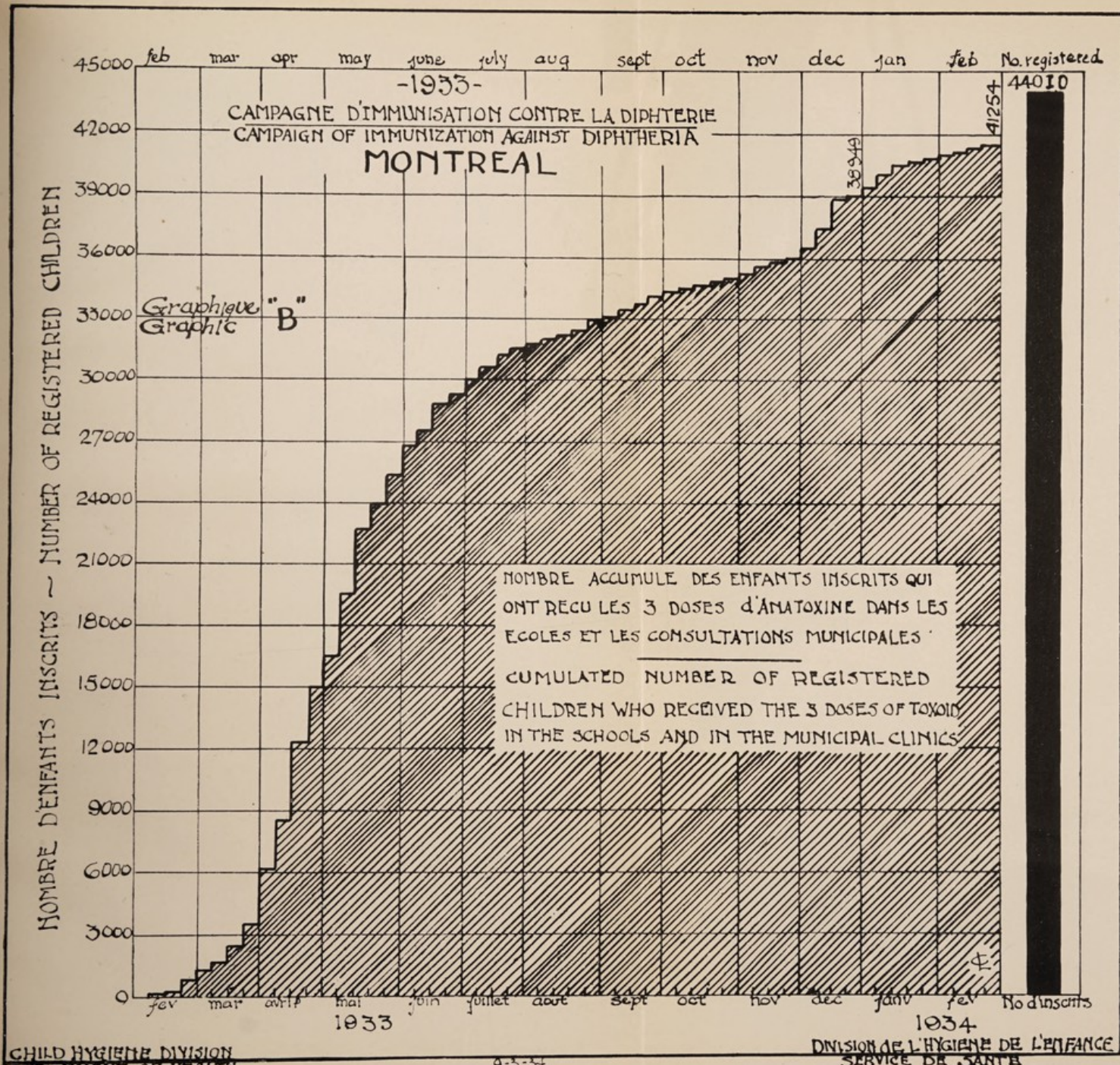
REPORT OF IMMUNIZATION IN THE SCHOOLS AND
MUNICIPAL CLINICS DURING THE
1933 CAMPAIGN.

(By week and by month).

Week	Anterior Schicks	Toxoid		
		1st dose	2nd dose	3rd dose
Week ending January 7.....	12	54	.....	.....
" " " 14.....	48	220	.....	.....
" " " 21.....	221	736	.....	.....
" " " 28.....	48	465	38	.....
" " February 4.....	50	384	203	.....
JANUARY.....	379	1859	241	.....
Week ending February 11.....	177	825	684	.....
" " " 18.....	367	1251	422	22
" " " 26.....	1148	2495	366	178
" " March 4.....	2517	3119	783	622
FEBRUARY.....	4209	7690	2255	822
Week ending March 11.....	3347	4546	1060	403
" " " 18.....	1790	2788	2454	379
" " " 25.....	946	2085	3015	713
" " April 1.....	1296	4045	4748	1205
MARCH.....	7379	13464	11277	2700
Week ending April 8.....	716	2610	2487	2602
" " " 15.....	177	1445	1754	2421
" " " 22.....	378	1131	2996	3746
" " " 29.....	243	900	3138	2729
APRIL.....	1514	6086	10375	11498
Week ending May 6.....	163	801	1402	1518
" " " 13.....	76	788	1260	3013
" " " 20.....	181	1044	1240	3205
" " " 27.....	113	638	658	1127
" " June 3.....	118	938	923	1483
MAY.....	651	4209	5483	10346
Week ending June 10.....	47	470	1021	1269
" " " 17.....	30	228	762	1288
" " " 24.....	15	185	657	769
" " July 1.....	7	165	446	673
JUNE.....	99	1048	2886	3999







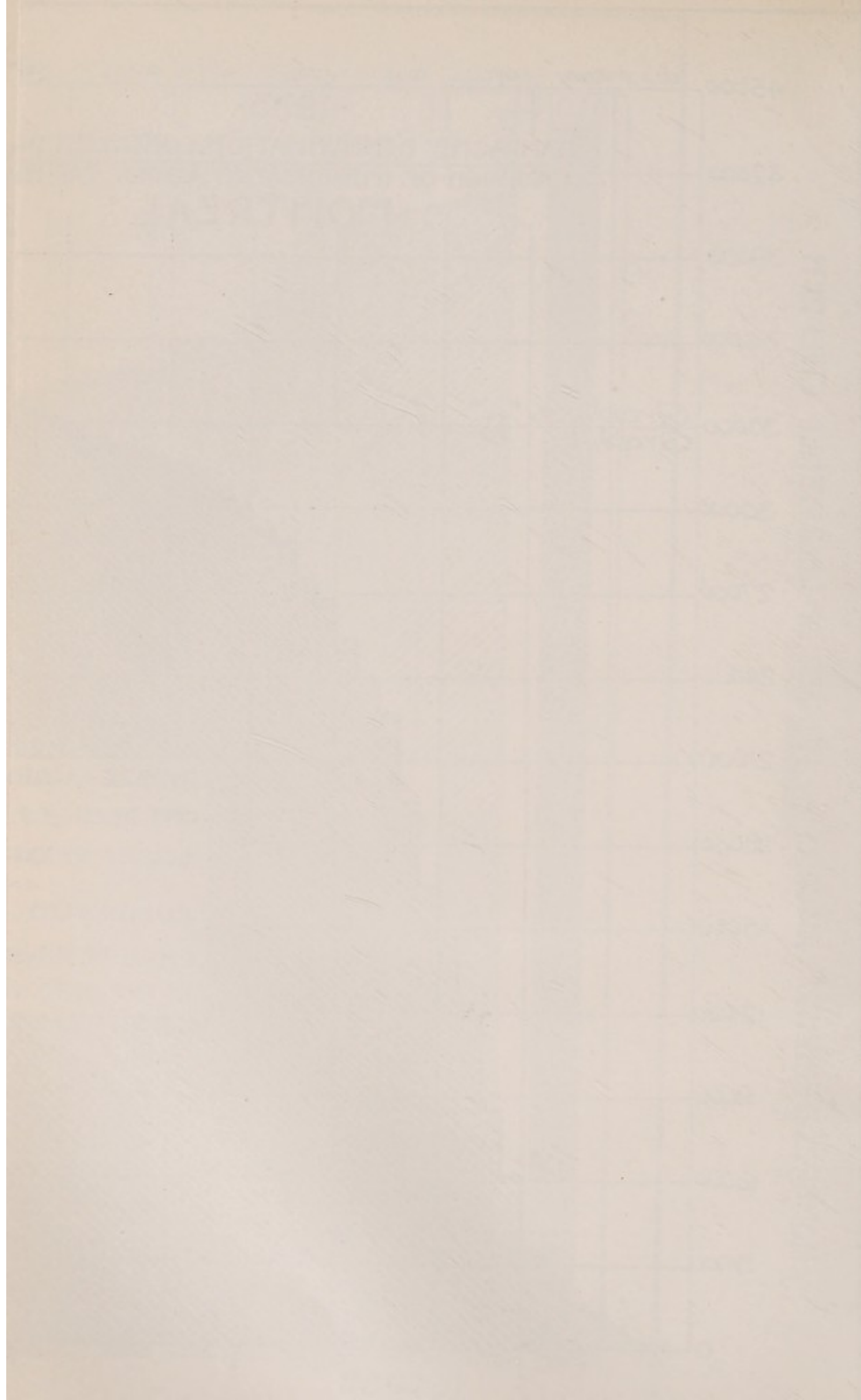


TABLE XXII.

REPORT OF IMMUNIZATION IN THE SCHOOLS AND
MUNICIPAL CLINICS DURING THE
1933 CAMPAIGN.

(By week and by month — Continued).

Week	Anterior Schicks	Toxoid		
		1st dose	2nd dose	3rd dose
Week ending July 8.....	10	226	278	724
“ “ “ 15.....	12	268	212	625
“ “ “ 22.....	13	258	180	495
“ “ “ 29.....	9	273	244	316
JULY.....	44	1025	914	2160
Week ending August 5.....	16	354	283	237
“ “ “ 12.....	34	397	276	203
“ “ “ 19.....	23	397	269	263
“ “ “ 26.....	22	287	324	262
“ “ September 2.....	20	315	406	353
AUGUST.....	115	1750	1558	1318
Week ending September 9.....	2	158	269	237
“ “ “ 16.....	5	98	320	314
“ “ “ 23.....	1	109	291	338
“ “ “ 30.....	0	107	204	281
SEPTEMBER.....	8	472	1084	1170
Week ending October 7.....	0	209	124	295
“ “ “ 14.....	1	307	121	252
“ “ “ 21.....	5	511	110	202
“ “ “ 28.....	22	652	189	135
“ “ November 4.....	16	911	296	117
OCTOBER.....	44	2590	840	1001
Week ending November 11.....	15	1593	423	120
“ “ “ 18.....	9	547	635	175
“ “ “ 25.....	20	414	949	303
“ “ December 2.....	6	692	1440	339
NOVEMBER.....	50	3246	3447	937
Week ending December 9.....	6	259	517	608
“ “ “ 16.....	5	121	461	796
“ “ “ 23.....	0	184	773	1465
“ “ “ 30.....	1	7	71	129
DECEMBER.....	12	571	1822	2998
TOTAL.....	14504	44010	42182	38949

TECHNIQUE OF IMMUNIZATION AGAINST DIPHTHERIA.

As practised by the Department of Health.

I. — IMMUNIZATION.

The method of diphtheria immunization practised and recognized by the Department of Health, consists of the administration of Anatoxin Ramon (Connaught Laboratories, Toronto), in three subcutaneous injections in the outer part of the left arm or in the abdominal region, in increasing doses at intervals of three weeks. The first dose is 0.5 cc., the 2nd. 1 cc., and the 3rd. is 1.5 cc. This method means the administration of about 60 units.

It is recommended to immunize the children from the age of 6 months to 10 years, without a Schick test, and after a positive Schick test those of more than 10 years.

Six months after the 3rd injection of Toxoid, a Schick test could be done to prove whether the child was well immunized; if the reaction is still positive, a 4th injection of 1.5 cc. of toxoid is given. However, the practice of Posterior Schicks was abandoned, because of the high percentage of successful immunizations after 3 injections.

II. — SCHICK TEST.

The Schick test is the means we have of recognizing those who are immunized against diphtheria and those who are susceptible of having this disease. It also allows us to demonstrate the value of active immunization.

This consists of the intra-dermal injection on the palmar surface of the right fore-arm, of "Schick Reaction" (dilution of unheated toxin) a dose of 0.1 to 0.2 cc. If the subject is not immunized an area of redness appears at the point of inoculation 24 to 48 hours after injection. This remains 8 to 10 days and is followed by desquamation and pigmentation.

To be absolutely sure and to avoid being misled by false reactions due to proteins present, a control injection is given in the left forearm, in the same manner and the same dose with "Control Reaction" (dilution of heated toxin).

The results are read at the end of 8 days and.

The reaction is **Positive** if there is reaction on the right and none on the left. This indicates susceptibility to Diphtheria and necessitates immunization by means of Toxoid.

The reaction is **Negative** if there is no reaction either on the right or the left. This indicates non-susceptibility and natural immunity of the subject.

This method employed by the Department of Health since 1928 has proven its efficacy; 99.2% of those who received their three doses of toxoid, showed a "Negative Schick" and were considered immunized. (See following commentary, Table XXIII).

GENERAL REPORT OF IMMUNIZATION AGAINST DIPHThERIA IN THE SChOOLs AND MUNICIPAL CLINICS.

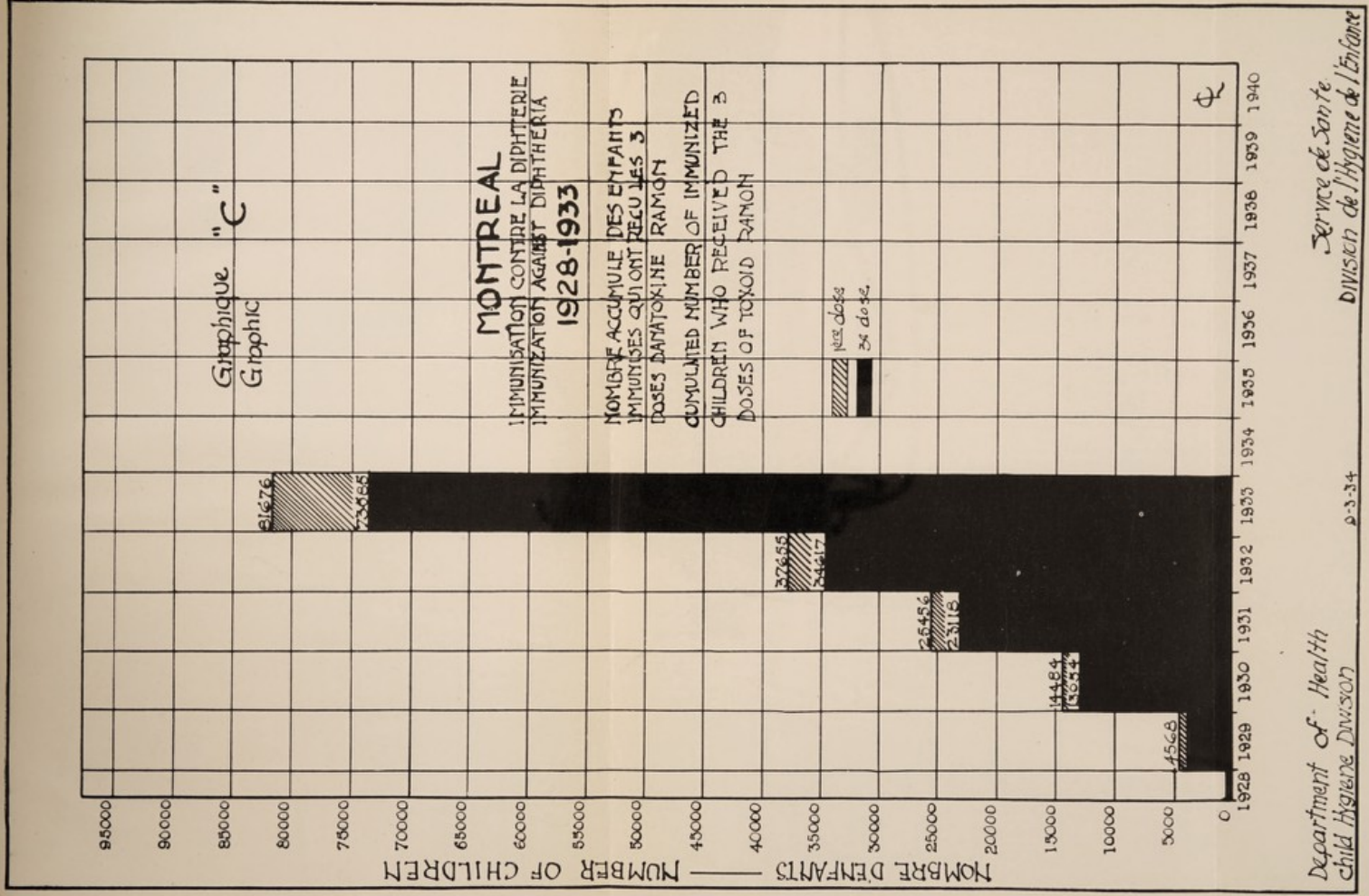
1928-1933.

The following table presents the general report of Diphtheria Immunization done in the schools and clinics from September 1928 to December 31, 1933. It presents the complete results of Immunization for the years 1928-1929-1930-1931 and 1932 by the year and for the group of years.

For 1933 it presents only the total registrations for the Anterior Schick and the first injection (1st dose) of Anatoxin Ramon, and the number of children who received the three doses up to December 31, 1933. This report of 1933 will be completed during 1934, according to subsequent injections and Posterior Schicks given.

TABLE XXIII.
IMMUNIZATION AGAINST DIPHTHERIA.
1928-1933.

	1928 1929	1930	1931	1932	Total 1928 to 1932	1933	Total
I—Anterior Schicks.....	1253	3746	3709	3335	12043	14504	26547
Negative reaction.....	715	2466	2402	2103	7686		
Percentage.....					66.1%		
Positive reaction.....	456	1158	1110	1168	3892		
Immunized.....	435	1128	1066	1137	3766		
Doubtful reaction.....	21	10	7	6	44		
Did not return for reading.....	61	112	190	58	421		
II—Total registration for immunization.....	4568	9916	10972	12199	37655	44010	81665
1—Received 3 doses.....	3946	9108	10064	11499	34617	38949	73566
Percentage.....					91.9%		
2—Received only 2 doses.....	283	405	442	371	1501		
3—Received only 1 dose.....	339	403	466	329	1537		
Difference of.....	622	808	908	700	3038		
III—Posterior Shicks.....	3557	8384	9219	6658	27818		
a) Totals:							
Negative reaction.....	3347	7962	8886	6310	26505		
Positive reaction.....	40	88	81	28	237		
Did not return for reading...	170	334	252	320	1076		
b) Details:							
1—After 3 doses.....	3455	8255	9000	6515	27225		
Negative reaction.....	3257	7845	8686	6187	25975		
Positive reaction.....	35	80	70	21	206		
Did not return for reading	163	330	244	307	1044		
2—After 2 doses.....	102	129	219	143	593		
Negative reaction.....	90	117	200	123	530		
Positive reaction.....	5	8	11	7	31		
Did not return for reading	7	4	8	13	32		
3—Posterior Schicks not done after 2nd and 3rd doses..	672	1129	1287	5199	8287		
IV—Supplementary Injections (4th dose).....	36	55	56	23	170		
Posterior Schicks.....	32	64	43	10	149		
Negative reactions.....	32	61	39	9	141		
Positive reactions.....		2	2	0	4		
Not return for reading.....		1	2	1	4		



W. H. H. H.

W. H. H. H.

Comments :

From September 1928 to December 31, 1933, the total number of registrations for Diphtheria Immunization in the schools and Municipal clinics, reached the total number of **81,676**.

The results obtained by immunization for the years **1928, 1929, 1930, 1931 and 1932**, were proven by Posterior Schick Tests.

Among 27,818 children who had the Posterior Schick, 26,742 came back for the reading and of this number 26,505 had a negative reaction, (98.3%), and were considered immunized.

1° **After three doses.** Of the 34,617 children who received three doses of Toxoid, 27,225 were submitted to the Posterior Schick; of 26,181 who returned for a reading, 25,975 had a negative reaction, that is **99.2%** were considered as immunized.

2° **After two doses.** 1,501 children received but 2 doses of Toxoid; of these, 593 were submitted to the Posterior Schick; out of these 561 returned for the reading and 530 had no reaction (Schick negative), altogether **94.4%**.

NEGATIVE POSTERIOR SCHICK

After three doses of Toxoid given at "Weekly" intervals.

(1931-1932).

In a work presented at the Convention of the Association of French speaking Physicians in September 1930, and published in the "Health Bulletin" in January 1931, we stated, according to preconceived and admitted opinions, that "the interval required between injections of Toxoid is 2 to 3 weeks; to observe this interval is an important point. Immunization is slow in its production, "it is acquired gradually."

However, an experiment made in one of the city anti-diphtheritic clinics, proved as efficient with the same doses but at weekly intervals. The reading of 101 posterior Schicks after the injection of toxoid in doses of 0.5, 1, and 1.5 cc. at "weekly" intervals gave 98 negative results, or 98%.

This experiment was continued during 1931 and 1932 in the schools and in several clinics; this included 9024 children immunized in this manner of whom 7795 had a posterior Schick reading.

This following table XXIV, indicates the results and establishes a comparison between the results of posterior Schicks read after immunization by means of 3 doses of toxoid (a) at intervals of 3 weeks and, (b) at intervals of "one week."

TABLE XXIV.

RESULTS OF POSTERIOR SCHICKS.

After three doses of toxoid at 3 week intervals and weekly intervals during 1931 and 1932.

	1931		1932		Total	
	Intervals of		Intervals of		Intervals of	
	1 week	3 weeks	1 week	3 weeks	1 week	3 weeks
Posterior Schicks read.....	4177	4579	3618	2390	7795	7169
Negative reactions..	4158	4528	3615	2572	7773	7100
Percentage.....	99.5	99.05	99.6	99.3	99.5	99.03

This table shows that the percentage of negative Posterior Schicks is: (a) 99.03% in the case of children immunized at 3 week intervals, and (b) 99.5% in those immunized at "weekly" intervals.

The difference of a few tenths between the two results is too small to be significant.

These results, carried out with a sufficiently large number of cases to be impressive, indicate that the last method is also efficacious.

This method also has the advantage of simplifying considerably the work of organization and the work of the nurses by eliminating a good number of home visits. Time is thus saved and the sending of the post-cards used for reminders is diminished.

This experiment also showed that with the simplified organization, the difference observed between the number of children who received a first dose and those who received the three doses diminished in a proportion varying between 1 to 2%.

VACCINATION AGAINST SMALLPOX.

Smallpox vaccination is practised in the offices of the Well Baby Clinics throughout the year, on the same days and during the same consultation hours.

During the summer vacations, in the months of August and the first week of September, in order to furnish the school population greater facilities of being vaccinated before the opening of schools, 46 vaccination centres were opened throughout the city. These centres were established either where there was a clinic or in a municipal building.

In the clinics, special hours were arranged for the vaccination, in the forenoon, so as not to interfere with the work of the clinics which is greatly increased during the summer.

Again, the inspection staff was called on to vaccinate in industrial establishments.

The following table indicates the number of vaccinations made by the medical inspectors during 1933.

TABLE XXV.

Number of Vaccinations:

In Lafontaine Park	1,718
In the schools and Clinics	9,754
In industrial establishments	913
<hr/>	
Total	12,385
Number of revaccinations	1,148
Number of verifications or certificates	10,215

DISTRIBUTION OF LITERATURE.

A certain number of publications, circulars and posters are distributed annually by the Division of Child Hygiene.

Circulars :

No. 1—"Medical Inspection of Schools" . .	300
No. 2—"Height and Weight of Children" . .	12,000
No. 3—"Immunization against Diphtheria" . .	32,500
No. 4—"Help the Child"	3,765
No. 5—"Technique of Immunization against Diphtheria"	1,975
No. 51—"Prevention of Diphtheria in our Homes"	140,000

Posters :

No. 1—"Help the Child"	1,775
No. 2—"Infant Hygiene"	3,650
No. 3—"Mother, nurse your Child"	1,650
No. 4—"Campaign to wipe out Diphtheria" . .	14,000
No. 5—"Prevention of Diphtheria"	1,375

Publications :

No. 2—"Infant Hygiene" (french)	17,575
No. 2a—"Infant Hygiene" (english)	4,350
No. 3—"Prenatal Hygiene"	3,675
No. 4—"Child Hygiene League" (french)	575
No. 4a—"Child Hygiene League" (english)	225
No. 5—"Breast feeding"	3,725

During the course of the year 1933, the doctors and nurses gave their efficient aid to the Division of Contagious Diseases and Medical Control.

I must mention in particular the excellent results of the "Dental Campaign in the Schools" and the important part of our division in the "Campaign of Immunization against Diphtheria" undertaken by the Department of Health.

I am also pleased to underline the fine spirit which reigned amongst the members of the personnel.

Allow me to felicitate and thank them for the devotion which they showed in the accomplishment of their duties.

Respectfully submitted,

AD. GROULX, M.D., D.P.H.,

Superintendent 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 honor to submit the annual report of the Division of Sanitation for 1933, in which the statistics of the operations of the year are summarized under the following classification.

- I.—Examination of plans and specifications of new or modified buildings.
- II.—Sanitary records of dwellings.
- III.—Sanitary inspection, including;
 - (a) complaints and their inquests;
 - (b) regular inspections of various industrial, commercial and educational establishments, institutions, etc.;
 - (c) inspection of lanes, yards, etc.;
 - (d) inspection of privies, cesspools, etc.;
- IV.—Plumbing and drainage in new or modified buildings
- V.—The work of the Board of Examiners for plumbers.
- VI.—Permits and licenses of various categories.
- VII.—Notification and proceedings.

VIII.—Inspections relating to the enforcement of special by-laws:

- (a) By-law No. 1006: concerning barber-shops, hair-dressing parlors, etc.;
- (b) By-law No. 1009: concerning laundries, etc.;
- (c) By-law No. 1089: concerning mattresses and other stuffed articles of bedding, etc.;
- (d) By-law No. 1203: concerning the water supply of establishments in the City of Montreal, etc.;
- (e) By-law No. 1226: concerning gas installations in buildings, etc.;
- (f) By-law No. 1252: concerning public baths and bathing.

IX.—Supervision of the Inspectors' work.

I.

EXAMINATION OF PLANS AND APPLICATIONS
FOR PERMITS.

(a) New constructions	876
(b) Modified constructions	1,321
(c) Plumbing and drainage (permits granted)	1,284

II.

SANITARY RECORDS OF DWELLINGS.

The sanitary records of dwellings, inaugurated in 1921, have been completed in 1929. The annual report of the same year gives a summary of the statistics of the first survey and a few general remarks related thereto.

The work carried on, from year to year, has given the following results at the end of 1933:

	Survey and Re-survey re-survey (1933) (1921-1933)	
(a) Inspections	30,428	262,848
(b) Findings :		
(1) occupied dark rooms	372	9,804
(2) unoccupied dark rooms (storage)	29	1,547
(3) unsanitary dwellings (inhabitated cellars, etc.)	26	1,086
(c) Notification :		
(1) dark rooms	96	5,260
(2) unsanitary dwellings (inhabitated cellars, etc.)	9	1,089
(d) Execution :		
(1) corrected dark rooms	33	7,174
(2) placarded dark rooms	49	3,056
(3) unsanitary dwellings (inhabitated cellars, etc., vacated)	19	345

(a) The number 262,848 includes 141,877 dwellings visited during the period 1921-29, and 120,971 during the period 1930-1933.

City Assessors' reports give for the end of 1933, 189,446 dwellings of which 13,235 were vacant; the corresponding figures for 1920, are 127,900 and 605 respectively.

(b) This inspection has allowed us to locate dwellings containing rooms not lighted directly to the outside air; 9,804 such rooms have been recorded of which 7,174 or 73% had been corrected at the end of 1933.

(c) The interested owners have co-operated with the Health Department in this work, and in no case it has been necessary to use coercitive measures. 3,056 rooms have, moreover, been placarded, of which about one half were only used for storage purposes.

(d) The above figures show that approximately 3/4 of the number of dark rooms recorded have been corrected, and about 1/3 of the number of unsanitary dwellings recorded have been vacated.

III.

Complaints : (a) SANITARY INSPECTION.

Total number	10,228
Founded	6,800
Not founded	3,428

The measures ordered and executed after investigation are the following:

Plumbing and drainage	1,508
Constitutional insalubrity	530
Acquired insalubrity (dwellings)	1,758
Acquired insalubrity (yards and out-houses)	3,004
<hr/>	
Total number of complaints founded	6,800
Water leakage	2,020

(b) REGULAR INSPECTIONS.

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

	Inspec- tions (1)	Plumbing and drainage (2)	Other defects	Unclean
Dwellings	45780	4827	448	1175
Boarding houses	246			
Boarding houses for children (3)	103			
Public buildings, stores and other establishments	5094	200		261
Educational establishments (4)	489			
Industrial establishments	2727	255		360
Theatres, moving pictures, etc.	331	8		24
Laundries (By-law No. 1009)	700	23		151
Barber shops, hair-dressing par- lors, etc. (By-law No. 1006)	5989	90		262
Establishments: Manufacturing of mattresses, filling materials (By- law No. 1089)	3692			
Various buildings (gas piping and fixtures)	4234	1028		
Garages, comfort stations	8876			

- (1) These figures include the number of dwellings, public buildings, stores, etc., visited in 1933 exclusive of second visits; 30,428 records of dwellings have been filled, revised and indexed.
- (2) In many places defects were found after a smoke test which was necessary in 198 cases.
- (3) The supervision of this work is under the jurisdiction of the Division of Child Hygiene, with whom we co-operated.
- (4) General inspections of all schools are made in the course of the school year. The inspection of schools, has been placed under the direction of the Division of Child Hygiene, but when necessary the co-operation 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	3,793
Yards	41,532
Vacant lots	6,882
Sheds	43,045
Cellars or basements	21,563
Drains and plumbing systems	60,530
Manure boxes (nuisances)	197
Stables	965

(d) **PRIVY VAULTS AND CESSPOOLS**

There are at present in the City of Montreal 593 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	856
2. Piping (before installation of fixtures)	1,455
3. Piping (after installation of fixtures)	1,949
4. Oil of mint tests	121
5. Water test	1,250
6. Works completed and tested	1,656
7. Calls for inspection	3,342

V.

BUREAU OF PLUMBING EXAMINERS.

(a) Number of sittings	20
(b) Total number of plumbers examined	133
(c) New licenses granted to master-plumbers	19
(d) New licenses granted to journey-men-plumbers	35

VI.

LICENSE PERMITS.

(a) Master-plumbers (By-law 318) ..	632
(b) Journeymen-plumbers (By-law 318)	354
(c) Barber-shops (By-law 1006)	1,791
(d) Laundries (By-law No. 1009)	403
(e) Establishments: Manufacturing of mattresses, filling materials, etc. (By-law 1089)	168

VII.

NOTIFICATION AND PROCEEDINGS.

Official notices served	5,088
Second notices	1,304
Notices given by inspectors	10,429
Actions taken (Recorder's Court)	34
Convictions	33

VIII.

ENFORCEMENT OF SPECIAL BY-LAWS.

1.—The statistics relating to the enforcement of by-laws concerning barber-shops, etc. (No. 1006), laundries (No. 1009), mattresses and other stuffed articles (No. 1089), and gas installations in buildings (piping, appliances and flue connections) (No. 1226), are contained in the table relating to regular inspections. III (b).

2.—By-law No. 1203, concerning the water supply of establishments located in the City of Montreal:—

There are within the city a certain number of establishments supplied by the municipal aqueduct and by a second source of water supply (St. Lawrence River, the Des Prairies River, Lachine canal, wells, etc.) for industrial use, feeding of steam boilers or feeding of a fire protection system.

In most cases the conduits of the two systems are connected by check valves, so as to allow the use of either of the two sources.

The adoption at the end of 1932 and the enforcement in 1933 of the present by-law by the division of Sanitation of the Health Department and by the division of Canalization of the Public Works Department are the results of this situation which constitutes a danger of contamination of the water of the city municipal aqueduct.

The following figures summarize the work accomplished in 1933:

I. Preliminary inspections	194
Inspections following application for permits	104
Re-inspections	336
Water samples taken	273
Permits granted by the Executive Committee	21
Other permits recommended	2
Auxiliary water supply abandoned	5
Modification projets under preparation	76

II. The following figures represent the number of known establishments provided with an auxiliary source at the end of 1933 :

From the St. Lawrence river	23
From the Lachine canal	45

From the Des Prairies river	1
From artesian wells	103
(of which 51 are no longer in use)	

3.—By-law No. 1252 — concerning public baths and bathing :

The results of analyses of water samples taken in the various public baths in the City of Montreal during the last few years, have shown that filtration and automatic disinfection of swimming pool water are necessary, and as the consequence of our ascertaining these results, By-law No. 1252, concerning public baths and bathing, has been finally adopted by the City, on September 22, 1933.

Swimming pools within City limits may be classified as follows:

	Municipal baths	Semi- public baths	Open air pool	Total
(a) Filters and automatic disinfection equipment:—				
Chlorination	4	2	.....	6
Ultra violet rays	1	1	.....	2
(b) Filters and intermittent disinfection	11	5	.....	16
(c) Intermittent disinfection only	2	1	1	4
Total	18	9	1	28

The work of supervision has required in 1933, 56 inspections and 239 water samples.

Municipal public baths are operated by the division of Parks and Recreations of the Public Works Department.

IX.

SUPERVISION OF THE INSPECTORS' WORK

Control reports	797
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AIME COUSINEAU, C.E.,

Superintendent Engineer of the
Division of Sanitation.

Division of Food Inspection

DIVISION OF FOOD INSPECTION.

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

Director, Department of Health,
City Hall Annex.

Dear Sir:—

I have the honor to submit herewith, the annual report of the Division of Food Inspection for the year 1933.

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, D.V.M.,
Superintendent Food Inspection Division.

Acidity tests	243
Sediments tests	21,891
Temperatures taken	17,720
Total number of gallons examined . . .	453,200

Section No. 1—(Continued)

Confiscation :

Milk (in gallons)	23,477
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INSPECTION OF MILK PRODUCERS IN THE
COUNTRY.

Inspections :

Dairy score cards	4,679
Special	8,745
At Railway Stations	76
Total	13,500

Cows :

Number examined	74,766
Clean	68,082
Tuberculin tested within the year	74,645
Tuberculin test overdue	121

Stables :

Number	4,679
Clean	4,383
With concrete floor	4,152
With 400 cubic feet of air space per animal	4,507
With 1 foot of light area per animal	4,500
Whitewashed entirely	4,514

Dairies :

Number	4,597
Clean	4,436
Unfinished or unsuitable	82

Refrigeration :

With ice	4,266
With spring water	161
Producers not having satisfactory cooling-systems	252

Section No. 1—(Continued)

Miscellaneous :

Written notices	779
Written notices by letter from the Office	500
Producers interdicted	110

INSPECTION OF CREAM PRODUCERS IN THE COUNTRY.

1933.

Inspections :

Dairy score cards	1,935
Special	1,943
At railway Stations	1
<hr/>	
Total	3,879

Cows :

Number examined	25,569
Clean	21,281
Tuberculin tested within the year	24,733
Tuberculin test overdue	836

Stables :

Number	1,935
Clean	1,595
With concrete floor	1,423
With 400 feet cubic of air space per animal	1,830
With 1 foot light area per animal	1,558
Whitewashed entirely	1,721

Dairies :

Number	1,672
Clean	1,443
Unfinished or unsuitable	263

Section No 1 — (Continued)

Refrigeration :

With ice	881
With spring water	346
Producers not having satisfactory refrigeration	708

Miscellaneous :

Written notices	695
“ “ by letter from the Office	2,246
Producers interdicted	286

INSPECTIONS IN THE CITY.

At the Railway Stations	345
In dairies	5,258
In groceries	5,598
In dining-rooms	941
In restaurants	5,821
In markets	643
In stables	302
In private house	141
In various places	661
Special	1,551
Total	21,261

Milk cows examined	4,179
Empty cans examined	36,377
“ “ confiscated	201
Can tops (lids) confiscated	98
Notices for poor milk	339
Written notices (various)	12,396
Actions taken	58
Condemnations	56
Judgment deferred	1
Action withdrawn	1

Section No. 1.—(Continued)

OBSERVATIONS AND IMPROVEMENTS, 1929 to 1933.

Inspection of dairy farms.

	1929	1930	1931	1932	1933
Number of producers visited.....	4548	4358	4373	4562	4679
Cows examined.....	66144	63672	65676	69403	74766
Cows found clean.....	56527	54695	59055	63428	68082
Stables with cement floor.....	3483	3524	3748	3903	4152
Stables with 400 cubic feet of air per animal....	4319	4008	4175	4250	4507
Stables with one square foot of glass per animal.	3954	3919	4107	4304	4500
Whitewashed stables.....	4123	3942	4218	4383	4514
Clean stables.....	4075	3915	4042	4237	4383
Producers having a dairy.....	4214	4174	4296	4470	4597
Producers whose dairy was not found satisfactory	334	184	55	89	82
Producers whose dairy is maintained in a clean condition.....	3814	3760	4241	4381	4436
Producers having ice.....	3660	3987	3887	4210	4266
Producers cooling milk in spring water or wells..	139	152	139	143	161
Producers not having satisfactory cooling systems.....	749	219	347	209	252
Notices in writing.....	302	680	1006	830	779
Notices (letter from office).....	5395	5180	5312	5487	500
Producers interdicted.....	333	192	207	112	110

Section No. 1:—(Continued)

PROGRESS IN THE METHODS AND EQUIPMENT OF MILK PRODUCERS.

1929 to 1933.

	1929	1930	1931	1932	1933
Cows:					
Clean.....	85.46%	85.90%	89.94%	91.39%	91.06%
Stables:					
Whitewashed.....					
Clean.....	90.65%	89.93%	96.91%	96.49%	96.47%
With concrete floors.....	89.59%	89.83%	92.43%	92.87%	93.67%
	76.58%	80.86%	85.70%	85.55%	88.73%
Milk rooms:					
Number.....					
Clean.....	92.65%	95.77%	98.23%	97.98%	98.25%
	90.50%	90.08%	98.72%	98.00%	96.50%
Refrigeration:					
With ice.....	80.47%	91.48%	88.88%	92.28%	91.18%
With spring water or wells.....	3.05%	3.48%	3.19%	3.13%	3.44%

DIVISION OF FOOD INSPECTION.

Milk Section No. 1.

RECAPITULATION, 1933.

Total number of establishments	14,186
“ “ “ inspections.. .. .	38,640
“ “ “ cows examined	104,514
“ “ “ samples of milk, cream and ice-cream collected for chem- ical and bacteriological anal- ysis	11,912
“ “ “ various examinations of milk, cream and ice-cream.. .. .	56,650
“ “ “ gallons of milk examined ..	453,200
“ “ “ “ “ “ confiscated .	23,477
Complaints	51
Actions taken	58
Condemnations	56
Judgment deferred	1
Action withdrawn	1
Written notices	15,151
Permits recommended	606

STATEMENT OF PROSECUTIONS ENTERED IN THE
RECORDER'S COURT AND RESULTS.

by Section No. 1

OF THE FOOD INSPECTION DIVISION, 1933.

Number of prosecu- tions		Fines	Costs
	BY-LAW No. 891		
13	Article 2: (Selling milk and cream in the City without a permit for license).....	\$147.00	\$ 59.01
14	Article 10: (Delivery vehicles not bearing name and address; vehicles not exclusively reserved to convey milk).....	140.00	62.43
1	Article 12: (Milk not kept in a proper place)...	10.00	6.70
1	Article 21: (Bottles of milk not properly labelled)	10.00	3.73
4	Article 24: (Milk kept on railway station plat- form more than 30 minutes).....	40.00	19.05
11	Article 25c: (Milk the temperature of which is above 50 degrees Fahr.).....	120.00	55.59
3	Article 86: (Milk not containing the required percentage of butterfat or density).	40.00	14.78
2	Article 87: (Dirty milk).....	75.00	11.05
2	Article 99: (Cream not bearing the right per- centage).....	30.00	10.76
2	Article 136: (Name of the product not indicated).	25.00	7.05
2	Article 153: (Selling milk after having been inter- dicted).....	20.00	8.56

STATEMENT OF PROSECUTIONS ENTERED IN THE RECORDER'S COURT AND RESULTS.

by Section No. 1.—(Continued)

OF THE FOOD INSPECTION DIVISION, 1933.

Number of prosecu- tions		Fines	Costs
1	BY-LAW No. 1103 Article 29: (Selling butter in the City without a permit for license).....	10.00	3.50
2	SECTION No. 4 WEIGHT OF BREAD BY-LAW No. 617 Section 5a: (Exchange of bread).....	10.00	7.46
	Total.....	\$657.00	\$269.67
1	Judgment deferred.		
1	Action withdrawn.		
60			

DIVISION OF FOOD INSPECTION

Section No. 2.

	Total number of establishments	Total number of inspections
Private abattoir (city)	1	297
Private abattoirs (country) . .	503	1,662
Markets	7	513
Butchers	369	5,339
Butchers and grocers	798	11,547
Grocers	1,254	18,146
Poultry dealers	76	936
Fish stalls	40	526
Cold storage	7	60
Sundry manufacturers	72	629
Sundries	43	512
Special . . . . .	..	1,926
Total	3,170	42,093
Written notices		4,676
Actions taken		38
Convictions		37
Cases dismissed		1
Complaints		84
Samples collected		312
Analysis		342
Dogs having bitten someone		308
Dogs visited, saving bitten someone		1,197
Research re : negris bodies		22
Permits granted		1,406
Country abattoirs interdicted		161

DIVISION OF FOOD INSPECTION.

Section No. 2.—(Continued)

CARCASSES INSPECTED AND CONFISCATED.

At the private abattoir. (*)

	Inspections	Confiscations
Cattle	469	4
Calves	1,344	1
Carcasses of mutton	2,081	1
Hogs	1,214	
	<hr/>	<hr/>
Total	5,108	6

At the inspection stations.

	Inspections	Confiscations
Calves	22,572	65
Carcasses of mutton	3,419	3
Hogs	20,848	5
	<hr/>	<hr/>
Total	46,839	73

At the commission stores.

	Inspections	Confiscations
Calves	45,143	374
Carcasses of mutton	12,414	65
Hogs	28,668	59
	<hr/>	<hr/>
Total	86,225	498

Total number of carcasses inspected	138,172	
Total number of carcasses confiscated		577

(*) The inspection at the public abbatoirs is performed by the Federal Government.

DIVISION OF FOOD INSPECTION.

Section No. 2.—(Continued)

FOODSTUFFS AND MEATS CONDEMNED (lbs.)

	Private abattoir	Inspection stations	Commis- sion stores	Markets, butchers, etc.	Total
Beef.....		20	22	2254	2296
Veal.....		185	1913	1243	3341
Mutton.....		100	397	2860	3357
Pork.....		12200	6682	3168	22250
Poultry.....		223	2717	2847	5787
Fish.....				47638	47638
Sundry meats....	7471	915	273	15100	23579
Sundry foodstuff..				59265	59265
Total.....	7471	13643	12204	134375	167693

Ice condemned..... 2 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	3,170
Total number of inspections	42,093
Total number of carcasses inspected	138,172
Total number of carcasses confiscated	577
Foodstuffs and meats condemned (lbs.)	167,693
Actions taken	38
Convictions	37
Cases dismissed	1
Complaints	84
Samples collected	312
Analyses	342
Written notices	4,676
Dogs having bitten someone	308
Dogs visited, having bitten someone	1,197
Research re : negri bodies (all negative)	22
Permits granted	1,406
Country abattoirs interdicted	161

DIVISION OF FOOD INSPECTION. Section No. 2.—(Continued)
SUMMARY AND RESULTS OF ACTIONS TAKEN IN 1933.

By-Law	Article	Offense	Number of actions taken	Against	Fines	Costs	Total
Prov.	39w	Sale of meat unfit for consumption..... Foodstuffs exposed outside.....	2 1	Farmers..... Grocer.....	\$ 10.00 20.00	\$ 7.75 5.48	\$ 17.75 25.48
296	14-61	Prohibited trade.....	2	Peddlers.....	3.00	3.50	6.50
828	3	Trading without a license.....	1	Poultry dealer.....	2.00	7.23	9.23
"	14	Dirty establishments.....	6	Poultry dealers.....	40.00	28.92	68.92
"	20b	Live poultry not properly kept.....	1	Butcher.....	5.00	3.73	8.73
"	21	Live poultry not properly kept.....	1	Poultry dealer.....	2.00	4.90	6.90
896	3	Trading without a license.....	1	Sausage manufacturer.....	20.00	6.36	26.36
"	13	In possession of non inspected meats.....	2	Butchers.....	.....	8.33	8.33
"	17	Prohibited trade.....	1	Farmer.....	40.00	.....	40.00
"	25	Use of preservatives in meats.....	3	Farmer.....	.....	6.03	6.03
"	28	Dirty establishments.....	2	Butchers.....	110.00 40.00	15.16 7.81	125.16 47.81
926	27	Dirty establishments.....	1	Grocer.....	10.00	3.75	13.75
1120	49	Foodstuffs not protected.....	3	Grocers.....	30.00	11.19	41.19
"	49a	Foodstuffs exposed outside.....	6	Butchers.....	60.00	19.36	79.36
			2	Grocers.....	20.00	7.94	27.94
			2	Fruits and vegetables dealers.....	20.00	9.21	29.21
		Total.....	38		\$432.00	\$156.65	\$588.65

DIVISION OF FOOD INSPECTION.

Section No. 3.

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

1933.

1° Establishments for which
a permit is necessary :

Kind of Establishments	Number of establishments to be visited	Number of visits
Restaurants	5,330	21,245
Dining-Rooms	836	7,536
Bakeries	125	2,614
Confectioneries	85	1,336
Pastry-Shops	115	2,018
Fruit and vegetables stores ..	209	2,026
Beverage manufacturers	69	1,135
Sundry Manufacturers	148	1,606
Hotels and Taverns	289	559
	<hr/>	<hr/>
Total..	7,206	40,075

2° Establishments for which
a permit is not ne-
cessary :

Institutions	181	248
------------------------	-----	-----

Section No. 3—(Continued)

3° Sundries :

Vehicles	1,447 (1)	4,685
Special Inspections		5,675
	<hr/>	<hr/>
Total	1,447	10,360
Grand total	7,387	50,683
	<hr/> <hr/>	<hr/> <hr/>

4° Samples collected for
analysis :

Bacteriological	775
Chemical	37
	<hr/>
Total	812

5° Confiscations :

Utensils	229
Fruits (in pounds)	10,170
Vegetables (in pounds)	64,690
Various foodstuffs (in pounds)	12,610
	<hr/>
Total	87,470

6° Sundries :

Complaints	121
Written notices	3,117
Actions taken	110
	<hr/>

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

Section No 3—(Continued)

Actions in Court on January	
1st, 1933	3
Actions withdrawn	2
Actions dismissed	1
Convictions	110
Actions in Court on December	
31st, 1933 . . . . .	...

7° Permits :

Granted in restaurants, dining- rooms, candy stores, etc...	7,593
Granted in bakeries, confec- tioneries, pastry-shops, bev- erage manufacturing and various manufacturing... .	632
Deferred on December 31st., 1933	56
Refused on December 31st., 1933	126
Establishments for which a per- mit is not required : reli- gious institutions, welfare associations, etc...	443
<hr/>	
Total number of permits	8,850

P.S. — The surplus of permits with the number of establishments to be visited in 1933, 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.

DIVISION OF FOOD INSPECTION.

Section 3—(Continued)

COMPARATIVE TABLE.

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

Etablissements	1930		1931		1932		1933	
	To be visited	Visited	To be visited	Visited	To be visited	Visited	To be visited	Visited
1—Establishments for which a permit is necessary:								
Restaurants.....	3,998	16,953	4,466	16,963	4,915	19,664	5,330	21,245
Dining-Rooms.....	773	3,689	926	5,999	976	9,374	836	7,536
Bakeries.....	128	910	128	1,844	126	2,770	125	2,614
Confectioneries.....	55	369	70	898	87	1,441	85	1,336
Pastry-Shops.....	96	680	135	1,355	136	2,242	115	2,018
Fruit and vegetable stores.....	184	1,200	240	1,597	259	1,859	209	2,026
Beverage Manufacturing establishments.....	55	299	59	571	72	1,124	69	1,135
Various manufacturing establishments.....	102	532	109	976	127	1,529	148	1,606
Cooked meats establishments.....	18	116	*	*	*	*	*	*
Hotels and taverns.....	.....	.....	.....	.....	252	295	289	559
2—Establishments for which a permit is not necessary:								
Institutions.....	97	134	112	63	109	101	181	248
Taverns.....	237	347	231	194	†	†	.....	.....
3—Sundries:								
Vehicles.....	1,173†	187	1,478†	1,224	1,473†	1,382	1,447†	4,685
Special inspections.....	.....	4,625	.....	5,874	.....	5,567	.....	5,675
Total.....	5,743	30,041	6,476	37,558	7,059	47,348	7,387	50,683

DIVISION OF FOOD INSPECTION.

Section 3—(Continued)

COMPARATIVE TABLE.—(Continued)

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

	1930	1931	1932	1933
4—Samples collected for analysis:				
Chemical.....		5	21	37
Bacteriological.....		468	1,331	775
Total.....		473	1,352	812
5—Confiscations:				
Utensils.....	94	4	141	229
Fruits (in pounds).....	59,846	14,258	21,731	10,170
Vegetables (in pounds).....	142,850	79,307	92,346	64,690
Various foodstuffs (in pounds).....	4,036	9,400	16,167	12,610
Total.....	206,732	102,965	130,244	87,470
6—Sundries:				
Complaints.....		50	111	121
Written notices.....	6,785	3,604	3,524	3,117
Actions in Court on January 1st.....		2		3
Actions taken.....	217	138	58	110
Actions withdrawn.....	101	47		2
Actions thrown out.....		1	1	1
Convictions.....	114	92	54	110
Convictions.....	2		3	
Actions in Court on December 31st.....				

DIVISION OF FOOD INSPECTION.

Section 3—(Continued)

COMPARATIVE TABLE.—(Continued)

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

7—Permits:				
Granted in restaurants, dining-rooms, candy-stores, etc.....	5,052	6,029	7,146	7,593
Granted in bakeries, confectioneries, pastry-shops, beverage manufacturing and various manufacturing.....	367	594	649	632
Deferred on December 31st.....	282	26	20	56
Refused on December 31st.....	35	57	78	126
Establishments for which a permit is not required: Religious institutions, welfare associations, etc..			122	443
Total permits.....	5,736	6,706	8,015	8,850

P.S.—The surplus of permits with the number of establishments to be visited in 1933 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.

* These establishments are now under the supervision of section No. 2.

† See Table 1.

‡ The number of vehicles to be examined does not appear in the total.

**STATEMENT OF PROSECUTIONS ENTERED IN THE
RECORDERS' COURT AND RESULTS
BY SECTION No. 3
OF THE FOOD INSPECTION DIVISION, 1933.**

Number of prosecu- tions		Fines	Costs
	BY-LAW No. 283		
	Section 4a: (Dirty utensils)		
5	Bakeries.....	\$ 70.00	\$ 19.52
3	Pastry-shops.....	15.00	7.63
	Section 7: (Dirty delivery waggons)		
8	Bakeries.....	50.00	34.36
	Section 8: (Use of tobacco)		
4	Employees smoking while on duty.....	4.00	16.43
	Section 13: (Delivery waggons not bearing names and address)		
2	Bakeries.....		16.63
	Section 15: (Foodstuffs exposed in a food estab- lishment, without any protection against contamination)		
1	Bakery.....	3.00	3.73
	BY-LAW No. 609		
	Article 11: (Establishments not kept in a clean and sanitary condition)		
1	Non-alcoholic beverage mfg. estab.....	10.00	5.75
	BY-LAW No. 926		
	Article 2: (Operating a food establishment with- out having previously obtained from the City a license to that effect)		
8	Restaurants.....	15.50	35.85
1	Confectionery.....		4.25
3	Non-alcoholic beverage mfg. estab.....		11.23
	Article 10: (Employees not provided with medical cards)		
3	Bakeries.....	30.00	12.06
13	Restaurants.....	190.00	67.66

**STATEMENT OF PROSECUTIONS ENTERED IN THE
RECORDERS' COURT AND RESULTS
BY SECTION No. 3,
OF THE FOOD INSPECTION DIVISION,
1933.—(Concluded)**

Number of prosecu- tions		Fines	Costs
	BY-LAW No. 926—(Continued)		
	Article 29: (Food establishments not kept reason- ably free from flies)		
1	Bakery.....	10.00	4.25
	Article 27: (Establishments not kept in a clean and sanitary condition)		
2	Bakeries.....	60.00	8.96
20	Restaurants.....	215.00	81.24
5	Fruits and vegetables stores.....	65.00	22.15
2	Non-alcoholic beverage mfg. estab.....	20.00	5.83
2	Pastry-shops.....	30.00	8.51
	Article 31: (Dirty water-closets)		
1	Restaurant.....	10.00	4.95
1	Fruits and vegetables store.....	10.00	4.08
	BY-LAW No. 1120		
	Article 49: (Foodstuffs exposed in food estab- lishments without any protection against contamination)		
1	Fruits and vegetables store.....	10.00	3.73
3	Peddlers.....	20.00	11.54
	Article 49a: (Foodstuffs displayed outside of food establishments)		
6	Fruits and vegetables stores.....	32.00	16.66
1	Pastry-shops.....	10.00	.....
	PROVINCIAL HEALTH BY-LAWS		
	Article 39w: (Foodstuffs exposed at shop windows, not being properly protected against dust and other source of contamina- tion)		
16	Fruits and vegetables stores.....	20.00	27.91
	Total.....	\$899.50	\$434.91

DIVISION OF FOOD INSPECTION.

SECTION No. 4.

WEIGHT OF BREAD IN THE CITY OF MONTREAL
DURING THE YEAR 1933.

	Inspec- tions made	Loaves weighed	Loaves confisc- ated	Notices sent	Actions taken
In bakeries.....	1,209	132,152	4,321	28	1
In grocery stores.....	1,086	30,644	13	7	.....
In pastry shops.....	152	3,275	.....	1	.....
In restaurants.....	491	5,004	6	1
In vehicles.....	126	458	2
Total.....	3,064	171,533	4,334	44	2

REFRIGERATION

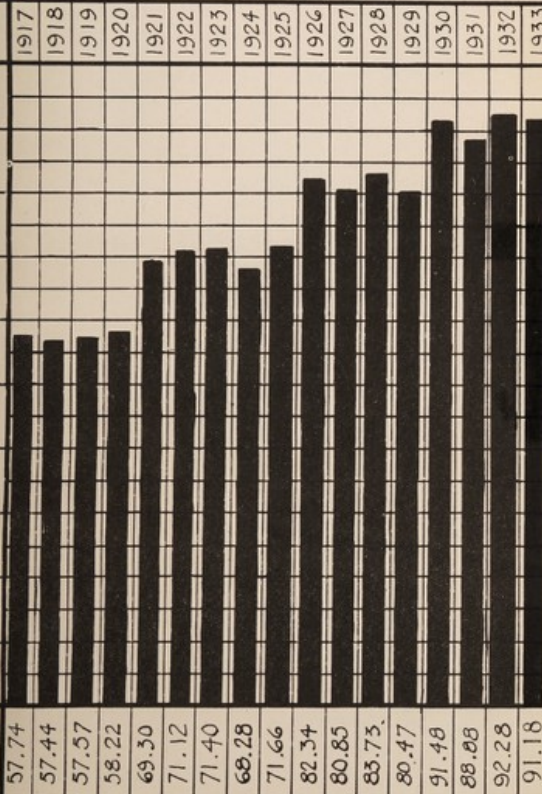
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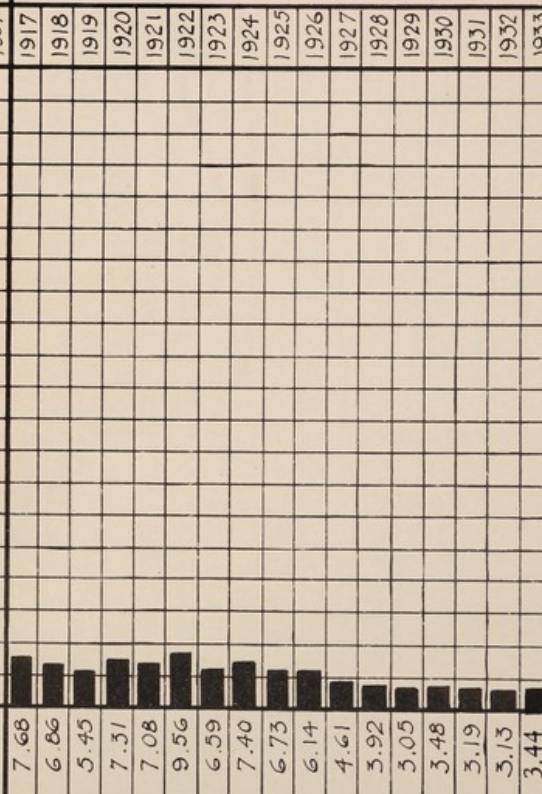
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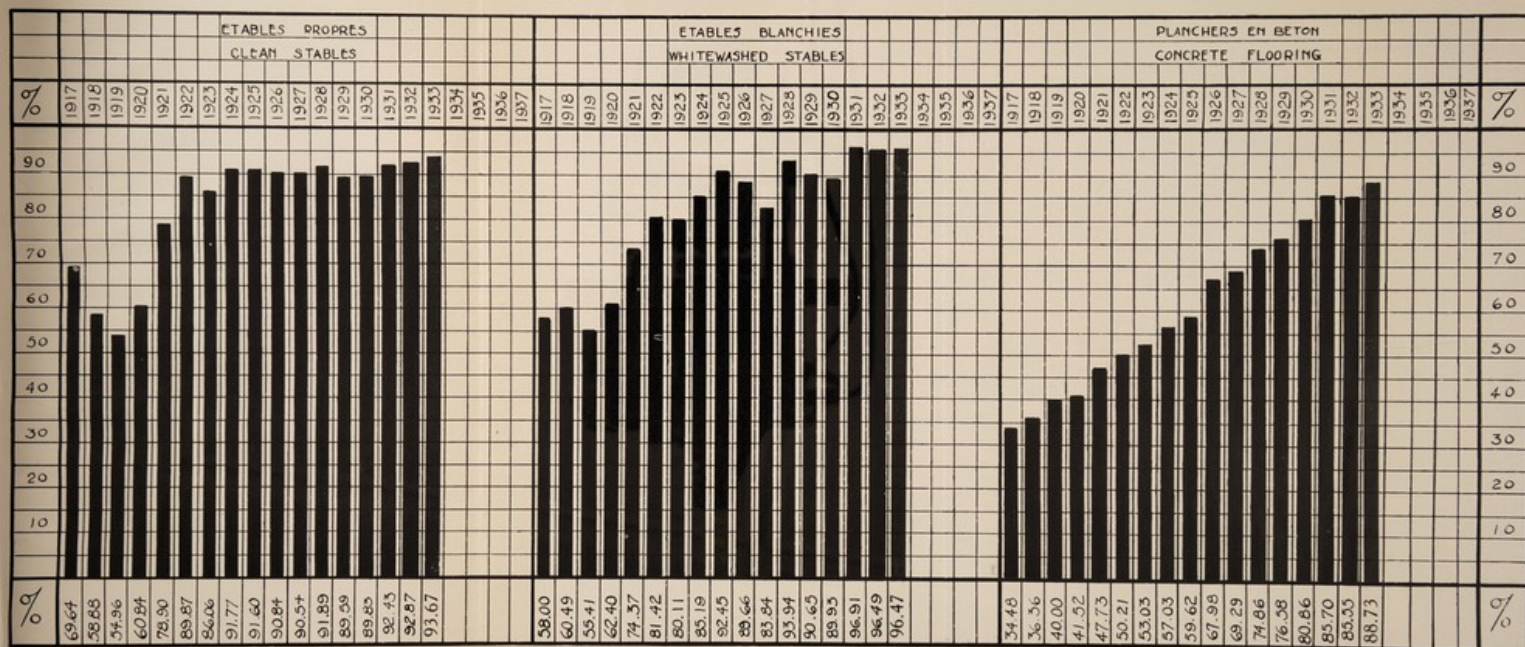
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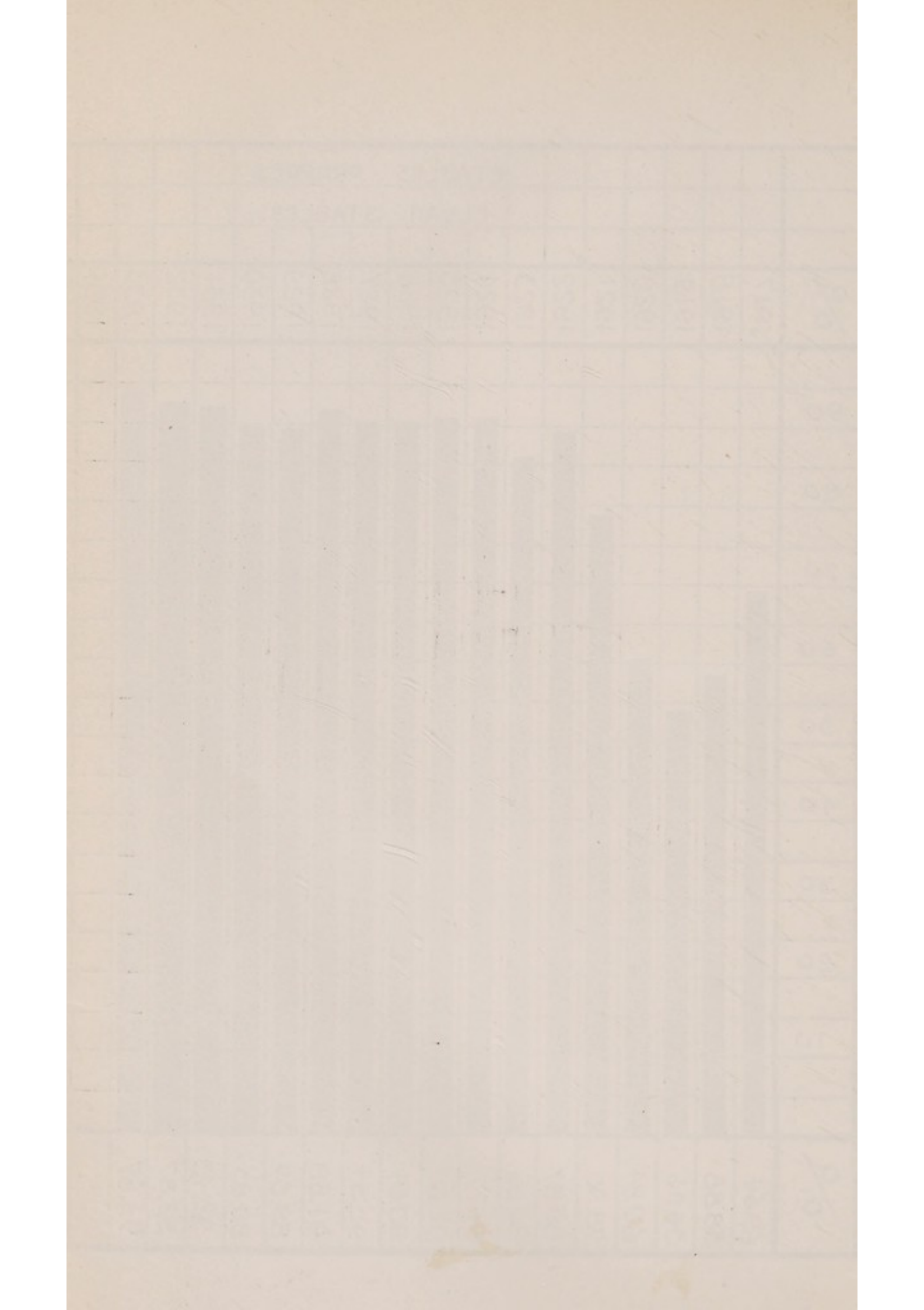
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Division of Municipal Assistance

**PERSONNEL OF THE DIVISION OF MUNICIPAL
ASSISTANCE FOR THE YEAR 1933.**

ALBERT CHEVALIER	Superintendent.
C. J. GAUTHIER	Assistant Superintendent & Secretary.
G. LAPROTTE.. .. .	Chief Clerk.
J. DEGUISE	Clerk.
P. E. GAGNE	"
Z. LONGPRE	"
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.
Miss R. BEAUPRE	"
J. M. LALIBERTE	Bookkeeper.
Dr. E. CHABOT	Physician.
J. A. DONATO.. .. .	Chief Investigator.
P. E. PROVOST	Investigator.
A. BRABANT	"
CHS. ED. LEFEBVRE	"
ARMINI CHEVALIER	"
E. SANCHE.. .. .	"
O. GIROUX.. .. .	"
R. DAOUST	"
J. DESROCHERS.. .. .	Supervisor of the Meurling Refuge.
D. LAVOIE	Clerk.
A. HENUSET	Fireman.
J. BRUNET	"
G. FILION	Lauderer.
J. BURON	Cook.
N. LATRAVERSE.. .. .	Watchman.
J. R. ROBITAILLE	"
A. GOUGEON	"
A. HINTON	"
L. PARISIEN	"

TWENTY-NINTH ANNUAL REPORT OF THE DIVISION
OF MUNICIPAL ASSISTANCE FOR THE
YEAR 1933.

Dr. S. Boucher,

Director of the Department of Health,
City Hall.

Dear Sir: —

I beg to submit herewith the twenty-ninth Annual Report of the Division of Municipal Assistance for the year 1933.

This year our Division has dealt with 58,395 cases, which necessitated 42,870 investigations and the hospitalization of 46,419 persons at the expenses of the City. These figures do not include the work done at the Meurling Municipal Refuge, which during the year 1933 has supplied 204,489 sleeping accommodations to 4,741 individuals and given 434,514 meals to the individuals lodged.

On the 31st of December 1933, there remained 1,109 enquiries in abeyance.

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 1933 for assistance to its ratepayers a sum of \$14,823,799.81, as follows:

A) Relief of various kinds	\$ 2,719,430.98
B) In Direct Relief	15,897,090.42
C) Remittance of real estate tax to Charitable Institutions	528,279.98
<hr/>	
Total	\$19,144,801.38

LESS

A) Money collected for maintenance	\$ 22,558.08	
B) Money collected for amusement tax	329,598.29	
C) Reimbursement for unemployment by the Federal and Provincial Governments	3,960,577.65	
D) Reimbursement for unemployment by the Federal and Provincial Governments for the Meurling Municipal Refuge	8,267.55	4,321,001.57
		<hr/>
		\$14,823,799.81

Or: \$9,289,784.03 more than in 1932.

STATEMENT OF THE OPERATIONS OF THE MUNICIPAL ASSISTANCE DIVISION FOR THE YEAR 1933.

217

Items	Hospitalized at City's cost	Number of investigations	Number of cases	Expenditure	Sums collected
Neglected children.....	531	972	987	\$ 89,342.05	\$ 778.98
Juvenile Delinquents and Juvenile Court.....	225	211	225	44,244.29	232.25
Insane.....	943	1,110	1,137	368,238.62	19,866.09
Incurable patients and others.....	241	430	430	132,381.95	
Tuberculous.....	152	176	176	73,000.00	1,497.05
Assistance to the poor.....		402	402		
Street vendors.....		335	335		
Special cases.....		1,545	1,545	4,013.19	178.06
Burial of paupers.....		576	600		
Deportation of immigrants.....		792	792	3,495.09	5.65
Repatriation of strangers.....		629	629	307,690.52	
Pensions and annuities.....		171	171		
Charitable institutions having registered (By-Law 626).....		205	205		
Persons authorized to collect gifts for said institutions (By-Law 626).....		61	61		
Tag-Days.....		32	32		
Quebec Public Charities Act.....	44,327	35,223	50,668	1,351,021.07	329,598.29
Grants.....				283,215.00	
Total.....	46,419	42,870	58,395		
In 1932.....	40,509	37,013	51,247		
Mourling Municipal Refuge—Free night lodgings: 204,489; free meals given: 434,514.....				29,089.67	
Administration expenditure of general office.....				33,699.53	
Unemployment crisis (*5,273.16 included for miscellaneous expenditures).....				15,897,090.42	3,968,845.20
Total money disbursed for assistance purposes.....				18,616,521.40	
To be added: Exemption of taxes to charitable institutions: \$39,131,850.00 at \$1.35%.....				528,279.98	
Grand total.....				\$19,144,801.38	\$4,321,001.57
In 1932.....				\$ 7,813,606.57	\$2,278,990.79

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.

987 applications for placing or discharging neglected children had to be settled during 1933. These applications necessitated 972 investigations, 15 of which remained in abeyance on the 31st of December 1933.

The result of said investigations was as follows:

Accepted cases	443
Refused cases	215
Procedures discontinued	91
Applications for release granted	179
Special cases	44
	<hr/>
Total	972

Children were placed as follows:

Children in schools of industry on the 1st January 1933	1,238
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Admitted during the year:

At Maison Ste-Domitille	173
A Notre-Dame de Montfort	167
At Orphelinat d'Huberdeau	114
	<hr/>

Total	454
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Readmitted during the year	77
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Total	531
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Total	1,769
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Discharged, set free or internments terminated ..	575
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On the 31st of December 1933	1,194
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Distributed as follows:

Maison Ste-Domitille, Laval-des-Rapides	550
Notre-Dame de Montfort	359
Orphelinat d'Huberdeau	285

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

On December 31st, 1933, none were waiting for their admission.

The cost of maintenance of these children was \$89,342.05 in 1933 (paid by the City for transportation \$821.55 and to the Provincial Government \$88,520.50).

The parents of certain children found able to pay for the maintenance of said children were called upon to refund to the the City the amount of \$778.98.

Juvenile delinquents.

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

Mont St-Antoine	131
Bon-Pasteur	37
Shawbridge	31
Girl's Cottage	26

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

Investigations closed	197
Objections to payment	6
Parents having to reimburse	8
Under investigation on December 31st, 1933	7

The sum of \$232.25 was collected in 1933 from responsible parties.

On the 31st of December 1933, there were, in the Reform Schools, at the City's expense, 415 juvenile delinquents, as follows:

At Mont St-Antoine	223
At Maison Lorette	84
At Shawbridge	87
At Girl's Cottage	21

The City of Montreal paid to the Provincial Government in the year 1933, for the maintenance of the Juvenile Court, the sum of \$6,500.00.

Another sum of \$37,624.29 was paid by the City for maintenance expenses and \$120.00 for transportation expenses in the year 1933, making a total of \$37,744.29.

Insane.

There were in the asylums for the insane, at the City's expenses, on the first of January 1933, 3,475 patients. During the year, 943 of these patients were admitted: at St-Jean de Dieu, 622; at Verdun, 133; at l'Hospice Ste-Anne-de-la-Baie-St-Paul, 65; at l'Asile de Bordeaux (for the criminal insane), 78; at LaJemmerais School, 44, and at St-Michel Archange, 1; 611 of these patients were either discharged from these asylums or died during the year; consequently, there were left 3,827 patients on the 31st of December 1933, distributed as follows:

Institutions.	Patients.
St-Jean-de-Dieu	2,139
Verdun	548
L'Hospice Ste-Anne-de-la-Baie-St-Paul	321
Bordeaux (Criminal Insane)	271
Ecole LaJemmerais	171
L'Aide à la Femme	168
Beauport (St-Michel-Archange and Hospice Dufrost)	102
Les Buissonnets	85
St-Ferdinand d'Halifax	22

There was an increase of 36 admissions in the year 1933 over the year 1932.

Mental cases in 1933 required 1,110 investigations, the results of which have been as follows:

Investigations closed	838
Parents having to reimburse the City	133
Special investigations for the Quebec Government.	25
Objections to payment	39
Procedures discontinued	63
Insane persons deported	10
Insane persons repatriated	2

On the 31st of December 1933, there remained 27 investigations to be made. 843 commitment papers were prepared in 1933 by our Division.

The City of Montreal has received for the board of the insane patients, from the latters, parents during the year 1933 the sum of \$19,866.09.

The maintenance of the insane patients in the asylums in the year 1933 has cost the City:

For the repatriation and transportation of insane persons	\$ 3,099.43
For the maintenance of patients in hospitals (At the presentation of this report, this account was not as yet verified.)	365,139.19
	<hr/>
Total	\$368,238.62

Accounts receivable on December 31st, 1933 \$ 7,879.16

INCURABLE PATIENTS AND OTHERS.

Application for the hospitalization of incurable patients and others during the year 1933 amounted to 430. These applications necessitated 430 investigations, the result of which has been as follows:

Recommendable cases	265
Cases not recommendable, etc.	133
Parents having to refund cost of maintenance to the City	2

There were 241 patients hospitalized during the year 1933:

At l'Hôpital du Sacré-Coeur	111
At the Grey Nuns, St-Mathieu Street	8
At St-Luc Hospital	22
At Refuge Notre-Dame-de-la-Merci	61
At Hospice St-Henri	39

On the 31st of December 1933 there were 15 vacant places in the above mentioned institutions: 10 patients were waiting for their admission on the same date.

The amount paid for the maintenance of the incurables during the year 1933 was \$132,381.95, as follows:

To l'Hôpital du Sacré-Coeur	\$59,943.82
To the Grey Nuns'	14,600.00
To St-Luc Hospital	10,950.00
To Refuge Notre-Dame-de-la-Merci	34,218.75
To Hospice St-Henri	12,669.38

Tuberculous

There were 176 applications for hospitalization of indigent tuberculous during the year 1933. These applications necessitated 191 investigations, the result of which has been as follows:

Recommendable cases	147
Cases not recommendable	28
Deported	1

The number of tuberculous hospitalized during the year was 152.

97 tuberculous patients were at the Sacred Heart's Hospital on the 31st of December 1933 at the City's expenses; there were 3 vacant places and none were waiting for their admission on the same date.

The amount paid for the maintenance of the tuberculous during the year 1933 was of \$73,000.00.

The sum of \$1,497.05 has been reimbursed to the City by the parents of the incurable or of the tuberculous.

Assistance to the indigents

During the year 1933, 402 applications for relief of various kinds were filed with our Division. Most of these cases were referred to Charitable Institutions.

Mendicants and street vendors

335 applications for street vendor licenses were made at our office in the course of the year. These applications

have necessitated 335 investigations with the following result:

Applications recommended upon payment of the	
\$10.00 license fee	22
Applications recommended free of charge	242
Applications not recommended or discontinued	71

Special cases

1,545 requests for research or information were made through this Division during the year 1933. These researches were of a particular nature and we are pleased to state that they were attended to satisfactorily.

Burial of indigents

600 requests for burial of poor persons at the City's expenses were made in 1933. These have necessitated 576 investigations, with the following results:

Persons buried at the City's expenses	537
Responsible parties having been called upon for reimbursement of whole or part of expenses incurred	7
Requests refused or discontinued	32
Under investigation on the 31st of December 1933.	24

The amount collected in 1933, from responsible parties for burial expenses was \$178.06.

The amount paid by the City for burial expenses during the year 1933 was \$4,013.19.

Deportation

The cases of deportation of immigrants figured at 792 in 1933. After investigation these cases were disposed of as follows:

Immigrants deported	412
Proceedings discontinued or refused	210
Under investigation at Ottawa on the 31st of December 1933	170

Repatriation

629 requests for repatriation came before this office

in 1933. The amount spent by the City for this purpose was \$3,495.09.

The above mentioned requests were disposed of as follows:

Persons repatriated at the City's expenses	455
Requests refused or discontinued after investigation	174

An amount of \$5.65 was reimbursed by a person who had been repatriated.

Pensions and annuities

During the year 1933, 171 cases of pensions and annuities for the City employees were dealt with, as follows:

Employees who have been granted pensions	150
Pensioners deceased	21

On the 31st of December 1933, there were 613 persons (540 adults and 73 children) drawing a pension or annuity from the City.

The expenses incurred for this purpose in 1933 amounted to \$307,690.52.

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, 205 Institutions soliciting or collecting gifts or alms have registered in 1933 (in 1932, 195) and 61 persons were authorized to solicit such gifts or alms (in 1932, 60).

Tag-Days

His Worship the Mayor received during the year 1933, 32 applications for permission to hold Tag-Days or Guignolees, in compliance with the above mention By-Law. These applications were handed to this Department for attention and we reported as follows:

Favourable recommendations	34
Not recommended	8

26 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 1933

No.	Date	Associations	Receipts	Expenses	Surplus	% of expenses
1	Mar. 18	Salve Regina Protectorate for Boys.....	\$ 929.68	\$ 154.40	\$ 775.28	\$ 16.60
2	April 22	Hervey Institute.....	610.50	63.75	546.75	10.44
3	" 29	Society Prevention Cruelty to Animals.....	5,785.18	585.16	5,200.02	10.11
4	May 6	Fédération Nationale St-Jean-Baptiste.....	1,564.60	13.92	1,550.68	.89
5	" 8	Orphelinat de la Providence.....	1,475.00	107.82	1,367.18	7.31
6	" 20	Bien-Etre de la Jeunesse.....	2,001.65	307.01	1,694.64	1.53
7	" 27	Salvation Army.....	2,400.00	48.39	2,351.61	20.16
8	June 3	St. John Ambulance Brigade.....	1,105.63	107.88	997.75	10.25
9	" 6	Young Hebrew Malbish Arumim Society.....	1,308.68	193.75	1,114.93	14.80
10	" 13	Montefiore Hebrew Orphans Home.....	1,978.13	307.00	1,671.13	15.52
11	" 24	Société St-Jean-Baptiste.....	1,007.62	574.51	433.11	57.02
12	" 26	Laurentian Fresh Air Camp.....	951.00	831.40	119.60	87.42
13	July 8	Hellenic Ladies Philanthropic League.....	330.00	185.93	144.07	56.34
14	" 22	Colonie de Vacances Ste-Thérèse de l'Enfant-Jésus.....	462.71	60.00	402.71	12.97
15	Aug. 22	Hebrew Consumptive Aid Association.....	1,640.22	222.71	1,417.51	13.58
16	Sept. 2	Montreal Humane Society.....	285.89	65.75	220.14	22.99
17	" 9	Greek Ladies Benevolent Society.....	409.05	55.44	353.61	13.55
18	" 16	Institut Notre-Dame du Bon Conseil.....	2,002.56	311.77	1,690.79	15.56
19	" 23	Foyer Notre-Dame de la Garde.....	1,309.86	409.79	900.07	31.28
20	" 30	Franciscaines Missionnaires de Marie.....	345.52	10.00	335.52	28.94
21	Oct. 5	School for Crippled Children.....	1,917.03	65.11	1,851.92	33.96
22	" 14	Navy League of Canada.....	541.94	88.76	453.18	16.38
23	" 28	Société de Secours aux Enfants Infirmes.....	4,510.93	489.07	4,021.86	10.84
24	Nov. 4	Les Vétérans Français de la Grande Guerre.....	210.80	36.74	174.06	17.43
25	" 11	Greater Montreal Poppy Day Relief Fund.....	13,878.48	5,467.05	8,411.43	39.39
26	" 18	Orphelinat Italien St-Joseph.....	2,387.63	76.70	2,310.93	3.21
Total.....*			\$51,350.29	\$10,839.81	\$39,510.48	21.11

Quebec Public Charities Act

The proceeds from the "Amusement Tax and Surtax" applied to the working of the Quebec Public Charities Act, during the year 1933 were as follows:

Total revenu from the tax	\$650,454.98
City share	\$324,556.75
Governments share	324,556.81
Reimbursements	1,341.42
	<hr/>
	\$650,454.98
 Total revenu from the surtax	 \$252,588.80
City share	\$ 5,041.54
Governments share	247,037.27
Reimbursements	509.99
	<hr/>
	\$252,588.80
 Total	 \$903,043.78
Total of the City share from the tax and surtax	\$329,598.29
Less administration expenses..	23,521.72
	<hr/>
Net proceeds.. . . .	\$306,076.57
Governments share from the tax and surtax	\$571,594.08

The City disposed of its share of the said proceeds as follows:

For transportation of patients and paid to Maternities, Crèches and day nurseries	\$ 113,359.51
To the Provincial Government for the maintenance of patients in the hos- pitals, homes, orphanages, asylums, etc.	1,214,139.84
To include the expenses of collection of the tax	23,521.72
	<hr/>
Grand total	\$1,351,021.07

At the presentation of this report, this account was not as yet verified.

The number of requests for hospitalization under the Quebec Public Charities Act, sent to our Division during the year 1933 was as follows:

Applications for hospitalizations in Hospitals, Sanatoria, Homes and Orphanages	32,258
Cases reconsidered	1,487
Under investigation on the first of January 1933	640
Transferred to other Institutions	1,704
Total	36,089

Investigations made during the year	35,223
Under investigation on the 31st of December 1933	866

The result of these investigations has been as follows:

Accepted cases	29,748
Cases refused	5,475

To these 29,748 cases accepted after investigation, we must include or add 14,579 cases accepted in the Maternities, Crèches, Day Nurseries, and school for crippled children without investigations, making a total of 44,327 hospitalized persons and of 50,668 cases (refused 5,475, under investigation 866).

Comparative tables of hospitalization requests received and the result of the investigations since 1921.

Years	Applications received	Accepted cases	Refused cases	Under investigation
1921				
1922	10,328	8,933	1,095	241
1923	9,138	7,889	1,109	381
1924	9,060	8,506	1,040	333
1925	10,496	9,228	1,406	195
1926	20,068	19,138	971	154
1927	21,769	20,399	1,183	187
1928	23,326	21,889	1,223	214
1929	26,633	24,526	1,776	331
1930	30,260	26,445	2,586	1,229
1931	35,196	30,985	3,353	858
1932	42,949	38,204	4,105	640
1933	50,668	44,327	5,475	866

SUBSIDIES

Subsidies and grants accorded by the City of Montreal in 1933 amounted to \$283,215.00 distributed as follows: —
As per contracts or resolutions for hospital purposes or charitable institutions:

Hôpital Ste-Jeanne d'Arc	\$ 15,000.00
Children's Memorial Hospital	15,000.00
Hôpital Notre-Dame	12,500.00
Jewish General Hospital	12,500.00
Montreal General Hospital	25,000.00
St. Mary's Hospital	30,515.00
Hôpital St-Luc	50,200.00
Hôpital Ste-Justine	5,000.00
Children's Memorial Hospital	2,500.00
Institut Neurologique	15,000.00

Hospital ambulance service :

Notre-Dame Hospital	1,500.00
Montreal General Hospital	1,500.00
Royal Victoria Hospital	1,500.00
Hôpital St-Luc	1,500.00
Hôtel-Dieu	500.00
Hôpital Ste-Justine	500.00
Western Hospital	500.00
Hôpital Ste-Jeanne d'Arc	500.00
Children's Memorial Hospital	500.00

Patronages and homes :

Montreal Boys' Home	500.00
Salve Regina Boys' Home	500.00

Children's welfare :

Summer Camp for Girls (Bruchesi Institute)	1,500.00
Summer Camp for Boys (Bruchesi Institute)	1,500.00
Colonie de Vacances des Grèves	800.00

Colonie de Vacances de Ste-Thérèse de l'Enfant-Jésus	700.00
Colonie de Vacances de Ste-Thérèse de l'Enfant-Jésus (construction)	300.00
Colonie de Vacances de l'Aide aux Enfants Infirmes	500.00
Diocesan Camp Corporation of Montreal ..	500.00
Colonie de Vacances Jeanné-d'Arc.. . . .	300.00

General clinics :

Montreal Dispensary	500.00
Herzl Dispensary	500.00
Dispensaire de l'Hospice St-Henri	500.00
Hospice St-Henri (for six beds)	2,500.00

Dental clinics :

Hôpital du Sacré-Coeur	1,700.00
Montreal General Hospital	500.00
Hôpital dentaire Laval	1,200.00

Homes, orphanages and asylums :

Asile des Vieillards des Petites Soeurs des Pauvres	1,500.00
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Education and assistance:

Institut du Radium	5,000.00
Ligue de la Sécurité publique	2,500.00
Institut des Aveugles de Nazareth	1,500.00
Institut des Sourdes-Muettes	500.00
Association Canadienne-Française des Aveugles	500.00
Montreal Association for the Blind	500.00
Canadian National Institute for the Blind ..	500.00
Royal Life Saving Society	200.00
St. John Ambulance Brigade	100.00
Société de Secours aux Enfants Infirmes ..	500.00

Association Catholique de la Jeunesse Canadienne-Française	100.00
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Patronages and homes :

Patronage St-Vincent-de-Paul	250.00
Maison d'Oeuvres Jean-le-Prévost	200.00

Children's welfare :

Parks and Playgrounds Association	550.00
Bien-Etre de la Jeunesse	600.00

Educational :

Victorian Order of Nurses	500.00
University Settlement	100.00
Fédération St-Jean-Baptiste	200.00
Ecoles des Arts et Métiers	2,000.00
Ecole d'Hygiène sociale appliquée	500.00
Child Welfare Association	1,500.00
Fédération d'Hygiène Infantile	1,500.00
Art Association	200.00
Société d'Archéologie et Numismatique de Montréal	1,700.00

General assistance :

Salvation Army	2,000.00
Family Welfare Association	2,500.00
Société Catholique de Protection et de Renseignements	1,250.00

Homes, orphanages and asylums :

Assistance publique	6,000.00
Bon-Pasteur (pénitentes)	500.00
Sheltering Home (temporary home for women)	250.00

Fraternal societies :

Montreal Sailors' Institute	400.00
Catholic Sailors' Club	400.00

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
Institut Bruchési et Royal Edward Institute (Christmas stamps)	2,000.00
Royal Edward Institute	8,000.00
Royal Edward Institute (Rosemount Dispensary)	1,900.00

Home relief:

Protestant Relief Committee	500.00
Baron de Hirsch Institute	3,000.00
Catholic Welfare Bureau	1,000.00
Catholic Social Service Guild	500.00

Assistance (women and children) :

Maternal Assistance	4,000.00
St. Ann's Day Nursery	100.00
Grey Nuns (Bureau of Adoption)	1,500.00

Night refuges, shelters :

Union Nationale Française	600.00
Old Brewery Mission	700.00
L'Oeuvre des Sans-Foyers (Sister Bonneau)	800.00

Society for the protection of women and children :

Society for the Protection of Women and Children	800.00
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Protection of animals :

Society for the Prevention of Cruelty to Animals	2,500.00
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Propaganda :

Montreal Tourist and Convention Bureau . .	5,000.00
Total	<u>\$283,215.00</u>

The value of the real estate owned by Charitable Institutions and exempted from taxation, in 1933, was \$39,-131,850.00. The real estate tax at \$1.35% amounts to \$528,279.98.

Social Service Record

The number of Record-cards on the 31st of December 1933 amounted to 128,829, i.e. 114,001 individual records and 14,828 cards for lodging.

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 1933, were as follows:

Salaries (permanents)	\$30,169.56
Salaries (temporary)	1,539.04
Transportation	1,553.58
Incidentals	179.24
Furniture	162.51
Social Service Exchange	95.60
Total	<u>\$33,699.53</u>

MEURLING MUNICIPAL REFUGE

During the year 1933, there were 204,645 entries for lodging accommodations in the Meurling Municipal Refuge. Of this number, 156 individuals were refused admis-

sion for good cause, so that the net number of lodgings given was 204,489. These lodgings were given to 4,741 individuals, or an average of 43.1 times each individual.

The number of refugees who have been supplied with work or with situations amounted to 16,399; the average age of the persons lodged was 43 years.

**Comparative report of the years 1932-1933 giving the
number of lodgings, meals and the number
of persons sheltered.**

Months	Lodgings		Meals		Persons	
	1932	1933	1932	1933	1932	1933
January	21,677	21,822	44,749	45,005	1,061	1,144
February	20,369	19,727	42,153	40,728	1,202	1,207
March	21,750	21,872	44,962	45,087	1,199	1,203
April	20,570	20,926	42,585	43,953	1,307	1,310
May	20,870	17,901	43,076	39,136	1,644	1,283
June	20,877	12,292	43,173	27,418	1,553	1,107
July	21,408	13,547	44,348	29,216	1,420	1,219
August	21,583	13,520	44,593	30,015	1,345	1,207
September	20,874	14,218	43,016	30,986	1,380	1,215
October	21,609	15,187	44,627	33,147	1,563	1,227
November	21,156	16,357	43,636	35,033	1,475	1,245
December	21,476	17,120	44,447	35,794	1,490	1,250
Total	254,219	204,489	525,345	435,518	5,531	4,741

N.B.—The totals 5,531 and 4,741 are the numbers of persons inscribed.

**Number of persons who, during the year, have received
medical attention against various diseases
mentioned below.**

Alcoholism	1
Amputated	1,857
Tonsillitis	59
Cancer	1
Heart	79
Erysipelas	1

Mumps	1
Epilepsy	6
Stomach	543
Liver	4
Boils	146
Influenza (grippe)	256
Hernia	4,232
Hydrocele	166
Diarrhoea	20
Constipation	1,851
Cystitis	269
Malformations	2,044
Neuralgia	1,179
Ears	98
Paralysis	481
Scabies	87
Pediculosis	48
Other skin diseases	1,992
Sores	913
Acute Bronchitis	24
Chronic Bronchitis	2,290
Articular rheumatism	87
Chronic rheumatism	574
Piles	93
Varicose veins	6,353
Varicocele	160
Ulcer	129
Gonorrhoea	23
Syphilis	1
Venereal diseases	18
Fracture	2
Sprain	15
Eyes	187
Other diseases	245
Vaccinated	292
Total number of treatments	26,827
Total number of diseases	41

Table showing the number of night lodgings given by the
Refuge as per nationality.

Americans	921
Australians	15
Austrians	709
Belgians	726
Bulgarians	250
B. W. Indies	69
Canadians	138,757
Danish	741
Dutch	101
English	11,025
Esthonians	154
Finnish	6,182
French	1,858
Germans	888
Greeks	710
Hungarians	2,271
Irish	4,032
Italians	2,828
Japanese	7
Lithuanians	505
Neo-Zinlanders	69
Newfoundlanders	540
Norwegians	857
Polish	5,996
Roumanians	2,572
Russians	1,877
Scotch	2,276
Serbians	269
Slovacks	9,173
Swedish	1,482
Swiss	1,495
Turkish	8
Ukranians	5,120
Welsh	6
Total number of lodgings given	204,489
Total number of nationalities	34

Canadians	67.85%
Other nationalities	32.15%

Total number of night lodgings furnished daily, as per
trades, to the homeless.

Barbers	550
Butchers	220
Bakers	607
Cigar-makers	1,693
Clerks	835
Shoemakers	1,894
Core-makers	317
Cooks	2,088
Firemen	663
Electricians	339
Tin-smiths	136
Blacksmiths	88
Printers	431
Engineers	625
Gardeners	128
Laborers	184,764
Machinists	797
Mechanics	296
Joiners	2,256
Sailors	541
Painters	2,626
Plumbers	71
Polishers	49
Tailors	791
Weavers	463
Iron-Workers	106
Solderers	265
Moulders	490
Lath-layers	12
Brick-layers	105
Miners	9

Masons	21
Pressmen	17
Leather-cutters	100
Furriers	13
Plasterers	47
Stone-cutters	36
Total number of lodgings given	204,489
Total number of trades	38
Trades-men	09.7%
Laborers	90.3%

Laundry of the Refuge

857,293 pieces of linen were washed at the Laundry of the Refuge. Of this number, 5,645 pieces were belonging to different departments of the City Hall; 9,990 to the refugees; 841,658 to the Refuge.

EXPENSES

The expenses incurred by the City for the service of the Meurling Municipal Refuge during the year 1933 were as follows:

Salaries	\$14,820.00
Heating	2,203.92
Lighting	911.72
Gas	130.80
Food, maintenance and linen	9,889.56
Repairs of the building	1,133.67
Total	<u>\$29,089.67</u>

During the year 1932, the total cost amounted to \$28,462.05.

The City of Montreal was reimbursed by the Provincial and Federal Governments of a sum of \$8,267.55 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 1933, have really amounted to \$20,822.12.

UNEMPLOYMENT CRISIS

During the year 1933 the Advisory Relief Board was replaced by a new "Unemployment Commission" composed of: —

M.Mrrs. H. A. Terreault, as Chairman.

J. A. A. Leclaire,

J. N. Drummond,

L. F. Philie, Director of Finances, and

Albert Chevalier, Superintendent of the Municipal Assistance, members ex-officio.

As in the previous year, Direct Relief was distributed through the Charitable Organizations according to the religion or nationality to which the unemployed family was belonging and this up to the beginning of the month of November 1933.

During the months of November and December, the Direct Relief has been distributed to the unemployed by the City through the "Unemployment Commission" above mentioned.

Herewith will be found a table showing the Direct Relief distributed monthly to the families affected, by the unemployment crisis, in the City of Montreal.

The total amount disbursed by the City, including the administration cost of the Unemployment Commission, for Direct Relief, during the year 1933, amounted to the sum of \$15,897,090.42; the City was reimbursed by the Federal and Provincial Governments of a sum of \$3,968,845.20, including a sum of \$8,267.55 reimbursed for the cost of maintenance of the Meurling Municipal Refuge.

Therefore, the City of Montreal has really disbursed up to the 31st of December 1933 from its budget the sum of \$11,928,145.22, but at the same time there is still a balance due to the City by both Governments of about \$5,500,000.00.

TABLE SHOWING DIRECT RELIEF DISTRIBUTED
IN THE CITY OF MONTREAL IN 1933.

Months	Number of heads of families relieved	Depend- ents of heads of families	Indivi- duals relieved (Homeless)	Total number of persons	Total number of meals distrib- uted	Total number of lodgings given
January.....	41,600	158,498	12,062	212,160	568,978	118,688
February.....	44,460	165,668	12,254	222,382	530,849	107,320
March.....	46,466	168,933	13,039	228,438	627,462	128,302
April.....	46,969	173,159	12,999	233,127	597,757	123,732
May.....	46,485	164,545	11,667	222,697	492,812	107,195
June.....	43,615	158,146	8,133	209,894	411,572	82,558
July.....	42,382	154,591	7,633	204,606	402,285	84,548
August.....	42,079	151,399	7,844	201,322	400,721	95,920
September.....	39,018	127,378	7,017	173,413	389,084	84,595
October.....	37,959	123,577	7,076	168,612	394,212	88,405
November.....	40,320	134,394	7,378	182,092	420,252	102,438
December.....	43,853	151,975	7,067	202,895	453,663	102,881
Total.....	515,206	1,832,263	114,169	2,461,638	5,689,647	1,226,582
Monthly average.....	42,934	152,689	9,514	205,136	474,137	102,215

Cooperation with the Police Department.

During the year 1933 the Department of Police through its representatives connected with our Office, looked after the following cases:

Cases reported before the Recorder's Court and the Police Court were as follows:

Prisoners remanded for mental examination	151
Insanes committed after examination	102
Declared responsible and disposed of by the Courts	47
Escaped from the Toronto Insane Hospital and taken back under escort to the Ontario Pro- vincial Hospital	1
Patient returned under escort to Waterville, N. S.	1

Escaped from St-Jean-de-Dieu, found and recom- mitted	2
Patient transferred from Bordeaux Hospital to Ver- dun Hospital	1
Patient transferred from Bordeaux Hospital to St- Jean-de-Dieu	1
Idiot or imbecile patients escorted:	
To St. Ann's Hospital, Baie St-Paul, Que.	66
Backward children escorted to:	
LaJemmerais School, Quebec	43
Patients and children conducted under escort of a matron of the Department of Police	30
Patients and children escorted and handed over to their parents:	
From St. Ann's Hospital, Baie St-Paul, Que.	10
From LaJemmerais School, Quebec	20
Child escaped and taken back under escort to La- Jemmerais School	1
Children transferred from LaJemmerais School to St-Jean-de-Dieu Asylum, under escort	2
Patient transferred under escort from Baie St-Paul to Verdun Hospital	1
Persons conducted for repatriation:	
To different railway stations	453
To the wharf for boats	4
Repatriated under escort to Quebec	9
Repatriated under escort to Three-Rivers	1
Repatriated under escort to Baie St-Paul	2
Repatriated under escort with a matron of Police Department to Ottawa	1

Repatriated under escort with a matron of the Police Department to Quebec	1
Repatriation cases refused after investigation ..	53
Repatriation cases discontinued or in abeyance ..	39
Cases of Deportation submitted to the Department of Immigration during the year, as follows:	
Undesirables and public charges deported	413
Deportation refused or precedures suspended	210
Under consideration on December the 31st 1933 ..	177

Special cases :

Arrested as beggar after investigation, having in his possession false documents of the Unemploy- ment Commission and of religious authorities, brought before the court and sent to jail ..	1
Two Direct Relief cases investigated RE: false re- presentations and report made to the Detective Department	2
Vagrancy case indicted before the Court and sent to jail	1
At the request of the American Department of Labor, regarding an insane patient of the Manhattan State Hospital, New York City, an investigation was made, the parents were found and case reported accordingly	1
Total number of cases disposed of during the year	1,696

Respectfully submitted,

A. CHEVALIER,

Superintendent of the Municipal
Assistance.

Division of Medical Control

DIVISION OF MEDICAL CONTROL.

STAFF OF THE DIVISION OF MEDICAL CONTROL FOR THE YEAR 1933.

Dr. J. A. Brien	Superintendent.
Dr. A. N. Bourdeau	Medical-Inspector.
Dr. J. A. Dauth	Medical-Inspector.
Dr. A. Plante	Visiting-Physician.
Miss A. Bernier	Stenographer-typist.
Miss G. Charette	Stenographer-typist.

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 1933, which is as
follows :—

MUNICIPAL EMPLOYEES.

Sick referred for examination.

Director of Services	3
Department of Public Works	523
Department of Finances	375
Department of Health	707
Assessor's Office	31
City Clerk's Office	44
City Attorney's Office	36
Auditor's Office	44

1,763

CANDIDATES APPLYING FOR A POSITION.

Referred for examination.

Director of Services	0
Department of Public Works	25
Department of Finances	18
Department of Health	5
Assessor's Office	1
City Clerk's Office	1
City Attorney's Office	2
Auditor's Office	1
Police Department — Surety Division	2

55

SPECIAL REPORTS — re : State of Health.

Director of Services	0
Department of Public Works	7
Department of Finances	4
Department of Health	10
Assessor's Office	0
City Clerk's Office	1
City Attorney's Office	1
Auditor's Office	0

23

The number of Civic employees who on account of illness were reported to the Division of Medical Control in 1933, was 723 less than in 1932. This difference was probably due to the excessively cold weather that we had without remission during the fall and winter of 1933-34, and which compel every one to dress very warmly and take a specially good care of his health to withstand the endless inclemency of the winter.

At the request of the different departments, we have made during the year 1933, twenty-three (23) special reports bearing on employees who on account of illness or poor health had to ask for a special conge in order to recuperate their health.

In accord with the policy of the Department of Public Works, we have made a special examination of many Engineers or Inspectors who were wishing to work in compressed air. The examination that these applicants have to pass is quite severe and bears especially on blood pressure, heart, lungs and kidneys ; organs who have to be in perfect condition. A certain number were refused because they were too old (50 years old or more) or on account of lesions of these organs. Thanks to this examination not a single death or accident occurred among the workmen or engineers who had to work in cofferdam during 1933.

NEGLECTED CHILDREN

Under the Law of the Public Assistance.

Referred for examination before being sent to industrial schools	371
Referred after coming out of industrial schools	343

714

Those who knew only the good side of life, should come and visit us on Tuesday morning, when poor children are to be sent to Industrial Schools, at Laval-des-Rapides, Montfort or Huberdeau. They would be able to see at first sight the helplessness and misery of those poor kids abandoned by heartless parents: Poor little orphans graceful, neat, but without protection.

Above all, one may see poor little ones of both sexes, about six years old, who have never known what a mother or father's love can be because they are alone in life and are what we call "illegitimates children".

The City protects those children, and it is in the Industrial Schools mentioned above, that they are placed, to give them a roof and family, of which they are badly in need, to equip them with necessary means to struggle for life...

We had in 1933, 371 requests for housing in our Industrial Schools, 209 boys and 162 girls. It is a decrease of 44 with last year. On figures mentioned above, 363 requests were accepted, 8 deferred, none refused. Nearly every child examined was clean. Those that were deferred, 8 in all were (which is always the case) carriers of parasites or affected with skin diseases. An appropriated treatment given to those children in our Hospitals, cured them in a few days and we were able to attend to them thereafter.

Returns from the Industrial Schools were 343; they were 347 for 1932. Amongst those numbered, 334 were in good health, 9 only were suffering slightly from scratches, boils, etc. All had chubby cheeks and the appearance of healthy children.

CHILDREN'S DEPARTURE (1933)

Industrial Schools.

	Boys	Girls	Total
Children leaving.....	209	162	371
Accepted.....	206	157	363
Refused.....			
Adjourned.....	3	5	8
Total.....			371
Vaccinated.....	203	157	360
Non vaccinated.....	6	5	11
Total.....			371

CHILDREN'S RETURN (1933)

Industrial Schools.

	Boys	Girls	Total
Children's return.....	187	156	343
In good health.....	182	152	334
Unwell.....	5	4	9
Total.....			343

INCURABLES.

Incurables referred for examination during year 1933
and who were disposed of as follows.

	Men	Women	Total
Number of requests.....			618
Examinations:			
At the office.....			134
At home.....			413
Discontinued.....			71
Total.....			618
Pulmonary tuberculosis.....	119	91	210
Cancer.....	35	58	93
Incurable diseases.....	21	24	45
Homes (Chronic diseases).....	131	68	199
Hospitals (Acute diseases).....	30	41	71
Total.....			618

HOUSING OF INCURABLES IN THE CITY BEDS.

In the past year, the Health Department, always

anxious to improve the welfare of the poor, has succeeded to make arrangements with the St. Henry's Home, in order to place the poor paralytics. This was a real success on account of the trouble we had in trying to find a home for these poor wretches. Indeed we can't forget that the paralytic is the most difficult case to place in hospitals. The Homes and the Sacred-Heart Hospital too, are not very keen in accepting such cases. They are not to blame, when we consider that very often they are confined for years in the City Beds. For that reason, before, all requests for their housing in Homes, were refused from our department, but with the new arrangements with l'Hospice St-Henri, we were able to correct this deficiency, that is a big improvement and a step towards the realization of our wish for a General Hospital for which we are badly in need for the care of those suffering from paralysis.

The classification of beds, at the disposal of the City of Montreal, was as follows in 1933 :—

Sacred-Heart Hospital :

100 beds for pulmonary tuberculosis (50 men, 50 women).

100 beds for cancer or other incurable diseases requiring medical cares.

St. Henry's Home :

35 beds for paralytic cases (18 women, 17 men).

10 beds for poor persons (men).

Notre-Dame de la Merci Hospital, Bordeaux :

75 beds for old men or cripples (men).

St. Luke's Hospital :

10 beds for emergency cases (men-women).

Grey Nuns, St. Matthew St. :

40 beds for old people or cripples (20 men, 20 women).

It is well known that only strickly poor people are received in our beds. It is known that those suffering from incurable diseases are accepted in our beds at the Sacred-Heart Hospital. A few doctors and many citizens think that the Sacred-Heart Hospital being now a General Hospital as well as Notre-Dame, St. Luke, Hôtel-Dieu and Ste-Jeanne D'Arc hospitals, that we are obliged to attend all cases whatever ails them. We repeat once more that only those suffering from incurable tuberculosis, cancer or diseases judged incurable are accepted in our beds. For other diseases the applicants must apply themselves at the Hospitals or the Public Assistance.

For the "Housing cases" we attend first to those who are single or without children. For those having a family, a serious inquiry is made, and even if only one girl or boy of a family of eight or ten, is working, she or he is supposed to provide the necessity of this father or mother and consequently all requests are refused. It often happens that heartless daughters or sons refuse to offer a home to their parents, when it is possible for them to do so, without

depriving themselves. Those heartless persons are taking great risks that the same lot will be theirs when old or sick.

The beds for urgent cases that we have at St. Luke's Hospital are especially for the poor, which cases are reported from the Police or the Charity Institutions or from the Meurling Refuge, when a refugee is taken suddenly ill.

During 1933, the demands for housing were of 618 against 634 for 1932, which makes a decrease of 16 for the past year. Upon those numbers we have found 119 men and 91 women suffering from pulmonary tuberculosis ; 35 men and 58 women suffering from cancer ; the incurable cases requiring medical care were of 21 men and 24 women ; housing cases were of 131 for men and 68 for women ; finally, the hospital cases were of 30 for men and 41 for women. .

This decrease of 16 cases for housing requests, in spite of the increasing of the population shows an improvement in the general health of Montreal inhabitants and permit us to hope for still better results in the near future.

FOOD ESTABLISHMENTS.
MONTHLY CLASSIFICATION OF HEALTH CERTIFICATES, 1933.

Certificates	January	February	March	April	May	June	July	August	September	October	November	December	Grand total
Number of certificates issued.....	1738	2621	2580	3773	5458	3913	2629	2790	2159	2090	2281	2056	34,088
Number of certificates refused....	23	28	31	23	78	44	31	36	42	34	49	35	454
CASES:—													
Pyorrhea.....	6	5	7	5	13	8	6	8	9	6	13	9	95
Tuberculosis.....	1	.....	1	.....	3	5	2	2	1	1	1	2	19
Uncleanliness.....	8	11	12	9	15	9	8	9	10	12	10	10	123
Skin diseases.....	5	5	2	5	12	6	5	6	8	5	4	5	68
Cancer of the lip.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Venereal diseases.....	3	7	9	4	35	16	10	11	14	10	20	9	148
Total.....	23	28	31	23	78	44	31	36	42	34	49	35	454
Number of vaccinations.....	7	43	128	207	58	34	8	635	451	433	630	305	2,939
Number of verifications.....	7	43	128	207	58	34	8	580	403	402	566	299	2,735

MEDICAL EXAMINATION OF FOOD HANDLERS.

Since the last five (5) years, that the By-Law No. 926, obliging all food handlers, to have a health certificate, is enforced we are able to-day to ascertain the good results of such a measure.

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, butcher shops and groceries stores, etc.

These various establishments employ between twenty-five (25,000) and thirty thousand (30,000) 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 Division 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.

One of the first effect, was to prevent those whose state of health was not what it should be from working in second rate eating-houses, where they were employed,

because of their low salary. If we still find such undesirable subjects it is very seldom.

All those suffering from Venereal Diseases, are prevented from working in any capacity whatever as soon as we have received the report of the Provincial and Municipal Laboratories. If more cases are found amongst girls serving in restaurants or eating-houses, the reason is due to the economical crisis, obliging those poor girls to prostitute themselves to be able to balance their budget. The ordinary salary paid being three dollars (\$3.00) a week, they cannot very well count now on the tips, with which they were able in the past to complete a reasonable salary.

Therefore, we are able to state that more than 85 to 90% of the girls afflicted with venereal diseases, are those who are rooming, while those living at home with their parents or close relatives are generally free from such diseases, having no fear of being turned out of their apartment on account of non payment of their rent.

In bearing with the Public, as much as possible, we try to make them understand what a great comfort personal hygiene is, that it is for their own safety as well as that of the Public, that we are so keen in advising them.

Our first objective is to instruct the employees of Food Establishments, and convince them that our by-law is not made to annoy them, but of the absolute necessity for them, to be very careful of their corporal cleanliness on account of their health.

The Medical Examination which was required at first only for employees of eating-houses, hotels, dairies and bakeries is now required for all those who manipulate food

in whatever form and included now all grocers, butchers, etc.

A Municipal By-Law is now planned, obliging all Barbers and Hairdressers operating in the City, to have a Medical Certificate. That would be a very opportune Law, as at the request of the Sanitary Division, we have already examined Barbers, presenting skin lesions of hands or face, which lesions were found to be specific, diagnosis which was confirmed by the Provincial Laboratory. No need to say that those barbers were not permitted to exercise their profession until complete disappearance of the lesions, and improvement in their state of health, and only after a favorable report from the Provincial Laboratory.

HEALTH CERTIFICATES REFUSED DURING THE YEAR 1933 — On account of :

Pyorrhea :

Persons afflicted with pyorrhea are referred to their family physician or dentist for treatment. As soon as there is improvement in their condition we permit them to resume their occupation with the promise they will continue their treatment until completely cured.

Tuberculosis :

All tuberculosis cases are prevented from working in food establishments. According to the gravity of their illness they are sent to the Bruchesi Institute or at the Cartierville Hospital, where the City of Montreal pays for one hundred (100) beds for patients of both sexes. All doubtful cases have to be radiographed or furnish a certificate from an hospital.

Uncleanliness :

Cases of uncleanliness which cases we find especially amongst youngsters are really too many. They are prevented from working until their general appearance has improved; that is to say they must, according to their case, take a good hot bath with soap and brush, change their undergarments, clean and cut their finger-nails and hair if necessary. In all cases we examined we insist upon strict corporal cleanliness especially that of the hands, finger-nails and fore-arms.

Skin diseases :

Eczema or psoriasis of hands or arms which present an oozing or scaly appearance giving a repugnant sight are all excluded from working in food premises until completed healing or real improvement in the appearance of the spots.

Cancer of the lip :

The same rule applies to cases of cancer of the lip or face which present the same repugnant sight. The staphylococcic or streptococcic diseases such as boils, carbuncles, if placed on arms or fore-arms prevent those suffering from such diseases to work on no account until completely cured.

Venereal disease (Gonorrhea and Syphilis)

The Gonorrhea or Syphilis cases are excluded from all food establishments. They have to be treated until cured of their infection. The gonorrhea cases are permitted to resume their work again only after we have received two (2) negative reports from the Municipal Laboratory. The examination having been made at interval of fifteen (15) days. Persons suffering from Syphilis are permitted to work after having taken treatment for a certain period,

they bring a certificate from their treating physician, attesting that they are not contagious and that they take their intra-veinous injections regularly.

For more additional guarantee every five (5) or six (6) months, those persons have to come at the Municipal Laboratory for a new blood test which is made at the Provincial Laboratory who sends us a report.

You may judge by these few notes that persons so afflicted who would be a constant danger for the Community and their fellow working companions are either cured or improved or at least bleached of their infection.

MUNICIPAL MEURLING REFUGE.

Comparative table for the year 1932-1933.

	1932	1933
Number of refugees examined during the year....	254,219	204,489
Disposable beds per night.....	708	708
Number of refugees per night.....	696	560
Number of sick refugees examined during the year.....	44,600	26,827
Number of sick refugees examined per night....	122	73
Number of different nationality during the year.	5,531	4,741
Sleeping average per person.....	45	43
Average age.....	43	43

Meurling Refuge.

At some time during 1933, a priest of Montreal asks us to visit the Meurling Refuge. After leading him in the different wards where the refugee is to pass before going to bed, after showing him the cleanliness, seeing the tidiness of everything, he said to us with a smile : "Gentlemen, I owe you some apology. According to gossip, I had a very bad opinion of your Refuge, truly I was sure to find everything untidy, there, where the most fastidious cleanliness is observed. Now that I have seen everything, you may be sure that for my penance I will defend the Refuge against all who will try to slander its organisation."

Nevertheless, if more people were better informed of our activities, if only they knew that the Refuge is washed and cleaned thoroughly, that pillow-cases, night gowns, bedclothes, and towels are washed and changed every day, that a Doctor is at the disposal of all refugees every night and that he has with him a complete Medicine Chest, that each refugee has to take a shower-bath before going to bed and that while he sleeps his clothes are disinfected or washed if wanted. Isn't this enough to prove that all slanders are false. The City of Montreal may boast that it is in possession of one of the best organized Institution of the kind in Canada and other countries as well.

If we compare the chart of 1933, given above we can see a considerable decrease in the night-lodgings : 204,489 against 254,219 for 1932, where 560 against 696 night-lodgings were ask for in the last year. The cause of this decrease is due to the opening of the new "Refuge Catholique Belmont" and camps for the unemployed, amongst them the one at Valcartier. The number of ill persons was less also, 26,827 against 44,600 for 1932. A daily total of 73 ill refugees against 122 for the past year.

There was no epidemic reported during the past year. Scabies cases were less and the numerous cases of furunculosis that we had in 1932, did not make their appearance this year.

There are very few cases of amputated, only about six, always the same ones. The old invalid men are about fifty. Talking of the latter we want to refute a complaint

made against us by communists, accusing us of not trying to place these old men in institutions, rather than letting them run the streets. That is all a falsehood and we can prove it : In two different occasions, according to an order of the Superintendent of Municipal Assistance, arrangements were made to place fifty of these poor wretches at Notre-Dame de la Merci, Bordeaux or l'Hospice St-Henri. Only ten accepted our offer ; more than that, six stayed only a few days and were back at the Refuge soon after. All the others refused, under pretence that the Institutions were too far from the heart of the City. The very cold weather of December brought with it an epidemic of colds, bronchitis and grippe, but appropriated treatment was given. A few frozen noses, hands and feet were attended to, nothing very serious though.

After all, 1933 was not too bad regarding the general state of health and we are very pleased of the good health of our refugees.

TABLE OF MUNICIPAL EMPLOYEES DEAD DURING YEAR 1933.

Department of Public Works..... 9

Name	Age	Date	Illness
H. Longley.....	54	8-2-33	Pneumonia.
J. Ménard.....	66	8-2-33	Apoplexy.
C. Rouleau.....	65	21-2-33	Apoplexy.
C. Marcil.....	70	5-3-33	Uremia.
N. Nicolle.....	54	25-3-33	Hemiplegia.
C. Allard.....	71	21-3-33	Uremia.
A. Gariepy.....	49	12-6-33	.....
O. Desroches.....	71	11-12-33	Heart failure.
D. Séguin.....	58	13-12-33	Cancer of the lung.

Department of Finances..... 9

Name	Age	Date	Illness
P. Brophy.....	61	7-5-33	Cancer of pylorus.
J. R. Racette.....	33	22-6-33	Cancer of liver.
G. Joyal.....	48	30-7-33	Suicide.
E. Lamoureux.....	74	31-7-33	Sclerosis of arteries.
J. A. Leroux.....	55	10-10-33	Heart failure.
H. Cartier.....	62	20-9-33	Pernicious anemia.
G. Desjardins.....	60	8-11-33	Chronic heart and kidney disease.
J. Z. Gauthier.....	42	15-11-33	Embolism.
H. P. Primeau.....	48	26-11-33	Angina pectoris.

Department of Health..... 3

Name	Age	Date	Illness
F. P. Connelly.....	63	12-1-33	Acute indigestion.
T. McCall.....	63	26-4-33	Myocarditis.
H. S. Masterman.....	80	10-7-33	Sclerosis of arteries.

Assessor's Office..... 1

Name	Age	Date	Illness
J. Marleau.....	67	31-10-33	Fracture of skull.

City Clerk's Office..... 1

Name	Age	Date	Illness
P. L. N. Beaudry.....	81	27-3-33	Chronic nephritis.

I am highly pleased to hereby express my gratitude to the staff of the Medical Control, who has done the utmost during this past year 1933, by their cooperation with me in doing their individual work in a praise worthy manner.

My hearty thanks also to the Director and to every Superintendent of Division of the Department of Health whose cooperation was always at hand. May they accept the expression of my deep gratefulness.

Yours respectfully,

J. A. BRIEN, M.D.,

Superintendent of the Division of
Medical Control.

Division of Laboratories

DIVISION OF LABORATORIES.

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

Dear Sir :

I respectfully submit to you the report of the Division of Laboratories for the year 1933.

We have made, during the year, 48,335 bacteriological and chemical examinations, divided as follows : 29,220 for the Division of Food Inspection, 1,148 for the Division of Sanitation, 3,927 for the Division of Contagious Diseases, 364 for the Division of Child Hygiene, 547 for the Division of Medical Control, 2,802 for the Police Department and 10,327 for the physicians of the City.

To this we must add the preparation of eight litres of convalescents' serum, for the treatment of acute anterior poliomyelitis (infantile paralysis). This item is not mentioned in report submitted.

We notice a marked increase in the total number of examinations for the year 1933 over that of 1932, which was 38,441.

Yours truly,

A. BOLDUC, M.D.,

Superintendent, Division of Laboratories.

Outline of the analyses made from January 1st 1933
to December 31st 1933.

I. Solid Food :

Barley	1
Coffee	13
Fish (bact. exam.)	1
Meat (pathological exam.)	17
(Exam. for tubercle B.)	3
Chopped Meat (re-adulterations) ..	121
Raisins (bact. exam.)	1
Sojà Beans	1
Sugar (Chem. exam.)	16
Tea	7

Beans (bact. exam.)	1
Corn (bact. and chem. exam.)	2
Peas (bact. exam.)	1
Pea soup (bact. exam.)	8
Shrimp* (bact. exam.)	2

Biscuits (bact. and chem. exam.) ..	1
Bread	7
Cake (bact. exam.)	1
Sausages (re-adulterations)	190

II. Liquid Food :

Milk and cream.

1° Natural :

(a) Samples brought by our inspectors :

Bacteriological analysis :

Microscopic count.	15,732
Research of Streptococcus.	2

Chemical analysis :

Completed (1)	96
Summary (2)	2,698
Acidity test	5
Preservative test	2,775

(b) Samples brought by the citizens :

Summary chemical analysis plus preservative test	591
--	-----

2° By-Products :

Evaporated Milk (bact. and chem. analysis)	2
Cheese	1
Yoghourt (chem. anal.)	3

Miscellaneous.

Carbonated beverages and spruce beers (bacteriological and chemical examination)	1,026
Water from the Montreal Aqueduct (bacteriological examination)	766
Water from various sources (bacteriological and chemical examination)	663
Vinegar	1

III. Chemical Products :

Disinfectants	2
Fungicide	1
Washing powder	1
Sausages seasoning	2

IV. Biological analyses : (3)

Blood : Widal Test	922
Feces : re-B. Typhosum and paratypho- sum A. and B.	1,772
Urines : re-B. Typhosum and paratypho- sum A. and B.	1,772

V. Miscellaneous :

Meat Hooks (re-quality of metals used in their making)	2
Chek-O-Door (deodorising apparatus) ..	1
	————— 48,335

(1) Completed chemical analysis means specific gravity, butter fat, dry extract, defatted extract, water.

(2) Summary chemical analysis means specific gravity by "Quevenne" lacto-densimeter, butter fat by "Babcock" test, preservative test.

(3) These tests are carried out for the detection of "Germs carriers" among the employees of dairies and other food handlers.

Division of Sanitation :

Celluloid water meter	1
Hypochlorite ("Sallex")	1
Water from public swimming pools (bact. and chem. analyses)	732
Water from various sources (bact. and chem. analyses)	414
	————— 1,148

Division of Contagious Diseases :

Blood : Test re-Brucella Abortus	94	
Widal Test	451	
Diphtheria (exam. after culture)	2,382	
Rabies (research of Negri bodies)	21	
Sputum (tuberculosis)	1	
Stools (agglutination test for B. typho- sum and paratyphosum A. and B.) ..	468	
Throat cultures : re-hemolytic strepto- coccus	48	
Urines (agglutination test for B. typho- sum and paratyphosum A and B) ..	462	
	—————	3,927

Division of Child Hygiene :

Diphtheria (examination after culture) ..	185	
Urines (chemical and microscopic an- alyses)	179	
	—————	364

Division of Medical Control :

Blood : Red and white cells count	3	
Test for bleeding time	1	
Test for coagulation time	1	
Widal test	1	
Diphtheria (examination after culture) ..	2	
Sputum (tuberculosis)	3	
Stools (agglutination test for B. typho- sum and paratyphosum A and B) ..	1	
Urethral and vaginal secretions (food handlers)	371	
Urines (agglutination test for B. typho- sum and paratyphosum A and B) ..	1	

Urine (chemical and microscopic analysis)	162	
Vincent's Angina	1	
	<hr/>	547

Specimens analyzed for the Police Department :

Narcotic drugs	102	
Sputum (tuberculosis)	3	
Urethral and vaginal secretions (prostitutes)	2,697	
	<hr/>	2,802

Specimens analyzed for physicians :

Ambard's formula	3	
Ascitic fluid	2	
Blood : Culture	11	
Red and white cell count	71	
Test for bleeding time	5	
Test for chloridemia	1	
Test for coagulation time	5	
Test for cholesterol	21	
Test for creatinine	35	
Test for sugar	370	
Test for urea	170	
Test for uric acid	22	
Test re-Brucella Abortus	4	
Widal test	240	
Cerebro-spinal fluid	1	
Conjunctival secretions (gonococcus)	1	
Diphtheria (examination after culture)	91	
Maternal Milk	16	

Nasal secretions	1
Pleural fluid	7
Sputum (tuberculosis)	1,247
Stools : Agglutination test for <i>B. typhosum</i> paratyphosum A and B	61
Bacteriological examination (tubercle bacilli, ameba, worms, blood, calculi, etc.)	18
Urethral secretions (gonococcus)	345
Urinary calculi	1
Urines : agglutination test for <i>B. typhosum</i> and paratyphosum A and B	40
Bacteriological examination (gonococcus, tubercle bacilli, <i>B. coli</i> , etc.)	82
Chemical and microscopic analysis	7,429
Vincent's Angina	14
Wounds pus	13
	<hr/> 10,327
	<hr/>
Total	48,335

CONTAGIOUS DISEASES — YEAR 1933.

Diseases	Number of specimens	Positive	Negative	Suspicious	Unsatisfactory	Percentage		
						Positive	Negative	Suspicious
Diphtheria.....	2659	148	2510	0	1	5.57	94.39	0.00
Rabies.....	21	0	21	0	0	0.00	100.00	0.00
Tuberculosis.....	1315	229	1083	0	3	17.42	82.35	0.00
Typhoid:								
Clinic.....	1552	91	1460	0	1	5.86	94.07	0.00
Detection of "germ carriers" (food handlers).....	4472	26*	4446	0	0	0.58	99.42	0.00
Gonorrhea:								
Clinic.....	372	97	266	8	1	26.08	71.50	2.15
Food handlers.....	371	56	313	2	0	15.09	84.37	0.54
Prostitutes †.....	2697	222	2475	0	0	8.23	91.77	0.00

* These positive results come from 24 Widal tests and two urines (positive to B. Typhosum).

† Women arrested in disorderly houses.

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Bacteriological analyses of milk, cream, ice-cream,
water, etc.

Division of Food Inspection :

Quantitative analysis (Standard Plate Count).

Pasteurized milk (delivered to consumers)	2,278
Special milk (delivered to consumers) ..	1,714
Cream	304
Ice-cream	149
Controls in pasteurizing plants and spe-	
cial milk establishments	2,486
Tests on washing of utensils	935
Water from various sources, eggs, food	
sundries, oysters	331
Water from the Montreal Aqueduct.. .	383
Carbonated beverages and spruce beers..	506
	————— 9,086

Division of Sanitation.

Water from public swimming pools	244
Water from various sources	207
	—————
	451

Qualitative analysis : (Fermentation test for the detection of bacteria of the B. coli group) in the above samples ..

group) in the above samples ..	9,537	9,537
	<hr/>	<hr/>
Total		19,074

BACTERIOLOGICAL ANALYSIS, 1933

Pasteurized Milk — Plate-Court.

Number of samples	Numeration					Percentage				
	Less than 25,000 bacteria per c.c.	From 25,000 to 50,000 bacteria per c.c.	From 50,000 to 100,000 bacteria per c.c.	More than 100,000 bacteria per c.c.	Samples void	Less than 25,000 bacteria per c.c.	From 25,000 to 50,000 bacteria per c.c.	From 50,000 to 100,000 bacteria per c.c.	More than 100,000 bacteria per c.c.	Samples void
From January to May (incl.): 1032	778	166	54	34	0	75.4	16.1	5.2	3.3	0.0
From June to September (incl.): 683	432	146	65	39	1	63.3	21.4	9.5	5.7	0.1
From October to December (incl.): 563	482	54	15	12	0	85.6	9.6	2.7	2.1	0.0
For the year: 2278	1692	366	134	85	1	74.3	16.06	5.9	3.7	0.04

BACTERIOLOGICAL ANALYSIS, 1933—(Continued)
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.):										
1032	25	61	146	886	0	2.4	5.9	14.1	85.9	0.0
From June to September (incl.):										
683	54	107	211	471	1	7.9	15.6	30.8	69.1	0.1
From October to December (incl.):										
563	6	13	53	510	0	1.0	2.3	9.4	90.6	0.0
For the year:										
2278	85	181	410	1867	1	3.7	7.9	17.99	81.97	0.04

BACTERIOLOGICAL ANALYSIS, 1933—(Continued)

Special Milk — Plate Count.

Number of samples	Numeration			Percentage		
	Less than 25,000 bacteria per c.c.	More than 25,000 bacteria per c.c.	Samples void	Less than 25,000 bacteria per c.c.	More than 25,000 bacteria per c.c.	Samples void
From January to May (incl.): 697	593	103	1	85.1	14.7	0.2
From June to September (incl.): 573	(*) 519	(†) 53	1	90.6	9.2	0.2
From October to December (incl.): 444	411	33	0	92.6	7.4	0.0
For the year: 1714	1523	189	2	88.8	11.1	0.1

(*) Not more than 50,000.

(†) More than 50,000.

BACTERIOLOGICAL ANALYSIS, 1933—(Continued)
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.):										
697	19	60	201	495	1	2.7	8.6	28.8	71.0	0.2
From June to September (incl.):										
573	123	233	398	174	1	21.4	40.6	69.4	30.4	0.2
From October to December (incl.):										
444	7	32	127	317	0	1.5	7.2	28.6	71.4	0.0
For the year:										
1714	149	325	726	986	2	8.7	18.9	42.4	57.5	0.1

Division of Statistics

DIVISION OF STATISTICS.

Dr. S. Boucher,

Director Health Department,
City Hall (Annex)
Montreal.

Dear Sir:

I have the honour to submit to you the report of the Division of Vital Statistics for the year 1933.

Judging from the general death rate, which is the best mean to determine the sanitary condition of the population, year 1933 may be considered as absolutely normal. There was no predominance of any disease liable to increase the general death rate. On the contrary, this rate has been decreased in a greater proportion than that obtained since many years.

With the rapid decrease of the birth rate, it is anticipated that the death rate will still be lowered during the next few years, but it is impossible to foresee in what proportions it will be affected, because, notwithstanding the fact that the organization to control the spread of infectious diseases has been highly perfected, it is always possible that one of them acquires such a virulence as to become uncontrollable, upsetting all rate calculations.

The dreadful influenza epidemic which has caused so many deaths in 1918, is still too recent to have been forgotten and it is unnecessary to insist on that point.

The collection of statistical data has been made according to the methods described in previous reports, an exception being made for births. The new method employed to collect births will be referred to later.

Estimation of the population.

It must be stated that the estimation of the population is rendered each year more complicated, owing to perturbation in the migration movements, due to the present economic depression.

It is a well known fact that only a few dwellings have been built during the last two years. On the other hand, the number of unoccupied dwellings seems to be increased. Does it mean that the population is decreasing? I do not think so, but it is believed that the increment is not as high as in the years immediately preceding the last census.

The increase in the number of vacant dwellings is explained by the fact that many unemployed have become roomers, thus reducing the number of households living in separate dwellings.

We have computed in 1933 a greater number of marriages, but many of those marriages have been contracted in spite of the depression, and many of the newly married couples have continued to live with the parents of either the bride or of the bridegroom.

An account must also be kept of the unusually large number of persons living in refuges, that are not enumerated in parochial censuses which remain the soundest basis on which the estimation of the population is made.

According to the last federal census, the French population is 63.9% of the total. If 10,000 is added as the population living in refuges, to the population enumerated by the French parishes, we obtain 847,000 as the total population on July 1st, 1933.

This number is an increase of 14,000 over the population estimated for the preceding year, and 28,500 over the census year population. But foreign immigration being at a standstill, a larger estimation does not seem to be justified.

Birth Registration.

The number of births registered in 1933 has been 18,431 comparing with 19,997 in 1932, which is a decrease of more than 1,500. It is not believed however, that this diminution is due to neglect in registering births.

Intensification in 1932 and 1933 of the educational campaign initiated a few years ago on the importance of birth registration has certainly been fruitful, because there is a decrease of late registration in the books of the protestant churches and of the synagogues. Last year, the number of jewish girls registered, exceeded the number of boys while in previous years, we had to add to the number of registration, in order that the proportion between male and female births be nearer the normal proportion.

In order to understand the reason of this deficiency, it is necessary to remind the usage adhered to by the jewish population in the matter of birth registration. The boys were generally registered in his official book by the Rabbi performing circumcision. As regards the girls, in about one third of the cases, their names were entered only in a book kept at the synagogue, which is not the official book for the registration of births. This constitutes the naming ceremony which as a rule, is not presided by a Rabbi but by an ordinary member of the synagogue who is not authorized to keep the official birth registration book.

It follows that the jewish girls, whose parents do not supplement that naming ceremony by a real registration performed either by a Rabbi or by the City Clerk, are not officially registered and are unable to obtain a birth certificate.

It has been possible to rectify to a great extent this condition of no birth registration, not only for jewish girls, but also for many protestant children, since 1932 when a system has been established to the effect that the births registered by the minister of the churches and by the Rabbi are reported to this office.

In order to fully understand the meaning of this statement, it is necessary to recall that in the Province of Quebec, birth registration methods differ from those followed in the other provinces outside of Quebec, where the doctor, the nurse or the midwife attending to a birth, must declare that birth to a registrar appointed by the government for each municipality and the registrar must register all births so declared.

In this province, the minister of any authorized church or congregation is, ipso facto, an officer for the registration of civil status acts, and he is entrusted with the official registry book authenticated by the protonotary of the judicial district wherein the municipality is situated. For all religious sects adhering to baptism, the registration of births is usually made when the child is baptized. The entry in the authenticated book attesting that the child has been baptized, constitutes the registration of that birth.

This is an excellent registration system for Roman Catholics who as a rule are baptized very early after birth ; it is not quite so good for the protestant denominations who delay baptism for a long period ; it shall be very defective for adherents to jewish faith until they all understand that it is an obligation to have all births, (girls and boys) registered by an authorized Rabbi ; it is inoperative for those who do not belong to any religious sect or adhere to a cult not officially recognized.

These deficiencies are more apparent than real, because it has been provided in the civil code of the province that the parents who have not registered the birth of their child with the minister of their church within four months

from the date of the birth, are liable to a penalty of fifty dollars (\$50.00) unless they have supplemented this omission by declaring that birth to the secretary or City clerk of the municipality in which they reside and by making it an obligation to the secretary or City clerk to enter such declarations in the official book that he must keep for that purpose. The law is complete and gives the parents every facility to comply with it. The defaulters have no other excuse than negligence or ignorance of the law.

Moreover, the municipal by-law No. 315 enacts the obligation for the physician or the midwife assisting to a birth to declare that birth to the sanitary authority within eight days from the date of its occurrence. A similar obligation is created by the law of vital statistics of the province of Quebec. Such a declaration does not constitute a birth registration, and cannot be used for that purpose, because the parents, at least the father, must sign the registration act as entered in the official book.

But since the ministers of the churches report to this office the births registered by them, the declarations received from the physicians are used as a check to official registration. Whenever a birth is not registered within the time limit enacted by the civil Code, a letter is sent to the parents reminding them of their legal obligation in that respect. With such notices, a leaflet is sent, explaining how to register births and a double effect is obtained. On the one hand, the number of late registration is diminished and, on the other, these letters and leaflets constitute by themselves an excellent educational mean, because through them a great many people become conversant with the law, who otherwise would continue to ignore it.

The system of reports from the ministers of the Churches works up in a satisfactory manner and we have on our list, 269 churches of various denominations.

The following table shows for each denomination the number of churches and the proportion of those who send their reports regularly.

Religious denomination	Number of churches	Number sending reports	Per cent
Roman Catholics, French.....	78	78	100.0%
Roman Catholics, English.....	16	15	93.7%
Roman Catholics, others.....	12	11	91.7%
Anglican.....	35	33	94.3%
United.....	47	45	95.7%
Presbyterian.....	22	21	95.5%
Baptist.....	13	13	100.0%
Other Protestant.....	12	12	100.0%
Greek Orthodox.....	8	8	100.0%
Synagogues.....	26	26	100.0%
Total.....	269	262	97.4%

Seven churches or less than 3% have not sent any report. As regards the others, a check of their reports with the registrations in their books has shown omissions, and 524 births have been added to the number reported.

It has been impossible to classify those 524 births according to race, because this information is not entered in the registration book, and in the following table, they are classified under "race unknown".

The following table shows that in each group of churches there are children registered pertaining to various races. In reports for previous years, compiled directly from the registry books of the churches, this information was lacking, and there was no other alternative than to classify as french, all births registered in french churches; as british, all births registered in the books of the Irish, Anglican, presbyterian and other churches generally intended for the use of the british race, deducting from the total, the births registered in protestant churches specially intended for other races, etc. But this procedure lacked in precision and was very unsatisfactory.

LEGITIMATE AND
Classified according to r
Legitim

Religious Denominations	Grand total	TOTAL		Sex	Fre
		Male	Female		
Roman Catholics:		6,339		M	6,
French.....	12,455	.....	6,116	F	5,
English.....	961	472	489	M	
Others.....	740	378	362	F	
Anglicans.....	837	407	430	M	
United Church.....	676	367	309	F	
Presbyterian.....	263	124	139	M	
Other Protestants.....	212	100	112	F	
Greek Orthodox.....	189	92	97	M	
Synagogues.....	670	401	269	F	
Municipal.....	385	141	244	M	
Total—Legitimates.....	17,388	8,821	8,567	F	66

Illegitim

Roman Catholics:		478		M	
French.....	930	.....	452	F	
English.....	8	4	4	M	
Others.....	6	3	3	F	
Anglicans.....	30	11	19	M	
United Church.....	34	17	17	F	
Presbyterian.....	1	1		M	
Other Protestants.....				F	
Greek Orthodox.....	3	3		M	
Synagogues.....				F	
Municipal.....	31	21	10	M	
Total—Illegitimates.....	1,043	538	505	F	
Grand total.....	18,431	9,359	9,072	M	66

LEGITIMATE BIRTHS.

by sex and racial origin.

Males.

	Scotch	Irish	Other British	Jews	Italian	Ruthenian Polish	Czecho Slovak	Other races	Race unknown
	19	57	1	.....	46	15	2	46	.....
	10	62	2	2	50	7	.....	33	.....
	43	225	7	.....	11	3	1	25	35
	51	234	2	1	6	2	.....	20	37
	.....	.....	.....	.....	170	80	73	45	4
	.....	.....	.....	.....	182	74	52	42	5
	35	30	13	.....	2	2	.....	13	49
	35	25	17	4	2	1	1	20	35
	55	17	24	.....	3	9	7	45	60
	57	26	11	.....	1	4	6	39	29
	56	12	3	.....	4	.....	1	3	9
	49	11	4	.....	9	.....	1	3	23
	2	3	2	.....	10	1	3	38	21
	6	3	2	.....	12	.....	2	47	11
	.....	.....	.....	.....	.....	1	10	78	4
	.....	.....	.....	.....	.....	.....	16	72	7
	.....	.....	.....	401	.....	.....	.....	.....	.....
	.....	.....	.....	269	.....	.....	.....	.....	.....
	26	5	4	8	3	4	4	27	.....
	11	5	1	139	7	1	2	24	.....
	236	349	54	409	249	114	101	320	182
	219	366	39	415	269	90	80	300	147

Females.

	5	13	.....	.....	4	.....	.....	6	78
	1	17	.....	.....	3	2	.....	9	80
	.....	.....	.....	.....	.....	.....	.....	.....	4
	.....	.....	.....	.....	.....	.....	.....	.....	3
	.....	.....	.....	.....	2	.....	1	.....	.....
	.....	.....	.....	.....	1	.....	.....	.....	2
	2	.....	.....	.....	.....	.....	.....	.....	3
	2	.....	2	.....	.....	.....	.....	.....	7
	1	.....	1	.....	.....	.....	.....	1	10
	3	.....	1	.....	.....	.....	.....	1	8

	.....	.....	.....	.....	.....	.....	.....	3	.....

	1	1	.....	.....	.....	.....	.....	8	.....
	.....	1	1	.....	.....	.....	1	5	.....
	9	14	1	.....	6	.....	1	18	95
	6	18	4	.....	4	2	1	15	100
	245	363	55	409	255	114	102	338	277
	225	384	43	415	273	92	81	315	217

The new collection system for births is a marked progress as it gives a much more accurate idea of their distribution between the ethnical groups of the population, and the rates in statistical tables II, VII, VIII (pages 293 and 296) are somewhat modified if compared with previous years.

The Morti-Natality.

At the beginning of 1932, the Provincial Bureau of Statistics has issued a special form on which, stillbirths and deaths of children who died within twenty-four hours from birth are reported. This form has been drafted according to the suggestions I made to the meetings of the Canadian Public Health Association in 1930 and 1931 for a better definition of the word "Stillbirth" in order that more uniformity be obtained in all the provinces.

With the use of this form, a better classification of the stillbirths is obtained. The attending physician is no longer bound to state whether the child was born alive or dead, but to supply information corresponding to the adopted definition. Diverging opinions are thus avoided, and classification is more uniform and more in accordance with the facts.

In 1932, 565 stillbirths were recorded and the rate per hundred living births was 3.06%.

Deaths.

The number of deaths in 1933 has been reduced to 8,975 which is a decrease of 753 from the previous year and 1,986 if comparison is made with 1928. The death rate per 1,000 of population is 10.60 which is considered a low death rate. Since 1927, the rate of death has decreased gradually from year to year. This is shown in the following table:

NUMBER OF DEATHS PER MONTHS FROM 1928 TO 1933.

Comparison of 1933 with the 5 preceding years.

Month	1928	1929	1920	1931	1932	Mean 5 years	1933
January.....	886	1079	979	966	865	955.0	803
February.....	837	853	837	894	704	825.0	744
March.....	898	901	1001	927	1014	948.2	808
April.....	1010	961	1005	859	968	960.6	797
May.....	914	1001	895	801	852	892.6	812
June.....	791	759	771	694	741	751.2	813
July.....	772	819	706	832	744	774.6	655
August.....	981	865	856	820	718	848.0	676
September.....	899	823	831	785	721	811.8	710
October.....	800	862	772	767	738	787.8	736
November.....	777	781	762	729	708	751.4	698
December.....	1396	900	841	812	955	980.8	723
Total.....	10961	10604	10256	9886	9728	10287.0	8975
Mean.....	913.4	883.7	854.7	823.8	810.7	857.2	747.9
Per 1,000 of population..	14.8	13.9	13.0	12.2	11.7	12.9	10.6

This table shows a decrease in the death rate of four per thousand of population if comparison is made between 1928 and 1933, and that such rate is also two per thousand lower in 1933 than the average of the five preceding years.

Furthermore if the monthly number of deaths is compared with the average of the last five years, it is seen that, with the exception of June, each month shows a marked decrease in the number of deaths, the greater difference (257) being apparent in the last month of the year.

By comparing deaths for the last three years as classified according to the international list of the causes of deaths, one takes into account the relative importance of each group of diseases and their tendency to increase or decrease. This is done in the following table in which the number of deaths for each group and the rate per 1,000 population are indicated.

DEATHS BY VARIOUS GROUPS OF DISEASES.

Causes	Years			Per 1,000 of population		
	1931	1932	1933	1931	1932	1933
I—Epidemic diseases:						
Typhoid.....	34	37	31	0.04	0.04	0.04
Diphtheria.....	71	53	18	0.09	0.06	0.02
Influenza.....	164	270	158	0.20	0.33	0.19
Tuberculosis (pulmonary).....	766	722	670	0.94	0.87	0.79
Other infectious diseases.....	395	428	333	0.49	0.51	0.39
Total.....	1430	1510	1210	1.76	1.81	1.43
II to V—General diseases:						
Cancer.....	808	823	931	0.99	0.99	1.10
Other general diseases.....	356	355	343	0.44	0.42	0.40
Total.....	1164	1178	1274	1.43	1.41	1.50
VI—Diseases of the nervous system.....	629	572	420	0.77	0.69	0.50
VII—Diseases of the circulatory system..	1554	1651	1804	1.91	1.98	2.13
VIII—Diseases of the respiratory system..	983	960	802	1.21	1.15	0.95
IX—Diseases of the digestive organs:						
Diarrhoea, 0 to 2 years.....	877	664	516	1.08	0.80	0.61
Other diseases of the digestive system..	637	590	526	0.78	0.71	0.62
Total.....	1514	1254	1042	1.86	1.51	1.23
X—Diseases of the genito-urinary system..	931	1056	937	1.14	1.27	1.11
XI—Puerperal state.....	90	99	92	0.11	0.12	0.11
XII—Diseases of the skin.....	48	28	38	0.06	0.03	0.04
XIII—Diseases of the bones.....	9	10	12	0.01	0.01	0.01
XIV—Congenital malformation.....	136	155	154	0.17	0.19	0.18
XV—Diseases of early infancy:						
Debility, etc. (158-160-161).....	306	255	284	0.37	0.31	0.33
Premature birth.....	424	352	344	0.52	0.42	0.41
Total.....	730	607	628	0.90	0.73	0.74
XVI—Senility.....	76	59	65	0.09	0.07	0.08
XVII—Violent or accidental deaths:						
Suicides.....	52	53	54	0.06	0.06	0.06
Homicides.....	29	19	20	0.03	0.02	0.02
Other violent deaths.....	416	391	333	0.52	0.47	0.40
Total.....	497	463	407	0.61	0.55	0.48
XVIII—Cause of death not determined..	95	126	90	0.12	0.15	0.11
Grand total.....	9886	9728	8975	12.16	11.68	10.60

From the preceding table, it appears that the proportion of deaths for the group of infectious diseases is much lower in 1933 than for the two previous years. The same remark is applicable to the diseases of the nervous, the respiratory and the digestive systems.

On the other hand, the rate for the group of general diseases is higher owing to an increase of the deaths due to cancer. The diseases of the circulatory system are also more prevalent.

As regards the other groups of diseases, the difference one way or the other is very slight and this is more evident if comparison is made between the two last years only.

Age of the population and specific death rates.

In the report for year 1932, page 215, were published figures based on the returns of the last federal census about the number of persons living at various age groups in each of the province. It was shown that the proportion of the population under 20 years of age in the province of Quebec had a tendency to decrease with a corresponding increase in the groups over 20. The result is an increase of the mean age.

Since last year, the same figures have been published for the population of Montreal and it is now possible to compute specific death rates by age groups for some diseases, and compare such rates for 1921 and 1931.

Let us recall for those of our readers who may not be familiar with the statistical terminology that a specific death rate for age groups, consists in comparing the number of deaths at a stated age, to the number of the persons living at that age. As an example, if 100 individuals die between the ages of 30 and 40, and there are 10,000 people living at that age, the death rate per 1,000 of population will be 10. This is the specific death rate for the age group 30 to 40 years.

This rate differs from the general death rate in that for the latter, the computation is made by taking into account the total deaths and the total population irrespective of ages, while the former introduces a third factor which is the age of the deceased.

The specific rate is more accurate than the general rate, because it is a well known fact the age has a great influence on morbidity.

Some diseases spread only amongst children, others are the appendage of old age; others may be contracted at any age, but are more prevalent at certain periods of life. It follows that when the proportion of the population of a certain age group is decreasing, the number of deaths from diseases peculiar to that age group, must also decrease.

From the following table can be seen at a glance how the various age groups of the population of Montreal have been modified between the last two censuses.

POPULATION OF MONTREAL IN 1921 AND 1931.

Distribution in age groups and percent of total
in each group.

Age group	Population		Percent of total	
	1921	1931	1921	1931
1	2	3	4	5
0 to 4 years.....	69,607	81,602	11.25%	9.97%
5 to 9 years.....	70,166	82,881	11.34%	10.13%
10 to 14 years.....	62,513	77,092	10.11%	9.42%
15 to 19 years.....	58,817	79,166	9.51%	9.67%
20 to 29 years.....	111,419	157,007	18.02%	19.18%
30 to 39 years.....	96,536	129,346	15.61%	15.80%
40 to 49 years.....	67,882	97,334	10.98%	11.89%
50 to 59 years.....	41,660	61,665	6.74%	7.53%
60 to 69 years.....	23,855	34,035	3.85%	4.16%
70 to 79 years.....	9,649	14,491	1.56%	1.77%
80 to 89 years.....	2,284	3,498	0.37%	0.43%
90 years and more.....	216	261	0.03%	0.03%
Not stated.....	3,902	199	0.63%	0.02%
Total.....	618,506	818,577	100.0%	100.0%

A comparison between columns 4 and 5 shows for 1931 a decrease of 3.15% in the percentage of the population for the three age groups from 0 to 15 years, and this diminution is spreaded over the other age groups which in 1931 have a higher percentage than 1921. It is therefore evident that the mean age is now higher than ten years ago.

Since 1921, the general death rate in Montreal has been appreciably lowered. It is important to know whether this decrease is the result of the improvement in sanitary conditions, or if it is only the consequence of the change in age distribution as shown above. With this aim in sight, we have computed specific rates for all deaths at various age periods, also for a few diseases, such as tuberculosis and appendicitis which affects all age group; diphtheria, which is prevalent nearly exclusively amongst children; cancer and diabetes which are predominant on people over 40 years.

In order to eliminate a factor of error due to the annual variation in the prevalence of disease, the number of deaths quoted for each age periods is not the one obtained in 1921, and 1931, but the average for the three years 1920-21-22 and 1930-31-32.

As regards the population, it is reasonable to believe that the increase has been about the same in the year preceding as in the one following the census and that the population enumerated in 1921 and 1931, is the average for the three years.

The rates have therefore been computed by taking as a basis the population in each group, according to the censuses, and the average number of deaths for three years.

**AVERAGE NUMBER OF DEATHS FROM ALL CAUSES
AND FROM CERTAIN DISEASES, DIVIDED
INTO AGE GROUPS**

For years 1920-1922 and 1930-1932.

Age groups	Tuber- culosis		Diphtheria		Cancer		Diabetes		Appen- dicitis		All causes	
	1920 to 1922	1930 to 1932	1920 to 1922	1930 to 1932	1920 to 1922	1930 to 1932	1920 to 1922	1930 to 1932	1920 to 1922	1930 to 1932	1920 to 1922	1930 to 1932
	2	3	4	5	6	7	8	9	10	11	12	13
0 to 4 years....	77	55	110	43	2	2	1	2	2	12	4546	2950
5 to 9 years....	32	24	55	20	1	3	.....	1	6	15	309	196
10 to 14 years....	33	20	5	4	.....	1	1	1	11	16	159	125
15 to 19 years....	112	91	1	1	2	2	.....	1	10	11	258	218
20 to 29 years....	267	247	1	1	7	10	4	2	11	20	665	607
30 to 39 years....	210	169	1	.....	28	47	3	6	7	16	733	656
40 to 49 years....	129	144	1	.....	76	115	7	12	5	13	688	868
50 to 59 years....	74	88	.....	.....	109	188	20	27	2	9	749	1044
60 to 69 years....	37	48	.....	.....	138	232	21	46	1	4	980	1277
70 to 79 years....	13	13	.....	.....	85	167	11	35	.....	2	949	1283
80 to 89 years....	2	2	.....	.....	22	41	3	8	1	1	450	643
90 and over.....	.....	.....	.....	.....	2	4	.....	1	.....	.....	80	89
Total.....	986	901	174	69	472	812	71	142	56	119	10566	9956

**SPECIFIC RATE PER 10,000 POPULATION
OF EACH AGE GROUP.**

0 to 4 years....	11.06	6.74	15.81	5.27	0.29	0.24	0.14	0.24	0.29	1.47	653.3	361.4
5 to 9 years....	4.56	2.89	7.84	2.41	0.14	0.36	.....	0.12	0.85	1.81	44.0	23.6
10 to 14 years....	5.28	2.59	0.80	0.52	.....	0.13	0.16	0.13	1.76	2.07	19.4	16.4
15 to 19 years....	19.02	11.49	0.17	0.13	0.24	0.25	.....	0.13	1.70	1.39	43.8	27.5
20 to 29 years....	23.98	15.73	0.09	0.06	0.63	0.64	0.36	0.12	0.99	1.27	66.3	38.7
30 to 39 years....	21.71	13.06	0.10	.....	2.89	3.63	0.31	0.46	0.72	1.24	75.8	50.7
40 to 49 years....	19.28	14.79	0.15	.....	11.36	11.81	1.05	1.23	0.75	1.33	102.9	89.1
50 to 59 years....	18.20	14.27	.....	.....	26.81	30.49	4.92	4.38	0.49	1.46	184.3	169.3
60 to 69 years....	16.16	14.10	.....	.....	60.26	68.16	9.17	13.51	0.43	1.18	428.0	375.2
70 to 79 years....	13.47	8.97	.....	.....	88.09	115.25	11.40	24.15	.....	1.38	983.5	885.4
80 to 89 years....	8.76	5.72	.....	.....	96.32	117.21	13.13	22.87	4.38	2.86	1970.2	1838.2
90 and over.....	.....	.....	.....	.....	92.59	153.26	.....	38.31	.....	.....	3703.7	3409.9
Total.....	15.93	10.99	2.81	0.84	7.63	9.91	1.15	1.73	0.90	1.45	170.1	121.5

If a comparison is made between columns 12 and 13, it is seen that the general death rate for 1931 is lower at all age groups. It must be noticed, however, that the greater diminution (45%) is met under the age groups of 0 to 4 years.

Tuberculosis (column 2 and 3) shows also a decrease at all age groups, but it is more accentuated between the ages of 15 to 40 years. During this period of ten years, the general death rate from tuberculosis has fallen from 15.93 to 10.99 per 10,000 of population which is a difference of 31 per cent.

Diphtheria, a disease more prevalent amongst children, has decreased on the whole, by 70%. The diminution being shown at all age groups is greater for the group 0 to 4 years.

Deaths from cancer, diabetes and appendicitis have increased by 30-33 and 38 percent respectively.

As regards cancer, the increase is very small up to 60 years and much greater over 70 years of age. It is hard to explain why cancer is more prevalent amongst old people than ten years ago.

Diabetes shows a very small difference one way or the other at all age groups up to 60 years; above that age, there is a greater and constant increase. This may be the result of the use of Banting's Insuline, which might have contributed to permit to a number of diabetic patients to reach an older age.

Appendicitis is more prevalent at all ages, excepting the age groups 15 to 19 and 80 to 89.

It must be noticed however, that a too great importance must not be given to the variation of the rates affecting the advanced age groups on account of the small number of persons living at those ages, the consequence of which is, that a difference of one in the number of deaths, makes a great difference in the rate.

Respectfully submitted,

EUGENE GAGNON, M.D.,

Superintendent, Division of
Vital Statistics.

DIVISION OF STATISTICS.

TABLE 1.

POPULATION (ESTIMATED).

Nationalities:	Number	Proportion per 1,000
French-Canadians	541,233	63.90%
British-Canadians	184,646	21.80%
Jews	50,396	5.95%
Other nationalities	70,725	8.35%
Total	847,000	100.00%

TABLE II.

BIRTHS.

(Still-births not included)

Nationalities:	Sex		Total	Proportion per 1,000 population
	M	F		
French-Canadians	6,533	6,325	12,858	23.76%
British-Canadians	1,276	1,281	2,557	13.85%
Jews	409	415	824	16.35%
Other nationalities	864	804	1,668	23.59%
Not stated	277	247	524	
Total	9,359	9,072	18,431	21.76%

TABLE III.

DEATHS.

(Still-births not included)

Nationalities:	Sex		Total	Proportion per 1,000
	M	F		
French-Canadians	3,121	3,050	6,171	11.40%
British-Canadians	953	961	1,914	10.37%
Jews	176	166	342	6.78%
Other nationalities	340	182	522	7.38%
Unknown	14	12	26	7.38%
Total	4,604	4,371	8,975	10.60%

TABLE IV.
MARRIAGES.

Nationalities:	Total	Proportion per 1,000
French-Canadians	3,342	6.18%
British-Canadians	1,397	7.56%
Jews	611	12.12%
Other nationalities	614	8.68%
Total	5,964	7.04%

TABLE V.
BIRTHS AND MARRIAGES.
(By place of registration)

Catholic Churches:	Births		Total	Marriages
	M	F		
French-Canadians	6,817	6,568	13,385	3,342
Others	857	858	1,715	797
Total	7,674	7,426	15,100	4,139
Protestant Churches:				
Anglicans	418	449	867	415
Presbyterians	125	139	264	126
United Churches	384	326	710	480
Baptists	19	21	40	27
Other protestants	81	91	172	78
Total	1,027	1,026	2,053	1,126
Other denominations:				
Synagogues	401	269	670	611
Orthodox Churches	95	97	192	88
Births registered at the City Hall	162	254	416	..
Total	658	620	1,278	699
Grand total	9,359	9,072	18,431	5,964

TABLE VI.

DEATH BY CIVIL STATUS AND NATIONALITIES, YEAR 1933.

Civil status	French- Canadians		British- Canadians		Jews		Other nationalities and unknown nationalities		Total		Grand total	Per- cent
	M	F	M	F	M	F	M	F	M	F		
Married.....	1153 36.94	1041 34.13	445 46.69	322 33.51	115 65.35	76 42.17	157 44.35	61 31.44	1870 40.61	1494 34.18	3364 37.48%	37.48%
Single.....	423 13.55	468 15.31	207 21.62	205 21.33	19 10.80	15 9.04	69 19.77	23 11.86	718 15.60	711 16.27	1429 15.92%	15.92%
Widowers and widows.....	449 14.39	672 22.03	174 18.26	303 31.53	17 9.66	57 34.34	22 6.22	28 14.43	662 14.39	1060 24.25	1722 19.19%	19.19%
Unknown.....	7 0.23	.....	7 0.73	1 0.10	1 0.56	.....	11 3.11	.....	26 0.56	1 0.02	27 0.31%	0.31%
Children under 15 years.....	1089 34.89	869 28.53	120 12.70	130 13.53	24 13.63	24 14.45	95 26.55	82 42.27	1328 28.84	1105 25.28	2433 27.10%	27.10%
Total.....	3121 100.00	3050 100.00	953 100.00	961 100.00	176 100.00	166 100.00	354 100.00	194 100.00	4604 100.00	4371 100.00	8975 100.00%	100.00%

TABLE VII.

COMPARATIVE TABLE OF BIRTHS AND DEATHS.

	Births	Deaths	Excess of births over deaths of	Natural increase per 1,000 population
French-Canadians	12,858	6,171	6,687	12.36%
British-Canadians	2,557	1,914	643	3.48%
Jews	824	342	482	9.57%
Other nationalities	1,668	522	1,146	16.20%
Not stated	524	26	498	....
<hr/>				
Total	18,431	8,975	9,456	11.17%

TABLE VIII.

DEATHS OF CHILDREN UNDER 1 YEAR.

	Births	Deaths from 0 to 1 year	Proportion per 1,000
French-Canadians	12,858	1,482	115.3%
British-Canadians	2,557	183	71.50%
Jews	824	28	34.0%
Other nationalities	1,667	103	61.7%
Unknown	524	21	....
<hr/>			
Total	18,431	1,817	98.6%

TABLE IX.
BIRTHS, MARRIAGES, AND DEATHS.

From 1872 to 1933 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 to 1933.....	809,000	10,269	12.69	20,107	24.85	6,383	7.89

TABLE

DEATHS FROM

By different causes, 1

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.
Measles.....														
Whooping cough.....	8	2	10	3	4	7	3	4	7	1	2	3	1	...
Influenza.....	2	2	4	6	1	7	3	1	4	2	6	8	...	3
Tuberculosis.....	1	1	2	...	1	1	...	...	...	1	1	2	...	...
Syphilis.....	9	...	9	4	...	4	3	1	4	4	1	5	6	2
Other epidemic diseases.....	...	...	...	2	...	2	2	2	4	3	1	3	1	1
General diseases (Nos. 45 to 77).....	...	1	1	...	...	...	1	3	4	...	1	1	1	...
Meningitis.....	1	1	2	...	...	...	2	...	2	...	2	2	1	...
Convulsions.....	3	...	3	2	2	4	...	...	...	...	...	...	...	1
Other diseases of the nervous system.....	...	...	...	1	...	1	...	1	1	...	3	3	3	1
Diseases of the circulatory system.....	...	...	...	...	...	...	...	1	1	...	1	1	...	...
Bronchitis.....	...	...	...	...	...	...	...	...	...	...	2	2	...	...
Pneumonia.....	20	9	29	10	17	27	13	5	18	18	16	34	11	12
Other diseases of the respiratory system.....	1	1	2	2	2	4	2	1	3	1	1	2	1	1
Diseases of the stomach.....	...	...	...	...	1	1	1	...	1	1	...	1	...	...
Diarrhoea.....	19	5	24	18	2	20	24	3	27	31	6	37	38	15
Other diseases of the digestive system.....	...	...	...	2	...	2	...	...	...	...	...	...	2	1
Diseases of the genito-urinary system.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the skin, etc., (Nos. 151 to 156).....	1	...	1	...	...	...	...	2	2	...	1	1	1	...
Malformations.....	15	1	16	12	...	12	18	...	18	16	2	18	15	...
Debility, congenital.....	9	...	9	8	...	8	10	...	10	3	...	3	5	...
Premature birth.....	39	...	39	33	...	33	28	...	28	20	...	20	26	...
Result of confinement.....	5	...	5	10	...	10	7	...	7	5	...	5	13	...
Other diseases peculiar to early infancy.....	5	...	5	8	...	8	15	...	15	9	...	9	11	...
External causes.....	1	1	2	3	1	4	2	...	2	3	...	3	1	...
Ill-defined causes.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	139	24	163	124	31	155	134	24	158	117	46	163	139	37

1 YEAR, IN 1933.

months and by groups of ages

Age	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	
...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	1
...	2	...	...	3	6	9	2	2	4	3	3	1	1	2	1	1	2	25	25	50	
1	5	...	...	...	...	...	2	...	2	1	1	2	2	4	...	...	...	21	17	38	
1	1	...	1	1	...	...	...	...	...	1	1	...	...	...	...	1	1	3	7	10	
1	7	2	...	2	5	...	5	...	...	4	...	4	1	...	1	2	...	2	46	5	51
3	5	...	1	1	1	...	1	1	1	1	2	3	2	...	2	1	...	1	16	10	26	
...	...	...	...	1	...	1	2	1	3	...	...	...	1	...	1	1	...	1	7	6	13
2	2	...	...	...	...	...	1	...	1	2	...	2	...	...	...	1	1	7	6	13	
1	1	...	...	...	...	...	...	...	...	1	...	1	...	1	1	...	...	...	6	5	11
1	3	1	...	1	...	...	1	...	1	1	...	1	...	1	1	2	4	6	11	11	22
...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	4	4	
6	13	8	5	13	5	2	7	15	4	19	13	4	17	9	4	13	17	7	24	146	91	237
...	3	2	...	2	...	...	...	...	...	...	...	...	1	...	1	1	...	1	14	6	20
...	...	1	...	1	...	1	1	...	...	...	...	...	1	...	1	...	...	...	4	2	6
6	50	33	5	38	29	25	54	55	15	70	48	11	59	19	7	26	26	3	29	384	103	487
...	...	...	...	...	...	...	1	...	1	1	...	1	...	1	1	...	...	...	6	2	8
1	1	1	...	1	...	...	...	...	...	...	...	...	1	...	1	1	...	1	3	1	4
...	3	1	1	2	2	...	2	3	...	3	1	...	1	2	1	3	1	...	1	15	5	20
11	12	6	...	6	7	...	7	10	...	10	12	...	12	8	2	10	11	...	11	141	6	147
...	9	5	...	5	7	...	7	9	...	9	6	...	6	7	...	7	6	...	6	84	...	84
...	38	35	...	35	20	...	20	32	...	32	21	...	21	29	...	29	23	...	23	344	...	344
...	6	4	...	4	12	...	12	5	...	5	12	...	12	6	...	6	5	...	5	90	...	90
...	10	4	...	4	13	...	13	12	...	12	7	...	7	8	...	8	8	...	8	110	...	110
...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	2	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	1	1
4	176	103	14	117	106	34	140	151	22	173	130	23	153	98	21	119	106	18	124	1499	318	1817

TABLE

DEATHS OF ILLEGITIMATES

By causes, age, and sex

Place of death	Crèche de la Miséricorde					Crèche St. Paul					Protestant	
	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.
Causes												
Whooping-cough.....												
Diphtheria.....												
Grippe.....	8	1	3	4	16							
Syphilis.....	13	4	4	1	22		1	2		3		
Tuberculosis (all forms).....				1	1							
Meningitis.....	1				1			1		1		
Bronchitis.....	1				1							
Broncho-pneumonia.....	6	5	2	1	14	3		6	3	12	2	
Pneumonia.....	3	8	7	9	27							2
Diarrhoea.....	91	39	11	1	142	1	1	1		3	4	2
Malformation.....	26				26	1	1			2		
Premature birth.....	19				19						2	
Congenital debility.....	21				21							
Other diseases of early infancy.....	21				21							
Infanticide.....												
Other causes.....	17	11	5		33	2		1	1	4	2	1
Total.....	227	68	32	17	344	7	3	11	4	25	10	5
Per cent.....	65.9	19.8	9.3	5.0	100.0	28.0	12.0	44.0	16.0	100.0	52.6	26.3

Number of births at "Misericordia"..... 552

Number of deaths at "Misericordia"..... 327

Proportion per 1,000 births..... 592.4

CHILDREN IN 1933.

d place of death

Institu- tions	Private boarding houses and maternities					Other places					Grand total					
	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
.....
.....
.....	.....	.....	1	.....	.....	1	.....	.....	1	1	2	8	2	4	5	19
.....	.....	3	.....	.....	.....	3	5	.....	.....	.....	5	21	5	6	1	33
3	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	4	5
.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	1	1	.....	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
3	11	4	.....	.....	2	17	4	1	.....	1	6	26	10	9	7	52
2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	5	10	7	9	31
6	25	3	2	1	31	31	4	7	1	.....	12	125	52	15	2	194
.....	7	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	34	1	.....	.....	35
2	8	.....	.....	.....	.....	8	16	.....	.....	.....	16	45	.....	.....	.....	45
.....	1	.....	.....	.....	.....	1	1	.....	.....	.....	1	23	.....	.....	.....	23
.....	11	.....	.....	.....	.....	11	6	.....	.....	.....	6	38	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	3	.....	.....	.....	3
3	.....	.....	.....	1	.....	1	4	1	2	1	8	25	13	9	2	49
19	66	9	4	3	82	82	45	9	4	3	61	355	94	52	30	531
100.0	80.5	11.0	4.9	3.6	100.0	100.0	73.8	14.8	6.6	4.8	100.0	66.9	17.7	9.8	5.6	100.0%

TABLE XII.

TOTAL OF DEATHS FROM 0 TO 1 YEAR, FROM
DIFFERENT CAUSES, 1932 AND 1933.

Diseases	1932			1933		
	0 to 6 months	6 to 12 months	Total	0 to 6 months	6 to 12 months	Total
Measles.....	1	14	15	.....	1	1
Whooping cough.....	16	33	49	25	25	50
Influenza.....	25	22	47	21	17	38
Tuberculosis.....	4	13	17	3	7	10
Syphilis.....	48	4	52	46	5	51
Other epidemic diseases.....	22	11	33	16	10	26
General diseases (Nos. 45 to 77)	3	7	10	7	6	13
Meningitis.....	17	9	26	7	6	13
Convulsions.....	7	9	16	6	5	11
Other diseases of the nervous system.....	12	9	21	11	11	22
Diseases of the circulatory system.....	3	1	4	1	2	3
Bronchitis.....	5	2	7	.....	4	4
Broncho-pneumonia.....	125	68	193	110	71	181
Pneumonia.....	29	21	50	36	20	56
Other diseases of the respiratory system.....	15	4	19	14	6	20
Diseases of the stomach.....	4	6	10	4	2	6
Diarrhoea.....	486	128	614	384	103	487
Other diseases of the digestive system.....	7	4	11	6	2	8
Diseases of the genito-urinary system.....	2	1	3	3	1	4
Diseases of the skin (Nos. 151 to 156).....	6	4	10	15	5	20
Malformation (No. 157).....	133	8	141	141	6	147
Debility, icterus, etc. (Nos. 158 to 161).....	164	1	165	194	.....	194
Premature birth (No. 159).....	352	.....	352	344	.....	344
Result of confinement (No. 160)	90	.....	90	90	.....	90
External causes.....	14	8	22	15	2	17
Ill-defined causes.....	.....	2	2	.....	1	1
Total.....	1590	389	1979	1499	318	1817

TABLE XII a

DEATHS FROM 0 TO 1 YEAR.

Legitimate and illegitimate children

Rate per 1,000 births, 1914-1933.

Years	Number of births		Number of deaths 0 to 1 year		Rate per 1,000 births		Total Mortal- ity	(*)
	Legit- imate	Illigit- imate	Legit- imate	Illigit- imate	Legit- imate	Illigit- imate	per 1,000 births	
1	2	3	4	5	6	7	8	9
1914.....	20,637	749	3,660	541	177.3	722.3	196.4	4.1
1915.....	19,945	747	3,233	546	162.1	730.9	182.6	4.5
1916.....	19,084	675	3,134	538	164.2	797.0	185.8	4.9
1917.....	19,038	626	2,872	616	150.8	984.0	177.3	6.5
1918.....	19,654	719	3,256	646	165.7	898.4	191.5	5.4
Average....	19,872	703	3,231	577	162.9	820.8	185.1	5.0
1919.....	19,159	800	2,945	698	153.7	872.5	177.5	5.7
1920.....	20,305	875	3,375	697	166.3	796.6	192.2	4.8
1921.....	20,221	925	2,599	690	128.5	745.9	155.6	5.8
1922.....	19,663	1,057	2,538	766	129.1	724.7	159.4	5.6
1923.....	19,435	1,092	2,238	819	115.2	750.0	148.9	6.5
Average....	19,757	950	2,739	734	138.6	772.6	167.7	5.6
1924.....	20,386	1,114	2,273	878	111.5	788.1	146.5	7.1
1925.....	20,805	1,171	2,221	469	106.8	400.8	122.4	3.8
1926.....	19,986	1,112	2,088	433	104.5	389.4	119.5	3.7
1927.....	19,893	847	2,031	394	102.1	465.2	116.9	4.5
1918.....	19,374	933	2,488	431	128.4	461.9	143.7	3.6
Average....	20,089	1,035	2,220	521	110.5	503.4	129.8	4.6
1929.....	19,417	998	2,239	462	115.3	462.9	132.3	4.0
1930.....	19,974	1,019	2,162	458	108.4	449.4	124.8	4.1
1931.....	19,634	1,065	1,824	521	92.9	489.2	113.3	5.3
1932.....	18,965	1,032	1,525	454	80.4	439.9	98.9	5.4
1933.....	17,388	1,043	1,316	501	75.7	480.3	98.6	6.3
Average....	19,076	1,031	1,813	479	95.0	464.6	113.9	5.0
Average 20 years..	19,697	930	2,501	578	127.0	621.5	149.3	4.9

(*) Quotient obtained by dividing the figures of column 7 by those of column 6.

TABLE XIII.
STILLBIRTHS, LEGITIMATE AND ILLEGITIMATE IN 1933.
Causes of deaths, period of gestation and sex

Causes of morbi-natality	6½ 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	2	3	4	7	11	2	2	4	1	4	5	8	15	23
Toxaemia of pregnancy.....	1	4	5	10	12	22	20	18	38	15	24	39	46	58	104
Malformation incompatible with life.....	1	.....	1	3	11	14	4	4	8	13	14	27	21	29	50
Other causes and causes not specified.....	.....	.....	.....	1	.....	1	.....	.....	.....	2	1	3	3	1	4
II — Mortality from premature birth:															
Maternal exertion (over-work).....	.....	.....	.....	4	.....	4	.....	.....	.....	1	.....	1	5	.....	5
Traumatism causing premature birth.....	1	.....	1	6	7	13	4	1	5	3	2	5	14	10	24
Abnormal placental insertion.....	5	1	6	10	4	14	9	3	12	18	8	26	42	16	58
Acute diseases and infections.....	3	2	5	5	11	16	7	5	12	1	4	5	16	22	38
Chronic infection (syphilis).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other causes and causes not specified.....	7	.....	7	10	8	18	4	3	7	.....	2	2	21	13	34
III — Foetal mortality during "parturition":															
Abnormal presentation and prolapsed cord..	.....	.....	.....	2	.....	2	2	.....	2	25	21	46	29	21	50
Obstacles to parturition.....	.....	1	1	.....	1	1	1	2	3	83	47	130	84	51	135
Other causes and causes not specified.....	.....	.....	.....	.....	1	1	.....	.....	.....	19	20	39	19	21	40
Total.....	19	10	29	55	62	117	53	38	91	181	147	328	308	257	565

TABLE XIII a

PREMATURE, BORN UNDER SIX AND A HALF MONTHS GESTATION AND NOT INCLUDED
IN STILLBIRTHS STATISTICS.

Causes of mortinatality	Under 4 months				4 months				5 months				Grand total			
	M		F		M		F		M		F		M		F	
	M	Un.	Tt.	Tt.	M	Un.	Tt.	Tt.	M	Un.	Tt.	Tt.	M	Un.	Tt.	Tt.
I — Foetal mortinatality during "gestation":																
Syphilis and other chronic diseases.....	1	.....	1	3	2	1	3	5	3	6	8	6	31	21	6	12
Toxaemia of pregnancy.....	1	1	2	11	5	6	39	14	25	7	39	21	31	3	52	52
Malformation incompatible with life.....	.....	.....	.....	2	2	.....	8	3	5	.....	8	3	7	.....	10	10
Other causes and causes not specified.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II — Mortinatality from premature birth:																
Maternal exertion (overwork).....	5	.....	1	6	3	1	4	2	9	17	11	3	17	3	1	21
Traumatism causing premature birth.....	8	1	3	12	9	3	12	8	11	28	19	12	28	12	3	43
Abnormal placenta insertion.....	2	1	3	5	3	2	5	10	6	11	16	13	11	13	.....	24
Acute diseases and infections.....	14	5	3	22	16	7	23	11	22	52	33	23	52	23	3	78
Chronic infection (syphilis).....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	.....	1	.....	1
Other causes and causes not specified.....	8	1	4	13	10	8	18	16	22	40	38	25	40	25	4	69
III — Foetal mortinatality during "parturition":																
Abnormal presentation and prolapsed cord.....	.....	.....	.....	1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1
Obstacles to parturition.....	.....	.....	.....	1	.....	1	.....	2	.....	.....	2	3	.....	3	.....	3
Other causes and causes not specified.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	39	9	11	59	51	29	80	72	103	193	175	110	193	110	11	314

TABLE
DEATHS BY AGE

AGES		Legitimates					Total
		French-Canadians	British-Canadians	Jews	Other nationalities	Unknown	
Premature children.....	M	142	19	4	8	.....	173
	F	95	18	3	12	.....	128
From 0 to 1 month.....	M	169	22	7	17	2	225
	F	90	23	4	9	5	131
From 1 month to 6 months....	M	185	24	1	15	.....	225
	F	140	23	6	7	.....	176
From 6 months to 1 year.....	M	126	7	.....	8	.....	141
	F	98	13	1	13	.....	125
Total under 1 year.....	M	622	72	12	48	2	754
	F	423	77	14	41	5	560
From 1 year to 2 years.....	M	79	8	4	7	.....	98
	F	70	13	2	1	.....	86
From 2 years to 3 years.....	M	49	3	1	3	.....	56
	F	30	2	.....	7	.....	39
From 3 years to 4 years.....	M	21	7	3	.....	.....	31
	F	21	2	1	4	.....	28
From 4 years to 5 years.....	M	8	1	.....	4	.....	13
	F	15	2	1	3	.....	21
Total under 5 years.....	M	779	91	20	62	2	954
	F	559	96	18	56	5	734
From 5 years to 9 years.....	M	39	7	2	6	1	55
	F	50	3	2	3	.....	58
From 10 years to 14 years.....	M	33	7	2	7	.....	49
	F	37	8	2	5	.....	52
From 15 years to 19 years.....	M	51	14	2	13	.....	80
	F	65	21	3	4	.....	93
From 20 years to 24 years.....	M	78	19	5	8	.....	110
	F	95	24	7	16	.....	142
From 25 years to 29 years.....	M	67	25	5	8	.....	105
	F	115	26	8	7	.....	156
From 30 years to 34 years.....	M	81	20	8	21	.....	130
	F	122	26	8	3	.....	159
From 35 years to 39 years.....	M	99	31	5	26	.....	161
	F	106	38	6	12	.....	162
From 40 years to 44 years.....	M	113	43	11	23	1	191
	F	122	29	5	6	.....	162
From 45 years to 49 years.....	M	146	55	10	31	2	244
	F	150	57	6	11	.....	224
From 50 years to 54 years.....	M	158	77	22	33	.....	290
	F	150	60	15	14	.....	239
From 55 years to 59 years.....	M	175	101	15	26	.....	317
	F	174	58	14	7	.....	253
From 60 years to 64 years.....	M	191	102	22	22	.....	337
	F	162	70	24	4	.....	260
From 65 years to 69 years.....	M	253	115	20	23	.....	411
	F	218	81	17	8	.....	324
From 70 years to 74 years.....	M	414	157	24	15	.....	610
	F	434	194	20	12	.....	660
From 80 years to 90 years.....	M	193	70	2	5	1	271
	F	238	125	8	7	.....	378
Over 90 years.....	M	13	4	1	1	.....	19
	F	30	22	1	1	.....	54
Total over 5 years.....	M	2104	847	156	268	5	3380
	F	2268	842	146	120	.....	3376
Grand total.....	M	2883	938	176	330	7	4334
	F	2827	938	164	176	5	4110

V
YEAR 1933.

Illegitimates					Total	Sex		Grand total	Percentage of total deaths
French-Canadians	British-Canadians	Jews	Other nationalities	Unknown		Male	Female		
23				1	24	197			
14	1		1	3	19		147	344	3.83%
44	3		4	5	56	273			
44	5	1	1	3	54		185	458	5.10%
134	9		4	1	148	373			
130	13	1	3	1	148		324	697	7.77%
22	1				23	164			
26	2		1		29		154	318	3.55%
223	13		8	7	251	1007			
214	21	2	6	7	250		810	1817	20.25%
11	2				13	111			
7	1				8		94	205	2.29%
2			1		3	59			
2					2		41	100	1.11%
1			1		2	33			
							28	61	0.68%
						13			
	1				1		22	35	0.39%
237	15		10	7	269	1223			
223	23	2	6	7	261		995	2218	24.72%
1					1	56			
							58	114	1.27%
						49			
							52	101	1.13%
						80			
							93	173	1.93%
						110			
							142	252	2.81%
						105			
							156	261	2.91%
						130			
							159	289	3.22%
						161			
							162	323	3.60%
						191			
							162	353	3.93%
						244			
							224	468	5.21%
						290			
							239	529	5.89%
						317			
							253	570	6.35%
						337			
							260	597	6.65%
						411			
							324	735	8.19%
						610			
							660	1270	14.15%
						271			
							378	649	7.23%
						19			
							54	73	0.81%
1					1	3381			
							3376	6757	75.28%
238	15		10	7	270	4604			
223	23	2	6	7	261		4371	8975	100.00%

TABLE XV.
DEATHS BY AGES, NATIONALITIES AND MONTHS, FOR 1933.

Nationalities:	French-Canadians		British-Canadians		Jews		Other nationalities		Unknown		Grand total	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
January:												
Under 5 years.....	168	31.28	17	9.09	2	7.69	16	30.77	.....	.....	203	25.28
Over 5 years.....	369	68.72	170	90.91	24	92.31	36	69.23	1	100.00	600	74.72
Total.....	537	100.00	187	100.00	26	100.00	52	100.00	1	100.00	803	100.00
February:												
Under 5 years.....	135	25.96	23	15.97	5	15.15	16	36.36	.....	.....	182	24.46
Over 5 years.....	385	74.04	121	84.03	28	84.85	28	63.64	3	100.00	562	75.54
Total.....	520	100.00	144	100.00	33	100.00	44	100.00	3	100.00	744	100.00
March:												
Under 5 years.....	154	28.26	24	13.04	1	4.00	18	35.29	.....	.....	200	24.75
Over 5 years.....	391	71.74	160	86.96	24	96.00	33	64.71	3	100.00	608	75.25
Total.....	545	100.00	184	100.00	25	100.00	51	100.00	3	100.00	808	100.00
April:												
Under 5 years.....	180	31.85	18	11.04	1	4.35	10	23.26	.....	.....	212	26.60
Over 5 years.....	385	68.15	145	88.96	22	95.65	33	76.74	3	100.00	585	73.40
Total.....	565	100.00	163	100.00	23	100.00	43	100.00	3	100.00	797	100.00
May:												
Under 5 years.....	185	31.62	18	12.00	4	16.67	6	11.54	.....	.....	214	26.32
Over 5 years.....	400	68.38	132	88.00	20	83.33	46	88.46	1	100.00	598	73.68
Total.....	585	100.00	150	100.00	24	100.00	52	100.00	1	100.00	812	100.00
June:												
Under 5 years.....	175	31.47	17	9.94	3	9.37	8	16.33	.....	.....	207	25.46
Over 5 years.....	381	68.53	154	90.06	29	90.63	41	83.67	4	80.00	606	74.54
Total.....	556	100.00	171	100.00	32	100.00	49	100.00	5	100.00	813	100.00
July:												
Under 5 years.....	108	25.06	18	12.25	3	10.00	7	16.28	.....	.....	138	21.07
Over 5 years.....	323	74.94	129	87.75	27	90.00	36	83.72	2	50.00	517	78.93
Total.....	431	100.00	147	100.00	30	100.00	43	100.00	4	100.00	655	100.00

TABLE XV.
DEATHS BY AGES, NATIONALITIES AND MONTHS, FOR 1933—(Continued).

Nationalities:	French-Canadians		British-Canadians		Jews		Other nationalities		Unknown		Grand total	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
August:												
Under 5 years.....	134	29.45	22	14.76	5	16.13	11	28.95	2	66.67	174	25.74
Over 5 years.....	321	70.55	127	85.24	26	83.87	27	71.05	1	33.33	502	74.26
Total.....	455	100.00	149	100.00	31	100.00	38	100.00	3	100.00	676	100.00
September:												
Under 5 years.....	164	32.28	15	11.62	5	18.52	17	37.78	1	100.00	202	28.45
Over 5 years.....	344	67.72	114	88.38	22	81.48	28	62.22	.....	.....	508	71.55
Total.....	508	100.00	129	100.00	27	100.00	45	100.00	1	100.00	710	100.00
October:												
Under 5 years.....	143	27.99	25	16.13	4	12.12	7	18.92	.....	.....	179	24.32
Over 5 years.....	368	72.01	130	83.87	29	87.88	30	81.08	.....	.....	557	75.68
Total.....	511	100.00	155	100.00	33	100.00	37	100.00	.....	.....	736	100.00
November:												
Under 5 years.....	115	24.84	15	8.67	2	6.89	10	31.25	1	100.00	143	20.49
Over 5 years.....	348	75.16	158	91.33	27	93.11	22	68.75	.....	.....	555	79.51
Total.....	463	100.00	173	100.00	29	100.00	32	100.00	1	100.00	698	100.00
December:												
Under 5 years.....	137	27.68	13	8.03	5	17.24	8	22.22	1	100.00	164	22.68
Over 5 years.....	358	72.32	149	91.97	24	82.76	28	77.78	.....	.....	559	77.32
Total.....	495	100.00	162	100.00	29	100.00	36	100.00	1	100.00	723	100.00
Total:												
Under 5 years.....	1798	29.14	225	11.76	40	11.73	134	25.67	21	80.77	2218	24.72
Over 5 years.....	4373	70.86	1689	88.24	302	88.27	388	74.33	5	19.23	6757	75.28
Grand total.....	6171	100.00	1914	100.00	342	100.00	522	100.00	26	100.00	8975	100.00

DEATHS BY CIVIL STAT

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
Ahuntsic-Bordeaux.....	15	6	2	5	30	3	16
Bourget.....	44	25	12	4	29	4	28
Crémazie.....	21	5	6	2	35	1	17
Delorimier.....	60	11	16	10	62	6	37
Hochelaga.....	33	10	17	12	31	5	21
Lafontaine.....	13	2	.....	2	14	.....	5
Laurier.....	12	3	3	4	27	.....	11
Maisonneuve.....	40	13	16	8	42	4	24
Mercier.....	39	12	10	6	29	.....	21
Montcalm.....	36	2	12	7	27	1	10
Mount Royal.....	13	2	3	.....	11	.....	9
Notre-Dame de Grâces.....	28	2	10	9	51	1	32
Papineau.....	39	6	10	6	26	4	18
Préfontaine.....	37	12	13	8	30	.....	20
Rosemount.....	66	15	28	17	73	3	37
St. Andrew.....	13	2	1	2	28	1	26
St. Ann.....	19	3	9	3	21	4	12
St. Cunégonde.....	31	13	11	10	20	4	18
St. Denis.....	26	7	10	6	39	4	34
St. Edward.....	49	14	14	10	46	3	24
St. Eusèbe.....	34	9	11	6	35	.....	15
St. Gabriel.....	44	7	9	3	36	4	26
St. George.....	13	1	1	.....	19	3	20
St. Henry.....	56	10	16	13	42	4	29
St. James.....	49	6	10	4	40	6	36
St. John.....	30	13	16	6	37	1	25
St. Jean Baptiste.....	39	7	18	6	38	4	21
St. Joseph.....	15	2	8	4	17	1	13
St. Lawrence.....	21	6	5	3	30	4	33
St. Louis.....	19	6	4	4	42	2	25
St. Mary.....	39	11	8	8	21	1	16
St. Michael.....	12	.....	4	3	26	.....	17
St. Paul.....	54	16	17	8	37	3	18
Ville Marie.....	15	1	6	1	13	1	12
Villeray.....	81	15	43	12	66	6	51
Unknown.....	21	.....	1	1	1	.....	3
Institutions.....	323	43	21	2	5	2	61
Total.....	1499	318	401	215	1176	90	841

D BY WARDS, IN 1933.

50 to 69 years			70 years and over				Total				Grand total
Widowed	Single	Unknown	Married	Widowed	Single	Unknown	Married	Widowed	Single	Unknown	
9	2	.....	16	15	4	.....	78	27	50	.....	155
21	9	.....	24	30	8	.....	96	55	130	.....	281
11	7	1	9	16	2	.....	66	28	60	2	153
24	6	.....	39	55	5	1	191	85	145	1	422
11	6	.....	12	15	5	.....	82	31	104	.....	217
3	3	.....	8	17	1	.....	29	20	23	.....	75
9	8	.....	19	26	3	.....	84	35	44	.....	163
14	7	.....	24	29	5	.....	121	47	113	.....	281
13	1	.....	13	28	1	.....	81	41	90	.....	212
10	4	.....	9	14	1	.....	70	25	72	.....	167
9	5	.....	6	20	2	.....	39	29	34	.....	102
32	13	.....	36	70	6	.....	168	103	100	2	373
11	6	.....	15	28	7	.....	88	43	92	.....	223
2	.....	.....	21	11	2	.....	81	13	92	.....	186
19	.....	.....	24	43	4	.....	181	65	167	.....	413
15	20	.....	17	37	27	.....	102	53	91	.....	246
11	11	2	12	19	5	.....	71	34	62	2	169
18	9	.....	19	21	5	1	76	43	97	1	217
11	10	.....	23	33	5	.....	114	48	98	.....	260
22	9	.....	25	44	4	.....	125	69	124	.....	318
9	6	.....	10	23	4	.....	76	32	85	.....	193
16	5	.....	15	34	4	.....	84	54	98	.....	236
11	27	2	6	17	6	.....	56	31	68	3	158
22	4	.....	23	30	3	.....	115	56	131	.....	302
9	12	1	23	33	11	.....	106	48	128	1	283
12	4	1	16	24	2	.....	99	37	96	1	233
20	7	.....	24	48	5	.....	115	72	103	.....	290
12	10	.....	4	15	4	.....	53	28	56	.....	137
16	16	.....	6	20	3	.....	73	40	87	2	202
21	10	.....	18	39	5	.....	115	62	73	1	251
16	5	.....	12	23	2	.....	57	40	89	.....	186
14	7	.....	16	24	2	.....	80	38	45	.....	163
14	1	.....	25	29	2	.....	108	46	116	.....	270
7	13	.....	8	12	3	.....	42	20	51	.....	113
40	4	.....	31	59	3	.....	203	105	209	.....	517
3	3	2	1	5	4	.....	5	8	33	5	51
17	53	2	16	92	100	1	34	111	603	6	754
534	323	11	625	1098	265	4	3364	1722	3862	27	8975

DEATHS OF CHILDREN UNDER FIVE YEARS BY SEXES AND

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.....	155	10	11	21	13.5	2	...
Bourget.....	281	44	25	69	24.6	7	...
Crémazie.....	156	15	11	26	16.7	4	...
Delorimier.....	422	36	35	71	16.8	10	...
Hochelaga.....	217	22	21	43	19.8	8	...
Lafontaine.....	75	10	5	15	20.0	...	...
Laurier.....	163	10	5	15	9.2	1	...
Maisonneuve.....	281	28	25	53	18.8	9	...
Mercier.....	212	26	25	51	23.5	5	...
Montcalm.....	167	23	15	38	22.7	7	...
Mount Royal.....	102	7	8	15	14.7	3	...
Notre-Dame de Grâces.....	373	19	11	30	8.0	3	...
Papineau.....	223	26	19	45	20.1	7	...
Préfontaine.....	186	30	19	49	26.3	9	...
Rosemount.....	413	46	35	81	19.6	14	...
St. Andrew.....	246	8	7	15	6.0	1	...
St. Ann.....	169	16	6	22	13.0	3	...
Ste. Cunégonde.....	217	27	17	44	20.2	8	...
St. Denis.....	260	15	18	33	12.6	6	...
St. Edward.....	318	38	25	63	19.8	6	...
St. Eusèbe.....	193	24	19	43	22.2	5	...
St. Gabriel.....	236	27	24	51	21.6	7	...
St. George.....	158	5	9	14	8.8	...	...
St. Henry.....	302	31	35	66	21.8	7	...
St. James.....	283	33	22	55	19.4	4	...
St. John.....	233	25	18	43	18.4	9	...
St. Jean Baptiste.....	290	22	24	46	15.8	12	...
St. Joseph.....	137	10	7	17	12.4	5	...
St. Lawrence.....	202	17	10	27	13.3	4	...
St. Louis.....	251	11	14	25	9.9	1	...
St. Mary.....	186	31	19	50	26.8	3	...
St. Michael.....	163	10	2	12	7.3	3	...
St. Paul.....	270	41	29	70	25.9	8	...
Ville Marie.....	113	12	4	16	14.1	3	...
Villeray.....	517	57	39	96	18.5	18	...
Unknown.....	51	11	10	21	41.1	1	...
Institutions.....	754	184	182	366	48.5	13	...
Total.....	8975	1007	810	1817	20.2	216	...

MPARED TO THE TOTAL OF DEATHS

DS, IN 1933.

DEATHS

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		
1.9	12	11	23	14.9	64	68	132	84.5
4.3	51	30	81	28.8	103	97	200	71.2
3.8	19	13	32	20.5	76	48	124	79.5
3.7	46	41	87	20.6	154	181	335	79.3
7.8	30	30	60	27.6	85	72	157	52.9
.....	10	5	15	20.0	29	31	60	80.0
1.8	11	7	18	11.0	73	72	145	88.9
5.6	37	32	69	24.5	113	99	212	75.4
4.7	31	30	61	28.7	66	85	151	71.2
7.1	30	20	50	29.9	53	64	117	70.0
2.9	10	8	18	17.6	36	48	84	82.3
2.6	22	18	40	10.7	168	165	333	89.2
4.4	33	22	55	24.6	79	89	168	75.3
6.9	39	23	62	33.3	62	62	124	66.6
6.7	60	49	109	26.3	147	157	304	73.6
0.4	9	7	16	6.5	107	123	230	93.4
5.3	19	12	31	12.4	82	56	138	81.6
5.0	35	20	55	25.3	79	83	162	74.6
3.8	21	22	43	16.5	99	118	217	83.4
4.4	44	33	77	24.2	112	129	241	75.7
5.6	29	25	54	27.9	71	68	139	72.0
3.8	34	26	60	21.1	84	92	176	74.5
0.0	5	10	15	9.4	87	56	143	90.5
5.2	38	44	82	27.1	109	111	220	72.8
3.5	37	28	65	22.9	109	109	218	77.0
6.8	34	25	59	25.3	105	69	174	74.6
6.2	34	30	64	22.0	115	111	226	77.9
5.8	15	10	25	18.2	54	58	112	81.7
2.4	21	11	32	15.8	111	59	170	84.1
1.5	12	17	29	11.5	116	106	222	88.4
4.3	34	24	58	31.1	62	66	128	68.8
2.4	13	3	16	9.8	72	75	147	90.1
6.2	49	38	87	32.2	87	96	183	67.7
5.3	15	7	22	19.4	55	36	91	80.5
8.3	75	64	139	26.8	183	195	378	73.1
1.9	12	10	22	43.1	27	2	29	56.8
2.7	197	190	387	51.3	147	220	367	44.6
4.4	1223	995	2218	24.7	3381	3376	6757	75.2

DEATHS BY CERTAIN

WARDS	Typhoid fever	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Tuberculosis, pulmonary	Tuberculosis, other forms	Other contagious diseases
Ahuntsic-Bordeaux.....	1			1		2	11	4	3
Bourget.....				7		3	18	4	2
Crémazie.....					1		24	1	7
Delorimier.....	2		4	2	1	3	39	4	5
Hochelaga.....				5		5	16	6	2
Lafontaine.....							4		
Laurier.....				1		4	11	1	1
Maisonneuve.....	1		3	5	3	7	21	3	3
Mercier.....	1			2	1	6	17	4	2
Montcalm.....			1		1	2	7	1	3
Mount Royal.....				1			4	1	
Notre-Dame de Grâces.....	1		1	4		4	17	4	3
Papineau.....			1	3		1	15	4	2
Préfontaine.....	2			3		3	14	2	5
Rosemount.....			2	9	1	4	41	12	3
St. Andrew.....						1	13	7	3
St. Ann.....	1		1	2		1	10	1	2
St. Cunégonde.....				2	2	3	16	3	2
St. Denis.....	2			2		4	22	6	5
St. Edward.....	1		2		1	3	25	7	5
St. Eusèbe.....	1		3	4		1	11	3	3
St. Gabriel.....			2	1	1	3	16	3	4
St. George.....			1			1	17	2	4
St. Henry.....				1		3	17	4	5
St. James.....				1		3	28	4	9
St. John.....			1	1	1	2	19	6	3
St. Jean Baptiste.....	2		1	2	1	4	22	4	1
St. Joseph.....				1	1		10	2	1
St. Lawrence.....						1	39	3	5
St. Louis.....				2	1	1	24	3	3
St. Mary.....			1	2		1	17	3	
St. Michael.....							14		1
St. Paul.....	1	1		2		5	11	8	1
Ville Marie.....		1		1			14	3	1
Villeray.....			2	4	2	6	38	11	5
Unknown.....							3		
Institutions.....	15					21	25	7	39
Total.....	31	2	26	71	18	108	670	141	143

VIII.

SEASES, BY WARDS, IN 1933.

Cerebral hemorrhage	Endocarditis and myocarditis	Pneumonia	Enteritis	Nephritis	Puerperal state	Diseases of early infancy	Deaths by violence			Other diseases	Total
							Suicide	Homicide	Others		
4	18	5	5	16	.....	10	.....	1	7	45	155
5	28	6	25	37	2	21	.....	.....	10	77	281
.....	18	4	5	7	.....	11	4	.....	8	44	156
5	45	8	22	56	4	32	.....	.....	18	109	422
1	20	10	12	16	3	13	1	.....	9	78	217
5	12	3	3	7	.....	10	.....	.....	5	18	75
4	24	8	3	16	1	8	5	.....	3	54	163
3	27	8	11	32	4	19	1	.....	8	86	281
2	23	7	6	11	3	16	2	1	7	81	212
7	12	10	15	13	3	16	2	.....	3	48	167
.....	12	7	.....	11	.....	8	3	1	5	34	102
8	53	17	5	24	1	14	2	3	21	139	373
3	27	2	17	22	3	21	.....	.....	11	59	223
5	12	6	12	11	6	22	1	.....	7	54	186
8	38	18	23	34	2	30	2	1	17	123	413
5	35	10	6	22	1	6	3	.....	6	90	246
4	16	8	6	15	2	9	1	1	10	58	169
4	31	10	16	22	3	16	.....	.....	14	52	217
6	32	9	15	36	5	9	.....	.....	9	64	260
8	33	11	19	36	5	22	1	.....	5	91	318
3	22	5	14	24	1	17	1	.....	9	52	193
4	26	12	21	14	7	18	1	.....	9	60	236
2	16	2	1	16	4	5	4	.....	8	54	158
10	24	6	29	29	4	25	2	.....	21	88	302
.....	31	4	18	31	1	21	1	1	5	96	283
3	24	9	15	21	.....	12	1	1	11	68	233
9	33	6	18	31	.....	21	.....	1	11	77	290
3	20	6	1	17	3	7	1	.....	8	36	137
3	17	4	5	13	4	11	5	.....	4	57	202
5	30	5	9	15	1	7	3	.....	10	92	251
1	21	4	18	17	2	13	1	.....	6	62	186
4	20	6	1	12	1	6	1	.....	10	57	163
8	21	14	21	26	.....	25	1	.....	8	84	270
.....	11	3	4	16	.....	6	2	.....	4	32	113
7	61	14	21	61	16	45	.....	.....	18	154	517
.....	3	.....	2	2	.....	10	.....	9	5	16	51
4	67	38	158	35	.....	66	2	.....	3	220	754
153	963	305	582	824	92	628	54	20	333	2709	8975

TABLE XIX.
DEATHS BY AGES, QUARTERS OR SEASONS, IN 1933.

AGES	1st quarter (Winter)			2nd quarter (Spring)			3rd quarter (Summer)			4th quarter (Autumn)			Total for year				
	January	February	March	Total 1st quarter	April	May	June	Total 2nd quarter	July	August	September	Total 3rd quarter		October	November	December	Total 4th quarter
From 0 to 1 month.....	90	79	82	251	57	70	78	205	57	52	64	173	59	64	50	173	802
From 1 month to 6 months...	49	45	52	146	60	69	74	203	46	54	87	187	71	34	56	161	697
From 6 months to 1 year.....	24	31	24	79	46	37	24	107	14	34	22	70	23	21	18	62	318
From 1 year to 2 years.....	19	13	21	53	32	16	19	67	11	15	16	42	11	10	22	43	205
From 2 years to 3 years.....	13	4	8	25	9	11	8	28	4	8	9	21	6	10	10	26	100
From 3 years to 4 years.....	6	4	8	18	3	8	2	13	5	7	3	15	8	.....	7	15	61
From 4 years to 5 years.....	2	6	5	13	5	3	2	10	1	4	1	6	1	4	1	6	35
Total under 5 years.....	203	182	200	585	212	214	207	633	138	174	202	514	179	143	164	486	2218
Over 5 years.....	600	562	608	1770	585	598	606	1789	517	502	508	1527	557	555	559	1671	6757
Grand to'al.....	803	744	808	2355	797	812	813	2422	655	676	710	2041	736	698	723	2157	8975

TABLE XX.

DEATHS FROM CONTAGIOUS DISEASES. BY MONTHS, YEAR 1933.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid fever.....	1	.....	1	.....	.....	3	2	8	9	3	1	3	31
Paratyphoid.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Small-pox.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles.....	.....	.....	.....	2	.....	1	.....	.....	.....	1	.....	.....	2
Scarlet fever.....	3	2	3	.....	.....	.....	.....	2	1	2	2	8	26
Diphtheria.....	3	.....	3	1	2	1	1	1	1	2	1	2	18
Whooping cough.....	11	10	10	4	2	3	.....	13	6	4	4	.....	71
Meningitis C. S.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	3
Erysipelas.....	.....	3	3	4	4	6	.....	1	2	2	3	4	32
Polomyelitis.....	.....	.....	.....	.....	.....	.....	.....	2	2	2	.....	.....	6
Mumps.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Varicella.....	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	4
German measles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis of the lungs.....	70	59	53	68	63	66	63	40	50	50	48	40	670
Tuberculosis, other forms.....	9	8	9	16	18	17	10	13	12	10	7	12	141
Enteritis.....	30	29	31	47	59	58	48	69	82	65	30	34	582
Influenza.....	26	13	13	20	4	8	.....	3	5	5	6	5	108
Total.....	155	124	127	164	154	164	125	152	170	146	102	112	1695

TABLE XXI.

DEATHS FROM CERTAIN DISEASES

Average number and proportion per 100,000 population for each period of 5 years, from 1876 to 1933.

Periods of years	(*)	Typhoid	Smallpox	Whooping cough	Scarlet fever	Diphtheria	Tuberculosis		Cancer	Diarrhoea	Bright's disease
							Pulmonary	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	.....
	Rate	31.7	1.0	23.7	24.4	31.0	214.7	57.0	63.1	373.0	43
1906-1910	No	156	.....	85	67	114	683	186	247	1822	.....
	Rate	40.0	.....	21.8	17.2	29.3	175.3	47.7	63.4	467.6	55
1911-1915	No	108	1	66	90	157	969	183	341	2249	.....
	Rate	21.9	0.2	13.4	18.2	31.8	176.2	37.1	69.1	455.9	88
1916-1920	No	89	1	63	69	174	929	194	422	1844	.....
	Rate	16.1	0.2	11.4	12.5	31.5	168.4	35.2	76.5	334.3	90
1921-1925	No	55	.....	45	78	134	785	165	532	1382	.....
	Rate	8.4	.....	6.9	11.9	20.4	119.6	25.2	81.1	210.7	90
1926-1930	No	139	.....	37	46	143	798	157	681	1028	.....
	Rate	18.4	.....	4.9	6.1	18.9	105.7	20.8	90.2	136.2	90
1930	No	41	.....	21	41	83	806	177	806	1065	.....
	Rate	5.1	.....	2.6	5.1	10.4	101.2	22.2	101.2	133.7	88
1931	No	32	.....	30	20	71	766	121	852	974	.....
	Rate	3.9	.....	3.7	2.4	8.7	93.6	14.8	104.1	119.0	90
1932	No	37	.....	47	24	53	722	112	853	731	.....
	Rate	4.4	.....	5.6	2.9	6.4	86.7	13.4	102.4	87.8	100
1933	No	31	.....	2	26	18	670	141	931	582	.....
	Rate	3.7	.....	0.2	3.1	2.1	79.1	16.6	109.9	68.7	90

(*) 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 1933.

Population	541,233	184,646	50,396	70,725	847,000
Causes of death	French- Canadians	English- Canadians	Jews	Other nationalities or Unknown	Total
Typhoid.....	26—83.9%	5—16.1%	.....	.....	31—100.0%
Measles.....	2—100.0%	.....	.....	.....	2—100.0%
S-arlatina.....	18—69.2%	6—23.1%	.....	2—7.7%	26—100.0%
Whooping cough.....	61—85.9%	7—9.9%	.....	3—4.2%	71—100.0%
Diphtheria.....	13—72.2%	3—16.7%	.....	2—11.1%	18—100.0%
Influenza.....	86—79.6%	14—13.0%	1—0.9%	7—6.5%	108—100.0%
Tuberculosis, pulmonary.....	443—66.1%	123—18.4%	22—3.3%	82—12.2%	670—100.0%
Tuberculosis, other forms.....	106—75.1%	15—10.7%	1—0.7%	19—13.5%	141—100.0%
Other contagious diseases.....	99—69.2%	33—23.1%	2—1.4%	9—6.3%	143—100.0%
Cancer.....	563—60.5%	265—28.5%	56—6.0%	47—5.0%	931—100.0%
Diabetes.....	119—69.5%	35—20.5%	12—7.0%	5—3.0%	171—100.0%
Cerebral hemorrhage.....	143—65.5%	51—23.4%	18—8.3%	6—2.7%	218—100.0%
Endocarditis and myocarditis, acute and chronic.....	883—64.7%	351—25.8%	80—6.0%	49—3.5%	1363—100.0%
Pneumonia.....	449—69.7%	136—21.1%	21—3.3%	38—5.9%	644—100.0%
Enteritis.....	495—85.1%	47—8.0%	9—1.6%	31—5.3%	582—100.0%
Nephritis.....	635—77.0%	146—17.7%	11—1.4%	32—3.9%	824—100.0%
Diseases of early infancy.....	621—79.4%	92—11.8%	17—2.2%	52—6.6%	782—100.0%
Accidents.....	205—61.6%	80—24.0%	20—6.0%	28—8.4%	333—100.0%
Total.....	4967—70.3%	1409—20.0%	270—3.8%	412—5.9%	7058—100.0%
Other causes of death.....	1204—62.8%	505—26.3%	72—3.8%	136—7.1%	1917—100.0%
Grand total.....	6171—68.5%	1914—21.4%	342—3.9%	548—6.2%	8975—100.0%

CLASSIFICATION OF DEATHS BY CAUSE

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.....					7	19					11	
Measles.....		1		1								
Scarlet fever.....	1		5	8		4			1	2	11	
Whooping-cough.....	23	19	9	7	1	2	2	3		2		
Diphtheria.....	1		5	6		1			2			
Grippe and influenza.....	12	19	5	6	18	26	1	3	2	2	11	
Tuberculosis, all forms.....	5	4	19	11	227	283		1	2	3	755	
Syphilis.....	21	24		1	12	4		3		1	65	
Other infectuous and parasitic diseases.....	6	9	3	6	9	4	2	4			77	
Cancer and malignant tumors.....		2	1	1	225	334			1		1222	
Diabetis.....					47	72					99	
Other tumors and other general diseases.....	4	1	6	3	32	59	2	3			144	
Diseases of the nervous system.....	21	20	8	14	107	110	1	3		1	411	
Diseases of the circulatory system.....	2		2	1	579	538		1			2588	
Diseases of the respiratory system.....	121	91	55	47	126	126	12	12	5	5	685	
Diseases of the digestive system.....	241	192	32	21	169	154	21	14	3	4	621	
Diseases of the genito-urinary system.....	3		2		327	379			1		785	
The puerperal state.....						67						
Diseases of the skin and cellular tissue.....	7	11	1	3	9	4		1			55	
Congenital malformation and early infancy.....	374	241	4	2			43	48			11	
Old age.....					11	30					77	
Violent and accidental deaths.....	3	2	14	7	159	42	1	2	4	1	711	
Ill-defined causes of deaths.....		1			40	10					200	
Total	845	637	171	145	2105	2268	85	98	21	21	8477	

II a

ES, SEX AND NATIONALITIES, IN 1933.

Jews					Other nationalities or unknown						Total			
Mar	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	F	M	F	M	F	M	F			
.....												8	23	31
.....												.....	2	2
.....							1				1	8	18	26
.....							3					35	36	71
.....									1		1	8	10	18
.....				1		2	1	1		1	2	44	64	108
.....			1	13	9			3	4	70	24	414	397	811
.....						3				3		45	36	81
1				1		1		1		1		31	31	62
.....				28	28					1	27	404	527	931
.....				7	5						4	67	104	171
.....			1	3	4	1		2		10	5	74	98	172
.....				12	14		1	1	2	15	4	206	214	420
.....				51	43					49	18	941	863	1804
3	1			6	16	11	10	3	3	12	5	421	381	802
4	3			4	12	14	13	1	2	22	7	574	468	1042
.....			1	8	6		1			22	14	441	496	937
.....					2						8	.....	92	92
.....				2	2	1				2	1	27	23	50
8						28	24					459	323	782
.....				1						1	1	20	45	65
...	4	1	16	5		4	5	4	2	25	8	305	102	407
.....			3							9	1	72	18	90
16	8	4	156	146		65	59	16	15	273	120	4604	4371	8975

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:												
Tuberculosis of the lungs...	1		1		15	24			1		15	
Tuberculosis, other forms...					5	1				1		
Other infectious and parasitic diseases.....	2		2	1	4	5			2		6	
II—Cancers and other tumors.....					36	42					27	
III—Rheumatismal diseases, etc.....					4	7		1			5	
IV—Diseases of the blood, etc.....					1							
V—Chronic poisoning, etc.....												
VI—Diseases of the nervous system.....	2				11	3				1	7	
VII—Diseases of the circulatory system.....				1	21	11					26	
VIII—Diseases of the respiratory system.....		1	2	2	7	6			2		9	
IX—Diseases of the digestive system.....	3	6	1	1	35	18	1	1	1	1	26	
X—Diseases of the genito-urinary system.....					34	25					20	
XI—The puerperal state.....						3						
XII—Diseases of the skin, etc.....					2	1						
XIII—Diseases of the bones.....			1		1							
XIV—Congenital malformation.....	2	1			1		3	2		1		
XV—Diseases of the early infancy.....	6	9					7	6				
XVI—Old age.....											2	
XVII—Violent and accidental deaths.....	1	1		1	26	5					18	
XVIII—Ill-defined causes of deaths.....					3	1					1	
Total.....	17	18	7	6	206	152	11	10	6	4	162	

Number of permits issued for removal:

Men..... 771

Women..... 715

Number of permits issued to enter..... 664

III.

MONTREAL, IN 1933.

Jews					Other nationalities						Total		
0 to year	1 to 5 years		Over 5 years		0 to 1 year	1 to 5 years		Over 5 years			M	F	Grand total
F	M	F	M	F	M	F	M	F	M	F			
				1				4	1		37	31	68
									1		5	7	12
		1			1			1			18	11	29
			1	2					2		64	67	131
				1							9	12	21
											1	3	4
			1								21	7	28
			3	1					1		50	29	79
		1	1	1							21	19	40
	1		1			1		2	1		71	50	121
			1	1					1		55	35	90
												5	5
			1								3	1	4
			1								3		3
											6	4	10
											14	15	29
											2		2
			2	1				2			49	13	62
			1								5	1	6
	1	2	13	8	1	1			9	7	434	310	744

KIV.

O THE INTERNATIONAL NOMENCLATURE

d ages.

	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
	F	M	F	M	F	M	F	M	F	M	F	M	F
1	5	1	4	1	2	1	1	2	2	1			1
2													2
3													3
4													4
5													5
6													6
a)													a)
b)													b)
c)													c)
7													7
8			1	1				1					8
9	1												9
10						1							10
11													11
a)				2	1	1	3	1	1	1	3	2	a)
b)					1		1		2		1		b)
12									2		1		12
13													13
a)									1				a)
b)													b)
c)										1			c)
14											1		14
a)													a)
b)													b)
c)													c)
d)													d)
15			1			1	3			1	1		15
16													16
17													17
18													18
19													19
20													20
21													21
22	59	32	53	45	44	37	31	34	23	40	14	35	22
23													23
24	3	1	2	1			2		1		1		24
25													25
26	4	4	2		3				1	1	2	2	26
27			1	1		1	1						27
28									1				28

KIV.

TO THE INTERNATIONAL NOMENCLATURE and ages—(Continued)

0 to 4 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												
F	M	F	M	F	M	F	M	F	M	F	M	F													
	1							1					23												
		1		1		1		1			1		30 31												
1			1	1									a)												
			1	1									b)												
	1		1					1					c)												
													33												
													34												
				1		3	2	1		1			a)												
				1	1	3	1	1	3	1	1		b)												
													c)												
													35												
1			1		1			1			1		36												
		1						1					a)												
													b)												
													c)												
													37												
													38												
													a)												
													b)												
													39												
													40												
													41												
													a)												
													b)												
									1				42												
													43												
													44												
74	39	65	51	55	42	37	45	27	52	16	44	22	32	23	24	6	13	10	16	14	1	10	...	3	
	1					1	2	...	2	2	7	2	6	...	12	1	13	...	14	...	2	1	1	...	45
									1	...	3	3	4	1	3	2	4	...	1	2	2	46
			1	3	1	4	2	9	9	10	8	12	11	20	12	19	14	22	23	7	8	a)
			1	2	1	1	2	2	...	2	1	...	4	4	1	4	2	4	3	1	2	b)
		1	1		3	2	3	1	2	1	5	6	6	4	8	8	6	6	9	...	3	c)
			1							2	...	4	1	1	...	1	2	1	3	d)
								1	...								1	e)
																		1	f)
			3		3	3	5	1	11	8	5	11	8	11	9	8	12	12	17	2	5	1	1	...	g)
		1					2	...	2	1	3	2	11	1	1	2	3	1	3	1	...	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.....	123		123												
49	Cancer and malignant tumor: other female genital organs...	13		13												
50	Cancer and malignant tumor of the breast.....	86		86												
51	Cancer and malignant tumor of male genito-urinary organs...	45	45													
52	Cancer and malignant tumor of the skin.....	10	8	2												
53	Cancer and malignant tumor of other organs not stated.....	64	25	39		1	1	2	2	1	2		1	3		
54	Tumors (non-malignant):															
	a) female genital organs.....	23		23					1	1						
55	b) other organs.....	9	4	5												
	Tumors whose character is not specified:															
	a) female genital organs.....								1	1						
	b) other organs.....	9	5	4												
	Total.....	972	413	559		1	1	2	4	3	2		1	4		
III.—Rhumatic Diseases, Diseases of the Nutrition of Endocrin Glands and other General Diseases.																
56	Acute articular rhumatic fever.....	23	9	14			2	1	2	1	1	3	2	2		
57	Chronic rheumatism, osteoarthritis.....	14	4	10									1			
58	Gout.....															
59	Diabetes mellitus.....	171	67	104												
60	Scurvy:															
	a) infantile scurvy (Barlow's disease).....															
	b) scurvy.....															
61	Beriberi.....															
62	Pellagra.....															
63	Rickets.....															
64	Osteomalacie.....	1		1												
65	Disease of the pituitary gland (hypophysis).....															
66	Disease of the thyroid gland and parathyroid glands:															
	a) goitre.....	2	1	1												
	b) exophthalmic goitre.....	12	2	10			1							1		
	c) myxoedema and cretinism.....	4	1	3												
	d) tetany.....															
	e) others.....															
67	Diseases of the thymus.....	8	5	3	3	2	1		1	1						

[illegible]

TABLE
CLASSIFICATION OF DEATHS ACCORDING
By causes, sex

[illegible]

XIV.

ON THE INTERNATIONAL NOMENCLATURE

nd ages—(Continued)

[illegible]

XIV.

TO THE INTERNATIONAL NOMENCLATURE

nd 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													
F	M	F	M	F	M	F	M	F	M	F	M	F														
...	1	1	...	1	1	2	2	3	1	5	5	12	5	11	9	6	16	10	18	25	4	9	2	1	82 a)	
...	...	...	...	1	...	...	...	...	...	2	...	1	2	1	...	...	1	1	2	1	1	5	...	1	b)
...	2	3	6	1	1	4	1	2	...	1	4	3	2	9	15	5	3	...	1	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	83
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	84 a)
1	...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
1	1	...	...	1	1	...	1	2	...	...	...	...	...	...	...	...	1	...	2	...	1	...	...	...	85
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	86
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	87 a)
...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1	...	...	1	2	...	...	...	b)
...	1	1	...	1	...	1	...	...	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	d)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	e)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	88
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	1	...	...	...	89 a)
...	...	1	2	1	1	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
3	3	5	4	7	7	9	14	5	7	9	10	17	16	16	15	12	24	13	39	48	12	19	2	3		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	90
1	1	...	...	1	1	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...	91
4	7	7	7	11	7	8	10	8	6	15	12	11	12	19	12	10	22	13	29	51	18	15	...	1	92	
...	1	1	...	...	1	4	...	1	1	...	1	...	...	1	1	1	3	1	...	2	...	1	...	...	93 a)
1	...	3	2	2	8	6	5	8	15	13	23	8	24	16	30	29	40	46	72	90	47	71	3	7	b)	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	2	1	1	1	...	...	c)
...	1	2	3	...	2	2	9	1	15	2	22	10	15	8	30	8	28	8	31	20	11	4	...	2	94	
1	1	1	...	...	2	1	2	...	1	2	1	1	4	4	2	8	5	1	4	6	3	1	1	...	a)
...	...	2	1	...	1	...	1	3	6	5	8	3	7	3	6	3	13	5	12	15	7	7	...	...	b)
...	...	...	...	...	2	...	...	...	...	1	1	2	...	1	...	1	...	1	...	...	...	...	...	...	96
...	...	...	1	...	1	...	3	...	6	4	5	4	19	9	18	9	23	20	59	45	46	64	4	10	97
...	...	...	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1	1	...	2	3	5	...	1	98 a)
...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	1	...	1	1	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	99

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
100	Diseases of the veins: varix, hemorrhoids, phlebitis, etc....	5	4	1						
101	Diseases of the lymphatic system (lymphangitis, etc.).....	2	1	1		1	1			
102	Idiopathic anomalies of blood pressure.....	48	17	31						
103	Other diseases of the circulatory system.....	1		1						
	Total.....	1804	941	863	1	1	2	1	5	4
									6	5
										10
	VIII.—Diseases of the Respiratory System.									
104	Diseases of the nasal fossae and annexa.....	5	3	2						2
105	Diseases of the larynx.....	9	4	5	1	2		2	2	
106	Bronchitis:									
	a) acute.....	11	5	6		2	2	1	1	
	b) chronic.....	16	10	6						
	c) unstated.....									
107	Broncho-pneumonia, including capillary bronchitis.....	339	175	164	53	57	44	27	34	31
108	Lobar pneumonia.....	225	120	105	13	9	12	6	18	12
109	Pneumonia not specified.....	80	42	38	8	6	1	1	6	4
110	a) Pleurisy.....	19	15	4	2	1	1			1
111	b) Purulent pleurisy.....	25	11	14	2	1	2		3	5
112	Congestion, oedema, embolism, hemorrhagic infarct of lung..	46	24	22	3	2	1	1		1
113	Asthma.....	16	4	12			1			
114	Pulmonary emphysema.....	3	2	1					1	
	Other diseases of the respiratory system, except tuberculosis:									
	a) pneumonia, including occupational diseases of the lungs.....									
	b) others, including gangrene of the lung.....	8	6	2						
	Total.....	802	421	381	82	78	63	38	64	55
									7	9
									4	4
										7
	XI.—Diseases of the Digestive System.									
115	Diseases of the buccal cavity and annexa, including pharynx, tonsils and adenoids.....	22	14	8	2			6	1	1
116	Diseases of the oesophagus.....	2	1	1						
117	Ulcer of the stomach or duodenum:									
	a) stomach.....	34	22	12						
	b) duodenum.....	10	9	1						

XIV.

THE INTERNATIONAL NOMENCLATURE

d 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.....	20		20												
	b) uterus.....	7		7												
	c) mammae.....															
	d) others.....															
	Total.....	937	441	496	3		1	3	1	1	1	1	1			44
	XI.—The Puerperal State.															
140	Abortion, with septic conditions.....	17		17												
141	Abortion, without mention of septic conditions, including haemorrhages.....															
142	Ectopic gestation.....	2		2												
143	Other accidents of gestation (haemorrhages not included).....	2		2												
144	Puerperal haemorrhage:															
	a) placenta praevia.....	11		11												
	b) other haemorrhages.....	7		7												
145	Septicaemia and puerperal sepsis (not returned as result of abortion):															
	a) Puerperal septicaemia and puerperal pyaemia.....	22		22												
	b) puerperal tetanus.....															
146	Puerperal albuminuria and eclampsia.....	20		20												
147	Other forms of toxæmia of pregnancy.....	2		2												
148	Phlegmasia alba dolens, embolism or sudden death (not returned as septic):															
	a) phlegmasia alba dolens and thrombosis.....	1		1												
	b) embolism and sudden death.....	4		4												
149	Other accidents of pregnancy.....	4		4												
150	Other stated diseases or conditions not mentioned (puerperal state).....															
	Total.....	92		92												
	XII.—Diseases of the Skin and Cellular Tissue.															
151	Furunculosis.....	4	2	2	1	1										
152	Phlegmon.....	26	14	12	3	6	1	3					1	1		
153	Other diseases of the skin, annæa, and of the cellular tissue.....	8	3	5	2	1			1					1		
	Total.....	38	19	19	6	8	1	3	1				1	2		

XIV.

TO THE INTERNATIONAL NOMENCLATURE and ages—(Continued)

0 to 4 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	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		F
1		3		5		2		2		4		1				1											139
				1		2				2		1				1											a)
																											b)
																											c)
																											d)
5	3	9	11	16	15	16	13	17	28	35	25	39	30	45	51	42	71	57	133	133	44	70	3	6			
7		4		2		3		1																		140	
				1		1																				141	
																										142	
2																										143	
		2		4		3		2																		144	
		3		2				2																		a)	
																										b)	
																										145	
6		5		2		6		2																		a)	
																										b)	
2		5		6		2		4		1																146	
				1		1																				147	
																										148	
		1		2		1		1																		a)	
2		2																								b)	
																										149	
																										150	
19		22		20		17		12		1																	
	1			1		1		1		1		1		2		2			1	1						151	
																										152	
										1												1		1		153	
	1			1		2		1		2		1		2		2			1	1	1		1				

TABLE

CLASSIFICATION OF DEATHS ACCORDING TO CAUSES

By causes, sex, and age

[illegible]

KIV.

THE INTERNATIONAL NOMENCLATURE

d ages—(Continued)

rs	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	
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	163
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	164
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	165
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	166
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	167
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	168
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	169
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	170
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	171
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	172
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	a)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	b)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	173
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	174
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	175
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	176
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	177
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	178
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	179
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	180
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	181
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	182
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	183
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	184
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	185
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	186
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	186 1)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3a)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3b)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3c)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3d)
1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3e)

TABLE

CLASSIFICATION OF DEATHS ACCORDING

By causes, sex, and duration of illness

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
	3f) Accidental injury by aerial transportation.....	1	1													
187	Cataclysm.....															
188	Injury by animals.....															
189	Hunger or thirst.....	1	1													
190	Excessive cold.....	1	1													
191	Excessive heat.....	3	3		1											
192	Lightning.....															
193	Accidental injury by electric currents (lightning excepted)...	2	1	1												
194	Other accidents:															
	a) foreign body.....	1	1						1							
	b) others.....	3	3										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)...	1	1													
	Total.....	407	305	102	7	8	1	1	26	11	12	9	15	3	16	
	XVIII.—Ill-defined Causes of Death.															
199	Sudden death.....	87	69	18				1								
200	Cause of death unstated or not specified.....	3	3								1					
	Total.....	90	72	18				1			1					
	Total M.....		4604		843		164		216		56		49		80	
	Total F.....			4371		656		154		185		58		52		
	Grand total.....		8975		1499		318		401		114		101			
	Special classification for accidents															
	(included in above table)															
	Elevators.....	3	3													
	Other machines.....	6	6						2		2					
	Collision: Railroad and automobile.....	2	1	1												
	Collisions: Railroad and other vehicles.....															
	Other railroad accidents.....	10	9	1							1		1			
	Collisions: Tramways and automobile.....	4	3	1												
	Collisions: Tramways and other vehicles.....															
	Other tramway accidents.....	6	5	1												1
	Collisions: Automobile and automobile.....	7	5	2												
	Collisions: Automobile and other vehicles.....	2	2													
	Other automobile accidents.....	75	56	19					3	2	5	4	5			
	Motorcycle accidents.....	3	3													
	Total.....	118	93	25					5	2	8	4	6			4

[illegible]

METEOROLOGICAL SERVICE OF CANADA

Observations made at McGill Observatory

Longitude 75° 35' W

Month	Thermometer					*Barometer			
	† Mean	(a) Deviation from years means	Maximum	Minimum	Mean daily range	† Mean	Maximum	Minimum	
January.....	25.85	+12.32	45.3	- 5.3	15.59	29.936	30.70	29.16	0.0
February.....	21.79	+6.48	40.4	-11.7	15.60	29.899	30.54	29.34	0.0
March.....	26.30	+0.32	44.2	- 1.8	12.83	29.926	30.35	28.97	0.0
April.....	42.20	+1.24	67.2	26.2	14.19	29.951	30.54	29.35	0.0
May.....	56.99	+2.11	80.5	31.7	18.63	29.897	30.23	29.40	0.0
June.....	68.24	+3.68	93.5	45.0	18.54	29.855	30.11	29.30	0.0
July.....	69.66	+0.48	88.0	54.5	17.14	29.972	30.39	29.44	0.0
August.....	67.51	+0.88	87.6	54.0	15.77	29.982	30.38	29.39	0.0
September.....	60.83	+2.13	82.0	40.4	15.20	29.891	30.39	29.37	0.0
October.....	46.60	-0.13	67.2	19.2	12.43	30.076	30.65	29.52	0.0
November.....	25.33	-7.87	55.8	4.6	12.92	29.920	30.48	29.14	0.0
December.....	10.47	-9.11	37.1	-29.4	14.82	30.115	31.04	29.38	0.0
Means for 1933.....	43.48	+1.04	65.73	18.95	15.30	29.952	30.481	29.397	0.0
Means for 58 years ending Dec. 31st, 1933.....	42.44	.....	66.46	19.15	.....	29.980	.....	.....	0.0

*Barometer readings reduced to sea level and 32° F. †The monthly thermometer 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 59 years. ‡Humidity relative, saturation being 100. Means of readings every four hours from recording hygrometer. §For 52 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 93.5° (Fah.) above zero, on June 28th, the greatest cold was 29.4° below zero on December 29th. The extreme range of temperature was therefore 122.9 degrees.

ABSTRACT FOR YEAR 1933.

Montreal, Can. — Latitude 45° 30' N.

Eight 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
69.9			32.5	0.95	7	11.7	2.28	9	3	13
73.7			32.2	0.32	5	18.0	2.28	16	3	18
70.4			37.4	0.31	4	31.1	4.02	12	3	13
74.3			34.4	3.95	17	2.5	4.78	3	2	18
60.6			52.9	7.24	14		7.24			14
64.9			63.8	1.70	9		1.70			9
64.0			56.6	3.52	14		3.52			14
67.3			52.2	5.71	10		5.71			10
70.2			45.4	1.90	6		1.90			6
64.9			42.2	1.93	7	8.6	3.55	2	0	9
71.9			25.2	1.06	10	18.7	2.88	16	5	21
72.6			25.8	0.85	9	33.5	4.65	19	4	24
68.7			41.7	29.44		124.1	44.51	77	20	169
74.0			43.8	29.49		115.6	41.43	78	16	172

† The greatest temperature range in one day was 34.4 on January 19th; the least range was 2.6 on March 2nd. The warmest day was June 28th, when the mean temperature was 81.2 above zero. The coldest day was December 29th, when the mean temperature was 26.1 below zero, constituting a record. Fog on 11 days. Thunderstorms on 17 days. Lunar eclipses on 11 nights. Solar halos on 5 days. First trace of snow on October 24th. First appreciable snowfall on October 24th. First sleighing on October 24th. First zero weather on December 9th. The greatest rainfall in one day was 2.88 inches on August 24th.

THE HISTORY OF THE CITY OF BOSTON

FROM THE FIRST SETTLEMENT TO THE PRESENT TIME

BY SAMUEL JOHNSON

Year	Event
1630	First settlement of Boston
1634	First church organized
1636	First school established
1638	First public house
1640	First printing press
1642	First fire engine
1644	First hospital
1646	First library
1648	First newspaper
1650	First bank
1652	First college
1654	First shipyard
1656	First theatre
1658	First circus
1660	First fair
1662	First race
1664	First election
1666	First trial
1668	First execution
1670	First execution
1672	First execution
1674	First execution
1676	First execution
1678	First execution
1680	First execution
1682	First execution
1684	First execution
1686	First execution
1688	First execution
1690	First execution
1692	First execution
1694	First execution
1696	First execution
1698	First execution
1700	First execution
1702	First execution
1704	First execution
1706	First execution
1708	First execution
1710	First execution
1712	First execution
1714	First execution
1716	First execution
1718	First execution
1720	First execution
1722	First execution
1724	First execution
1726	First execution
1728	First execution
1730	First execution
1732	First execution
1734	First execution
1736	First execution
1738	First execution
1740	First execution
1742	First execution
1744	First execution
1746	First execution
1748	First execution
1750	First execution
1752	First execution
1754	First execution
1756	First execution
1758	First execution
1760	First execution
1762	First execution
1764	First execution
1766	First execution
1768	First execution
1770	First execution
1772	First execution
1774	First execution
1776	First execution
1778	First execution
1780	First execution
1782	First execution
1784	First execution
1786	First execution
1788	First execution
1790	First execution
1792	First execution
1794	First execution
1796	First execution
1798	First execution
1800	First execution
1802	First execution
1804	First execution
1806	First execution
1808	First execution
1810	First execution
1812	First execution
1814	First execution
1816	First execution
1818	First execution
1820	First execution
1822	First execution
1824	First execution
1826	First execution
1828	First execution
1830	First execution
1832	First execution
1834	First execution
1836	First execution
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1862	First execution
1864	First execution
1866	First execution
1868	First execution
1870	First execution
1872	First execution
1874	First execution
1876	First execution
1878	First execution
1880	First execution
1882	First execution
1884	First execution
1886	First execution
1888	First execution
1890	First execution
1892	First execution
1894	First execution
1896	First execution
1898	First execution
1900	First execution

THE HISTORY OF THE CITY OF BOSTON
FROM THE FIRST SETTLEMENT TO THE PRESENT TIME
BY SAMUEL JOHNSON



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1934

