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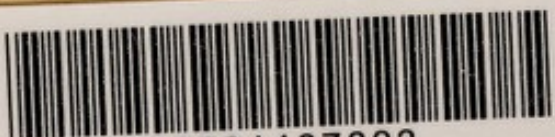
Report of the Department of Health

Year 1942

By DOCTOR AD. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A.
DIRECTOR



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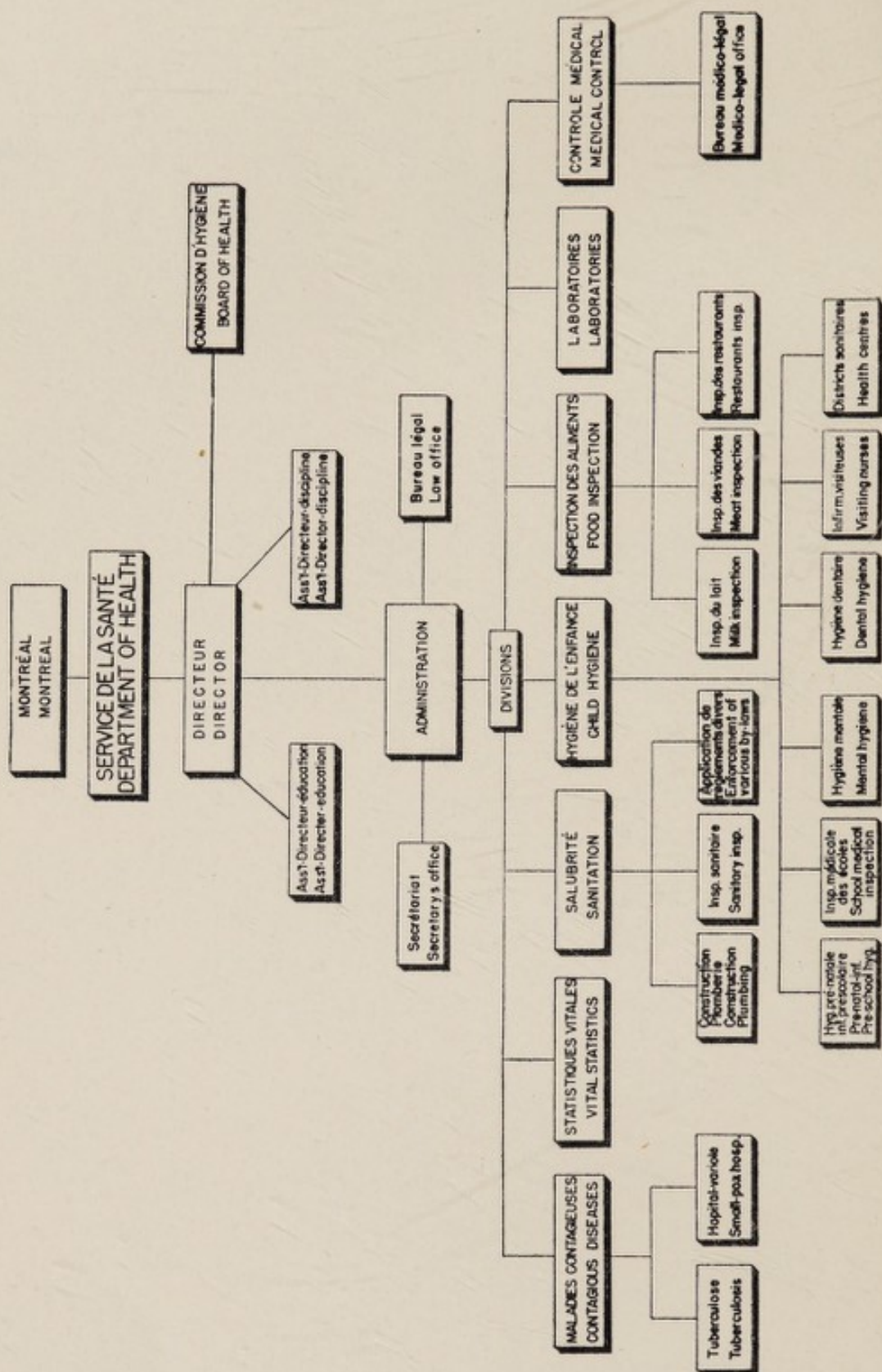


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Director of the Department of Health



CITY OF MONTREAL

Canada



Report of the Department of Health

Year 1942

By DOCTOR AD. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A.
DIRECTOR

CITY OF MONTREAL

Mayor:

His Worship Adhémar Raynault.

Executive Committee:

Councillor J. Omer Asselin, Chairman,
Councillor Geo. Marler, Acting Chairman,
Councillors Alfred Filion, R. F. Quinn, Geo. Guévremont and Aimé Parent,
members.

Board of Health:

His Worship Mayor Raynault, ex officio;
The Chairman of the Executive Committee, Councillor J. Omer Asselin,
ex officio;
The Director of the Department of Health, Dr. Adélar Groulx, ex officio;
Councillors Jessie K. Fisher, Dr. Z. H. Lesage, A. D. Quintin, Dr. Albert
LeSage, J. O. Taillefer;
Doctors Gaston Lapierre, Albéric Marin, A. Grant Fleming, J. R. Fraser,
L. P. Ereaux, Eudore Dubeau, D. P. Mowry;
Messrs. T. J. Lafrenière, R. de L. French, Kenneth Tyrrell.

Department of Health:

Dr. Adélar Groulx, M.P.H., F.R.S.I. (E.), F.A.P.H.A., Director;
Dr. Adrien Plouffe, Dr.P.H., Assistant Director;
Dr. Eug. Gagnon, Assistant Director;
Mr. L. de G. Sylvestre, Secretary in chief.

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STAFF OF THE DEPARTMENT OF HEALTH

Year 1942

DIRECTOR'S OFFICE:

Dr. AD. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A., Director,
 Dr. ADRIEN PLOUFFE, Dr.P.H., Assistant Director,
 Mr. AIME COUSINEAU,* Assistant Director and Sanitary Engineer,
 G. Ménard, lawyer,
 1 Secretary in chief,
 1 Office chief (general administration),
 1 Archivist,
 1 Clerk, 3rd grade,
 1 Clerk, 2nd grade,
 3 Stenographers,
 1 Messenger,
 1 Storekeeper in charge and 1 Clerk, 2nd grade.

DIVISION OF DEMOGRAPHY:

Dr. EUG. GAGNON,† Assistant Director and Demographer, Superintendent,
 1 Statistician (Doctor),
 4 Clerks, 2nd grade,
 4 Typist clerks.

DIVISION OF CONTAGIOUS DISEASES:

Dr. J. H. GERVAIS, D.P.H., Superintendent,
 Dr. C. F. BAYARD, Assistant Superintendent,
 1 Epidemiologist,
 1 Nurse (supervisor),
 3 Visiting nurses,
 3 Disinfectors,
 1 Clerk, 3rd grade,
 2 Clerks, 2nd grade,
 1 Stenographer clerk,
 1 Cook (male), 1 cook (female), Civic Hospital.

Tuberculosis Section:

Dr. LEO LADOUCEUR, Chief of Section,
 1 Nurse (supervisor),
 5 Nurses,
 2 Typist clerks.

DIVISION OF CHILD HYGIENE:

Dr. J. N. LAPORTE, D.P.H., Superintendent,
 Dr. C. A. BOURDON, M.P.H., Assistant Superintendent and health districts chief,
 1 Chief medical inspector (temporary chief of south-west district),
 5 Doctors, District Chiefs (Maisonneuve, St. James, Rosemount, N.D.G. and Delorimier).
 21 Medical inspectors,

*Appointed September 23rd, 1942.

†Died September 3rd, 1942.

Miss Maria Roy, R.N., Head Nurse,
 2 Assistant Head Nurses,
 7 Nurses, District chiefs,
 106 Visiting nurses of whom:
 2 for test of hearing in schools and
 2 to supervise children's boarding houses and private hospitals,
 1 Clerk, 3rd grade,
 1 Clerk, 2nd grade,
 3 Stenographers,
 7 Typist clerks,
 1 Stationary engineer and caretaker (Laurier Clinic).,
 1 Dietitian.

Mental Hygiene Section:

4 Psychiatrists,
 1 Nurse, Chief of group,
 6 Nurses (psychologists).

Dental Hygiene Section:

Dr. R. R. LALONDE, L.D.S., Chief of Section,
 7 Dentists,
 5 Nurses,
 2 Assistant-nurses,
 1 Stenographer.

Orthodontia Clinic:

Dr. PAUL GEOFFRION, Chief,
 1 Technician,
 1 Nurse.

DIVISION OF FOOD INSPECTION:

Dr. A. J. G. HOOD, D.V.S., Superintendent,
 Dr. J. BRIEN, M.P.H., Assistant Superintendent,
 1 Chief clerk,
 1 Clerk, 4th grade,
 1 Clerk, 3rd grade,
 1 Clerk, 2nd grade,
 3 Stenographer clerks,
 2 Typist clerks.

Section No. 1—Milk Inspection:

Sub-section 1—Inspection in the Country:

1 Veterinary, Chief of Section,
 9 Veterinaries, inspectors.

Sub-section 2—Inspection in the City:

1 Chief of Section,

Group A:

8 Inspectors,

Group B: Pasteurization plants and special milk:

8 Inspectors.

Section No. 2—Meat Inspection:

1 Veterinary, Chief of Section,
 9 Inspectors including 2 veterinaries,
 6 Veterinaries, at meat inspection stations,
 2 Inspectors' assistants, at meat inspection stations,
 1 Ice and abattoir inspector (outside of city).

Section No. 3—Inspection of Dining-Rooms, Restaurants and Bakeries:

1 Supervisor,
10 Inspectors.

DIVISION OF SANITATION:

Mr. AIME COUSINEAU, C.E., Assistant Director and Sanitary Engineer,

Mr. L. P. CABANA, C.E., Assistant Superintendent,

1 Clerk, 4th grade,

1 Clerk, 3rd grade,

1 Clerk, 2nd grade,

1 Stenographer.

Section No. 1—Construction, plumbing:

1 Chief of Section,

9 Sanitary inspectors.

Section No. 2—Sanitary inspection:

1 Chief of Section,

17 Sanitary inspectors.

Section No. 3—Special by-laws:

1 Chief of Section,

6 Sanitary inspectors.

DIVISION OF LABORATORIES:

Dr. R. BÉRARD, Superintendent and bacteriologist,

2 Bacteriologists (Doctors),

2 Chemists,

2 Analysts,

1 Assistant analyst,

1 Preparer,

2 Nurses' assistants,

1 Stenographer.

DIVISION OF MEDICAL CONTROL:

Dr. J. A. CHARRON, Superintendent,

4 Visiting physicians,

1 Stenographer,

1 Typist clerk,

1 Nurse.

Medico-legal section:

1 Doctor, Pension Fund,

1 Nurse and secretary.

ANNUAL REPORT

1942

To the Chairman and Members
of the Executive Committee,

Gentlemen,

I respectfully submit to your Committee the report of the Department of Health for the year 1942.

In the first part I show the statement of expenses for the fiscal year 1942-43; in the second part, I make certain commentaries in connection with the demographic movement and the development of certain contagious diseases; finally, in the third part of this report, I explain certain improvements made in the Department of Health during the year 1942.

Then follow the several reports from the different divisions and sections of the Department of Health.

STATEMENT OF EXPENDITURES

Year 1942-43

I must note that the fiscal year does not correspond with the calendar year, as it now begins on May first of each year to end on April 30th of the following year.

Consequently, expenditures mentioned in the following table correspond with the new fiscal year adopted by the City while the

rest of the annual report, the reports from divisions, tables, etc., are still, as in the past, based on the calendar year.

The total expenditures of the Department of Health for the fiscal year 1942-43 were \$1,251,815.94, divided as follows:

Health, properly so-called.....	\$ 765,348.02
Grants to semi-official organizations doing public health work.....	28,100.00
Contagious diseases hospital.....	458,367.92
Total.....	<u>\$1,251,815.94</u>

In order to estimate the expenditure per capita of population we must take as a basis the figures for 1942; the population being set at 926,000 we arrive at the following figures:

	Amount	Per capita
For health, including grants to semi- official public health organizations....	\$ 765,348.02	0.85
For hospital treatment of contagious di- seases.....	486,467.92	0.49
Total expenditures.....	<u>\$1,251,815.94</u>	<u>1.34</u>

The following list shows in detail the division of expenditures for the fiscal year 1942-43:

GENERAL EXPENDITURES 1942-43

MANAGEMENT

Salaries and wages.....	\$ 35,934.84
Administration.....	8,258.35
	<u>\$ 44,193.19</u>

EDUCATION

Administration.....	\$	5,038.82
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STATISTICS

Salaries and wages.....	\$	10,609.81
Administration.....	1,785.74	\$ 12,395.55

CONTAGIOUS DISEASES

Salaries and wages.....	\$	27,229.54
Administration.....	473,136.74	\$ 500,366.28

Tuberculosis section

Salaries and wages.....	\$	11,777.76
Administration.....	46,785.73	\$ 58,563.59

CHILD HYGIENE

Salaries and wages.....	\$253,789.36	
Administration.....	51,443.60	\$ 305,232.96

Mental Hygiene

Salaries and wages.....	\$	16,768.86
Administration.....	820.17	\$ 17,589.03

Dental Hygiene

Salaries and wages.....	\$	35,809.58
Administration.....	2,152.29	\$ 37,961.87

FOOD INSPECTION

Salaries and wages.....	\$117,266.67	
Administration.....	20,552.37	\$ 137,819.04

SANITARY INSPECTION

Salaries and wages.....	\$ 70,958.01	
Administration.....	10,427.28	\$ 81,385.29

LABORATORIES

Salaries and wages.....	\$ 24,019.80	
Administration.....	2,908.19	\$ 26,927.99

MEDICAL CONTROL

Salaries and wages.....	\$ 22,883.03	
Administration.....	1,459.50	\$ 24,342.53
Total.....		\$1,251,815.94

Demographic Movement and Commentaries

POPULATION

For the purpose of vital statistics the population of the City of Montreal is calculated and estimated by the Department of Health. In this estimate the demographer takes as a basis the decennial federal census taking also into account the natural increase in population, immigration and emigration.

Twice the estimate of population of the demographer, the late Dr. E. Gagnon, has been very close to the federal census figures, in 1931 and 1941, as follows:

Year	Municipal figures	Federal estimate
1931.....	813,000	818,577
1941.....	907,000	903,007

In its estimate of 926,000 for 1942 the Department of Health has not taken into account the City's floating population. According to the Industrial Bureau and the Assessors' Office, this is quite high; based on the figures of the Rationing Board, in 1942, this

department's demographer set it at 75,000 (which would be lower for 1943, after a more careful preliminary survey).

If we take into account this floating population, as Dr. Valois shows in his report, we obtain a total of 1,001,000 approximately, for the "de facto" estimate as it is called. Nevertheless for purposes of vital statistics and of comparison between rates of birth and death we must follow the figures shown as the permanent and stable population of any city, called the "de jure" estimate. This is the standard method followed by experts.

This is the reason why, in its annual report, the Department of Health will use the "de jure" figure set, for 1942, at 926,000, representing the permanent population of the City.

I would refer the reader to a complete study made by Dr. Ant. B. Valois, demographer and superintendent of the division of vital statistics, of the estimate of the 1942 population which is published further on in this volume (see page 200).

With this total of 926,000 the demographer can estimate the birth and death rates for the population living in the City of Montreal alone, after eliminating non-residents, and including residents of this City who were born or who died elsewhere.

NATURAL INCREASE OF POPULATION

This figure is arrived at by calculating the surplus of births over deaths.

The surplus in 1942 was 11,074 as against an average of 8,721 for the ten years from 1932-1941, showing an increase of 2,353 for the year 1942.

The natural increase of the population gives a rate of 11.96 per 1,000 population for 1942.

Table I
Number of births and deaths and natural increase for year
1942 and by five and ten-year periods since 1932
(residents only)

Period	Births	Deaths	Surplus of births over deaths
1932-36 (5 years)	90,947	45,754	45,193
1937-41 (5 years)	89,082	47,061	42,021
1932-41 (average for 10 years) .	18,003	9,282	8,721
1942	20,606	9,532	11,074

BIRTH RATE

The number of births in 1942 totalled 20,606 compared with 19,011 in 1941, showing an increase of 1,595 over the preceding year and 2,435 compared with 1940.

The proportion per 1,000 population is 22.25 for 1942, an increase of 1.20 over 1941, of 2.15 over the average for the five years 1937-41 and of 1.44 over the average for the previous ten years. This rate is the highest since 1932.

Table II shows a comparison between the number and rate of births for 1942 with those of the ten previous years, taken separately and in five and ten-year periods.

Table II

Population, number of births and rate per 1,000 population for each year and for 5 and 10-year periods from 1932-1942 (residents only)

Year	Population	Number of births	Rate per 1,000 population
1932.....	827,000 (1)	19,997	24.18
1933.....	835,000	18,431	22.06
1934.....	843,900	18,433	21.84
1935.....	852,300	17,361	20.37
1936.....	860,800	16,725	19.43
Average.....	843,900	18,189	21.55
1937.....	869,200	17,180	19.77
1938.....	877,700	17,062	19.44
1939.....	886,100	17,116	19.32
1940.....	894,600	18,713	20.92
1941.....	903,007	19,011	21.05
Average.....	886,121	17,816	20.10
10-year average.....	865,011	18,003	20.81
1942.....	926,000	20,606	22.25

(1) The population figures for 1932-40 were obtained by interpolation, based on the increase of the population between the last two federal censuses of 1931 and 1941.

MARRIAGE RATE

The number of marriages in 1942 was 11,781; there were 10,897 in 1941, thus there was an increase of 884 in 1942.

The proportion per 1,000 population was 12.72 for 1942, compared with 12.07 for 1941, an increase of 0.65 over the preceding year; it is also 1.26 in excess of the average for the five years from 1937-1941, and 3.04 over the average of the ten years between 1932 and 1941.

Table III gives a comparison of the rates and number of marriages in 1942 with those of the ten previous years, yearly and in five and ten-year periods.

Table III

Population, number of marriages and rate per 1,000 population for each year and for 5 and 10-year periods from 1932-1942

(residents only)

Year	Population	Number of marriages	Rate per 1,000 population
1932.....	827,000	5,780	6.99
1933.....	835,000	5,964	7.14
1934.....	843,900	6,536	8.25
1935.....	852,300	7,035	8.87
1936.....	860,800	7,633	8.87
Average.....	843,900	6,590	7.81
1937.....	869,200	8,305	9.55
1938.....	877,700	8,608	9.81
1939.....	886,100	10,650	12.02
1940.....	894,600	12,326	13.78
1941.....	903,007	10,897	12.07
Average.....	886,121	10,157	11.46
10-year average.....	865,011	8,373	9.68
1942.....	926,000	11,781	12.72

DEATH RATE

The number of deaths in 1942 totalled 9,532 compared to 9,711 in 1941, a decrease of 179 over the previous year.

The proportion of deaths per 1,000 population in 1942 was 10.29; it was 10.75 in 1941, showing a decrease of 0.46 over the latter.

This is the lowest rate ever reached in the history of the Department of Health of Montreal.

Table IV shows the death rate movement since 1932 for each year and for 5 and 10-year periods.

Table IV

Population, number of deaths and rate per 1,000 population for each year and for 5 and 10-year periods from 1932-1942 (residents only)

Year	Population	Number of deaths	Rate per 1,000 population
1932.....	827,000	9,728	11.76
1933.....	835,000	8,975	10.74
1934.....	843,900	8,955	10.61
1935.....	852,300	9,162	10.75
1936.....	860,800	8,934	10.38
Average.....	843,900	9,151	10.84
1937.....	869,200	9,738	11.20
1938.....	877,700	9,125	10.40
1939.....	886,100	9,191	10.37
1940.....	894,600	9,296	10.39
1941.....	903,007	9,711	10.75
Average.....	886,121	9,412	10.62
10-year average.....	865,011	9,282	10.73
1942.....	926,000	9,532	10.29

PRINCIPAL CAUSES OF GENERAL MORTALITY

The diseases caused by degeneration, those of the heart, cancer and nephritis, are the three main causes of deaths during 1942. The first two show a decrease, having the respective rates of 210.8 and 132.4 per 100,000 population, as compared with 225.4 and 138.5 in 1941.

Tuberculosis, accidents and diabetes show increases; other causes of death have decreased.

The general death-rate for residents of Montreal is quite low if we consider the dangers to which they are exposed. The increasingly cosmopolitan character of the population, overcrowding in dwellings, contacts with germ carriers, all are factors which tend to present dangers to the public.

Table V

Relative rank of the ten chief causes of death, number of deaths, rate per 100,000 population—1942
(residents only)

Rank	Causes of death (1)	Number of deaths	Rate per 100,000 population
1	Heart trouble (90-95 except 94).....	1,433	154.75
2	Cancer (45-55)	1,226	132.40
3	Nephritis (130-132)	1,119	120.84
4	Tuberculosis, all forms (13-22).....	725	78.29
5	Cerebral hemorrhage, with or without arterio-sclerosis (83-97)	677	73.11
6	Disease of coronary arteries (angina pectoris)—(94)	514	55.51
7	Infants' diseases (158-161)	485	23.54 (2)
8	Accidents (169-195)	405	43.74
9	Pneumonia (107-109).....	361	38.98
10	Diabetes (61).....	255	27.54

(1) Numbers in parentheses correspond to those of the classification of causes of death according to internationally accepted usage (1939).

(2) Rate per 1,000 live births.

A few of the main causes of deaths

Table

Population, number of deaths
and rate per 100,000 population yearly
(residents)

Year	Population	Heart trouble			Cancer		
		Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.
1932	827,000	1,326	13.63	160.34	823	8.46	99.52
1933	835,500	1,362	15.18	163.02	931	10.37	111.43
1934	843,900	1,435	16.02	170.04	907	10.13	107.48
1935	852,300	1,410	15.39	165.43	995	10.86	116.74
1936	860,800	1,551	17.36	180.18	990	11.08	115.01
Average	843,900	1,417	15.48	167.91	929	9.71	110.08
1937	869,200	1,598	16.41	183.85	1,031	10.59	118.61
1938	877,700	1,631	17.87	185.83	1,099	12.04	125.21
1939	886,100	1,826	19.87	206.07	1,141	12.41	128.85
1940	894,600	2,028	21.82	226.69	1,249	13.44	139.62
1941	903,007	2,035	20.96	225.36	1,251	12.88	138.54
Average	886,121	1,824	19.38	205.84	1,154	12.26	130.23
Average of 10 years	865,011	1,621	17.46	187.40	1,042	11.23	120.46
1942	926,000	1,952	20.48	210.80	1,226	12.86	132.40

VI

from certain main causes
and for 5 and 10-year periods 1932-1942
only)

Chronic nephritis			Broncho-pneumonia			Lobar pneumonia		
Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.
889	9.14	107.50	411	4.22	49.70	360	3.70	43.53
787	8.77	94.20	339	3.78	40.57	305	3.40	36.50
851	9.50	100.84	354	3.95	41.94	253	2.82	30.00
916	10.00	107.47	401	4.38	47.04	278	3.03	32.62
1,003	11.23	116.52	469	5.25	54.48	259	2.90	30.09
889	9.71	105.34	395	4.32	46.81	291	3.18	34.48
965	9.91	111.02	449	4.61	51.66	330	3.39	37.96
975	10.68	111.19	382	4.19	43.52	278	3.05	31.67
1,078	11.73	121.66	336	3.66	37.92	243	2.64	27.42
1,125	12.10	125.75	256	2.75	28.62	203	2.18	22.69
1,100	11.33	121.82	257	2.65	28.46	189	1.95	20.93
1,049	11.14	118.38	336	3.57	37.92	249	2.16	28.10
969	10.44	112.02	365	3.93	42.20	270	2.91	31.21
1,099	11.32	118.68	200	2.10	21.60	161	1.69	17.39

MATERNAL MORTALITY

The number of maternal deaths in 1942 was 62 compared with 70 in 1941; it was 99 in 1932.

The rate per 1,000 births was 3.01 in 1942 compared to 3.47 in 1941, a decrease of 0.46. In 1932 the rate was 4.9.

Table VII shows the lowering of the death rate since 1932 from 4.9 to 3.01, a very appreciable decline of 1.8 in the past decade.

Table VII

Number of living and stillbirths, number of maternal deaths and death rate per 1,000 living births and per 1,000 living and stillbirths per year and for 5 and 10-year periods—
1932-1942
(residents only)

Year	Births			Number of maternal deaths	Rate per 1,000 births	
	Live	Still (1)	Total		Live	Live and still
1932	19,997	643	20,640	99	4.95	4.80
1933	18,431	565	18,996	92	4.99	4.84
1934	18,433	495	18,928	97	5.26	5.12
1935	17,361	538	17,899	86	4.95	4.80
1936	16,725	483	17,208	88	5.26	5.11
Average....	18,189	545	18,734	92	5.06	4.91
1937	17,180	479	17,659	81	4.71	4.59
1938	17,062	471	17,533	77	4.51	4.39
1939	17,116	480	17,596	54	3.15	3.07
1940	18,713	513	19,226	70	3.74	3.64
1941	19,011	562	19,573	66	3.47	3.37
Average....	17,816	501	18,318	70	3.93	3.82
Average for 10 years..	18,003	523	18,528	81	4.50	4.37
1942	20,606	697	21,253	62	3.01	2.92

(1) These figures are based on the following definition: a still-born is a foetus born after 28 weeks or 6½ months of gestation, measuring at least 35 c.m., which has never breathed. This definition is accepted by the League of Nations and throughout Canada.

Causes of maternal mortality

The principal causes of maternal mortality are divided into two categories: as shown in the following table. We enumerate first the causes attributable to pregnancy itself in order of incidence: toxæmia, 0.74, infection 0.26, hemorrhages, 0.21; then those occurring during or after child-birth, the first and most important, infection or septicemia 0.79; accidents 0.68 and hemorrhages 0.37; toxæmia, 0.16, is not so frequent.

The number of deaths among pregnant women from toxæmia seems to indicate lack of pre-natal care. Abortion is one of the principal causes of infection during pregnancy.

Table VIII

The following table gives the chief causes of maternal deaths, the number of deaths and the rate per 1,000 live births for the years 1941-42 (residents only)

Causes	Number of deaths		Rate per 1,000 live births	
	1941	1942	1941	1942
A—During pregnancy				
Infection.....	5	7	0.26	0.34
Abortion without infection..	2	1	0.10	0.05
Ectopic gestation.....	2	2	0.10	0.10
Toxaemia.....	14	14	0.74	0.68
Hemorrhages.....	4	5	0.21	0.24
Other diseases and accidents during pregnancy.....	0	0	0.00	0.00
B—During and after child-birth				
Infection.....	15	17	0.79	0.82
Toxaemia.....	3	0	0.16	0.00
Hemorrhages.....	7	9	0.37	0.44
Other diseases and accidents.	13	7	0.68	0.34
Grand total.....	66	62	3.47	3.01

INFANT MORTALITY

The number of deaths registered in 1942 among children under one year of age totalled 1,190 compared with 1,336 in 1941, or a decrease of 146 deaths.

The death rate per 1,000 live births was 57.8 in 1942, the lowest rate ever reached in Montreal; this compares with 70.3 in 1941, or a very appreciable decrease of 12.5 per 1,000 births.

Table IX

**The following table gives the population, births (less still-born), the birth rate per 1,000 population, deaths among infants under one year and the death rates per 1,000 live births in five-year periods, from 1900-1942
(residents only)**

Year	Population	Births		Deaths 0 to 1 year	
		Number	Rate per 1,000 inhab- itants	Number	Rate per 1,000 live births
1900-1904.....	290,746	10,074	34.6	2,769	274.9
1905-1909.....	387,880	13,296	34.3	3,571	268.6
1910-1914.....	482,037	19,047	39.5	4,195	220.2
1915-1919.....	558,280	20,089	36.0	3,677	183.0
1920-1924.....	639,481	21,013	32.9	3,375	160.6
1925-1929.....	738,500	20,907	28.3	2,653	126.9
1930-1934.....	824,695	19,711	23.9	2,087	105.8
1935-1939.....	869,220	17,089	19.7	1,419	83.0
1940.....	894,600	18,713	20.9	1,110	59.3
1941.....	903,007	19,011	21.0	1,336	70.3
1942.....	926,000	20,606	22.2	1,190	57.7

Graph A which follows shows the appreciable results obtained since 1931; it presents an almost straight descending curve from 1931-1941 with a still greater decline for 1942.

Graph A

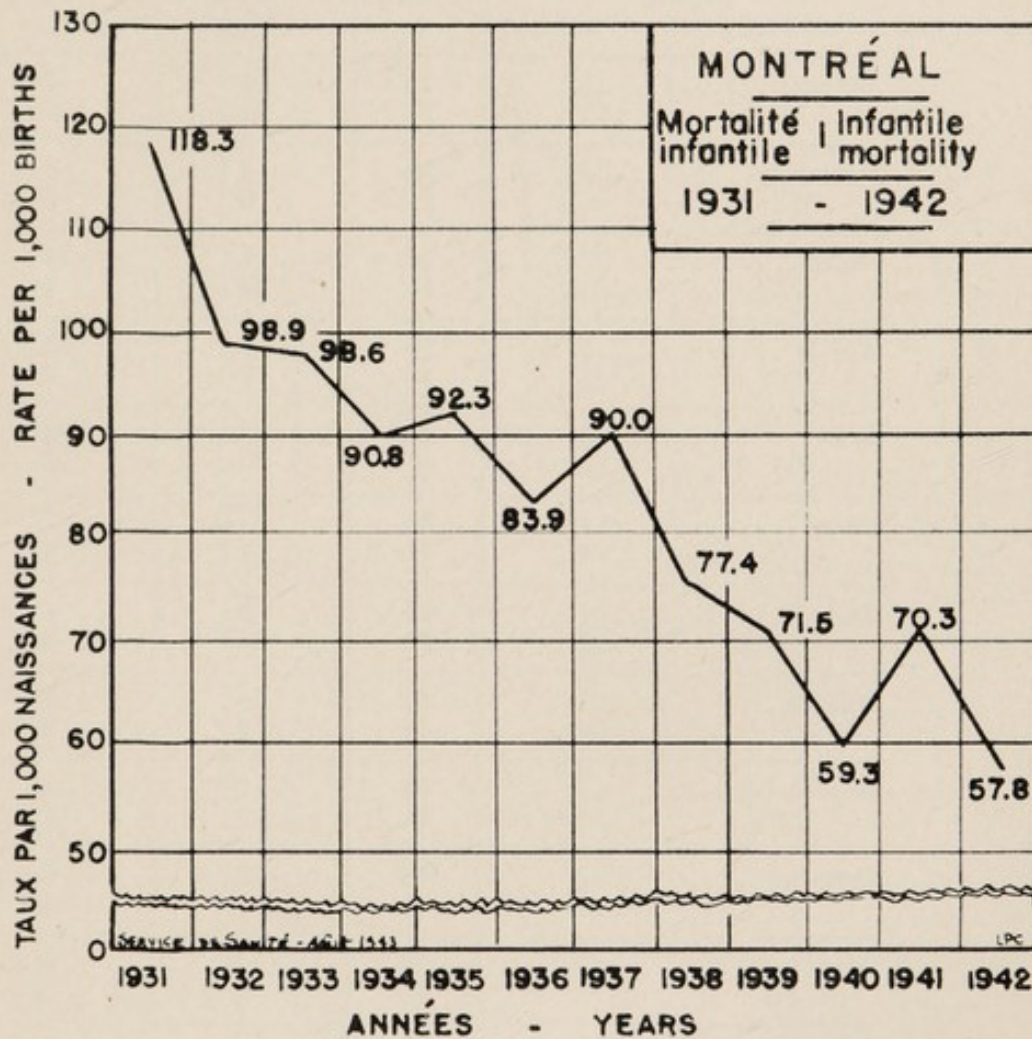


Table
 Number of deaths under one year,
 with percentages
 (residents)

Month	Sex	Under 24 hours	1 day to 6 days	1 week to 3 weeks
January.....	M	11	4	4
	F	14	5	6
February.....	M	14	8	10
	F	9	7	4
March.....	M	11	14	5
	F	20	5	9
April.....	M	9	15	8
	F	7	7	5
May.....	M	8	10	9
	F	10	6	7
June.....	M	15	7	5
	F	14	4	6
July.....	M	9	8	6
	F	10	5	6
August.....	M	14	10	9
	F	9	9	6
September.....	M	12	5	5
	F	9	8	5
October.....	M	16	5	13
	F	12	3	1
November.....	M	11	9	8
	F	9	3	8
December.....	M	21	8	4
	F	9	7	4
Total.....	M	151	103	86
	F	132	69	67
Percentage.....		23.8	14.5	12.9
Rate per 1,000 live births per age group.....		13.73	8.34	7.42
		41.54		

y months, sex and age groups,
 er age group — 1942
 nly)

1 to 2 months	3 to 5 months	6 to 8 months	9 to 11 months	TOTAL	
				Sex	Total
20 14	5 5	3 1	4 2	51 47	98
8 5	4 5	7 3	4 3	55 36	91
26 7	11 8	7 6	2 3	76 58	134
10 9	11 3	4 6	4 4	61 41	102
6 5	9 6	6 6	2 —	50 40	90
14 7	1 7	6 1	1 6	49 45	94
5 4	11 5	1 7	— 4	40 41	81
21 13	9 3	7 6	2 2	72 48	120
11 15	10 12	6 3	3 1	52 53	105
11 6	5 3	6 4	1 3	57 32	89
11 5	6 5	2 —	4 2	51 32	83
7 8	9 9	4 3	5 5	58 45	103
150 98	91 71	59 46	32 35	672 518	1,190
20.8	13.6	8.8	5.6	100.0	
12.04	7.86	5.10	3.24	57.75	

Deaths among illegitimate children

The high death rate of illegitimate children has the effect of keeping the general infant death rate very high in Montreal.

Table XI shows the divergency between the death rates among legitimate children, which is 49.0 per 1,000 live births and that of illegitimate children which reaches 226.6 per 1,000 for 1942.

Mortality among illegitimate children has however shown a decline compared with 1941; the rate of 226.6 for 1942 compares with 359.0 in 1941, a decrease of 132.4.

Table XI

Number of births, deaths under 1 year and rate per 1,000 live births, legitimate and illegitimate, for 1942

Category	Births	Deaths under 1 year	Rate per 1,000 births
Legitimate.....	19,591	960	49.0
Illegitimate.....	1,015	230	226.6
Total.....	20,606	1,190	57.75

Principal causes of infant mortality in 1942

Table XII shows the main causes of death among children under one year of age for 1942. It also shows the relative rank of each in order of frequency.

Table XII

Ten main causes of death under 1 year, rank, number, rate per 1,000 live births and percentage of total deaths
(residents only)

Rank	Causes of death	Number	Percentage	Rate per 1,000 live births
1	Premature births.....	291	24.45	14.12
2	Diarrhoea and enteritis.....	152	12.77	7.38
3	Congenital malformation....	150	12.61	7.28
4	Pneumonia.....	137	11.51	6.65
5	Otitis and mastoiditis.....	104	8.74	5.05
6	Congenital debility.....	77	6.47	3.74
7	Effects of delivery.....	63	5.29	3.05
8	Contagious diseases.....	56	4.71	2.72
9	Other diseases of new-born babies.....	54	4.54	2.62
10	Syphilis.....	25	2.10	1.21
	Other causes.....	81	6.81	3.93
	Total.....	1,190	100.00	57.75

This table shows that premature delivery stands in first place. Congenital causes taken together, premature births, congenital malformation, congenital debility, effects of child-birth and other diseases of new-born babies give a total of 30.8 per 1,000 live births; their total reaches 635, or 53.4% of deaths at this age. Diarrhoea and enteritis account for 12.7% of deaths. Pneumonia shows a marked decline.

Diarrhoea and Enteritis

With the exception of the year 1940 the rate for deaths from diarrhoea and enteritis among children under one year of age was the lowest ever reached in Montreal, in spite of an appreciable increase in births in 1942. This decrease is responsible in great part for the lower infant death rate.

For 1942 the death rate per 1,000 live births due to diarrhoea and enteritis was 7.4 compared with 10.5 in 1941, a decrease of 3.1 per 1,000 live births.

The following table compares the number and the mean birth rate to those of infant mortality due to diarrhoeas and enterites.

Table XIII

Population, number of births (still-born excluded), rate per 1,000 population, deaths from diarrhoea among children under one year of age and rate per 1,000 live births for 5-year periods from 1920-1939 and for the years 1940, 1941 and 1942 (residents only)

Year	Population	Births		Deaths from diarrhoea 0-1 year	
		Number	Rate per 1,000 population	Number	Rate per 1,000 live births
1920-1924.....	639,481	21,013	32.9	1,354	64.4
1925-1929.....	738,500	20,907	28.3	893	42.7
1930-1934.....	824,695	19,711	23.9	645	32.7
1935-1939.....	869,220	17,089	19.7	244	14.3
1940.....	894,600	18,713	20.9	116	6.2
1941.....	903,007	19,011	21.0	199	10.5
1942.....	926,000	20,606	22.2	152	7.4

Activities of the Department and Improvements Effected in 1942

CONTAGIOUS DISEASES IN 1942

The number of cases of contagious diseases reported in 1942 was 22,692, including tuberculosis; this is a decrease of 5,107 compared with 1941 when the total reached 27,799.

This appreciable decline in contagious diseases generally takes on special significance when we take into consideration the increased population, especially of the floating population, which travels through our city towards and from the war plants and the resulting crowding of dwellings. There is however a slight increase in tuberculosis and diphtheria.

Diseases which showed the greatest incidence are: measles, 4,923; whooping-cough, 4,814; chicken-pox, 4,061 and mumps, 3,799. Measles and mumps show a notable decrease from 7,430 and 6,390 respectively in 1941; on the other hand, whooping-cough and chicken-pox with 2,753 and 3,522 cases, increased.

Chicken-pox, diphtheria and tuberculosis are treated at greater length later in this report.

Poliomyelitis of which there were 42 cases in 1942, is also the object of special remarks.

Scarlet fever

Scarlet fever declined from 2,214 reported cases in 1941 to 1,774 in 1942, with 3 deaths in either year.

Typhoid fever

There was also a marked decline in typhoid cases from 122 local in 1941 to 25 in 1942. There were 9 local deaths in 1942 compared with 13 in 1941, making the death rate for the former year slightly less than 1 per 100,000 population.

Control of communicable diseases

The communicable diseases division of the Department of Health has the main duty of controlling such diseases and possible epidemics. The following few remarks will explain the work done by the department.

Every means of quarantine, isolation and control known or in use in any part of the world is utilized in Montreal, in conformity with provincial legislation. These precautionary measures are completed by the visit of a nurse to the homes where contagion exists so as to give verbal instructions as to the preventive measures to be taken.

Our doctors confirm the diagnosis of reported cases and nurses make control visits towards the termination of the illness.

One of the indirect reasons for the increase in the number of cases is the fact that there is more complete reporting by private practitioners of cases of contagious disease: we are getting better co-operation than ever before from the medical profession. It is also recognized, in scientific circles, that closer control shortens the cycles of contagious diseases.

The situation is not alarming. We are experiencing only less serious maladies. More effective control over scarlet fever and diphtheria, especially, due to the special work of investigation and propaganda to popularize immunization, has prevented greater incidence of both these diseases.

We must also point out that, in spite of the great number of cases of measles, mumps, chicken-pox and whooping-cough, there is a very low mortality rate among them.

This work is carried out in close collaboration with the heads of health districts and of their staffs, doctors and visiting nurses. Doctors, in 1942, made 8,024 control calls and nurses made 28,691.

Of 22,692 cases reported, 4,817 were cared for in hospitals, 21.2%.

POLIOMYELITIS

During the year 1942, 42 cases and 5 deaths due to poliomyelitis were reported to the Montreal Department of Health. In addition, in city hospitals, 45 cases from other municipalities throughout the province were cared for.

Poliomyelitis committee

Faced with an outbreak of this malady during the summer, a "Poliomyelitis committee" was formed with the authorization of the civic administration. This was a joint committee made up of members of the Board of Health, the provincial epidemiologist and representatives from the hospitals particularly interested in the care of cases of this disease.

The special committee was composed of: Drs. Albert LeSage, Grant Fleming, Gaston Lapierre and Adélard Groulx, from the Board of Health; Dr. A. R. Foley, Provincial Epidemiologist; Drs. Ed. Dubé, medical superintendent of Ste. Justine Hospital; Henri Charbonneau, medical superintendent of Pasteur Hospital; R. R. Struthers, head of the paediatrics division of the Children's Memorial Hospital; R. Smith, of the Pathological Institute; associate members: Capt. Alm. Roy and F./Lt. J. Oct. Roy; Drs. J. H. Gervais, Jos. Duplessis, and Messrs. Aimé Cousineau, C.E., and L. de G. Sylvestre, secretary.

This committee met twice, on August 4th and 11th, to study a plan of action submitted by the Director of the Department of Health on the means to be taken to prevent poliomyelitis.

The Board of Health

Following these meetings the Board of Health met on August 12th with Councillor J. O. Asselin, Chairman of the Executive Committee, in the chair, and, in its turn, studied the program of action detailed hereunder which had been submitted to the poliomyelitis committee appointed to fight this disease.

Measures for fighting poliomyelitis

Program of action—1942

I—Necessary collaboration:

- a—from medical profession;
- b—hospitals;
- c—social organizations;
- d—medical societies through formation of study committees;
by both the
 1. Société Médicale de Montréal and
 2. The Montreal Medico-Chirurgical Society.

II—Education of the public:

- a—Printing of 25,000 copies of a circular entitled: **“Poliomyelitis—General advice”**;
- b—Republishing 1,000 copies of a completely revised circular entitled: **“Advice to parents when there is a case of poliomyelitis in the home”**;
- c—**Publicity**—Newspapers and radio—It was decided that:
“All interviews to newspapers and advice to the public should emanate from one source.”
 1. Daily report of the situation;
 2. Releases concerning advice to the public.

III—Legislation: Observance of by-laws—

- a—**Compulsory reporting without delay** of all cases, confirmed or suspected, indicating whether with or without paralysis, to the Department of Health.
- b—**Severe quarantine and isolation**;
Facilities were given for hospital care (see decision of Minister further); medico-surgical isolation;
Isolation in the home: same as for enteric maladies and those of the respiratory system.

IV—Early diagnosis and facilities for treatment:

- a—**Call doctor** at first signs of the disease. Do not delay.
- b—**Analysis of spinal fluid:**
Facilities given doctors in laboratories;
- c—Hospital treatment of all cases;
- d—Orthopedic appliances provided in hospitals;
- e—Pulmotors—actual equipment: 19 distributed among following: St. Justine, 5; Pasteur, 3; Children's Memorial, 5; Alexandra, 1; St. Mary's, 1; Jewish General, 1; Homoeopathic, 1; St. Luke, 1; Royal Victoria, 1.
In 1938 the City ordered 10 pulmotors, 5 for St. Justine and 5 for the Children's Memorial.
- f—Supply and distribution of convalescent serum to doctors—reserve kept by the Department of Health.

V—Diet—Give a well-balanced diet.

VI—During an epidemic—avoid performing tonsillectomies.

Hospital facilities

In order to facilitate hospital care and the treatment of patients the Minister of Health and Social Welfare of the Province of Quebec decided that:

- a—"Poor patients would be cared for in hospitals as usual under the Public Assistance Act;
- b—"The middle class patient would have the following privilege: for each case, the Department of Health involved was to send in a report with its recommendations; for each day of hospital care and later on, for each electric treatment, the Government would pay the usual Government's share of a hospital day, the family to pay the difference;
- c—"For orthopedic appliances hospitals were enabled to make recommendations to the Minister." (Dr. Grégoire gave the assurance that these would be favorably received.)

Study committees of the medical societies

The study committees appointed by the medical societies, in their work of co-operation with the Department of Health, were composed of the following members:

1—**La Société Médicale de Montréal:** Drs. Ed. Dubé, chairman; Roma Amyot, Antonio Barbeau, J. A. Baudouin, Henri Charbonneau, Albert Comtois, A. Frappier, A. Guilbault, G. Lapierre, P. Letondal, D. Longpré, G. L. Prud'homme, J. E. Samson and Jean Saucier.

2—**The Montreal Medico-Chirurgical Society:** Drs. R. R. Struthers, chairman; H. B. Cushing, Grant Fleming, S. Graham Ross, Frederick Smith, Francis L. McNaughton and Guy H. Fisk.

The Health Department very greatly appreciated the generous support given by the medical associations above mentioned and wishes to express its gratitude to their committees for the useful suggestions, the effective results which followed their studies and their inestimable co-operation.

I would like at this point to draw attention to the special meetings which these societies organized for the benefit of their members and of the doctors in Montreal.

On February 13th the Montreal Medico-Chirurgical Society held a special meeting at which Dr. J. D. Trask of Yale University, the guest speaker, presented a paper on "Epidemiological Studies in Poliomyelitis."

On September first the "Société Médicale de Montréal" held a special meeting at St. Justine Hospital. The program dealt with the subject, "What every practising physician should know about poliomyelitis":

a—from a clinical point of view—Mr. Jean Saucier;

b—from the point of view of physiotherapy—Mr. Albert Comtois;

c—from the orthopaedic point of view—Messrs. E. Dubé and C. Caisse;

d—about the Kenny method (practical demonstrations)—Miss R. Hepworth.

SMALL-POX AND VACCINATION

In the annual report for 1939 we had commented at length upon small-pox in Montreal and its elimination through vaccination. In our City there has not been a single case of small-pox since 1930 and no deaths since 1918.

The following table shows, by ages and years, for the five-year period 1937-1942, the number of those vaccinated against this disease.

Table XIV
Vaccination against small-pox
1937-1942

Age when vaccinated		Persons vaccinated per year						Number and percentage by age groups of persons vaccinated as of January 1, 1943	
		1937	1938	1939	1940	1941	1942		
Pre-school ages	Under 1 year...	381	351	279	553	525	546	pop. 36,961 1,345 3.6%	Total under 2 years
	1 year.....	259	253	243	317	339	274	pop. 73,070* 6,397 8.8%	Total under 5 years
	2 years.....	336	240	206	320	313	347		
	3 years.....	578	319	326	437	495	506		
	4 years.....	1162	561	498	754	871	989	pop. 76,488* 47,146 61.6%	Total: 5-9
School age	5 years.....	3085	1628	1464	2735	2630	3651		
	6 years.....	7016	4216	4081	6466	6170	5846		
	7 years.....	1423	807	1005	1801	1394	1342		
	8 years.....	266	153	214	416	370	235		
	9 years.....	117	68	103	156	184	152		
	10 years or over (1)	9038	5308	6477	13825	11888	11114	76,879	Total: 10 years or over
Total.....		23661	13904	14896	27780	25179	25002	130,422	

(1) In this age group we have included the number of vaccinations given to persons handling food by the Medical Control Division, such persons having to be vaccinated every 7 years.

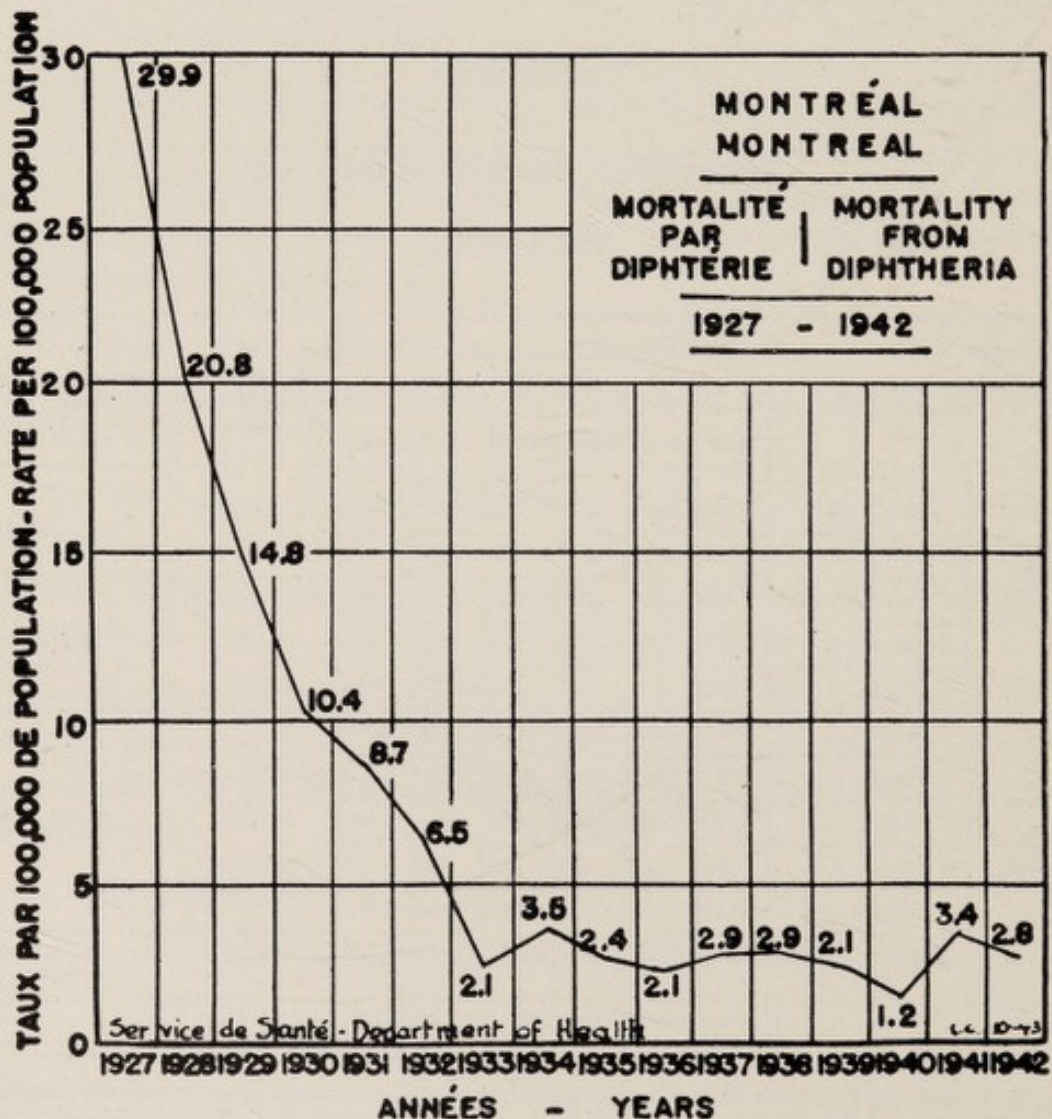
* These figures are an estimate based upon the federal census of 1941.

DIPHTHERIA AND IMMUNIZATION

In 1942 the number of reported cases of diphtheria increased; there were 212 cases, compared with 193 the previous year; however the number of deaths was lower, 26 against 31, giving a mortality rate of 2.8 per 100,000 compared to 3.4 in 1941.

The following graph shows the mortality curve for diphtheria in Montreal since 1927.

Graph B



The statistics given in certain tables published in the annual report of the communicable diseases division show that 41% of the diphtheria cases were among children between the ages 1 to 4 and 42.9% between 5 and 9; this means that 83.9% occurred among children under 10 years of age, whence the importance of having children immunized during pre-school years and even after they have reached the 6th or 9th month.

Dr. J. H. Gervais, superintendent of the communicable diseases division, also points out in his report the higher rate of such cases "in districts where the population is denser," in particular, in the St. James health district. Here there exist crowding of dwellings, poor hygienic facilities in many houses and a small proportion of children who are immunized. This is due to a movement of the rural working population towards the cities and industries.

Census undertaken re immunization against diphtheria of children under 10 years of age.

The success of the census undertaken in 1941 in the Southwest health district in the matter of anti-diphtheric immunization of children under 10 years of age has encouraged the City to extend it to the whole City. During 1942 there were 118,014 families visited by nurses of the several health districts. This census is continuing and will be finished in 1943; we will then be in a position to give results.

Immunization week—May 18-23, 1943

This campaign against diphtheria was started in Montreal in 1941 by a joint body composed of the Department of Health and the Health League of Canada. It has demonstrated that it was an excellent means of propaganda in the fight against this disease. The movement received the approval of the civil and religious

authorities and the greatest possible co-operation from the press, radio, doctors, volunteer organizations and parents.

In 1942, with the same collaborators, the Department of Health organized a diphtheria prevention week from May 18th to 23rd, following the program previously drafted and published in the annual report for 1941. The first two tables, at the end of this chapter, show the complete results and the wholesome influence of this propaganda week on the year's figures which show that 18,873 children were immunized in 1942.

Immunization against diphtheria—1928-1942

Table XV shows the present age of the 235,713 children immunized and the age at which they were inoculated, from September 1928 to 1942 inclusively.

Table XVI shows the number of children immunized, that is, who received the three doses of Ramon anatoxin, in Montreal, by years from September 1928 to 1942, either by the Department of Health, independent organizations or private practitioners.

Table XV

Immunization against diphtheria

Age of children who received 3 doses of Ramon anatoxin (toxoid) from September 1928 to 1942 inclusively

Ages	1928 to 1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	Total number of children	
												Immunized to date by ages	Age at which they were immunized
6 months-1 year.	1,615	2,181	2,063	2,887	3,214	3,589	4,040	4,662	5,055	6,481	7,049	1942 0 to 4 years pop. 73,070 (1)	42,836 6 months to 5 years
1 year.....	4,948	3,430	2,087	2,041	1,977	1,980	1,794	1,739	1,894	2,680	2,697		27,267
2 years.....	4,488	3,430	1,329	1,352	1,268	1,332	1,038	958	889	2,094	1,517	44,757	19,695 136,150
3 years.....	3,842	3,203	1,010	951	956	1,039	889	692	489	1,705	1,211	61.25%	15,987
4 years.....	3,715	3,084	904	875	794	864	598	616	425	1,476	1,044		14,395 58%
5 years.....	4,303	3,459	945	908	848	910	685	580	583	1,567	1,182	5 to 9 years pop. 76,488 (1)	15,970
6 years.....	8,059	6,589	2,787	3,149	3,000	3,227	2,581	2,371	2,357	2,829	1,889		38,838 6 and 7 years 65,742 28%
7 years.....	6,740	6,127	1,788	1,997	1,847	1,862	1,349	1,237	1,306	1,545	1,106	57,584	26,904
8 years.....	2,448	5,324	770	748	737	738	537	413	516	808	594	75.29%	13,633
9 years.....	1,284	5,299	387	288	294	323	184	119	217	514	397		9,286 33,821
10 years or over...	2,208	6,288	158	114	62	78	60	42	122	233	139		9,504 14%
Age unknown.....	540	282	91	65	44	57	...	45	...	206	68	133,372	1,398
Total.....	44,190	48,696	14,319	15,375	15,041	15,999	13,755	13,474	13,853	22,138	18,873	235,713	235,713

(1) These figures are an estimate based upon the federal census of 1941.

Table XVI
Immunization against diphtheria
1928-1942

Year	Health Department	Other organizations					Total
		Fédération d'hygiène infantile (19 clinics)	Child Welfare Association (8 clinics)	Infants' Homes and other	Doctors	Total	
1928.....	384	.....	1,083	.....	.....	1,083	1,467
1929.....	3,585	.....	754	.....	.....	754	4,339
1930.....	9,108	745	1,138	379	.....	2,262	11,370
1931.....	10,064	741	1,135	269	.....	2,145	12,209
1932.....	11,499	1,375	977	954	.....	3,306	14,805
1933.....	41,490	3,313	2,186	690	1,017	7,206	48,696
1934.....	11,484	1,206	1,257	153	219	2,835	14,319
1935.....	12,477	1,283	1,118	191	306	2,898	15,375
1936.....	12,017	1,666	757	317	284	3,024	15,041
1937.....	12,935	1,726	652	398	288	3,064	15,999
1938.....	10,473	1,799	757	442	284	3,282	13,755
1939.....	10,112	1,332	1,084	439	507	3,362	13,474
1940.....	10,137	1,991	890	401	434	3,716	13,853
1941.....	16,066	3,493	1,092	433	1,054	6,072	22,138
1942.....	12,780*	3,694	757	394	1,248	6,093	18,873
Total.....	184,611	24,364	15,637	5,460	5,641	51,102	235,713

*To January 31st, 1943.

THE PROBLEM OF TUBERCULOSIS

I—Deaths from tuberculosis in 1942

The number of deaths from tuberculosis, all forms, mounted to 725 in 1942, compared to 678 in 1941, an increase of 47.

The mortality rate per 100,000 population, which was 75.08, rose to 78.29 in 1942, an increase of 6.79.

The following table shows the number of deaths and the rate of mortality per 100,000 population by 5-year periods, from tuberculosis of the lungs and other forms, since 1915.

Table XVII
Deaths from tuberculosis

5-year periods	Number of deaths			Rate per 100,000 pop.		
	Pulmonary	Other forms	Total	Pulmonary	Other forms	Total
1915-1919.....	904	208	1,112	161.9	37.3	199.2
1920-1924.....	807	178	985	126.2	27.8	154.0
1925-1929.....	798	148	946	108.0	20.0	128.0
1930-1934.....	713	133	846	86.5	16.1	102.6
1935-1939.....	583	101	684	67.1	11.6	78.7
1940.....	510	71	581	57.0	7.9	64.9
1941.....	584	94	678	64.7	10.4	75.1
1942.....	639	86	725	69.0	9.3	78.3

II—The fight against tuberculosis in Montreal

1—Brief history (1914-1938)

Since 1914, anti-tuberculosis work has been entrusted to two **Institutes, the Bruchesi and Royal Edward**, which at present, operate six dispensaries for early diagnosis and collapse-therapy

(pneumothorax), located in different sections of the city; there is another, the seventh, at Cartierville, operated by the **Sacred Heart Hospital**.

The Anti-Tuberculosis and Public Health League—This organization did wonderful educational work from 1924 to 1928.

Health Camps for contact cases, boys and girls, located at St. Hippolyte and operated by the Bruchesi Institute and another at St. Agathe, operated by the Royal Edward Institute, the Vacation Camps, Scout Camps, those of the associations for the welfare of youth, which permit many children to enjoy life in the open-air, the "Bureau des Oeuvres Scolaires et de la Cantine" and similar English organizations, B.C.G. vaccination, and facilities for giving work to members of families, all these contribute in great part towards preventing tuberculosis.

The Universities have not lagged behind in this matter and have organized courses in phthisiology to help train the future doctor. Extension courses and clinical weeks have been organized under the auspices of the Medical Faculties of Montreal and McGill Universities, in hospitals and among the medical associations, chiefly at Sacred Heart Hospital and in the Laurentian and Mount Sinai sanatoria.

2—Steps taken by the Department of Health

A) Prior to 1938:

1—The milk and pasteurization by-law. Assuring a healthful milk supply through close, well organized inspection, and the high percentage (96%) of pasteurized milk sold and consumed, are important results obtained through efforts started by the civic authorities in 1927.

This corresponds with the total elimination (100%) of tuberculosis among herds of cattle producing milk sold in Montreal; this work was accomplished by the federal government.

2—**Medical inspection of pupils** (since 1906) and of **teachers** (since 1932) in schools and the **medical examination of food handlers** has greatly contributed towards early diagnosis of tuberculosis.

3—**The application of building by-laws** also has played an important role from the point of view of public health and more healthful dwellings. Insanitary housing, because it lacks natural

light and sunshine, neutralizes efforts to prevent tuberculosis and is prejudicial to the health of those obliged to live in such conditions.

4—Contract (1936) between the City and Sacred Heart Hospital for 100 beds to be used to care for this number of poor persons suffering from tuberculosis.

B) Since 1938:

1938 I—Close co-operation with the Minister of Health and the Provincial Committee for the Prevention of Tuberculosis.

II—Establishment of a tuberculosis section in the communicable diseases division with the appointment of a trained and specialized staff. This has the object of insuring better and closer relations with the various organizations combating tuberculosis.

Appointment of Dr. Léo Ladouceur, tuberculosis specialist, as head of this division, also of 5 nurses of whom one is head of the group, and 2 stenographers.

III—Keeping of a central file of all cases of tuberculosis in Montreal so that the situation may be followed from day to day.

IV—Inauguration of a system of free distribution of tuberculin to doctors and institutions.

V—Institution of tuberculin test among children in clinics and schools. Since 1939, the number of children receiving this test has reached 29,000.

VI—Education and propaganda:

- a) Map of Montreal: distribution by wards of deaths from tuberculosis: 5,000 copies;
- b) Illustrated poster: "**Let us Fight Tuberculosis**" —35,000 distributed;
- c) **Circulars:** 1—Tuberculosis—200,000 copies distributed;
- 2—Diet—edited and re-edited; 143,000 copies;

- d) **publications:** limited number of reports and work on tuberculosis;
- e) distribution of pamphlets and circulars issued by various anti-tuberculosis organizations;
- f) **house-to-house visits by nurses:** very practical and effective social work accomplished without ostentation;
- g) press releases and radio talks especially during Christmas Seal Campaign.

VII—Campaign of public education — 1938-1941 —

Through organization of more than **400** meetings of which 109 were for the public and 291 in schools, with addresses, sketches, films, etc. This work is continuing.

1940 VIII—Opening of municipal radiological clinic (1940)

as an indispensable complement to the tuberculosis section. The object of this clinic is to make a radiological examination of the lungs of contacts and of poor persons suspected of having the disease who are sent by a doctor.

IX—Radiological examination of municipal employees before they are employed; of **milk handlers** in dairies and pasteurizing plants; of certain food handlers, chiefly contacts and suspected cases.

Medical inspection of food handlers established in 1927 is of valuable assistance in detecting cases.

1941 X—Medical and radiographic examination of teachers

The medical inspection of pupils, started in 1905, and the medical examination of teachers, conducted since 1933, are of great help in the early discovery of this malady.

On May 17th 1941 an amendment to the Public Instruction Act (Art. 231, 5 George VI, Chap. 47) was sanctioned obliging all persons employed in a public school to submit to an annual medical exam-

ination and to a radiological examination of the lungs before being hired.

To give effect to this amended law the Department of Health renewed the agreement entered into in 1933 with the Catholic School Commission so as to extend its application to the whole staff, religious as well as secular; the same agreement was entered into with the Board of Protestant School Commissioners and the Health Department is obliged to see that the same law is observed in independent schools and institutions.

Among the factors which brought about the adoption of this new law we must mention the medical examination (clinical) of lay teachers of the Catholic School Commission of Montreal which, with the collaboration of the Health Department, paved the way for this measure.

1942 XI—Collaboration with the “Montreal Anti-tuberculosis League.” This newly organized body counts as members Dr. Ad. Groulx; Dr. L. Ladouceur, chief of the tuberculosis section, member of the board of medical advisers.

Collaboration of the Health Department with the Christmas Seal Campaign committee, every year.

Co-operating with the Department of Health and Social Welfare and the Montreal Department of Health, this new league intends, in 1943, to undertake to locate the cases of tuberculosis in industrial plants. The Health Department will take the measures necessary to assure full collaboration.

III—The Hospital problem

Studies conducted at different times by the Board of Health and the Provincial Committee for the Prevention of Tuberculosis have shown that hospital care is of inestimable value in preventing the spread of this disease and also the urgent need in Montreal for 1,000 more beds for treatment of cases. As a matter of fact, hospitals and sanatoria play an essential role in the fight against this disease by allowing the isolation of the patient and assuring him of care and rest, from the start, which he needs if he is to be cured.

In the fight against this disease there is not alone need to place the very sick in hospitals when little can be done to cure them, but it is more important still to provide rest for a tuberculous case in need of rest and who may be cured in six months or a year of a lesion caught at the outset. This is of great importance from the economic point of view whereas the more advanced case will need two or more years of treatment.

The extensive campaign launched and continued in the past 4 years or more against tuberculosis by the Montreal Department of Health, together with the Provincial Department of Health and the Provincial Committee for the Prevention of Tuberculosis, has had the effect of discovering a great number of cases which must be placed in hospitals.

On the other hand it is recognized that the lowest ratio of beds for tuberculous patients should be 2 beds per death. The present situation, according to a table which I drew up on January 15th 1941, shows the following:

In the Province of Quebec there were, at that date, 3,580 beds for tuberculous patients, or 1.26 beds per death. In the Province of Ontario there are 2.6 beds per death from this illness.

For Montreal District, including the Island of Montreal, with the 25 or 30 surrounding counties, there are 1,322 beds, that is, 1.04 per death.

The population of this district represents 48.7% of the population of the province; the number of deaths from tuberculosis in the district is 44% of the total deaths in the province and this district has only 36% of the total beds in the province.

On February 27th 1941 the Board of Health adopted a resolution of which a copy has already been sent to the proper authorities.

A distribution of the 1,322 beds, according to nationalities, in Montreal demonstrates that there are 615 in French-Canadian institutions; 615 in English institutions and 92 in Jewish institutions; the first is much inferior to the needs of the French-Canadian population. The proportions are as follows: French, 1.1; English, 5.7; Jewish, 6.6.

If we compare these figures with the whole population of the Montreal district we arrive at much lower ratios for beds per death.

The 1,322 beds now available in Montreal district institutions, as shown in the appended table, would hardly suffice for the needs of the City alone. There is therefore urgent need for at least 1,000 sanatorium beds for the French-Canadian population of Montreal.

Tuberculosis is increasing in Montreal since 1941; it is also showing an increase in Canada; this is an almost world-wide trend. Remarks and conclusions found in studies and reports made previously are still applicable and can be summed up, for Montreal district, to indicate an urgent need for sanatorium beds.

CHILD HYGIENE

The protection of the health of the expectant mother, the fight against infant mortality, supervision over the normal development, physical and mental, of a child from birth to school leaving, are some of the duties of the division of child hygiene which, to realize its enormous program, is subdivided into several sections of which the principal ones are:

- 1—Maternal, infant and pre-school hygiene;
- 2—Medical school inspection;
- 3—Mental hygiene;
- 4—Visiting nurses;
- 5—Nutrition;
- 6—Dental hygiene;
- 7—Health districts.

Maternal hygiene

The Department of Health operates five municipal pre-natal clinics where 388 mothers were registered in 1942. In the fight against maternal and infant mortality among new-born babies we must pay greater attention to pre-natal hygiene. Constant medical supervision over the pregnant mother plays an important part in the steps to assure that she will live, remain healthy and have a healthy child. The pre-natal clinic, in the office of the family doctor, the hospital or the health centres, is becoming daily more and more

necessary to prepare for a normal delivery and to prevent toxæmia and infections, mishaps of pregnancy and delivery, and abortion, the chief cause of infection.

The three first tables in the report of the superintendent of this division, Dr. J. N. Laporte (pages 105, 106 and 107 of this report), to which I refer you, giving gratifying information as to the number of mothers registered at the pre-natal clinics in 1942, the number of beds available in Montreal hospitals for maternity cases and the number of maternity cases treated during the year.

In 1942 there were 21,253 deliveries.

In the municipal and hospital pre-natal clinics 8,055 women at various stages of pregnancy were registered and were kept under medical observation, making a proportion of 37.9%.

In the hospitals and maternities there are 780 beds available for obstetrical cases of which 437 are private and semi-private while 343 are public.

Of 21,253 deliveries 15,670 occurred in hospitals, 73.7% and 5,593 at home, 26.3%. Moreover, 4,544, or 21.4% were public cases of which 3,946 came under the Quebec Public Assistance Act, 584 at homes, by doctors of "l'Assistance Maternelle," and 14 by the Social Welfare Department.

Infant and pre-school hygiene

Baby clinics, registration of births, visits to new-born babies by nurses and the distribution of pamphlets, etc., to mothers, comprise so many important items in the program of activities undertaken in Montreal to effectively combat infant mortality and revive breast-feeding.

The Department of Health operated 50 well-baby and pre-school clinics in parishes and districts not as yet served by voluntary organizations.

On January 26th 1942 the 50th municipal clinic was opened in St. Victor parish, to accede to a request from its pastor, Rev. Father P. E. Coursol, since appointed pastor of St. Jean-Baptiste parish. The co-operation of the new pastor, Rev. Father Joseph Théorêt, is an assurance of its success.

During the year, the Department of Health combined two English clinics belonging to the Child Welfare Association, the Maisonneuve Well-Baby Clinic and the Montreal General Hospital Well-Baby Clinic, with the civic clinics known as the Maisonneuve and St. James with special days and hours for the English people. An anti-diphtheric inoculation station was opened at the Notre Dame de Grace and Mount Royal health centres.

In addition to the 50 civic clinics there are 19 independent French clinics conducted by the "Gouttes de lait paroissiales" and 8 English ones under the management of the Child Welfare Association which make a total of 77 baby and pre-school clinics in the city.

Reports compiled by these several organizations show that 18,421 babies and 19,156 children were registered and put under medical control, 163,401 consultations were given to mothers by the doctors; visiting nurses made 51,378 visits to homes and assistant nurses, in the Gouttes de lait paroissiales, made 32,484 visits (see Table IV at page 109).

During the summer the Department of Health opened two nurseries in Lafontaine Park and St. Helen's Island and weighed 107 children, gave 319 first aid treatments, vaccinated and re-vaccinated 1,537 children and examined 131 children who were to enter school for the first time.

Groups of the Child Hygiene League were organized among young girls in five schools.

The Department of Health exerted meticulous control over the 17 private hospitals and 12 children's boarding homes operating under civic permits. The two nurses attached to this work made 4,158 visits and investigations.

Medical school inspection

The medical inspection of schools, inaugurated in 1906, is for the purpose of carefully watching over the health of pupils and teachers, supervising the normal development of the child by detecting and treating physical defects, preventing contagious diseases and assuring the pupils of a healthful school environment.

This inspection is made following an agreement entered into in 1929 between the Department of Health and the school boards, Catholic and Protestant.

The present program of medical school inspection includes teaching of hygiene, sanitary control over schools, control of contagious diseases, detection and correction of physical defects by periodical and routine medical examinations, dental inspection, examinations and talks, annual examination of teachers, audiometric tests, revised Binet-Simon psychometric test to classify children who are mentally backward, immunization against diphtheria and detection of tuberculosis contacts through Vollmer test.

During the 1941-1942 scholastic year doctors and nurses of the child hygiene division inspected 304 schools, of which 223 were under the Montreal Catholic School Commission, 47 under the Protestant Board and 34 private schools, attended by 141,369 pupils.

During the year, following requests to the Department of Health, medical inspection was extended to the following institutions: St. Mary's College, St. Arsène boarding school, Ange-Gardien boarding school, Deaf and Dumb (women) Institute, School of Arts and Trades. We hope before long to embrace all educational institutions of which the number not under inspection is daily being reduced.

The medical staff has also been entrusted with the cadet inspection in Protestant Schools.

Tables VII and following in the Child Hygiene Division's report (pages 113 and 114) furnish interesting data.

Medical examination of pupils

Medical inspectors made 7,821 visits in schools, 55,265 pupils, or 32.0%, were given the periodical examination; of this number, 25,027, or 45.2%, showed physical defects. The parents assisted at the examination of 6,340 pupils. Moreover, 18,502 special cases were referred to the medical inspectors.

Among important physical defects discovered we stress the following: malnutrition, 6,446, or 11.7%; enlarged tonsils, 8,292,

or 15%; adenoids, 3,803, or 6.9%; enlarged glands, 7,888, or 14.3% and defects of sight, 4,866, or 8.8%.

Visiting nurses made 34,940 visits to schools. In their classroom visits they made 656,730 examinations.

Check-up

Re-examination of 23,036 children, showing physical defects, demonstrated that 8,787 had been treated and cured and 2,037 were under treatment. Let us note, as interesting results, that 1,713 children with enlarged tonsils and 1,284 with adenoids were operated upon; 2,362 with defective sight were provided with glasses, a great number of which were given by hospitals and certain institutions.

Audiometric tests

Two special trained nurses are entrusted with this work. A total of 16,692 children in the 1st, 2nd and 3rd years were tested with the audiometer (No. 4-A); 837, or 5%, had poor hearing, 157 being deaf in both ears, 700 partly deaf, in one or the other ear. Of this number 3,556 had had running ears, 402 had abscesses and 760 had been operated upon.

Mental hygiene

Pursuant to an agreement and thanks to the close co-operation with the school authorities, 4,396 pupils submitted to the Binet-Simon mental test after preliminary surveys in the schools. Of this number, 2,772 were found backward and 23 were unstable. There were 1,357 border-line cases and 1,096 of slight mental debility, in all 2,453, who were recommended for auxiliary classes, while 253 cases of advanced mental debility and 66 cases of imbecillity, in all 319, were recommended for technical or sensorial teaching.

The staff in charge of this work, comprising four psychiatrists and seven psycho-technical nurses of which one is head of a group, also carried out 138 psychometric examinations in institutions in

collaboration with the Society for the Adoption and Protection of Children.

At the Laurier mental clinic 511 children were examined of which 132 were referred there by the Juvenile Court. These cases involved 486 investigations by psycho-technical nurses.

Medical examination of teachers

In my report for the year 1941 (page 71) I commented at length on this special work by the division of child hygiene and the tuberculosis section. I wish only to add that, in order to carry out the new law and pursuant to the agreements made with the school commissions, 5,545 teachers of both sexes were radiographed (see Dr. L. Ladouceur's report, page 100 of this report) and 5,465 were given a clinical medical examination (Dr. J. N. Laporte's report, page 120).

As mentioned by Dr. Ladouceur in his report, "18 employees of the Catholic and Protestant School Commissions who were or might become sources of contagion for children coming in contact with them were withdrawn from teaching, that is to say, at least until they are able to prove their recovery or that they are harmless."

Among the main physical defects revealed at the clinical examination, we notice chiefly troubles of vision, digestive troubles, those of hearing, the heart or of the nervous system.

Vacation camps

During July and August 1942, our doctors and nurses carried out medical examinations on 3,798 children before they left for various summer camps: "Les grèves, Colonie Jeanne d'Arc, le Grillon," and those of a number of Scout and Guide troops. The chief object of this examination is to eliminate contagious diseases and parasitic maladies and to control vaccination.

In the municipal clinics and in the schools, doctors immunized 12,780 children against diphtheria and vaccinated 13,172 against small-pox. There were 2,771 children who were given the tuberculin test.

VISITING NURSES

There are, in the Department of Health, 144 visiting nurses of whom 134 are attached to the child hygiene division and the health centres. The others are employed in the contagious diseases division as special nurses, 6 in the tuberculosis section and one in the medical control division.

The nurse is the doctor's assistant at school and in the clinic and her main duty is to educate the mothers and members of the families in the homes where she is generally most welcome. Her role is an admirable and highly meritorious one.

In 1942 the several reports which we compiled show that they made more than 242,150 visits to the homes, as follows:

a—to control contagious diseases, including T.B.....	28,691
b—investigations re immunization against diphtheria.....	143,478
c—in connection with schools.....	34,940
d—prenatal and well-baby clinics.....	30,883
e—special visits and investigations.....	4,158

The work of the visiting nurse has become generalized. Its primary purpose is the family which the nurse seeks to educate in matters concerning the health of its members, young or old. She continues in the home the work which was begun at the clinic and at school.

At the school, in addition to helping the examining physician, she makes a systematic examination of the pupils in class; in 1941-1942 they made 656,730 examinations, thus pupils were seen by a nurse on an average, five times during the year. To this work must be added that of carrying out the special examinations mentioned above.

NUTRITION

Nutrition campaign

The Department of Health has given its support to the nutrition campaign organized in Montreal by a committee of ladies of which the joint chairmen were Mesdames A. K. Hugessen and P. Casgrain.

This campaign began in Canada in 1942 with the establishment of a nutrition division in the Department of Pensions and National Health at Ottawa. This new organization showed the importance which the federal Minister of Health attached to the problem of proper nourishment. He requested the assistance of all social organizations throughout the country and a nutrition campaign was launched everywhere in the Dominion. Its slogan is "Nutrition for Health, Health for Victory."

In Montreal the Women's Canadian Club organized a campaign among mothers with Mrs. Hugessen as chairman. For the English-speaking population the first meeting was held in the Montreal High School on January 4th 1942. Dr. R. E. Wodehouse, representing the Hon. Ian MacKenzie, Minister of Pensions and National Health, inaugurated the campaign with an address. The guest speaker was Dr. Frederick F. Tisdall.

The French-speaking committee, with Mme Pierre Casgrain as chairman, held its first meeting on January 16th at the Plateau Auditorium. Hon. Henri Groulx, Minister of Health and Social Welfare for the Province of Quebec, delivered the opening address. The guest speaker was Dr. Sylvestre, Director of the Nutrition Division of the Department of Health and Social Welfare.

Following public meetings, series of courses on nutrition were organized throughout the City by both these volunteer ladies organizations with great success among English and French citizens. More than 5,000 women followed the English courses in 33 centres or districts in the City and about 27,800 followed French courses in 54 parishes. The courses were given by members of the association of lay technicians in social sciences aided by nurses from the Department of Health.

Nutrition specialist in the Department of Health

During the year a nutrition technician, Miss T. Marion, professor in the provincial Social Science Schools, was appointed. This marks an improvement in the organization of the child hygiene division, the duty of which is to give sound advice on proper nourishment and a well-balanced diet to mothers and children.

This is given through its clinics, its school inspection work and during the house-to-house visits by the nurses.

DENTAL HYGIENE

During the scholastic year the 7 dental inspectors of the department, under Dr. R. R. Lalonde, head of the dental hygiene section, examined 37,244 pupils of whom 28,918 were suffering from decayed teeth, that is, 77.9%, among whom were found 106,759 decayed teeth.

In the seven municipal dental clinics, 15,904 children were treated and among them 26,875 treatments were given: fillings, cleaning, etc. In all 29,670 teeth were extracted and 2,268 filled. There are now 142 children being treated at the municipal orthodontia clinic located in the dental faculty of Montreal University on the mountain.

The establishment of the orthodontia clinic in the dental faculty, among the splendid new Montreal University buildings, on the side of Mount Royal, permitted us to have more commodious quarters which include the general office, that of the dentist, a waiting room, a surgery, an X-Ray room, laboratory, etc. This new installation is one of the most modern possible. The staff comprises a clinic head, Dr. Paul Geoffrion, specialist in orthodontia, a graduate nurse and a technician in dental prosthesis.

SANITARY INSPECTION IN 1942

The inspection of buildings in Montreal is one of the duties of the sanitation division which also looks after requests for building permits, plumbing permits and licenses of various kinds.

In 1942 it issued 3,471 building and 2,303 plumbing permits as well as 3,541 license permits.

The work of this division is done by a staff of 42 employees of whom 2 are engineers, 3 are section heads and 33 are sanitary inspectors divided into three groups.

Building and plumbing (Section No. 1)

This section is responsible for the inspection of buildings under construction or undergoing repairs and for the inspection of plumbing and draining. This work demanded 65,781 inspections carried out by one chief and 8 other inspectors.

From the standpoint of public health and of sanitation of buildings the work of this section is very important. The insanitary dwelling, office or plant, owing to lack of natural light, is harmful to health. They may become factors in the spread of tuberculosis. Leaks of sewer or illuminating gas through faulty piping can also injure the health.

The enforcing of the plumbing by-law (1341) and of provincial sanitary by-laws permits of exerting control over work being carried out by builders and plumbers throughout the City.

Complaints and sanitary file (Section No. 2)

This section is responsible for investigations made following complaints of the existence of nuisances or causes of unhealthful conditions in the city. It is also responsible for keeping the sanitary record of dwellings in conformity with the Quebec Public Health Act. In virtue of this act the city sanitary authority is held to have the buildings inspected in order to ascertain any causes of unhealthful conditions.

This work demanded 92,076 visits of dwellings, dependencies, yards, etc., by the section chief and 15 inspectors; 31,312 record cards of dwellings and business places were filled out, revised and indexed. There were 9,179 requests for investigation made of which 5,992 were found to be justified.

Special by-laws (Section No. 3)

This section is responsible for the enforcement of special by-laws which have as their purpose the protection of the public's health. This control required 24,571 visits to the following places by a section chief and 8 sanitary inspectors: barber shops, hair-dressing parlors, laundries, upholstering establishments, dry-cleaning plants, massage parlors, funeral directors' parlors, children's boarding homes, theatres, industrial plants, educational institutions,

public swimming pools. They also look after fumigation and destruction of noxious weeds.

There were taken 416 samples for bacteriological analysis in 51 public pools, both indoor and outdoor. In 93% of the visits residual chlorine was found to exceed .2 p.p.m.

"The eradication of plants harmful to human beings"

(New edition)

During 1942 the Department (Sanitary inspection division) placed before the public a booklet entitled "The eradication of plants harmful to human beings" which deals with such weeds as produce skin eruptions by contact or cause hay fever through their pollen.

This pamphlet was written by Mr. René Meilleur, of the Montreal Botanical Garden, in collaboration with his colleagues and specialists from the federal and provincial departments of agriculture.

The treatise deals with poison ivy, wild parsnip, ragweed, in its various forms, and indicates how to eliminate them in the interests of public health.

As an appendix the booklet contains the text of By-laws Nos. 1621 and 1622 adopted by the civic authorities in 1940. By-law No. 1621 concerns vacant lots, how to prevent brush fires, grass fires and other inflammable growths. By-law No. 1622 deals with the destruction of harmful or noxious weeds which are the cause of hay fever, skin eruptions or other such troubles.

The collaboration of the Botanical Garden specialists has greatly assisted us in our work of enforcing By-law No. 1622.

FOOD INSPECTION

The city population can rest assured of constant and effective supervision by this department in order to assure pure milk and safe food.

The food inspection division is entrusted with the supervision of milk production and the cleanliness of milk sold and consumed

in the City, checking it from its origin on the farm to the ultimate consumer. Moreover the inspection of meat, bakeries, eating places such as public dining rooms and restaurants, groceries and other establishments where food is prepared, is under its control.

Milk inspection (Section No. 1)

Milk inspection comprises section No. 1 of this division. It entails employment of 10 veterinaries, inspectors of dairy farms in the country, and 16 city inspectors who look after pasteurization plants, dairies, special milk and the distribution of milk and by-products.

During 1942 Montrealers consumed 87,465 gallons of milk per day as compared with 80,628 in 1941; this is an increase of 6,837 gallons a day. The daily consumption in 1942 comprised 83,804 gallons of pasteurized milk, 95.82% of all milk sold, and 3,661 gallons of special (raw) milk, or 4.18% of milk sold.

Milk consumed here in 1942 originated in 4,829 farms kept constantly under inspection; 15,687 inspections were made by veterinaries of the department.

In Montreal there were, in 1942, 25 pasteurization establishments and 36 special milk plants (for raw milk) which necessitated 5,576 inspections. There were 6,135 other places where milk is handled which were likewise visited such as groceries, restaurants, hotels, dining rooms, etc. Moreover, 1,225 wagons and trucks were examined. Places selling or handling milk entailed 12,936 inspections in all.

During the year the inspectors took 15,378 samples of milk for bacteriological and chemical analysis and made 165,814 other examinations for sedimentation, temperature, Bang's disease, cleanliness of milk cans, etc.

The average fatty content of milk sold in Montreal was 3.53%. This percentage is based on the analysis of 3,383 samples of milk taken when delivered to the homes, in stores and schools.

It is admitted that milk, to be of good quality, should not contain coli-bacilli in more than 10% to 20% of samples submitted

for bacteriological analysis. These analyses show that milk is of high quality in 93.02% of the 25 pasteurized milk plants and in 71.28% of the 36 special or raw milk establishments, in conformity with the provisions of municipal by-law No. 891 concerning milk.

Vital statistics concerning deaths caused by certain diseases connected with milk have shown great improvement and correspond to the condition of the milk in Montreal as shown in the following table:

Table XVIII

Years	Milk		Death rates		
	% cows tubercu- linized	% milk pasteu- rized	Infants 0-1	Diarrhoea 0-1	Non-pul- monary tub. Rate per 100,000 pop.
			Rate per 1,000 live births		
1915-19.....	1.79	44.88	183.03	....	37.3
1920-24.....	4.21	62.57	160.6	64.4	27.8
1925-29.....	70.5	85.98	126.8	42.7	20.0
1930-34.....	97.0	95.0	105.8	32.3	16.1
1935-39.....	100.0	94.88	83.0	17.2	11.6
1940.....	100.0	95.56	59.3	10.5	7.9
1941.....	100.0	95.60	70.3	14.9	10.4
1942.....	100.0	95.82	59.2	7.8	9.3

Meat inspection (Section No. 2)

The inspection of meat in butcher stalls, small abattoirs and meat inspection stations is carried out by a staff of 19 inspectors of whom 9 are veterinary doctors and this comprises section No. 2 of the division. Inspection in the big abattoirs is under federal control which keeps inspectors on duty always, all of whom are veterinaries. This is because of the inter-provincial and even international character of the meat trade.

During 1942, 32,488 inspections were made in 1,404 establishments: markets, butcher stalls, fish markets, salting plants, abattoirs, etc.; 155,142 carcasses were inspected on the markets and in wholesale stores; 595 of these were confiscated and 247,179 pounds of meat and various other food were confiscated; 743 chemical and bacteriological analyses were also made. In addition 220,812 eggs were candled and 3,081 were condemned.

Inspection of bakeries and restaurants, etc.

(Section No. 3)

This section looks after the inspection of bakeries, restaurants, dining rooms, groceries, all places where food or food products are manufactured or stored.

There are 7,052 such places to be visited in Montreal and 1,261 delivery wagons besides. This work required, in 1942, 45,780 inspections.

There were 1,847 inspections made in the 80 bakeries here; 216,685 loaves of bread were weighed and 883 confiscated.

Health cards

The medical control division issued health cards to more than 35,000 food handlers after verifying vaccination and medical examination. This card is renewable every six months.

HEALTH DISTRICTS

Pursuant to the plan published in my 1938 annual report (page 37) and which was more extensively developed last year (page 56) the Department has organized two more health districts during 1942: Notre-Dame-de-Grace-Mount-Royal and Delorimier Districts.

**"NOTRE-DAME-DE-GRACE-MOUNT-ROYAL"
SANITARY DISTRICT**

This district was opened in January 1942. This is the fifth city health district being operated in Montreal by the Department of Health.

Staff

The staff is composed of two doctors, one of whom is district chief, the other, inspecting physician, a nurse who is group head, six visiting nurses and a stenographer, in all ten employees.

Dr. Clément de Guise is acting head of the district; he has been with the City since September 1929 when he was appointed epidemiologist in the contagious diseases division. During the 1931-32 school year he won a city scholarship and specialized in public health at Johns Hopkins University, Baltimore, Md., where he received the degree of Master of Public Health in June 1932. On December 16th 1941, he was appointed district chief in the child hygiene division and in 1942 became first chief district doctor in Notre-Dame-de-Grace-Mount-Royal.

Territory

The district includes Notre-Dame-de-Grace-Mount-Royal Wards.

The head doctor has his office at 3757 Prud'homme Avenue where the administration centre of the district is located. There are also located here the offices for the staff and for the clinics and consultations.

The total area of the district is 5,332 acres, with a population of 82,450.

Churches and schools

From the religious standpoint there are 5 French-Canadian Catholic parishes, 5 English Catholic parishes, 4 Anglican, 4 Presbyterian, 4 United Church and one Baptist Church. There are, therefore, in all 21 churches belonging to organized religious groups.

There are also 25 schools of which 16 Catholic and 9 Protestant. These schools are attended by 9,938 pupils in 318 class-rooms. There are 4,432 in Catholic schools and 5,506 in Protestant schools.

Baby dispensaries and clinics, social service

1—There are in this district 5 public hospitals: Homoeopathic, St. Mary's, Jewish General, Catherine Booth Memorial, Montreal Convalescent Home and 1 private hospital.

2—Well-baby and pre-natal clinics are 3 in number of which 2 are under control of the Health Department and the other is operated by the Child Welfare Association.

3—Other organizations: there are also in this district the following: Victorian Order of Nurses, Family Welfare, Y.M.C.A., Community Hall, Oxford Playground, Trenholme Park, McDonald Park, N.D.G. Playground, and the Côte des Neiges playground, Côte des Neiges Road at Claude Street.

DELORIMIER HEALTH DISTRICT

The above district was the sixth to be opened by the Montreal Health Department and it was inaugurated in July 1942.

The staff

This is composed of four full-time doctors of whom one is head doctor, two inspecting physicians and one psychiatrist; two part-time doctors, a dentist, a head nurse, two assistant nurses, 12 visiting nurses, a nurse in the dental clinic and a stenographer, making a total of 24 employees.

Dr. A. H. Prévost is the head doctor in this centre. He has been in the City's employ since early in 1919 when he was appointed inspecting physician in the Child Hygiene Division. He holds a diploma of Public Health from Laval University, Montreal (1915). In 1936 he was sent to the Contagious Diseases Division where he was epidemiologist and examining physician. On July 3rd 1942 he was named chief of the district and took charge of the Delorimier district.

Territory

The Delorimier sanitary health centre includes four complete wards: Delorimier, St. Denis, Lafontaine, St. Jean-Baptiste; also parts of Laurier, St. Louis, Crémazie, Bourget and St. Eusèbe.

The doctor in charge has his office at No. 4358 Boyer Street

where the health centre is located. There also are found the staff office and premises adapted to the clinics.

The total area of this district is 1,250 acres, with a population of 141,450.

Schools, Churches

From the religious angle there are 8 Catholic parishes French-Canadian, 2 English Catholic, 1 Lithuanian Catholic, 1 German Catholic; 4 Anglican, 3 United Church, 1 Presbyterian Church and 9 Jewish Synagogues. There are in all 29 churches or synagogues belonging to organized religious groups.

There are 40 schools of which 38 are Catholic and 2 Protestant. These schools are attended by 19,364 pupils divided among 615 classes. There are 18,456 children in Catholic schools and 908 in Protestant schools.

Well-baby clinics and dispensaries, social services

1—In this district are 6 private hospitals and 3 public nurseries.

2—Prenatal and baby clinics are 9 in number, of which 6 are under the Department of Health and 3 are operated by the Fédération d'Hygiène Infantile. There is a civic dental and radiological clinic and an independent organization, L'Assistance maternelle.

3—Other organizations include: Juvenile Court, Provincial School of Household Sciences, School of Higher Studies in Arts and Crafts, l'Aide aux Infirmes, L'Association des aides-maternelles, A.C.J.C., St. Jean Baptiste, Oeuvres de la Protection de la Jeune Fille, Notre Dame du Bon Conseil and St. Joseph homes, Auclair Hospice, Deaf and Dumb Institute (female), Association des Infirmières Visiteuses, St. Vincent de Paul Society, Providence Ste. Geneviève, Sœurs de l'Espérance, Action Catholique Féminine, Park Lafontaine playgrounds, Laurier and Guindon playgrounds.

THE DEPARTMENT OF HEALTH AND CPC MEDICAL SERVICES

Pursuant to the instructions and charter from the federal government concerning the organization of a local Civilian Protection Committee for the City of Montreal this committee is made up of four main divisions directed by their corresponding heads under the chairmanship of Mr. Honoré Parent, K.C., Director of Municipal Departments and Administrator delegate of the Quebec Municipal Commission.

The Director of the Department of Health acts as head of the Medical Services of the CPC.

The work of this division consists in keeping public health in Montreal at a high level and in organizing, in case of need, aid to the civilian population. Its duties and prerogatives are divided among the various aid organizations such as St. John Ambulance Brigade, St. John Ambulance Association, Canadian Red Cross Association, the hospitals, medical profession, nursing organizations, etc.

To assist the Director in his numerous and often delicate duties a general committee was formed composed of:

- Dr. A. Lapierre, Provincial Health Department;
- Dr. A. T. Bazin, Canadian Red Cross Association;
- Dr. A. Lorne C. Gilday, Montreal Hospitals Association;
- Dr. L. Gérin-Lajoie, French-Canadian Hospitals;
- Dr. A. Grant Fleming (deceased), medical director Bell Telephone Co. of Canada;
- Major A. H. Coates, St. John Ambulance Brigade;
- Lieut.-Col. Arthur Gaboury, St. John Ambulance Association;
- Dr. G. L. Prud'homme, President of the Société Médicale de Montreal;
- Dr. F. H. McKay, President of the Montreal Medico-Chirurgical Society;
- Mr. Aimé Cousineau, Sanitary Engineer, Department of Health;

Mr. Charles Barnes, officer in charge at headquarters;
Dr. C. A. Bourdon, liaison officer;
Mr. L. de G. Sylvestre, secretary.

The duties of the division of medical services of the CPC, which also give an idea of their responsibilities as to hygiene and aid to victims, may be divided into three main sections:

- 1—Public Health;
- 2—Aid to victims;
- 3—Disposal of the dead.

I—Public Health

We must first of all maintain public health at a high standard by education, prevention of epidemics, closer control over milk supplies, more rigid inspection of all premises.

From the public health point of view the prerogatives of this Committee are the same as the present duties of the Health Department and may be summed up as follows: education, prevention, inspection. This work is divided among the seven basic divisions of the Department.

The sanitation staff, whatever may be their status, doctor, nurse, veterinary, inspector, must remain at their posts even if, once in a while, they may be called upon to fulfill some other duties in an emergency.

During war time certain epidemiological problems must be the object of special study. Greater attention must be paid to the possible outbreak and spread of epidemic contagious diseases such as typhoid, typhus, diphtheria, scarlet fever, cerebro-spinal meningitis, influenza. Plans to combat these must be in readiness to meet every eventuality. Immunization against some of these diseases will guarantee protection to the public. Montreal is completely protected against small-pox; every effort is now being made to promote immunization against diphtheria which we are trying to eliminate from the City. Social diseases must be placed under strict control.

Another important problem is proper nutrition. The possible lack of certain essential foods and the rationing of others provide

an opportunity for sanitary authorities to organize special nutrition campaigns.

The inspection of food must be carried out with more care than ever; meat and milk must be very specially supervised; all milk consumed should, on account of certain production difficulties now encountered, be pasteurized.

The fact that mothers of children work in war plants also creates certain social and sanitary problems which involve the organization of nurseries for children.

For the past year doctors of the department, in their work of organizing the CPC, medically examined nearly 900 auxiliary firemen who volunteered their services in case of need.

In addition courses in first-aid work organized in schools to secure a "junior certificate" in the St. John Ambulance Association were given by our inspecting physicians and nurses who have become qualified as instructors.

II—Civilian casualties

The organization of detailed plans for caring for possible raid victims was one of the most important duties of the medical services and comprised the second section. The Director had to see that this was organized in conformity with the general plans and had to co-ordinate the efforts of all.

This important section includes training the auxiliary first-aid corps, selection of first-aid stations, evacuation centres, organizing ambulance service, general and auxiliary hospitals.

Training staff

It was most important to assure in the first place a competent staff, including volunteer first-aid corps, civilian protection committee members, or others who would be called upon to give first-aid to victims and who would become competent auxiliaries to the medical staff.

This training covers:

- a) first aid to the injured, and
- b) treatment and disinfection of gases.

Courses in first-aid treatment, under the direction of Lieut.-Col. Arthur Gaboury, were given to any groups requesting them from the St. John Ambulance Association: industries, large stores, companies, CPC, pupils, nurses, etc. This association has been entrusted with this training throughout the province. From 1940 to December 31st 1942 the association qualified 47,300 persons in the province of whom 33,500 were from Montreal; more than 14,000 school children received their "junior certificates."

Care of casualties

Care of civil casualties was assured through first-aid stations, evacuation centres and hospitals.

In the matter of giving treatment to the injured, members of the city police force, CPC, etc., who were qualified in first aid, were given the necessary equipment to assure first aid to casualties on the scene while awaiting the arrival of the stretcher corps or ambulances. For purposes of general organization the City was divided into 25 "CPC Districts."

The St. John Ambulance Brigade guaranteed the establishment and operation of 100 first aid stations and 30 mobile stations in strategic points of the city which would be available to general headquarters for special services when casualties would be heavy.

More serious cases would be taken to one of the 30 evacuation centres or to the hospitals, through the intermediary of the ambulance service.

Evacuation centres, better called clearing stations, were placed where all persons, injured or not but who were homeless and who gathered at first aid stations, were taken. There they would be classified, the more seriously injured would go to the hospitals and homeless persons would be sent to temporary shelters. The staff of these stations would be composed of doctors and nurses.

Along with the organization of these 30 clearing stations the Red Cross Association took over the following: organization of ambulance service; assisting hospitals in opening and equipping auxiliary hospitals; organization, direction and equipment of temporary shelters; organization and keeping register of casualties and general information and enquiry offices.

These duties were held to be essential services, under the direction of Dr. A. T. Bazin and Dr. E. Hurtubise, joint directors of the Committee for Welfare and Aid of Victims, of the Canadian Red Cross Association.

A complete list of first aid stations, of clearing stations and of temporary homes for the homeless was published in a special edition of the Health Bulletin (July-August 1942). The choice of these stations and the preparation of the list were in the hands of Dr. C. A. Bourdon, head of the health centres of the Department of Health, and of Sergeant-instructor G. J. Diseur, of the Police Cadet Training School, in co-operation with Dr. A. T. Bazin.

The registration of doctors and nurses whose assistance is required was carried out by means of a joint committee working in collaboration with the Red Cross. Doctors are responsible for first aid to be given in the casualty clearing stations; nurses would be on duty continually to assist the doctors. The auxiliary staff would guarantee effective operation of these centres.

Hospitals were entrusted with a major role in case of emergency. There are 14 general hospitals in the city the medical staffs of which had to be made available. They were to extend their capacity and evacuate their patients to other institutions.

A sub-committee composed of Drs. A. L. C. Gilday, L. Gérin-Lajoie, A. T. Bazin, C. A. Bourdon, was entrusted with the work of organizing the hospitals both as to medical efficiency and safety. To this end Dr. Bourdon, official of the Department of Health, was appointed liaison officer for all that might concern hospitals and the CPC.

Hospitals, with the assistance of the Red Cross, were to organize auxiliary hospitals to meet their needs or to evacuate their patients in case of raids.

III—Disposal of the dead

Finally, in an emergency, there would have been, unfortunately, the dead to consider. To this end a sub-committee of members of the clergy, sanitary officials, funeral directors, was formed under

the chairmanship of Mr. Aimé Cousineau, Director of the City Planning Department and sanitary engineer of the Department of Health, to look after the problem of disposal of the dead. There was also in this connection a sanitation problem, besides assuring proper transportation and burial with suitable religious ceremonies.

THE STAFF

Members of the staff on Service

From the outbreak of hostilities to the end of 1942, 13 members of the Health Department staff donned the uniform for active military service in the Canadian Army. These were:

From the Director's Office: Mr. Marcel Jetté, clerk;

Laboratories: Dr. F. Dussault, bacteriologist;

Child Hygiene: Dr. E. A. Blumenfeld, inspecting

Misses: R. P. Smith, nurse

E. Merleau, nurse

G. Côté, nurse

C. E. Lessard, nurse

J. Chaurette, nurse

G. Bernardin, nurse;

Mental Hygiene: Miss G. Labonté, nurse;

Food Inspection: Misses: G. Lalonde, clerk

B. Forget, clerk;

Sanitary inspection: Mr. R. Magnan, sanitary inspector.

Obituary: Dr. Eugène Gagnon, Demographer and assistant director of the Department of Health.

Dr. Gagnon died on September 3rd 1942 at Hôtel-Dieu, Montreal. He was born on July 30th 1877 and studied medicine at Laval de Montreal (now Montreal University), being admitted

to practice in June 1902. He was associate professor of histology in the medical faculty of the university and professor at the school of public health nurses at Montreal University.

He entered the Department of Health in 1914 and was the first superintendent of child hygiene, a position he held for ten years. In 1928 he became superintendent of the statistical division then in 1938 was appointed assistant director of the department and demographer. Dr. Gagnon had specialized in child hygiene and demography and contributed many scientific works, articles, papers and addresses before professional congresses for the advancement of these subjects. He was a frequent collaborator in the Health Bulletin, L'Union Médicale, the Canadian Public Health Journal, etc. He had been president and member of the Council of the Canadian Public Health Association, Statistical Division.

In the many duties which he performed Dr. Gagnon leaves remembrance and recognition of work well done, of a man who never abandoned the study of a problem until he had solved it. The Department has lost a faithful, zealous and loyal servant.

In a short time there will be published by the Department of Health a volume containing his most important contributions and works, a tribute to his memory.

Promotions:

Mr. Aimé Cousineau, Sanitary engineer and superintendent of the Division of Sanitary Inspection, was promoted to the position of Assistant Director and Sanitary Engineer of the Department of Health on September 23rd 1942.

In 1909 he received his diploma from the Montreal Polytechnical surveys, entered the City's employment in 1914 as sanitary engineer. He was the first to benefit from a City scholarship and specialized in sanitary engineering at the Massachusetts Institute of Technology and at Harvard University where he received the degree of S.B., sanitary engineering, in 1916, from both institutions.

In addition to being a member of many committees of study Mr. Cousineau is professor of city town planning at the Poly-

technical School and of city public health at the school for public health nurses at Montreal University.

Mr. Cousineau is a member of the following professional organizations: Corporation of Professional Engineers of the Province of Quebec; Engineering Institute of Canada; American Public Health Association (Fellow); Canadian Public Health Association; Royal Sanitary Institute (London, Eng.); Canadian Institute of Sewage and Sanitation; National Association of Housing Officials; Fédération internationale de l'Habitation et de l'Aménagement des villes; Conference of Municipal Public Health Engineers (president 1941); Montreal City Improvement League, from which he obtained, in 1933, the first honors prize for eminent services to the City.

Miss A. Martineau, group head nurse, Contagious Diseases Division, was promoted to the post of assistant chief nurse of the Child Hygiene Division. For two years she had been authorized by the City authorities to act, part time, as acting head of the school of public health nurses at Montreal University, Medical Faculty.

Other important promotions are noted elsewhere in this report; they concern, in most part, the formation of new health centres and CPC medical services.

Specialized training

Scholarships

Two scholarships were given by the municipal authorities to members of the staff of the Department of Health: Dr. J. Beauvilliers and Miss B. Laliberté.

Dr. Beauvilliers, inspecting physician of the Child Hygiene Division, attended Toronto University and Miss Laliberté went to the Teachers' College of Columbia University, New York.

Moreover, two nurses from the same division, Misses E. Guilbault and E. Perreault, obtained leave of absence with salary for

a year's studies, at their own expense, at the school for public health nurses, Montreal University.

Miss T. Marion, dietitian of the Department of Health, has also secured a 3-month leave of absence with pay for the purpose of taking further courses in dietetics at Cornell University, New York.

Scholarships were first given in 1931 and since that time 18 doctors, 1 engineer, and 10 nurses have taken advantage of them. Of the 29 scholarships three were given to doctors of this department through the generosity of the Rockefeller Foundation.

Certificate of sanitary inspector (C.S.I.)

Five inspectors of the Department of Health have been awarded their sanitary inspection certificates, after examinations, from the Canadian Public Health Association. These were Messrs. Roland Lafond, Léopold Massé, Léo Noel, Charles Pilotte, of the Sanitary Inspection Division, and Mr. Jean-Louis Laliberté, Food Inspection Division.

First Aid

The war has given an impetus to first aid training and in the Department of Health 104 nurses followed courses given by the St. John's Ambulance Association and obtained their first aid certificates.

Before completing this report I wish to mention in a special manner the full co-operation which this department has received from the Montreal newspapers, both English and French, in the work of educating the public which is being carried out relentlessly.

The space reserved by our local dailies for health items is always well chosen and the press releases which have been sent them officially have always received most courteous attention and treatment. Due to this co-operation from the Press there have been sent weekly, since July 1942, official releases to all the city dailies.

The educational items deal with various topics related to health and preventive medicine and give useful hints and advice to the public. In my capacity as Director and on behalf of the City I wish to thank the proprietors, editors and their staffs for their generous and willing co-operation.

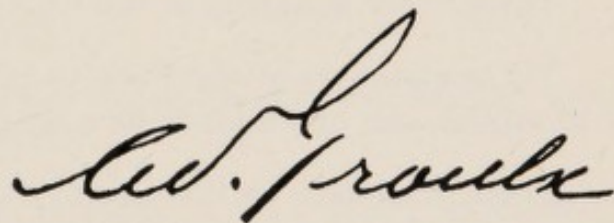
The radio stations have also given invaluable support to the Department of Health in their work, particularly during "immunization against diphtheria week" and the proper diet campaign. We wish to express our most cordial thanks to them.

The above comprise the main points of interest for the year 1942 from the point of view of public health in Montreal, which I wished to point out and comment upon.

I wish to thank the official and volunteer organizations which have lent us their valuable assistance. Let me pay tribute, in conclusion, to the devotedness and application of all our staff in its work for the protection of the health of the citizens of Montreal.

Respectfully submitted,

The Director of the Department of Health,



A. W. Froulx

THE BOARD OF HEALTH

Municipal By-law No. 1044 establishing the Board of Health, had already been amended in 1932 by By-law No. 1188. This by-law was again amended so as to allow a greater number of persons to be members of this board. This amendment became law through By-law No. 1671 which reads as follows:

“ARTICLE 1.—Section 1 of said By-law No. 105, as replaced by By-law No. 1044 and amended by By-law No. 1188 is further amended:

a) by replacing the first paragraph thereof by the following:

“Section 1.—The City Council, on the recommendation of the Executive Committee, shall appoint, on or before the first of May of each year, an advisory board to be known as the “Board of Health” and which shall be composed of eighteen members as follows:

His Worship the Mayor, *ex-officio*;

The Chairman of the Executive Committee, *ex-officio*;

The Director of the Department of Health, *ex-officio*;

Three other members of the City Council;

Three members of the Faculty of Medicine of the University of Montreal, one of whom to be a specialist in skin diseases;

Three members of the Faculty of Medicine of McGill University, one of whom to be a specialist in skin diseases;

A sanitary engineer chosen from among the professors of the Polytechnical School of the University of Montreal;

A sanitary engineer chosen from among the professors of the Faculty of Civil Engineering of McGill University;

A member of the Faculty of Dental Surgery of the University of Montreal;

A member of the Faculty of Dental Surgery of McGill University;

Two practising pharmacists, one of whom to be French-speaking, the other to be English-speaking."

b) by replacing the third and fourth paragraphs thereof by the following:

"The members of the said Board shall remain in office until the appointment of their successors. Their services shall be gratuitous.

The quorum of the said Board shall be seven members."

ARTICLE 2.—This by-law shall form part, to all intents and purposes, of said By-law No. 105 which it amends.

This Board, appointed by the City Council on June 2nd 1942, in conformity with By-law No. 1671, was composed, for the year 1942, as follows:

His Worship the Mayor, ex-officio;

The Chairman of the Executive Committee, ex-officio;

The Director of the Department of Health, ex-officio;

Councillor Jessie K. Fisher;

Councillor Z. H. Lesage;

Councillor A. D. Quintin;

Doctor Albert LeSage, Dean of the Faculty of Medicine of the University of Montreal;

Doctor Gaston Lapierre, member of the Faculty of Medicine of the University of Montreal;

Doctor Albéric Marin, member of the Faculty of Medicine of the University of Montreal and specialist in skin diseases;

Doctor Grant Fleming, Dean of the Faculty of Medicine of McGill University;

Doctor J. R. Fraser, member of the Faculty of Medicine of McGill University;

Doctor L. P. Ereaux, member of the Faculty of Medicine of McGill University and specialist in skin diseases;

Mr. T. J. Lafrenière, sanitary engineer and professor of the Polytechnical School of the University of Montreal;

Mr. R. de L. French, sanitary engineer and professor of the Civil Engineering Faculty of McGill University;

Doctor Eudore Dubeau, Dean of the Faculty of Dental Surgery of the University of Montreal;

Doctor D. P. Mowry, member of the Faculty of Dental Surgery of McGill University;

Mr. J. O. Taillefer, practising pharmacist;

Mr. Kenneth Tyrrell, practising pharmacist.

Questions studied

During the year, the Board studied the following questions:

Poliomyelitis situation in Montreal—summer 1942.

Communications re:

- a) peddlers;
- b) wrapping of bread.—Appointment of a sub-committee in this connection.

Director's Office

Report of
LAW OFFICE
for the year 1942

by
GORDIEN MENARD
 Lawyer, Department of Health

Briefs submitted for study and report.....	191
Drawing up of complaints for writs of summation in Recorder's Court.....	415
Actions taken.....	409
a) pleaded.....	405
b) maintained.....	402
c) dismissed.....	1
d) withdrawn.....	2
Study of contracts and legal opinions given in connection there- with.....	3
Preparation of notices.....	11
Preparation of affidavits.....	3
Study and reports on legal questions submitted.....	142
Legal opinions to the Director and the Superintendents of the various divisions of the Department of Health.....	371
Written reports.....	27
Draughting of By-laws.....	9

Director's Office

**Report of the
SECTION OF PUBLIC HEALTH EDUCATION
for the year 1942**

by

ADRIEN PLOUFFE

Doctor of Public Health

Assistant Director, Department of Health

The Annual Report

In 1942 we published the 1941 Annual Report which contained the report of the Director concerning the statement of expenditures (1941-42), an appreciation of the demographic movement, comments on maternal and infant mortality and on deaths among illegitimate children, diarrhoea among infants, deaths from tuberculosis, contagious diseases in 1941, typhoid, diphtheria and immunization also remarks on improvements made in the Department in 1941; organization of city health districts, centralizing of statistics, well-baby clinics and the fight against infant mortality, radiographic examination of teachers, dental inspection in schools. Then followed items concerning the Board of Health, the Legal Office, the Section in charge of health education of the public and reports from the several divisions.

The Health Bulletin

The Health Bulletin was published every two months during 1941, in which the following items appeared among others: The CPC in Montreal (chart of committees); Immunization Week in Montreal, appeal to the parents; What one should know about

diphtheria; Protecting food in Montreal; The CPC and the medical profession; Diphtheria, a preventable disease.

The July-August number was devoted entirely to the CPC and gave a complete list of field casualty stations, first aid stations, temporary shelters for homeless persons, and the boundaries of the several CPC districts.

The September-October number contained a tribute to the late Dr. Eugène Gagnon, Assistant Director of Health; compliments to Mr. Aimé Cousineau, the new assistant director; radiographic examination of teachers; address of Dr. Oscar Mercier, president of the XVIIth Convention of the A.M.L.F.A.N.; address of Dr. Adélar Groulx at this convention; accomplishments and works of Dr. Gagnon.

The November-December number contained comments on the year 1942; the first health district in Montreal; the nutrition campaign in Montreal.

Radio

Members of our staff spoke, under the auspices of several associations and thanks to the gracious co-operation of the radio stations, on various topics including: the fight against diphtheria; infant and maternal mortality; the campaign against tuberculosis; the clean-up campaign; proper nutrition; meat and milk inspection, etc.

Newspapers

The Department of Health sends to the Press, every so often, and according as need arises, news items and releases which are of interest to the public and of a nature to warn them against the danger of disease.

As in 1941 the Health Education Section provided the press with ample opportunities for co-operation. More than 700 different items were published under various headings such as "The Health Department"; "Health is Wealth"; "To Help Your Health"; "How to Preserve Health"; "The Good Health Bulletin"; "A health idea every day"; "Living Capital"; etc.

Very special thanks are due our dailies, weeklies and reviews which have not spared space or trouble to publish our propaganda material.

Now, more than ever, the war has demonstrated how publicity, through the radio and the press, can be a valuable medium of propaganda and one of the most effective and powerful agents available for this work. As in the past the Department of Health repeats its thanks to the radio stations and to the press for the gracious manner in which they have received the health-giving ideas of hygiene and preventive medicine which our section has tried to spread by every means and in every direction.

Division of Communicable Diseases

Report of the
COMMUNICABLE DISEASE DIVISION
for the year 1942

by

Dr. J. H. GERVAIS, D.H.P.
superintendent

In the course of the year nothing of particular importance has to be stated about the general evolution of communicable diseases.

However we would like to make a brief outline of the incidence of two diseases one of which has usually an endemic evolution, and the other appears rather of a sporadic form. These diseases are diphtheria and poliomyelitis.

Diphtheria

A slight increase in cases reported to the Division of Communicable Diseases has been noticed for the year 1942. We had 212 cases of diphtheria with a total of 26 deaths comparatively to 193 cases and 31 fatalities for the preceding year. We would like to give you explanations on the principal factors concerning the evolution of the disease.

If we refer to the Table "Cases of diphtheria by ages," we observe that we had 87 cases (41%) in the 1 to 4 years group, and 91 cases (42.9) in the 5 to 9 years group. The number of these cases is decreasing progressively in the groups of older ages; that can be explained by the ever increasing proportion of acquired immunity with the years.

Topographically speaking, this table shows us that the cases are more numerous in wards with a very dense population.

As a matter of fact we know that one of the health centres of our city has reported 86 cases of diphtheria, which is 40.5% of the total of morbidity for this year. A survey by our division

has revealed that in this same center we have a very dense population living in deplorable hygienic conditions.

The encumbrance of housing, due to a strong emigration from rural centers of working people in our war industries, has favoured the outbreak of diphtheria cases among a population not immunized by previous attack of this disease or by repeated contacts with sick patients.

And moreover, we know that in this center the total number of persons immunized is lower than in any of the other health centers, which derived more profit from the immunization campaign sponsored by the Department of Health in the past few years.

In a general way, it is not easy to prevent possible danger of contamination from persons travelling all over the province, where cases of diphtheria are registered within a couple of years.

Poliomyelitis

Few cases of poliomyelitis were registered at the Department of Health in the last six months of 1942. Those of local origin numbered 42 cases. We also had to hospitalize 45 cases coming from outside our city limits.

We evidently had an acute evolution of poliomyelitis in the region of Quebec and, as for diphtheria, we do not need to be surprised if our population had to suffer from a slight touch of this disease. Its evolution presented a very light form and the cases occurred mostly among children from 3 to 10 years of age.

Most cases were found in wards in which hygienic domestic conditions are more or less defective.

As commonly observed in the outbreak of this disease, it was in the mid-fall that we had a retrogression of the cases. This fact seems to confirm that the summer season has the most influence on the cyclic evolution of this disease.

In 1942, we had an increase in cases of whooping-cough and chickenpox, comparatively to 1941. As for scarlet fever, mumps and measles, we have registered a lower number of cases.

The following table shows the general evolution of contagious diseases as reported to our Division.

If we consider that our population has greatly increased in 1942, due to the fact that a great number of families have come to our city to work in the war industries, our fatality rate is lower for 1942. We can also add that it is lower than the one we have registered for the preceding years.

Table I

Diseases	Cases reported	Deaths	Percentage of deaths
Whooping-cough.....	4,814	40	0.8
Diphtheria.....	212	26	12.2
Amoebic dysentery.....	7	1	14.2
Bacillary dysentery.....	42	1	2.3
Lethargic encephalitis.....	0	0	....
Erysipelas.....	94	1	1.0
Undulant fever.....	1	0	....
C.S. Meningitis.....	13	5	38.4
Purulent ophthalmia.....	34	1	2.9
Mumps.....	3,799	0	....
Infantile paralysis.....	42*	5	11.9
Measles.....	4,923	12	0.2
German measles.....	399	0	....
Scarlet fever.....	1,774	3	0.1
Puerperal septicaemia.....	24	24	....
Typhoid fever.....	55†	9	16.3
Chickenpox.....	4,061	6	0.1
Smallpox.....	0	0	....
Total.....	20,294	134	0.6
Pulmonary tuberculosis.....	2,264	639	28.2
Tuberculosis other forms.....	134	86	64.1
Grand total.....	22,692	859	3.7

*Plus 45 outside cases with 1 death.

†Plus 26 outside cases with 3 deaths.

Summary of operations

Cases reported and confirmed.....	22,692
Number of deaths.....	859
Cases hospitalized.....	4,817

Visits by physicians (visits of control).....	8,024
Visits by nurses (tuberculosis included).....	28,691
Visits by disinfectors.....	4,223
Number of disinfections.....	3,446
Houses placarded.....	3,536

Number of vaccinations against smallpox:

(a) by Division of Child Hygiene, performed in schools and industrial establishments....	13,172
(b) by the Division of Medical Control.....	11,092
(c) by private physicians.....	506
(d) by other institutions.....	232
	———— 25,002

Number of complete immunizations against diphtheria reported to our Division and given by:

(a) Child Hygiene Division.....	11,154
(b) Child Welfare Association.....	757
(c) Fédération des Œuvres d'Hygiène infantile..	3,694
(d) Private physicians.....	1,248
(e) Other institutions.....	394
	———— 17,247

Number of dog bites reported to the Division of communicable diseases.....	219
--	-----

Free distribution of scarlet fever toxin:

Number of vials:

(a) curative doses.....	48
(b) preventive doses.....	52

Free distribution of antidiphtheria serum:

Number of vials:

(a) curative doses.....	319
(b) preventive doses.....	295

Free distribution of tuberculin (Vollmer Patch Test).....	15,880
---	--------

Free distribution of Toxoid (Anatoxine Ramon) for immunization against diphtheria.....	5,628
--	-------

Various analyses submitted to the Municipal Laboratory..	9,543
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* * *

Following this outline, details of the various operations in the Division of communicable diseases for the year 1942 are cited.

Table II
Typhoid fever*

1942 Months	Repartition							
	Number of cases		Source of infection		Hospitalization		Deaths	
	Local	Outside	In Montreal	Outside of Montreal	Local cases	Outside cases	Local cases	Outside cases
January.....	5	3	5	3	3	3	2	1
February.....	1	0	1	0	0	0	1	0
March.....	3	0	3	0	3	0	1	0
April.....	5	3	5	3	4	3	1	1
May.....	12	3	12	3	11	3	1	2
June.....	3	2	3	2	2	2	0	0
July.....	6	1	5	2	5	1	1	0
August.....	6	3	4	5	4	3	0	0
September.....	6	3	4	5	5	3	1	0
October.....	3	3	3	3	2	3	1	1
November.....	3	5	2	6	2	5	0	0
December.....	2	0	1	1	1	0	0	0
Total.....	55	26	48	33	42	26	9	5

Percentage of deaths for local cases: 16.3%.
*4 paratyphoid fever cases included.

Table V
Classification by nationalities

Diseases	French Canadians	English Canadians	Jews	Other Nationalities	Total
Whooping-cough.....	3,674	722	141	277	4,814
Diphtheria.....	189	17	0	6	212
Amoebic dysentery.....	0	5	2	0	7
Bacillary dysentery.....	22	15	3	2	42
Lethargic encephalitis.....	0	0	0	0	0
Erysipelas.....	67	20	1	6	94
Undulant fever.....	1	0	0	0	1
C.S. Meningitis.....	12	1	0	0	13
Purulent ophthalmia.....	31	1	0	2	34
Mumps.....	2,042	1,407	107	243	3,799
Infantile paralysis.....	26	13	0	3	42
Measles.....	2,595	1,216	771	341	4,923
German measles.....	230	124	18	27	399
Scarlet fever.....	1,079	481	114	100	1,774
Puerperal septicaemia.....	18	3	1	2	24
Typhoid fever.....	49	6	0	0	55
Chickenpox.....	2,103	1,331	397	230	4,061
Smallpox.....	0	0	0	0	0
Total.....	12,138	5,362	1,555	1,239	20,294
Pulmonary tuberculosis.....	1,531	430	122	181	2,264
Tuberculosis other forms.....	91	20	9	14	134
Grand total.....	.....	.....	.....	.....	22,692

VI

by wards

Mumps	Infantile paralysis	Measles	German measles	Scarlet fever	Puerperal septicaemia	Typhoid fever	Chickenpox	Smallpox	Total	Pulmonary tuberculosis	Tuberculosis other forms
257	2	126	13	19	1	1	138	0	756	50	1
22	1	56	7	43	1	3	52	0	391	63	5
35	0	92	7	29	1	0	71	0	401	75	5
92	0	154	7	78	1	2	94	0	620	122	12
67	0	160	8	48	0	4	65	0	526	68	5
7	0	9	4	7	0	2	15	0	82	37	2
29	0	162	4	54	1	0	96	0	413	58	1
516	0	96	14	120	1	4	274	0	1,408	77	2
346	0	97	7	83	0	3	78	0	837	63	3
58	0	212	23	20	1	1	159	0	624	50	4
281	0	243	15	104	1	1	199	0	923	36	1
352	2	404	45	117	0	5	719	0	1,758	72	1
25	2	33	3	17	1	0	24	0	277	59	4
81	0	226	15	43	0	6	82	0	688	49	3
206	5	333	56	67	0	2	330	0	1,235	105	5
111	0	83	15	85	0	2	70	0	409	79	2
36	0	95	5	33	1	0	30	0	244	47	2
22	7	27	4	43	2	0	45	0	256	49	5
44	2	87	4	49	1	1	95	0	449	67	4
98	0	183	29	81	2	0	111	0	781	93	4
50	1	41	14	35	1	0	32	0	298	51	5
59	0	80	10	50	1	0	91	0	362	47	2
33	1	53	5	39	0	0	44	0	192	38	2
113	5	152	6	36	0	2	158	0	600	61	6
29	0	45	3	43	1	1	39	0	257	79	1
204	1	58	4	28	1	3	160	0	648	59	3
49	2	260	6	63	0	2	94	0	691	67	7
32	0	30	6	18	0	0	18	0	149	32	1
80	2	110	9	27	1	1	41	0	339	84	6
36	2	310	5	33	0	1	111	0	611	67	5
49	0	134	5	59	1	1	111	0	561	55	6
26	1	46	3	24	0	0	33	0	216	37	1
39	5	338	27	35	1	0	107	0	673	64	2
22	0	15	6	16	0	0	38	0	139	46	5
293	1	373	5	128	2	7	237	0	1,480	158	11
3,799	42	4,923	399	1,774	24	55	4,061	0	20,294	2,264	134
.....	.....	.....	.....	.....	.....	.....	.....	.....	22,692	.....	.....

Control of Contagious Diseases

1942

Diseases	Control visits			
	Diagnosis	Super- vision of quaran- tined houses	Disinfection	Placards
Vincent's angina.....	1	39	0	0
Whooping-cough.....	1,382	5,065	748	1,433
Diphtheria.....	15	1,252	307	132
Amoebic dysentery.....	2	0	0	0
Bacillary dysentery.....	0	1	0	0
Lethargic encephalitis.....	0	1	0	0
Erysipelas.....	1	76	43	0
Undulant fever.....	6	0	0	0
Scabies.....	81	184	0	0
Miscellaneous.....	0	0	13	0
Skin diseases.....	109	179	0	0
Malaria.....	1	0	0	0
Wrong addresses.....	170	0	0	0
C.S. Meningitis.....	12	19	4	0
Purulent ophthalmia.....	1	35	0	0
Mumps.....	1,633	3,088	13	0
No infection.....	1,014	0	0	0
Infantile paralysis.....	83	103	62	5
Measles.....	1,019	5,442	437	1,644
German measles.....	152	380	4	0
Scarlet fever.....	166	2,612	1,325	322
Puerperal septicaemia.....	0	12	0	0
Under observation.....	377	0	0	0
Tuberculosis.....	1	3,209	461	0
Typhoid fever.....	87	51	11	0
Chickenpox.....	1,133	3,681	18	0
Miscellaneous visits.....	578	3,257	4,223	0
Vulvo-vaginitis.....	0	5	0	0
Total.....	8,024	28,691	7,669	3,536

Visiting nurses in their investigations in families have taken 5,479 cultures for laboratory analysis.

**Vaccinations against smallpox
performed by Private Physicians and Institutions**

Ages	1937	1938	1939	1940	1941	1942	Total
Under 1 year.....	0	20	56	310	198	265	849
1 year.....	0	42	42	91	64	38	277
2 years.....	0	41	17	119	27	27	231
3 years.....	6	20	51	82	53	28	240
4 years.....	9	32	57	86	34	61	279
5 years.....	41	80	173	324	73	66	757
6 years.....	109	221	488	930	195	111	2,054
7 years.....	8	65	163	319	78	30	663
8 years.....	1	13	48	81	24	10	177
9 years.....	0	2	27	41	16	8	94
10 years and over...	0	64	337	447	317	94	1,259
Total.....	174	600	1,459	2,830	1,079	738	6,880

Pasteur Hospital

Patients hospitalized.....	2,731
Number of days of hospitalization.....	99,382
Average sojourn for each patient.....	36
Maximum hospitalization per day.....	309
Minimum hospitalization per day.....	211
Average hospitalization per day.....	272
Deaths during the year 1942.....	74
Deaths during the first 48 hours.....	36
Number of deaths after the first 48 hours.....	38
Proportion of deaths during the first 48 hours to the total of deaths.....	48%
Ambulance calls.....	2,189
Microscopic examinations.....	3,674
Urinalyses.....	5,556

Nationality and religion of patients

Nationality	Total	Religion	Total
French-Canadians.....	2,620	Roman Catholics.....	2,670
English-Canadians.....	42	Protestants.....	54
Jews.....	1	Jews.....	1
Other nationalities.....	68	Other religions.....	6
Total.....	2,731		2,731

Fluctuation of patients

Diseases	In hospital January 1st, 1942	Ad- mitted	Total number of patients	Cured	Dead	In hospital Decem- ber 31st, 1942
Diphtheria.....	25	192	217	171	25	21
Scarlet fever.....	124	760	884	763	....	121
Measles.....	24	420	444	438	....	6
Erysipelas.....	2	57	59	56	....	3
Chicken-pox.....	6	39	45	43	1	1
Whooping-cough.....	80	862	942	828	22	92
Mumps.....	4	35	39	39	....	....
Influenza.....	1	20	21	19	....	2
German measles.....	....	11	11	11	....	....
Poliomyelitis.....	....	11	11	11	....	....
Diffuse phlegmon.....	....	8	8	7	1	....
Miscellaneous.....	16	316	332	290	25	17
Total.....	282	2,731	3,013	2,676	74	263

Alexandra Hospital

Patients hospitalized.....	1,804
Number of days of hospitalization.....	31,991
Average sojourn for each patient.....	23
Maximum hospitalization per day.....	167
Minimum hospitalization per day.....	65
Average hospitalization per day.....	116
Deaths during the year 1942.....	10

Deaths during the first 48 hours.....	3
Number of deaths after the first 48 hours.....	7
Proportion of deaths during the first 48 hours to the total of deaths.....	30%
Ambulance calls.....	1,349
Microscopic examinations.....	.....
Urinalyses.....	15,000

Nationality and religion of patients

Nationality	Total	Religion	Total
French-Canadians.....	466	Roman Catholics.....	775
English-Canadians.....	991	Protestants.....	915
Jews.....	104	Jews.....	104
Other nationalities.....	243	Other religions.....	10
Total.....	1,804		1,804

Fluctuation of patients

Diseases	In hospital January 1st, 1942	Ad- mitted	Total number of patients	Cured	Deaths	In hospital Decem- ber 31st, 1942
Diphtheria.....	.....	42	42	25	6	11
Scarlet fever.....	82	649	731	666	.....	65
Measles.....	27	263	290	288	.....	2
Erysipelas.....	.....	21	21	20	.....	1
Chicken-pox.....	.....	37	37	37	.....	.....
Whooping-cough.....	21	325	346	316	2	28
Mumps.....	10	287	297	293	.....	4
Influenza.....	.....	.....	.....	.....	.....	.....
German measles.....	.....	27	27	27	.....	.....
Poliomyelitis.....	.....	6	6	6	.....	.....
Diffuse phlegmon.....	.....	.....	.....	.....	.....	.....
Miscellaneous.....	1	147	148	146	2	.....
Total.....	141	1,804	1,945	1,824	10	111

Communicable Diseases Division**Report of the
SECTION OF TUBERCULOSIS
for the year 1942**

by

LEO LADOUCEUR, M.D.
Chief of Section

During the past year the Section of Tuberculosis carried out its work with extended scope. This section is gradually taking the course which, from its formation, the Director of the Department of Health charted for it: the co-ordination of the fight against tuberculosis and the adoption of uniform methods of operation by the organizations engaged in the fight.

During the year, groups of nurses have come to us from Montreal and McGill Universities. It is a pleasure for us to inform them on the *modus operandi* of our section hoping that they will find interest in this work and become enthusiastic promoters of our endeavors.

The Central Records Office

In 1942 there was an increase in the number of cases reported and deaths from tuberculosis. This increase is partly due to greater accuracy in detection, partly also to the hard, sustained work of the people, either in war plants or in industries where lack of manpower obliges the remainder of the staff to exert greater efforts.

In order to improve our records system we have been receiving, since November last, from sanatoria and hospitals, not only in Montreal but throughout the province, a monthly report on tuberculosis cases from Montreal showing those who left the institution within the month with details on their condition. This allows us to follow these cases wherever they go and to ascertain the state of their lesions.

Reported	Cases			Total
	Inc.	Mod. adv.	Greatly adv.	
Secondary T.B. (adult).....	488	1,274	387	2,149
T.B. of lungs (youth).....	102	4	9	115
T.B. other forms.....	...	...	...	134
Total reported cases.....	590	1,278	396	2,398

Work of visiting nurses

Visiting nurses have done an enormous amount of work in the past year as is shown in the following table. We have tried by all means to eliminate useless calls and I think that we have now reached the minimum consistent with absolute needs.

VISITS TO HOMES by nurses:	
New cases.....	1,501
Subsequent visits.....	1,662
Sundry.....	1,127
Total.....	4,290

The Radiological Clinic

During 1942 we took 12,406 radiographs in comparison with 9,866 in 1941.

Pursuant to the amendment to the Public Instruction Act adopted on May 17th, 1941, providing for obligatory examination of all teachers (male and female) during the 1941-42 school year, 5,545 teachers in Montreal schools were radiographed in the anti-tuberculosis clinics and hospitals of the city.

Eighteen employees of the Catholic and Protestant School Boards who were or might become contagious for children in contact with them were withdrawn from the profession either permanently or at least until they could prove their recovery or that they had become harmless. In addition 127 persons, carriers of hidden

fibrous tuberculosis, who were found after the most minute examination to be non-contagious, and 72 suspected cases must remain under close watch, with regular radiographs, so long as the proper authorities consider this necessary. Of these 99 have already been re-examined. Moreover we have radiographed 341 new or part time professors.

**Radiographic examination of teachers (male and female)
of the City of Montreal for 1941-42**

Teachers	Active T.B.	Fibrous, Latent, or app. cured	Suspected cases under observa- tion	Negative	Total
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1.—Montreal Catholic School Commission

Religious (F.).....	5	22	24	1,447	1,498
Religious (M.).....	4	13	10	735	762
Lay (M.).....	2	25	20	1,101	1,148
Lay (F.).....	4	14	15	873	906
Total.....	15	74	69	4,156	4,314

2.—Protestant School Board

Total.....	3	50	13	1,086	1,152
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3.—Private and independent schools

Religious.....	..	2	8	64	74
Lay (M.).....	..	0	0	1	1
Lay (F.).....	..	1	0	3	4
Total.....	..	3	8	68	79
Grand total.....	18	127	90	5,310	5,545

Doctors are placing greater confidence in the radiograph and the increased number of cases reported by them indicates progress as reflected in the following table:

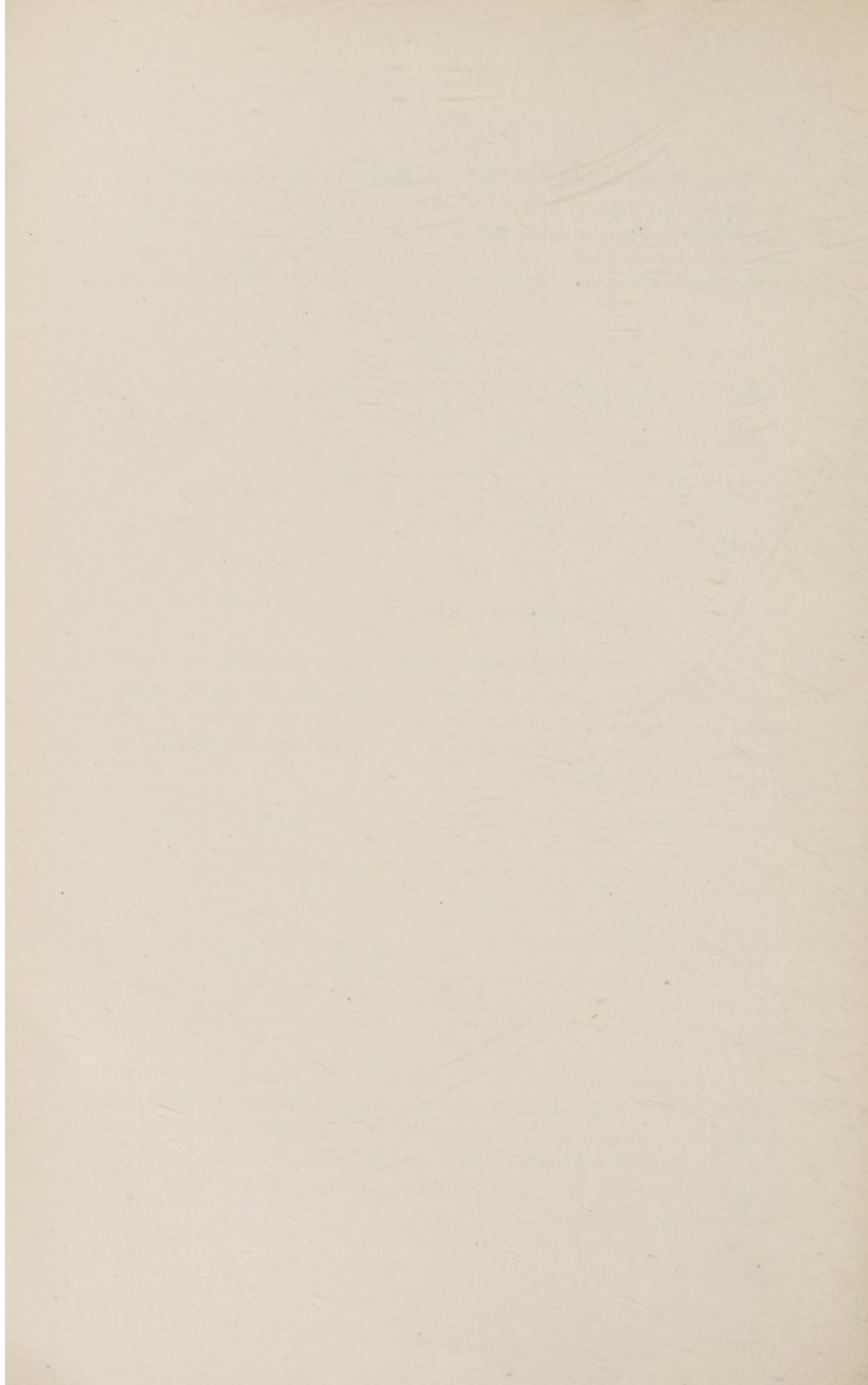
Cases referred	Positive					Neg.	Susp.	Total
	Inc.	Mod. adv.	Very adv.	A.F.	Total			
Doctors.....	166	633	23	45	867	5,506	2,589	8,962
Contacts.....	126	123	..	6	255	1,949	929	3,133
Volunteered.....	2	8	..	..	10	228	73	311
Total.....	294	764	23	51	1,132	7,683	3,591	12,406

Tuberculin (Vollmer Patch Test)

In 1941, 13,286 children or adults had been given the tuberculin test. In 1942 this number dropped to 3,077. We can easily understand that in this day of intense work, where the mother as well as the father leaves the home for the workshop, attendance at clinics may well diminish.

Reactions	Positive	Negative	No return	Total
Section of tuberculosis.....	88	264	9	361
Child Hygiene Div. and Health Districts.....	395	2,295	26	2,716
Total.....	483	2,559	35	3,077

Our organization for the detection of this malady in our fight against T.B. is constantly improving and will soon be comparable with that of other cities heretofore better equipped. We must not however slacken our speed when we are on such a fine road and it is our bounden duty to continue and intensify the fight until final success is reached.



Division of Child Hygiene

**Report of the
DIVISION OF CHILD HYGIENE
for the year 1942**

by
Dr. J. N. LAPORTE, D.P.H.
Superintendent

The report of the work of the division of Child Hygiene for the year 1942 is divided into three principal parts:

FIRST PART:

I—MATERNAL, INFANT and PRESCHOOL HYGIENE.

1. Maternal hygiene.

5 prenatal clinics.

2. Infant hygiene (0-1 year) and preschool hygiene (1-6 years).

a) 50 Well-baby and preschool clinics;

b) 2 Open-air clinics;

c) Child hygiene league;

d) Inspection of private boarding houses for children and private hospitals and maternities.

II—SCHOOL HYGIENE and MEDICAL INSPECTION OF SCHOOLS.

1. Medical examination of pupils.

2. Hearing tests with audiometer No. 4-A.

3. First-aid.

4. Medical examination of teachers.

5. Summer camps.

III—NUTRITION.

IV—MENTAL HYGIENE.

SECOND PART:

I—Immunization against diphtheria.

II—Vaccination against smallpox.

III—Tuberculin tests.

IV—Distribution of literature.

APPENDIX:

I—Report of the dental hygiene section.

II—Report of the sanitary districts section.

III—Report of the activities of the nurses of the Department of Health.

FIRST PART

1. MATERNAL HYGIENE

PRENATAL CLINICS

The following table indicates the results obtained in 1943 in the five municipal clinics.

Table I

Number of municipal clinics							5
Number of conferences							200
Number of prenatal cases registered	carried over cases						101
	new cases	Month of pregnancy when admitted					
		Under 4th 114	4th-5th 80	6th-7th 66	8th-9th 27	In 10th —	287
Number of	consultations with doctor						1,015
	blood pressures						978
	urinalyses						886
	Wasserman's tests						89
	positive						1
	negative						88
	notices to family physicians						14
Home visits	recruitment						602
	to registered mothers						281
	post-partum						125
	Total						1,008

The following table indicates the number of prenatal cases registered at "l'Assistance Maternelle" and in the prenatal clinics of Montreal Hospitals.

Table II

	Month of pregnancy when admitted					
	Under 4th	4th-5th	6th-7th	8th-9th	In 10th	Total
L'Assistance Maternelle..	115	237	396	427	44	1,219
Hospitals:						
Maternité Catholique..	16	110	200	379	...	705
Notre-Dame.....	10	21	34	258	...	323
Ste-Jeanne-d'Arc.....	14	18	60	12	...	104
Ste-Justine.....	68	107	155	117	...	447
St-Luc.....	42	49	60	71	7	229
Catherine Booth.....	85	145	111	59	...	400
Homoeopathic.....	62	40	7	3	...	112
Jewish General.....	44	88	22	12	...	166
Royal Victoria.....	277	166	334	284	124	1,185
St. Mary's.....	102	97	73	45	4	321
Woman's General.....	263	307	385	451	50	1,456
Total.....	983	1,148	1,441	1,691	185	5,448
Grand total.....	1,098	1,385	1,837	2,118	229	6,667

Maternity cases in Montreal

Table III

Number of confinements in 1942: 21,253

Rate per 1,000 population: 22.95

Number of beds and prenatal cases
in Montreal Hospitals—

1° Hospitals	Number of beds				Number of cases			
	Private	Semi-private	Public	Total	Private	Semi-private	Public	Total
Maternité Catholique...	4	9	175	188	10	46	649	705
Miséricorde.....	27	28	...	55	690	990	...	1,680
Notre-Dame.....	30	15	10	55	914	459	288	1,661
Ste-Jeanne d'Arc.....	9	20	5	34	296	339	46	681
Ste-Justine.....	16	4	15	35	489	214	336	1,039
St-Luc.....	12	16	10	38	517	...	198	715
Catherine Booth.....	5	22	23	50	58	598	262	918
Homoeopathic.....	7	13	5	25	127	488	126	741
Jewish General.....	6	19	16	41	146	702	142	990
Royal Victoria.....	23	13	62	98	559	559	1,241	2,359
St. Mary's.....	13	19	10	42	195	649	302	1,146
Woman's General.....	9	4	12	25	63	257	286	606
L'Aide à la femme.....	...	...	...	...	...	...	70	70
Private Hospitals								
Beaulac.....	12	...	...	12	362	...	...	362
Pinard.....	12	...	...	12	518	...	...	518
Ste-Anne.....	11	...	...	11	86	...	...	86
Ste-Thérèse.....	13	...	...	13	193	...	...	193
Mount-Royal.....	8	...	...	8	8	...	...	8
Mrs. L. Martel.....	5	...	...	5	101	...	...	101
Belvédère.....	11	...	...	11	145	...	...	145
Bellevue.....	10	...	...	10	195	...	...	195
St-Denis.....	12	...	...	12	274	...	...	274
Total.....	255	182	343	780	5,946	5,301	3,946	15,193
2° Home cases by private physicians.....	...	...	...	...	5,462	...	...	5,462
3° Number of indigent cases handled in the homes by private physicians and paid by:								
a) Social Welfare Department.....	...	...	...	...	...	...	14	...
b) L'Assistance Maternelle.....	...	...	...	...	...	...	584	598
Grand total.....	255	182	343	780	11,408	5,301	4,544	21,253

2. INFANT HYGIENE (0-1 year) and PRESCHOOL HYGIENE (1-6 years)

WELL-BABY and PRESCHOOL CLINICS

In the course of the year 1942, one new clinic was opened in St. Victor parish, making a total of 50 Well-Baby clinics. Besides, 27 independent clinics of which 19 French directed by "La Fédération d'Hygiène Infantile" and 8 English directed by the Child Welfare Association, continued operating in the city limits of Montreal. An annual subsidy of \$8,500.00 was granted to them by the city.

Following an agreement between the Department of Health and the Child Welfare Association, and, in virtue of a resolution by the Executive Committee of the City passed April 23rd 1935, two Well-Baby clinics passed under the control of the Department of Health (Division of Child Hygiene), during the year 1942.

1. The "Maisonneuve Clinic," situated at 4301 Adam Street, was discontinued on May 6th 1942 and transferred to Maisonneuve municipal clinic situated at 4298 Adam Street, where two days each week, Tuesday and Wednesday a.m. are reserved for English speaking mothers.

On Tuesday a.m. mothers are invited to attend the demonstrations given by the nurse, and Wednesday a.m. is the clinic day, with the doctor.

2. The "Montreal General Hospital Clinic," situated at 66 Dorchester St. East, was discontinued on May 5th 1942 and transferred to St. Jacques municipal clinic situated at 1184 St. Hubert Street, where one day each week, Tuesday p.m. is reserved for English speaking mothers.

Table IV

This table indicates the general results of the work done in the clinics during the year 1942

		Department of Health		Child Welfare Association		"Fédération d'Hygiène Infantile"	
		Infant	Pre-school	Infant	Pre-school	Infant	Pre-school
Number of clinics.....		50	50	8	8	19	19
Number of children registered...		11,129	11,950	1,616	2,922	5,676	4,184
Number of deaths (0-1 year) among registered babies.....		16	....	6	....	10	....
Percentage of deaths compared to the number of children registered.....		0.2	....	0.3	....	0.17	....
Number of children attending clinics.....		60,383	26,340	5,414	4,377	52,602	14,285
Average number of consultations per child.....		5.5	2.2	3.3	1.5	9.3	3.4
Home visits	nurses.....	16,754	13,121	2,586	5,245	6,736	6,936
	assistant-nurses.....	....	....	....	....	11,790	10,694
Group conferences	sessions.....	288					
	number present.....	535					

OPEN-AIR CLINICS

Two open-air Well-Baby clinics were opened during the months of July and August: one in Lafontaine Park and the other in St. Helen's Island. A doctor was in attendance every day at Lafontaine Park and on pic-nic days only at St. Helen's Island.

Table V

Camps open for a period of.....	2 months
Weighings.....	107
Dressings.....	319
Vaccinations.....	1,478
Revaccinations.....	59
Certificates.....	1,341
Examination of children entering school in September.....	131

CHILD HYGIENE LEAGUES

Several groups of the Child Hygiene League have been formed in 1942 by the personnel of the Division of Child Hygiene among young girls attending the following schools: Baron Byng, Garneau, Jacques-Viger, Madeleine-de-Verchères, Marguerite-Lemoyne, St. Clément, St. Gabriel-Lalemant, St. Georges, Ste. Jeanne-d'Arc, St. Nom-de-Jésus, St. Paul-de-la-Croix, Stadacona, St. Marc.

Another group has been organized by a nurse of the Child Welfare Association.

The number of groups organized in 1942 was 8 and the number of members 247.

Inspection of children's boarding houses and private hospitals and maternities for the year 1942

The supervision of children's boarding-houses and private hospitals and maternities, has been carried out as indicated in the table which follows:

Table VI

Children's boarding houses

Number of	Boarding- houses	With license (of which 2 were cancelled during the year)		12
		"Assistance aux Familles"		105
		Catholic Welfare Bureau		42
		Jewish Child Welfare		54
		Protestant Foster Home Centre		150
		Women's Directory		61
		Institution (L'Aide à la femme)		1
		Without license (where there is only one child)		133
		Total		558
	Children	Registered	Legitimate	332
			Illegitimate	540
			Total	872
		Deceased	Legitimate	3
			Illegitimate	37
			Total	40

Table VI—(Continued)

Private hospitals and maternities

Number of	Private Hospitals and Maternities—with license				17
	Patients	Maternity cases	Married		1,503
			Unmarried		556
			Total		2,059
		Medicine and surgery			1,083
		Total			3,142
	Births	Legitimate			1,418
		Illegitimate			490
		Total			1,908
	Deaths	Babies	At full term	Legitimate	59
				Illegitimate	16
			Premature	Legitimate	16
				Illegitimate	10
			Total			101
		Adults	Maternity and hospital cases			67

Work of the nurses

	Number of	
	Visits	Investigations
a) Boarding houses	898	396
b) Private hospitals and maternities	570	1,470
Special	441	383
Total	1,909	2,249
Action taken		1
Appearance in Court as witnesses		5

II. SCHOOL HYGIENE AND MEDICAL INSPECTION OF SCHOOLS

I. MEDICAL EXAMINATION OF PUPILS

The work of "Medical Inspection of Schools," primary and Junior High, Catholic and Protestant, French and English, and in a certain number of independent or private schools, was accomplished in the course of the school year 1941-1942, as is indicated in the following tables.

Table VII

**Number of schools, classes and pupils and
average number of schools and pupils for each medical
inspector and visiting nurse.**

1941-1942

		Catholic	Protes- tant	Independ- ent	Total
Number of	schools	223	47	34	304
	classes	3,369	828	271	4,468
	pupils	106,437	27,637	7,295	141,369
Average per				Schools	Pupils
	medical inspector			13.2	6,146.5
	school nurse			3.2	1,503.9

Table VIII
General report
1941-1942

I — Work of Medical Inspectors:					
Number of			July and August (1)	School year	Total
	Visits to schools	Routine		3,406	3,406
		Regular		4,415	4,415
		Total		7,821	7,821
	Routine examinations (2)			18,502	18,502
	Periodic physical examinations: (3)				
	pupils examined (4)		3,475	51,780	55,255
	a) normal		1,847	28,381	30,228
	b) sick or presenting one or several defects		1,628	23,399	25,027
	defects found (teeth excepted)		2,813	37,630	40,443
	notices to parents		472	12,326	12,798
	parents present at the exami- nation		3,475	2,865	6,340
II — Work of School-nurses:					
Number of	Visits	to schools			31,265
		to homes			34,455
	examinations				656,730 (5)
	Pupils	excluded as suspected cases of contagious diseases			4,741
		taken to dispensaries			200
	interviews with parents in school				1,935
	various treatments				24,091

- (1) This report indicates the total examinations made during July and August 1941 of all children who entered school for the first time at the beginning of September.
- (2) These examinations comprise the special cases referred or kept under observation.
- (3) The periodic physical examination consists of a complete physical examination of each pupil which is made at definite periods, that is every two or three years.
- (4) This total (55,255) shows that 39.08% of all pupils in the schools have received a complete physical examination.
- (5) This total shows that each pupil has been examined by a nurse on an average of 4.6 times during the school year for uncleanliness, pediculosis, skin diseases, etc.

Table IX
Results of physical and routine examinations
1941-1942

I — Periodic physical examination:				
	July and August	School-year	Total	% (1)
Number of pupils examined	3,475	51,780	55,255	
a) Normal	1,847	28,381	30,228	54.7
b) Sick or presenting one or several defects	1,628	23,399	25,027	45.3
Number of defects found:				
Vision	10	4,856	4,866	8.8
Eye disease	76	1,136	1,212	2.2
Hearing	11	332	343	0.6
Ear disease	25	557	582	1.1
Nasal obstruction	373	3,430	3,803	6.9
Tonsils	703	7,589	8,292	15.0
Lymphatic system	585	7,303	7,888	14.3
Goitre	2	137	139	0.3
Skin	55	1,534	1,589	2.9
Lungs	46	1,240	1,286	2.3
Heart	31	1,488	1,519	2.7
Digestive system	19	116	135	0.2
Genito-urinary system	43	269	312	0.6
Orthopedic	43	1,178	1,221	2.2
Nervous system	50	572	622	1.1
Mental condition	5	183	188	0.3
Malnutrition	736	5,710	6,446	11.7
Total number of defects	2,813	37,630	40,443	

(1) Percentage based on the number of children examined.

Table IX—(Continued)

**Results of physical and routine examinations
1941-1942—(Continued)**

II — Routine examination (during school year 1941-1942):			
Number of cases discovered among school children (at school or at home):		Total	% (2)
a) Contagious diseases	1. Diphtheria	40	0.03
	2. Scarlet fever	619	0.04
	3. Measles	2,431	1.7
	4. Chicken-pox	1,777	1.3
	5. German measles	238	0.2
	6. Mumps	3,328	2.4
	7. Whooping cough	887	0.6
b) Parasitic diseases	1. Pediculosis	8,353	5.9
	2. Scabies	417	0.3
c) Various skin diseases		4,343	3.1
d) Uncleanliness		5,140	3.6

(2) Percentage based on the number of pupils attending school.

CONTROL EXAMINATION AND CORRECTION OF PHYSICAL DEFECTS

School year 1941-1942

The control examination or re-examination is made by the medical inspectors and the nurses to discover among the pupils who were given a "Notice to Parents," those whose defects were corrected.

This re-examination is made by the nurses each month, and those treated are shown to the medical inspector who examines the degree of correction of the defects. At the end of the school year a general re-examination is made in order to estimate the complete results obtained in the course of the school year.

Those pupils who had a notice undergo re-examinations if the notice was not annulled by the correction of the indicated defects, or if the pupils had not in turn undergone a new periodic physical examination.

The results of these re-examinations, showing the correction of physical defects obtained in the course of the school year 1941-1942, are to be found in Table X which follows.

Table X

**Table showing the number of corrections of physical defects
obtained and established by re-examinations made in
the course of the school year 1941-1942**

I—Number of defective pupils:

a) re-examined.....	23,036
b) treated and cured.....	8,787
c) under treatment.....	2,037

II—Physical defects corrected:

Vision.....	2,810
Eye disease.....	247
Hearing.....	126
Ear disease.....	194
Nasal obstruction.....	1,835
Tonsils.....	2,812
Lymphatic system.....	2,056
Goitre.....	24
Skin.....	313
Lungs.....	262
Heart.....	196
Digestive system.....	42
Genito-urinary system.....	84
Orthopedic.....	66
Nervous system.....	136
Malnutrition.....	1,129
Total.....	12,332
Teeth.....	*3,707

III—Number of special corrections:

Enlarged tonsils (operations).....	1,713
Adenoids (operations).....	1,284
Defective vision (glasses).....	2,362

*The figure 3,707 represents only the number of children who, after receiving a notice at the medical examination, were treated by their dentist or in a clinic.

We must add that 15,904 children were treated in municipal clinics in 1942.

2. HEARING TEST
BY MEANS OF
THE AUDIOMETER No. 4-A
1941-1942

Two specially trained nurses are placed in charge of two audiometers to make the examination of hearing of pupils in the schools.

This inspection is made among the pupils of the 2nd and 3rd grades, seeing that it is important to ascertain the state of hearing of these pupils at the beginning of their school career.

The results of the hearing examination by means of the audiometer for the school year 1941-1942 are shown in the Table XI which follows.

Table XI
Hearing tests by means of audiometer No. 4-A

			Catholic	Protes- tant	Total
Number of	Schools visited		72	8	80
	Pupils	examined	14,873	1,819	16,692
		a) normal	14,085	1,770	15,855
		b) defective	788	49	837
CLASSIFICATION OF DEFECTS					
Number of defective pupils	with both ears		149	8	157
	with right ear only		315	16	331
	with left ear only		324	25	349
OTHER NOTED DETAILS					
Number of pupils who had	running ears		3,183	372	3,555
	previous abscesses		360	42	402
	been previously operated upon		656	104	760

3. FIRST AID

During the year 1942, 104 nurses have attended the lectures given by the Supervising Nurses in order to obtain their certificate in First Aid.

Such lectures have also been given by our doctors and nurses in 60 boys' schools and 55 girls' schools of the Catholic School Commission, to nearly 9,500 pupils.

A certificate in First Aid was awarded to 272 members of the C.P.C., of whom 207 were men and 65 women, after an examination by the medical inspectors of the Division of Child Hygiene, and 288 auxiliary firemen for the C.P.C. have undergone a physical examination.

4. MEDICAL EXAMINATION OF TEACHERS

Since September 1933, the lay teachers and employees of the Catholic School Commission were examined annually including religious teachers in a certain number of schools, but following a by-law adopted by the Provincial Government, all teachers in the province should undergo a complete physical examination and also an X-Ray examination of the lungs to have the right to teach in the schools under the control of the Department of Public Instruction.

As a consequence the number of examinations has increased by a few thousands, since it concerned all the teachers in the Catholic and Protestant schools and also in a great number of private institutions.

The staff of the Child Hygiene Division which is doing this work wishes to express its appreciation to the principals, religious and lay teachers and employees of the Catholic and Protestant schools for their fine co-operation.

The number of examinations made during the school year 1941-1942, is 5,465, of which 1,185 by the family physicians and 4,280 by the school medical inspectors.

The table on pages 122 and 123 indicates the observations made.

The notes which show the defects encountered are based on the answers of the personnel to the questions submitted and on the physical examination made by the physicians. He satisfies himself with the discovery that an organ is not normal and he does not endeavour to make a precise diagnosis of an existing disease. He makes no comment nor does he draw any conclusion or suggest any recommendation, except when he is concerned with one of the contagious diseases included in the group of those which are governed by provincial by-law.

Following the agreement made, the School Commissions decide alone the measures to be taken in each separate case, after receiving advice from their proper medical advisors.

5. SUMMER CAMPS

In the latter part of the month of June and during July and August, the medical inspectors and nurses of the Division of Child Hygiene made a medical examination of 3,798 children before departure for various summer camps.

The medical examination consists particularly in detecting contagious diseases, skin diseases, parasites, etc., and in eliminating all suspected cases. Each child must show evidence of successful vaccination, if not he is refused permission to depart for camp.

Height and weight calculations are taken for each child and recorded on the admission card. This information will allow the different organizations to note the good effects on these children, following their stay in the country.

Table XII
Medical examination of teachers and employees of Catholic and Protestant Schools,
and of a few independent schools
School year 1941-1942

	Catholic and independent schools			Protestant schools	Grand total of the examinations		
	First examination	Annual examination	Total		First examination	Annual examination	Total
Personnel examined							
Principals, directors and assistants	196	93	289	46	242	93	335
Special professors	39	20	59	47	86	20	106
Male teachers	638	782	1,510	124	762	782	1,634
Female teachers	1,431	779	2,210	765	2,196	779	2,975
Janitors and other employees	76	177	253	162	238	177	415
Total	2,380	1,941	4,321	1,144	3,524	1,941	5,465
School medical inspectors	1,962	1,664	3,626	654	2,616	1,664	4,280
Family physicians	418	277	695	490	908	277	1,185
Total	2,380	1,941	4,321	1,144	3,524	1,941	5,465
Examined by							

The number of children examined for the different summer camps is as follows:

Table XIII

Summer camps	Children examined
1. "Les Grèves" (boys).....	1,497
2. "Le Grillon" (boys and girls).....	288
3. "Jeanne-d'Arc" (girls).....	361
4. "Association des Guides" (boys and girls) Scouts and Guides.....	1,652
Total.....	3,798

III — NUTRITION

A technician in nutrition was appointed in the Child Hygiene Division on April 1st 1942.

The programme consists:

1—in helping the staff of this division to solve the problems of malnutrition and,

2—in giving to our staff and to the public the latest facts about foods and nutrition.

IV — MENTAL HYGIENE SECTION

The following table shows the results of the work done by four psychiatrists and seven psychologist nurses in the schools, for the school year 1941-1942.

Table XIV

Report of the psychometric tests made in the schools

Number of schools visited		76	
Number of pupils	examined		4,396
	normal	a) I.Q. 90-110	633
		b) I.Q. 80-90 Slow-minded	968
		Total	1,601
	abnormal	a) unsteady	23
		b) backward and unsteady	108
		c) backward	2,664
		Total	2,795

Classification of backward cases

Backward cases	Total		2,772	Recom- mendations
	1. Borderline		1,357	Auxiliary classes
	2. Mental debility	superior	1,096	
		inferior	253	Technical teaching (sensorial)
	3. Feeble minded		66	

PSYCHOMETRIC TESTS IN INSTITUTIONS

During the months of July and August 1942, the staff of the mental hygiene section made psychometric tests in a certain number of institutions, in co-operation with "La Société d'Adoption et de Protection de l'Enfance." These institutions are: Notre-Dame-de-Liesse; Maison Ste-Domitille, Laval des Rapides; Hospice St-Joseph, Chambly.

Table XV

Number of institutions visited			3	
Number of pupils	Examined		138	
	Normal	a) I.Q. 90-110	10	
		b) I.Q. 80-90 Slow-minded	20	
		Total	30	
	Abnormal	Unsteady	0	
		Blackward and unsteady	0	
		Backward	108	
		Total	108	

Classification

Backward cases	Total		108	Recom- mendations
	1. Borderline		39	Auxiliary classes
	2. Mental debility	superior	35	
		inferior	26	Technical teaching (sensorial)
	3. Feeble minded		8	

Table XVI**Report of Laurier Mental Hygiene Clinic
for the year 1942****I—Number of cases—Boys and Girls**

Old.....	115
New.....	396
Total.....	511

II—Comparison with past years

1938.....	246
1939.....	267
1940.....	264
1941.....	349
1942.....	511

III—Cases referred by:

Catholic School Board:	
Father Lussier's office.....	37
Victor-Doré School.....	24
Directors and Principals.....	28
Juvenile Court.....	132
"J O C" Social Service.....	1
Catholic Federated Charities:	
Assistance aux Familles.....	15
Institut Bruchési.....	1
St-Vincent-de-Paul.....	3
Hospitals:	
Children's Memorial.....	7
Montreal General.....	3
St-Jean-de-Dieu.....	3
Royal Victoria.....	1
Metropolitan Life Insurance.....	2

Table XVI—(Continued)**III—Cases referred by: (Continued)**

Ministry of Health and Social Welfare:	
Needy Mothers' Allowance Bureau.....	2
Social Welfare Department.....	25
"Bureau d'adoption et de protection de l'enfance".....	49
Others (doctors, parents, school nurses, private organizations, etc.).....	178
Total.....	511

IV—Problems

Mental development.....	199
Behaviour problems.....	203
Nervousness.....	11
Epilepsy.....	17
Kleptomania.....	37
Pyromania.....	4
Before adoption.....	33
School failure.....	7
Total.....	511

V—Distribution of intelligence

Normal.....	46
Slow-minded.....	58
Unsteady.....	9
Backward, backward and unsteady:	
Border-line.....	101
Mental debility (superior).....	99
Mental debility (inferior).....	71
Feeble minded.....	73
Idiocy.....	10
Children who were not tested.....	44
Total.....	511

VI—Recommendations

Emmélie-Tavernier School.....	72
Victor-Doré School.....	5
“Ecole des Epileptiques”.....	7
Special institutions.....	95
Dispensaries.....	11
Advice.....	256
Auxiliary classes.....	53
Baie St-Paul.....	5
Industrial School.....	7
	<hr/>
Total.....	511

VII—Number of visits and inquiries

School visits.....	88
Home visits.....	345
To clinic.....	53
	<hr/>
Total.....	486

VIII—Phone calls..... 1,296

SECOND PART
I. IMMUNIZATION AGAINST DIPHTHERIA

in the schools and in the municipal Well-Baby clinics

1928-1942

During the year 1942, immunization against diphtheria was successfully continued in the municipal preschool and Well-Baby clinics and in the schools.

It should be noted that 13,446 children received their first dose of Anatoxin-Ramon (toxoid) in 1942, and, of this number, on December 31st 1942, 11,154 had received the three doses; this number will be completed in the course of the first six months of the year 1943.

Table XVII

Showing the general results of the diphtheria immunization made in the municipal clinics and in the schools by the personnel of the division of Child Hygiene, from September 1928 to December 31st 1942

		1928-1940	(1) 1941	(2) 1942 (Dec. 31st)	Total
I—Anterior Schicks		27,304	9	1	27,314
II— Number of children	Registered for immunization	164,947	16,943	13,446	195,336
	1—Received 3 doses	155,751	16,066	11,154	182,971
	2—Received 2 doses only	4,635	409	1,346	6,390
	3—Received 1 dose only	4,561	468	945	5,974
III—Posterior Schicks		28,816	...	...	28,816
IV—Supplementary injections (4th dose)		172	...	...	172

- (1) The number of those who received the three injections was completed during the year 1942.
- (2) The number of those who received the three injections will be completed during the year 1943.

II. VACCINATION AGAINST SMALLPOX

The following table indicates the number and the age of the children who were vaccinated against smallpox since the year 1937 in the municipal Well-Baby clinics and at Lafontaine Park.

Table XVIII

Ages	1937	1938	1939	1940	1941	1942	Total
Under 1 year.....	351	301	202	236	319	276	1,685
1 year.....	216	174	176	196	251	210	1,223
2 years.....	276	168	147	179	260	288	1,318
3 years.....	519	262	240	322	412	458	2,213
4 years.....	1,062	480	399	623	793	886	4,243
5 years.....	2,874	1,444	1,192	2,297	2,449	3,465	13,721
6 years.....	6,608	3,769	3,379	5,300	5,744	5,542	30,342
7 years.....	1,307	662	764	1,382	1,225	1,232	6,572
8 years.....	232	116	138	311	321	209	1,327
9 years.....	95	59	63	90	153	133	593
10 years and over...	398	241	242	440	448	473	2,242
Total.....	13,938	7,676	6,942	11,376	12,375	13,172	65,479

III. TUBERCULIN TESTING

Detection of tuberculosis among children by "Vollmer" patch test was continued in Well-Baby clinics. This method, easier in its application, is well accepted by the public.

On December 31st 1942, this test was made in forty municipal clinics, it was also made in a certain number of schools.

The Child Hygiene Division, in co-operation with the Tuberculosis Section, held propaganda meetings for different associations and in schools of the city.

Table XIX**Tuberculin testing**

Number of conferences.....	967
Number of tuberculin tests.....	2,721
Number of positive reactions.....	390
Number of negative reactions.....	2,307
Number of cases who did not return for reading.....	24
Were vaccinated with B.C.G.....	4

IV—DISTRIBUTION OF LITERATURE

A certain number of publications, circulars and posters have been distributed by the Division of Child Hygiene.

Circulars (bilingual):

“Height and Weight of Children”.....	4,000
“Immunization against diphtheria”.....	12,250
“Cleaning of diapers”.....	10,250
“Artificial feeding”.....	9,950
“Advice to parents concerning the care of the child after the extraction of teeth”.....	6,450
“Breast feeding”.....	11,000
“Prevent blindness in your children”.....	10,250
“Child Nutrition and resistance to disease”	
French.....	14,500
English.....	4,300

“Letters from the Director to mothers on the occasion of the birth of a child”	
French.....	10,200
English.....	1,500
“Letters from the Director to mothers when the child is 6 months old”	
French.....	6,200
English.....	1,320
“Letters from the Director—Advice to mothers”	
French.....	9,100
English.....	1,050

Posters (bilingual)

“Prevent diphtheria”.....	8,256
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Publications

“Hygiène de l'enfant au premier âge”.....	14,056
“Hygiene of the Child during infancy”.....	325
“Prenatal hygiene” (bilingual).....	974
“Ligue d'hygiène infantile”.....	312
“Child Hygiene League”.....	120

During the course of the year 1942, the doctors and nurses gave their efficient aid to the divisions of Contagious Diseases and Medical Control.

I am pleased to stress the fine spirit which reigned among the members of the personnel. Allow me to felicitate and thank them for the devotion which they showed in the accomplishment of their duties.

Division of Child Hygiene**I. Report of the
SECTION OF DENTAL HYGIENE
for the year 1942**

by

**Dr. R.-R. LALONDE, L.D.S.
Chief of the Section**

The activities of the section of Dental Hygiene consist of:

- I—Dental inspection in the schools;
- II—Municipal dental clinics;
- III—Orthodontia clinic.

The actual personnel consists of the chief of the dental section, of seven dentists whose duties are operative work in the clinics and examining pupils in the schools at certain hours; of a dental specialist in orthodontia on part time. They are assisted in their work by nurses and nurse-aides.

I—DENTAL INSPECTION IN THE SCHOOLS

During October 1940 the Department of Health recommended dental examinations and lectures in the schools of the Catholic School Commission of Montreal.

The following table indicates the results of the dental inspection of 37,244 pupils.

This dental examination made of the pupils shows that 77.64% of the children suffer from dental caries.

II—Report of the
SECTION OF HEALTH DISTRICTS
for the year 1942

by

Doctor C.-A. BOURDON, M.P.H.,

Assistant-superintendent of the Child Hygiene Division
and Chief of the Section of Health Districts.

During 1942, two new health districts were organized, Notre-Dame de Grâce on January 2nd and De Lorimier on July 2nd, which makes a total of six districts.

The following tables indicate the mortality, morbidity rates and the work accomplished in the five districts which were in operation during the full year in comparison with the figures obtained for the whole city. These five districts were: Maisonneuve, South-Western, Saint-Jacques, Rosemont and Notre-Dame de Grâce.

The population in these five districts is 560,000 inhabitants and represents 60.5% of the total population of the City which is estimated at 926,000. The ethnical groups just as the social and economic conditions vary from one district to another.

The staff includes one Health Officer in charge of the district, one Supervisor Nurse, two to four full time school medical inspectors and seven to twenty visiting nurses. The distribution of the work to be accomplished is done by taking into account the number of schools to be visited, the school population to be supervised, the number of Well-baby clinics and the area of the district to be served.

On May 6th, 1942 two Well-baby clinics under the direction of the Child Welfare Association were transferred to the Depart-

ment of Health: the Maisonneuve Clinic, in the Maisonneuve Health District, and the Montreal General Hospital Clinic in the Saint-Jacques Health District.

In 1942, 212 cases of diphtheria were reported with a total of 26 deaths, the death rate being 2.81 per 100,000 population. If we compare the figures given in tables III and V, we find that in the Saint-Jacques Health District there were 85 cases, or 40.09% of the cases reported for the whole city, and 11 deaths out of a total of 26, or a death rate of 8.04 per 100,000 population against a death rate of 2.81 for the whole city.

The house-to-house survey in the Saint-Jacques Health District by the nurses, in order to find the number of children under ten years of age who had not yet been immunized against diphtheria, was completed and revealed that in the 24,664 families visited only 55.9% of the children had been inoculated. The Department of Health then sent 4,678 letters to the parents inciting them to have immunized all those of their children who had not yet been done. Following this survey, the percentage of inoculated children increased to 73%, on December 31st, 1942.

Although this good result has been achieved it still shows that a too great number of children are not yet immunized and that other means should be taken.

Staff:

Dr. J.-A. Landreville, M.P.H., Maisonneuve Health District.

Dr. L. Dubreuil, M.P.H., South-Western Health District.

Dr. F. Derome, D.P.H., Saint-Jacques Health District.

Dr. E. Chabot, D.P.H., Rosemont Health District.

Dr. C. de Guise, M.P.H., Notre-Dame de Grâce Health District.

Table I

Statistics of births and deaths in the health districts:
 Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre Dame de Grâce
 and in the whole city—1942

	Health Districts					Whole City
	Maisonneuve	South-Western	Saint-Jacques	Rosemont	N.D.G.	
Population.....	103,920	130,550	136,820	107,160	82,450	926,000
Number of births.....	2,520	2,861	3,192	2,364	778	20,606
Birth rate per 1,000 population.....	24.25	21.91	23.33	22.06	9.44	22.25
Number of deaths.....	948	1,326	1,572	877	641	9,532
General mortality rate per 1,000 pop....	9.12	10.16	11.49	8.18	7.77	10.29
Maternal mortality (per 1,000 live-births)	3.57	3.84	4.07	4.65	1.28	3.01
Infant mortality (per 1,000 live-births)...	50.79	60.12	68.61	54.99	53.98	57.75
Mortality from diarrhoea, 0-1 year (per 1,000 live-births).....	7.14	8.39	10.02	2.96	1.28	7.38
Mortality from tuberculosis (per 100,000 population):						
a) pulmonary.....	82.76	62.05	83.32	56.92	24.26	69.01
b) other forms.....	14.43	6.89	11.69	6.53	0.00	9.29
Total.....	97.19	68.94	95.01	63.45	24.26	78.30

Table II

Number and percentage of deaths for certain age groups in the health districts:
 Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre Dame de Grâce
 and in the whole city—1942

Age Group	Health Districts										Whole City	
	Maisonneuve		South-Western		Saint-Jacques		Rosemont		N.D.G.			
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%		
0-1 year.....	128	13.50	172	12.97	219	13.93	130	14.82	42	6.55	1,190	12.48
1-4 years.....	35	3.69	34	2.56	52	3.31	23	2.62	3	0.47	1,444	2.66
5-14 years.....	13	1.37	28	2.11	40	2.54	26	2.96	7	1.09	170	1.78
15 years and over.....	772	81.44	1,092	82.36	1,261	80.22	698	79.60	589	91.89	6,728	83.08
Total.....	948	100	1,326	100	1,572	100	877	100	641	100	9,532	100

Table III

Deaths from certain causes and death-rate per 100,000 population in the health districts:
Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre-Dame-de-Grâce,
and in the whole city—1942

Causes	Health Districts								Whole City			
	Maisonneuve		South-Western		Saint-Jacques		Rosemont			N.D.G.		
	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.		Deaths	Rate per 100,000 pop.	
Typhoid.....	3	2.89	...	...	2	1.46	1	0.93	2	2.43	9	0.97
Measles.....	1	0.96	4	3.06	2	1.46	2	1.87	...	...	12	1.29
Scarlet-fever.....	...	...	3	2.30	...	...	...	...	...	...	3	0.32
Whooping-cough.....	10	9.62	4	3.06	9	6.58	4	3.73	...	...	40	4.32
Diphtheria.....	2	1.92	1	0.77	11	8.04	2	1.87	...	...	26	2.81
Tuberculosis, pulmonary.....	86	82.76	81	62.05	114	83.32	61	56.92	20	24.26	639	69.01
Tuberculosis, other forms.....	15	14.43	9	6.89	16	11.69	7	6.53	...	...	86	9.29
Other contagious diseases.....	17	16.36	30	22.98	46	33.62	21	19.60	18	21.83	243	26.24
Other causes.....	814	783.30	1,194	914.59	1,372	1,002.78	779	726.95	601	728.92	8,474	915.12
Total of deaths.....	948	912.24	1,326	1,015.70	1,572	1,148.95	877	818.40	641	777.44	9,532	1,029.37

Table IV

Summary of the work accomplished in the control and the prevention of contagious diseases in the health districts: Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre-Dame-de-Grâce, and in the whole city—1942

	Health Districts					Whole City
	Maisonneuve	South-Western	Saint-Jacques	Rosemont	N.D.G.	
Number of cases reported and confirmed.....	3,528	2,651	2,460	2,711	2,791	22,692
Number of deaths.....	134	132	200	98	40	859
Number of cases hospitalized.....	578	415	936	379	274	4,817
Home visits: by physicians.....	1,255	829	760	970	593	8,024
by nurses.....	3,323	3,058	3,034	2,704	3,378	28,691
Tuberculin Tests (Vollmer).....	73	176	608	467	150	3,077
Immunization against diphtheria						
Number of children who had received the three doses on December 31st, 1942...	1,577	1,533	1,465	1,898	212	18,873
Vaccination against small-pox.....	1,720	2,678	956	1,788	346	25,002

Table V

Contagious diseases reported in the health districts:

Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre-Dame de Grâce and in the whole city, also percentage of cases in the districts in comparison with those for the whole city—1942

Diseases	Health Districts										Whole City
	Maisonneuve		South-Western		Saint-Jacques		Rosemont		N.D.G.		
	Cases	%	Cases	%	Cases	%	%	%	Cases	%	
Diphtheria.....	25	11.79	23	10.81	85	40.09	15	7.08	...	...	212
Scarlet-fever.....	304	17.11	222	12.51	188	10.59	166	9.36	221	12.45	1,774
Measles.....	579	11.76	729	14.80	360	7.31	641	13.02	647	13.18	4,923
German measles.....	44	11.25	61	15.29	45	11.28	107	26.84	60	15.03	399
Whooping-cough.....	983	20.41	462	9.59	734	15.25	583	12.11	179	3.67	4,814
Mumps.....	1,010	27.11	296	7.79	256	6.73	339	8.92	633	16.66	3,799
Chicken-pox.....	499	12.23	467	11.49	285	7.01	576	14.18	918	22.61	4,061
Small-pox.....	...	...	...	...	...	...	...	...	...	...	...
Erysipelas.....	7	7.44	13	13.83	24	25.53	1	1.06	8	8.51	94
Typhoid fever.....	17	30.90	...	...	4	7.27	3	5.45	6	10.91	55
C.S. meningitis.....	3	23.07	4	30.77	1	7.69	3	23.07	...	...	13
Polio myelitis.....	4	9.52	17	40.48	6	13.04	8	19.05	2	4.76	42
Lethargic encephalitis.....	...	...	...	...	...	...	...	...	...	...	...
Puerperal septicaemia.....	1	4.16	4	16.66	2	8.33	2	8.33	1	4.17	24
Purulent ophthalmia.....	2	5.83	3	8.82	10	29.41	6	17.65	...	...	34
Amoebic dysentery.....	...	...	...	...	...	...	...	...	2	28.57	7
Undulant fever.....	1	100.00	...	...	...	...	...	...	...	...	1
Bacillary dysentery.....	1	2.38	...	...	9	21.43	...	...	4	9.52	42
Pulmonary tuberculosis.....	257	11.35	330	14.58	424	18.73	248	10.95	108	4.77	2,264
Tuberculosis, other forms.....	13	9.70	20	14.93	27	20.14	13	9.70	2	1.49	134
Total.....	3,750	16.52	2,651	11.24	2,460	10.84	2,711	11.07	2,791	12.29	22,692

Table VI

Number of children immunized against diphtheria, who have received the three doses of Toxoid (Ramon), in the health districts: Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre-Dame de Grâce, and in the whole city—1942

Age at time protected	Health Districts					Whole City
	Maisonneuve	South- Western	Saint- Jacques	Rosemont	N.D.G.	
0 to 1 year.....	673	565	270	756	63	7,049
1 year.....	289	202	162	354	33	2,697
2 years.....	127	95	125	180	22	1,517
3 years.....	136	87	101	120	20	1,211
4 years.....	109	73	100	126	20	1,044
5 years.....	124	118	125	152	22	1,182
6 years.....	203	301	340	202	26	1,889
7 years.....	114	168	244	133	21	1,106
8 years.....	54	80	104	74	5	594
9 years.....	40	66	62	56	5	377
10 years and over.....	11	23	13	13	1	139
Unknown.....						68
Total*.....	1,880	1,778	1,646	2,166	238	18,873

*The segregation of children immunized by the practising physicians and the Voluntary Agencies, has not been done for each health district, but this number appears in the column "Whole City." Such segregation, however, will be done in the coming annual reports.

Table VII

Number of children vaccinated against small-pox, in the health districts:
Maisonneuve, South-Western, Saint-Jacques, Rosemont, Notre-Dame de Grâce
and in the whole city—1942

Age at time protected	Health Districts					Whole City
	Maisonneuve	South- Western	Saint- Jacques	Rosemont	N.D.G.	
0 to 1 year.....	.....	12	7	6	7	546
1 year.....	4	35	19	10	6	274
2 years.....	14	55	13	23	14	347
3 years.....	45	106	29	30	15	506
4 years.....	87	212	67	109	31	989
5 years.....	436	764	207	575	105	3,651
6 years.....	836	1,087	373	817	102	5,846
7 years.....	184	267	135	138	15	1,342
8 years.....	29	45	35	18	5	235
9 years.....	9	31	18	7	6	152
10 years and over.....	76	64	53	55	40	11,114
Total.....	1,720	2,678	956	1,788	346	25,002

III. Report of the

ACTIVITIES OF THE NURSES OF THE DEPARTMENT OF HEALTH

by

Miss MARIA ROY, R.N.

Chief Nurse

The nurses of the Department of Health carry on a generalized nursing programme with the exception of bedside nursing care. However cases of morbidity among the indigents are referred by our nurses either to the dispensaries, private organizations for care or to bureaus of Public Assistance for hospitalization.

Total number of nurses in the Department of Health 144

Division of Child Hygiene:

Chief Nurse, assistants and Health district nursing supervisors	10
Visiting nurses in the Health districts	107
Mental hygiene (one of whom is nursing supervisor)	7
For hearing tests in schools with the audiometer	2
For the supervision of childrens' boarding houses, private hospitals and maternities	2
Dental hygiene Section	6

Division of Communicable Diseases:

Visiting nurses (one of whom is nursing supervisor)	4
Tuberculosis section (one of whom is nursing supervisor)	4

Division of Medical Control 2

Distribution of nursing time:

Assisting doctors.....	27%	of their time
Teaching, either group or individual conferences.....	25%	" " "
Staff meetings—reports, etc.....	10%	" " "
Home visiting.....	38%	" " "

I—Home Visits: Number and distribution:

School children.....	34,455—33.9%
Babies and preschool children.....	29,875—29.4%
Prenatal cases.....	1,008— 0.9%
Communicable diseases.....	27,317—26.9%
Tuberculosis (active cases).....	4,414— 4.3%
Children's boarding houses and private hospitals.....	4,198— 4.1%
Mental hygiene.....	486— 0.5%
Visits for survey re: immunization against diphtheria.....	118,014
Throat swabs, re contacts of diphtheria..	3,749

II—Other work: Maternal and Child Hygiene:

Group classes (mothers) with demonstrations....	288
Attendance at group classes.....	535

School Medical Inspection:

Number of pupils examined.....	656,730
(or 4.6 for each pupil per year)	
Number of treatments.....	24,091
Interviews with parents.....	1,935
Children taken to dispensaries.....	200

II—Other work: Maternal and Child Hygiene:

(Continued)

First Aid Courses: (See Dr. J. N. Laporte's report,
page 120).

Mental Hygiene:

Psychometric tests..... 3,504

Hearing Tests with the Audiometer:

Schools visited..... 80

Number of children tested..... 16,692

Child Hygiene Leagues:

Groups..... 7

Group classes and demonstrations..... 84

Attendance..... 203

Field experience for 16 students from schools of Public Health
Nursing of Montreal and McGill Universities in three
Health Districts:

Montreal University..... 8

McGill University..... 8

Division of Food Inspection

Report of the
DIVISION OF FOOD INSPECTION
for the year 1942

by

Doctor A. J. G. HOOD, D.M.V.,
 Superintendent

SECTION No. 1—MILK INSPECTION

Table I

Summary of the work performed in this section

Establishments.....	10,964
Inspections.....	27,200
Cows examined.....	79,065
Samples of milk, cream and ice-cream collected for chemical and bacteriological analysis.....	15,378
Various examinations of milk, cream and ice cream.....	122,352
Gallons of milk examined.....	977,128
Gallons of milk and various by-products consumed per day.....	87,465
Gallons of milk confiscated.....	15,849
Quarts of cream confiscated.....	76
Complaints.....	15
Actions taken.....	60
Condemnations.....	57
Written notices.....	17,819
Actions dismissed.....	.....

I—SUB-SECTION OF INSPECTION OF MILK IN THE COUNTRY

Table II
Inspection of milk producers

Inspections:	
Dairy score cards.....	3,999
Special.....	10,121
At railway stations.....	36
Total.....	14,156
Cows:	
Number examined.....	66,277
Clean.....	57,032
Tuberculin tested within the year.....	66,277
Tuberculin test overdue.....	.....
Stables:	
Number.....	3,999
Clean.....	3,955
With concrete floor.....	3,932
With 400 cubic feet of air space per animal.....	3,849
With 1 foot of light area per animal.....	3,953
Whitewashed entirely.....	3,966
Dairies:	
Number.....	3,986
Clean.....	3,961
Unfinished or unsuitable.....	13
Refrigeration:	
With ice.....	3,573
With spring water.....	.....
Producers not having satisfactory cooling system...	36
Producers having electrical refrigeration.....	390
Miscellaneous:	
Written notices.....	9,711
Written notices by letter from the office.....	93
Producers interdicted.....	366
Cows examined re: mastitis:	
Herds.....	83
Cows examined.....	1,795
Cows condemned.....	69

Table III

Inspection of cream producers

Inspections:	
Dairy score cards.....	830
Special.....	708
At railway stations.....	3
	<hr/>
Total.....	1,541
 Cows:	
Number examined.....	12,788
Clean.....	10,912
Tuberculin tested within the year.....	12,788
Tuberculin test overdue.....	.....
 Stables:	
Number.....	830
Clean.....	785
With concrete floor.....	778
With 400 cubic feet of air space per animal.....	780
With one foot of light area per animal.....	809
Whitewashed entirely.....	778
 Dairies:	
Number.....	824
Clean.....	804
Unfinished or unsuitable.....	6
 Refrigeration:	
With ice.....	767
With spring water.....	.....
Producers not having satisfactory refrigeration.....	46
Producers having electrical refrigeration.....	17
 Miscellaneous:	
Written notices.....	995
Written notices by letter from the office.....	16
Producers interdicted.....	136

Table VI
 Detection of mastitis cases in milch cows
 Special milk (or cream) "By-law No. 891"

Number of herds and cows examined:				Classification by group:				
Herds	Total of cows in herds	Cows examined	Untested cows (dry or recently freshened)	No. 1 Healthy cows	No. 2a Suspected cows	No. 2b Slightly affected cows	No. 3 Positively affected cows	No. 4 Severely affected cows
89	2,562	1,966	596	212	867	745	58	84

Table VII
Classification of dairy cows from the point of view of the existence
of mastitis in the herd

Group	Examination	Result	Instructions which must be complied with	
			Cows	Milk
No. 1—Healthy cows:	1. Strip cup test. 2. Chemical test. 3. Physical examination.	Negative. Negative. Negative.	No restriction.	No restriction.
No. 2— (a) Suspicious cows.	1. Strip cup test. 2. Chemical test. 3. Physical examination. 4. Bacteriological examination.	Absence of pus, flakes or stringy milk. Negative or slight reaction. Few nodules, not painful. Negative (streptococci and staphylococci).	No restriction.	No restriction.
(b) Slightly affected cows.	1. Strip cup test. 2. Chemical test. 3. Physical examination. 4. Bacteriological examination.	Absence of pus, flakes or stringy milk. Slight or doubtful reaction. Fibrous nodules, painful. Absence of streptococci and staphylococci.	Must be placed in one end of stable.	May be sold for human consumption.

Table I

			Schools			Grand Total
			Catho- lic	Protes- tant	Inde- pendent	
Schools visited			195	53	15	263
Pupils in the schools			97,899	31,460	4,698	134,057
Visits to schools			911	248	31	1,190
Lectures			13	...	1	14
Attendance at lectures			24,984	8,272	1,169	34,425
Children examined			26,455	8,659	2,130	37,244
Number	of cases	Caries	21,110	6,639	1,169	28,918
		Normal	5,345	2,020	961	8,326
	of	Carious teeth	77,484	25,425	3,850	106,759
		Prophylaxis to be done	24,395	4,498	1,842	30,735
Notices sent to parents			18,356	6,637	1,147	26,140

II—MUNICIPAL DENTAL CLINICS

The number of municipal dental clinics is seven. The work of the municipal dental clinics consists of treatments, of prophylaxis, of the extraction and filling of teeth. Only indigent children of pre-school age and poor pupils are accepted. When the child is examined at the clinic, the parents who are present at the examination are advised as to the condition and care of the mouth. This contributes to greater co-operation and better results.

Table II**Report of Municipal dental clinics**

Number of children treated.....	15,904
Treatments: extraction.....	8,575
prophylaxis.....	4,990
filling.....	2,535
temporary.....	561
dressings.....	2,214
Total number of treatments.....	26,875
Number of teeth extracted.....	29,670
Number of teeth filled.....	2,268
Number of cases completed.....	802

The "Junior Red Cross" and the "Junior League" of Montreal, using the "Griffintown Club" Dental Clinic in collaboration with the Department of Health, have promoted and rendered dental services in a number of schools of the Protestant Board.

III—ORTHODONTIA CLINIC

The orthodontia clinic, which was opened in February 1940, is under the direction of Dr. Paul Geoffrion, Professor of Orthodontia of the faculty of Dentistry of the University of Montreal; the Municipal Orthodontia Clinic is situated in the new building of the University of Montreal.

As usual the children who suffer facial deformities and dental malocclusion and whose parents are unable to pay the regular fees for this service are treated in this clinic.

Table III**Report showing the work done at the orthodontia clinic for the year 1942**

Number of children treated.....	142
New cases.....	10
Number of cases completed.....	27
Examined.....	215

Table IV
Observations and Improvements in the inspection of dairy farms

	1920	1930	1940	1941	1942
Producers visited.....	3,131	4,558	4,979	4,984	4,829
Cows examined.....	42,706	63,672	81,153	81,687	79,065
Cows found clean.....	37,464	54,695	74,658	79,628	67,944
Stables with cement floor.....	1,300	3,524	4,669	4,728	4,710
Stables with 400 cubic feet of air per animal.....	2,495	4,008	4,664	4,737	4,629
Stables with one square foot of glass per animal..	1,582	3,919	4,862	4,904	4,762
Whitewashed stables.....	1,954	3,942	4,833	4,883	4,744
Clean stables.....	1,905	3,915	4,826	4,774	4,740
Producers having a dairy.....	2,005	4,174	4,958	4,952	4,810
Producers whose dairy was not found satisfactory.	....	184	96	132	45
Producers whose dairy is maintained in a clean condition.....	1,492	3,760	4,862	4,820	4,765
Producers having ice.....	1,823	3,987	4,724	4,652	4,340
Producers cooling milk in spring water or wells....	229	152	....	....	....
Producers not having satisfactory cooling system.	....	219	87	110	82
Producers having electrical refrigeration.....	....	....	168	222	407
Written notices.....	451	5,860	4,384	9,957	10,815
Producers interdicted.....	29	192	448	588	502

Table V
Progress in the methods and equipment of milk producers

	1920 %	1930 %	1940 %	1941 %	1942 %
COWS:					
Clean.....	87.72	85.90	92.	97.47	85.94
STABLES:					
Whitewashed.....	62.4	89.93	97.07	97.97	98.24
Clean.....	60.84	89.83	96.92	95.78	98.15
With concrete floor.....	41.52	80.86	93.77	94.86	97.53
MILK-ROOMS:					
Number.....	64.02	95.77	99.57	99.35	99.60
Clean.....	74.41	90.08	97.65	96.71	99.06
REFRIGERATION:					
With ice.....	58.22	91.48	94.88	93.33	89.87
With spring water or wells.....	7.31	3.48	....	....	....

No. 3—Positively affected cows.	1. Strip cup test.	Absence of pus but presence of flakes or stringy milk.	Must all be isolated immediately from the balance of the herd. We recommend the sale of these animals for slaughter.	Must not be sold for human consumption unless pasteurized.
	2. Chemical test.	Positive reaction in one or more quarters.		
	3. Physical examination.	Fibrous nodules, painful. Atrophy of one or more quarters.	Permission to keep these animals can only be granted for the current year.	May be used for young animals on the farm.
	4. Bacteriological examination.	Presence of streptococci or staphylococci or both.		
No. 4—Severely affected cows.	1. Strip cup test.	Presence of pus.	Must all be isolated immediately from the balance of herd and sold for slaughter.	
	2. Chemical test.	Marked reaction.		
	3. Physical examination.	Marked fibrosis, painful nodules with or without swelling; open abscesses. One or more quarters atrophied or dry.	If pure bred animals and during the gestation period, permission may be granted to breeders to keep these animals on condition that they are not giving milk and shall be kept in a separate stable.	Must not be sold for human consumption or used for young animals.
	4. Bacteriological examination.	Presence of streptococci or staphylococci or both.		

REMARKS:—The classification of the herd is only temporary and will be changed according to results obtained upon subsequent test.

Bacteriological examinations will only be made when deemed necessary by the Department.

One positive result obtained upon examination is sufficient to indicate in which group each cow is to be classed. Examinations are only made one month after calving and not less than one month before.

II—SUB-SECTION OF MILK INSPECTION IN THE CITY

Group A: from its entry into the city up to delivery:

Table VIII

Places to be visited and inspections

Places to be visited.....	6,135
Waggons and trucks.....	1,225

Inspections.....	5,927
------------------	-------

Details of inspections:

Milkmen.....	328
At the railway stations.....	165
In dairies.....	1,067
In groceries.....	358
In restaurants.....	927
In dining-rooms.....	274
In markets.....	297
In stables.....	26
In private houses.....	256
In various places.....	1,653
Special.....	576

Results:

Empty cans examined.....	43,462
Empty cans confiscated.....	112
Can tops (lids) confiscated.....	52
Notices for poor milk.....	125
Written notices (various).....	6,879
Actions taken.....	60
Condemnations.....	57
Actions dismissed.....	.....

Table IX
Examinations of milk and cream

Acidity tests	668
Sediment tests	36,739
Temperatures taken	40,491
Babcock tests	211
Physical examination (color, taste and smell)	37,810
Other examinations	6,433
Total of examinations	122,352
Gallons examined	977,128
Confiscations:	
Milk	15,849
Cream	19
Total	15,868

**Group B: of pasteurization and special milk
establishments**

Table X
Establishments and inspections

Pasteurization establishments	35
a) Milk	25
b) Cream	10
Special milk establishments (raw)	35
Inspections	5,576
a) in pasteurized milk establishments	3,346
b) in special milk establishments	820
c) in other institutions	1,410

Table XI

Milk consumed in Montreal (daily)

1—Pasteurized milk and by-products: (in gallons)

Milk.....	87,465
Cream.....	3,795
Ice Cream.....	5,447
	<hr/>
Total.....	96,707

2—Special milk (raw): (in gallons)

Milk.....	3,661
Cream.....	11
	<hr/>
Total.....	3,672
	<hr/>
Grand total.....	100,379

Table XI

Collection of samples for laboratory analysis

1 — For bactériological analysis:

Milk.....	7,358
Cream.....	754
Chocolate flavored dairy drink.....	236
Ice-cream mix.....	159
Ice-cream.....	454
Sterilization test for dairy utensils.....	882
Drinking water.....	485
River water for ice cutting.....	74
Water from wells and springs.....	44
Total.....	10,446

2—For chemical analysis:

Milk: on the street.....	897
in hotels.....	445
in groceries.....	530
in dairies.....	1,063
in various places.....	1,291
submitted by citizens.....	30
Total.....	4,256
Cream: on the market.....	706
submitted by citizens.....	27
Total.....	733
Grand total.....	4,989

Table XIII

**Butter fat test of milk sold in
Montreal**

	Percentage of butter fat	Samples	
		Number	Percentage
Milk upon delivery:	3.0+ -	104	7.01
	3.1	28	1.89
	3.2	91	6.13
	3.3	167	11.25
	3.4	237	15.97
	3.5	228	15.37
	3.6	194	13.07
	3.7	125	8.42
	3.8	73	4.92
	3.9	30	2.02
	4.0+	207	13.95
	Total	1,484	3.52
Milk in stores:	3.0+ -	70	4.01
	3.1	18	1.03
	3.2	37	2.12
	3.3	111	6.36
	3.4	254	14.54
	3.5	491	28.10
	3.6	447	25.59
	3.7	214	12.25
	3.8	72	4.12
	3.9	13	.74
	4.0+	20	1.14
	Total	1,747	3.51
Milk in schools:	3.0+ -	...	...
	3.1	...	...
	3.2	4	2.63
	3.3	6	3.95
	3.4	19	12.50
	3.5	39	25.66
	3.6	43	28.30
	3.7	31	20.39
	3.8	8	5.26
	3.9	2	1.31
	4.0+	...	...
	Total	152	3.56
Grand total.....		3,383	3.53

Table XIV
Daily consumption of milk in Montreal
Comparative table: 1934 to 1942

Years	Gallons received daily:			Gallons sold daily:			Percentage			Consumption per capita: (pint)
	Pasteurized milk	Special milk	Total	Pasteurized milk	Special milk	Total	Pasteurized milk	Special milk	Total	
1934	76,350	3,472	79,822	64,324	3,450	67,774	94.87	5.13	100%	0.6233
1935	76,633	3,314	79,947	66,608	3,232	69,840	95.31	4.69	100	0.6478
1936	77,164	3,945	81,109	66,330	3,779	70,109	94.59	5.41	100	0.64
1937	75,422	4,064	79,486	67,537	3,943	71,480	94.48	5.52	100	0.645
1938	75,642	4,084	79,726	66,189	3,934	70,123	94.39	5.61	100	0.623
1939	82,454	3,495	85,949	69,305	3,180	72,485	95.61	4.39	100	0.636
1940	85,625	3,534	89,159	71,868	3,339	75,207	95.56	4.44	100	0.6633
1941	91,459	3,673	95,132	77,081	3,547	80,628	95.60	4.40	100	0.7167
1942	96,830	3,710	100,540	83,804	3,661	87,465	95.82	4.18	100	0.7556

The total of pasteurized milk for the years mentioned above includes pasteurized milk, special milk, special pasteurized milk, pasteurized Jersey milk, homogenized pasteurized milk, chocolate dairy drink, fermented milk and fermented butter milk.

SECTION No. 2—MEAT INSPECTION

Table XV

Establishments visited and
inspections made

Kind of establishments:	Establishments	Inspections
Markets.....	7	829
Butcher stalls.....	1,017	22,819
Fish stalls.....	30	755
Poultry dealers.....	52	2,155
Packing houses.....	7	267
Grocers.....	...	56
Cooked meat dealers.....	31	818
Cold storages.....	12	102
Fruits and vegetables.....	5	4
Sundry manufacturers.....	19	416
Abattoirs.....	4	963
Ice dealers.....	225	803
Provisions.....	...	96
Specials.....	...	2,405
Total.....	1,404	32,488

Samples collected for analysis:.....	743
a) chemical.....	685
b) bacteriological.....	158

Eggs:	
Candled.....	220,812
Condemned.....	3,081

Animal bites: (dogs and others)	
Cases reported.....	199
Control visits.....	606

Food poisoning:	
Cases reported.....	21
Investigations and visits.....	104

Legal proceedings:	
Written notices.....	2,231
Actions.....	38
Condemnations.....	37
Complaints.....	131

Table XVI
Inspection and confiscation of carcasses

Places	Inspections	Confiscations
1. Private abattoirs:		
Cattle.....	328	...
Calves.....	1,938	...
Sheep and Lambs	3,136	...
Hogs.....	272	...
Total.....	5,674	...
2. Inspection stations:		
Calves.....	22,523	185
Sheep and Lambs	1,813	9.5
Hogs.....	46,673	61.5
Total.....	71,009	256
3. Commission stores:		
Cattle.....	...	...
Calves.....	27,586	219
Sheep and Lambs	3,824	15
Hogs.....	32,723	105
Total.....	84,133	339
Grand total.....	160,816	595

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

Table XVII
Pounds of meat and other foodstuffs
condemned

	Private abattoirs	Inspection stations	Commis- sion stores	Markets butchers, etc.	Total
Beef.....	129	889	45	14,723	15,786
Poultry.....	32	2,030	2,311	5,248	9,621
Veal.....	140	8,018	11,693	739	20,090
Fish.....	...	...	...	42,705	42,705
Sundry meats.....	...	11	483	5,731	6,225
Mutton.....	175	383	848	35	1,441
Pork.....	1,396	26,336	28,690	25,145	81,567
Sundry foodstuffs...	...	...	...	69,744	69,744
Total.....	1,872	37,667	44,070	163,570	247,179

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

**SECTION No. 3—INSPECTION OF RESTAURANTS,
DINING-ROOMS, GROCERY-STORES,
etc.**

Table XVIII

Establishments visited and inspections made

Kind of establishments:	Establish- ments	Inspec- tions
Candy stores.....	2,424	3,777
Restaurants.....	1,256	11,126
Dining-rooms.....	767	6,356
Grocery-stores.....	1,981	10,499
Confectioneries.....	49	678
Pastry-shops.....	117	1,935
Bakeries.....	80	1,042
Fruit and vegetable stores.....	214	2,383
Beverage manufacturers.....	29	388
Sundry manufacturers.....	135	1,148
Special inspections.....	....	5,037
Total.....	7,052	44,369
Delivery vehicles.....	1,261	1,411

Confiscations:

Utensils.....	122
Fruits (in lbs.).....	97,432
Vegetables (in lbs.).....	2,642
Various foodstuffs (in lbs.).....	610,561
Total (in lbs.).....	710,635

Table XIX

**Collection of samples for laboratory analysis
and procedures**

Samples collected for analysis:

Chemical.....	385
Bacteriological.....	136
Total.....	521

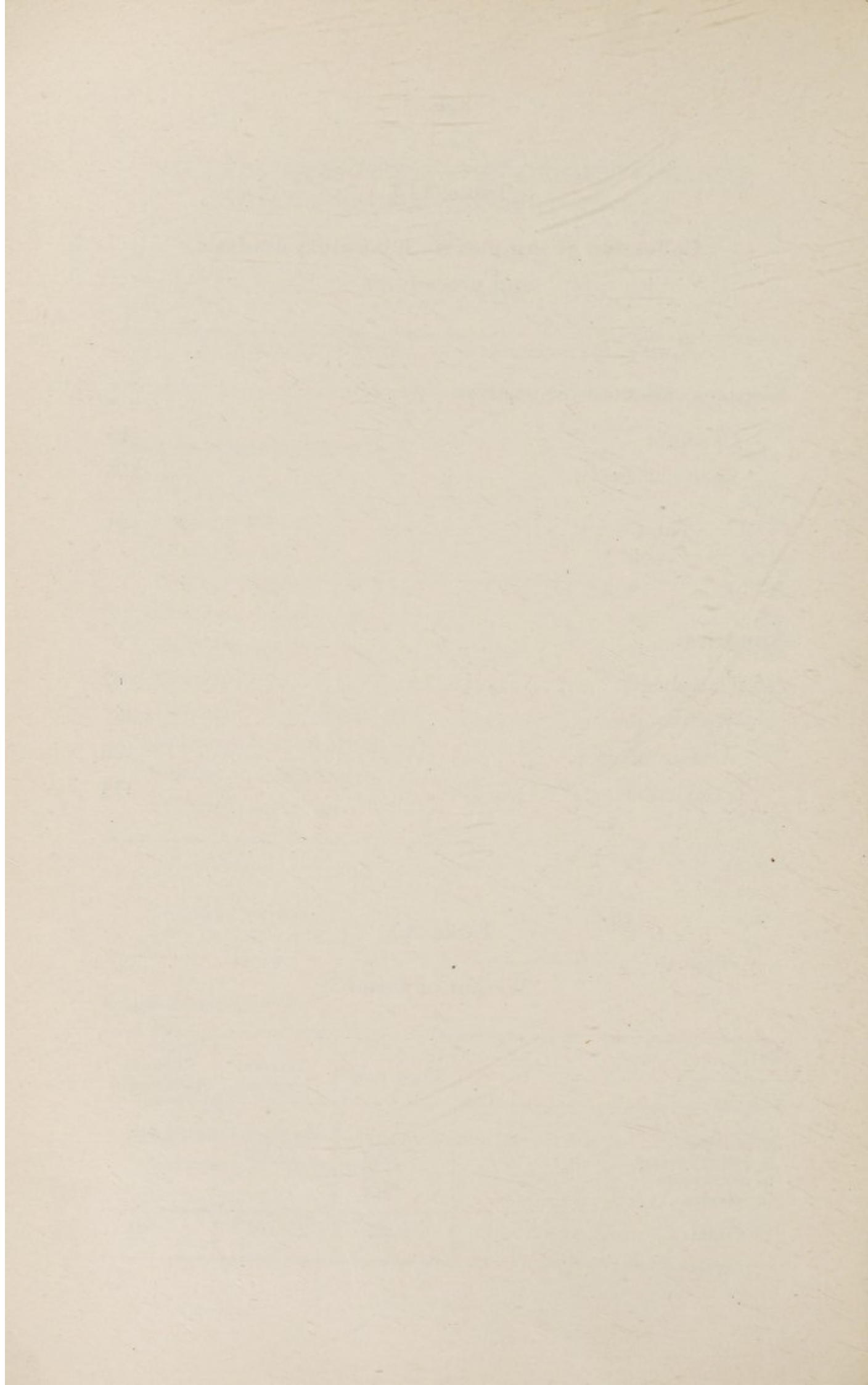
Sundries:

Complaints.....	67
Written notices.....	4,387
Actions taken.....	125
Convictions.....	114

Table XX

Weight of bread

	Inspections	Loaves weighed	Loaves confiscated
In bakeries.....	1,847	204,077	883
In grocery-stores.....	480	12,536	...
In restaurants.....	2	...	...
In vehicles.....	358	...	...
Total.....	2,687	216,685	883



Division of Sanitation

Report of the
DIVISION OF SANITATION
for the year 1942

by

Mr. AIMÉ COUSINEAU, C.E.,
Sanitary Engineer

The statistics of the operations of the Division of Sanitation for the year 1942 have been summarized in this report under the following classification:

- I—Examination of plans and specifications of new or altered buildings.
- II—Sanitary records of dwellings.
- III—Sanitary inspection including:
 - (a) investigation of complaints;
 - (b) regular inspections of various industrial, commercial and educational establishments, institutions, night refuges, theatres, movies, public halls, garages, public lavatories, etc.;
 - (c) inspection of lanes, yards, vacant lots, sheds, stables, etc.;
 - (d) inspection of privies, cesspools, etc.;
 - (e) investigation of flood claims;
 - (f) control of quality of water (collection of samples).
- IV—Plumbing and drainage in new or altered buildings.

V—The work of the Board of Examiners of Plumbers.

VI—License-permits of various categories.

VII—Notifications and prosecutions.

VIII—Inspections relating to the enforcement of the following special by-laws:—

- (a) By-law No. 1006: concerning barber-shops, hairdressing parlors, etc.;
- (b) By-law No. 1009: concerning laundries;
- (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 located in the City of Montreal;
- (e) By-law No. 1252: concerning public baths and bathing;
- (f) By-law No. 1267: concerning dry cleaning establishments (ventilation tests);
- (g) By-law No. 1275: concerning the use of fumigants for the destruction or control of vermin;
- (h) By-law No. 1341: concerning plumbing;
- (i) By-law No. 1573: concerning massage establishments and masseurs;
- (j) By-law No. 1622: concerning noxious weeds;
- (k) By-law No. 1631: concerning funeral directors and embalmers.

IX—Supervision of the Inspectors' work.

— I —

EXAMINATION OF PLANS AND APPLICATION FOR PERMITS

(a) New constructions.....	1,216
(b) Modified constructions.....	2,265
(c) Plumbing.....	2,303
	<hr/>
	5,784

— II —

SANITARY RECORDS OF DWELLINGS

The work carried on, from year to year since 1921, has given the following results at the end of 1942:—

	Re-survey (1942)	Survey and re-survey (1921-1942)
(a) Inspections	24,742	421,664
(b) Findings:		
1—Occupied dark rooms.....	60	11,179
2—Unoccupied dark rooms.....	....	1,893
3—Insanitary dwellings, inhabited cellars, etc.....	13	1,377
4—Overcrowded.....	24	....
(c) Notifications:		
1—Dark rooms.....	37	5,647
2—Insanitary dwellings, inhabited cellars, etc.....	13	1,317
(d) Execution:		
1—Corrected dark rooms.....	4	7,728
2—Placarded dark rooms.....	....	4,160
3—Insanitary dwellings, inhabited cellars, etc., vacated.....	11	578

(a) The number 421,664 includes 141,877 dwellings visited during the period 1921-1929, and 279,787 during the period 1930-1942.

(b) This inspection has allowed us to locate dwellings containing rooms not lighted directly from the outside: 11,179 such rooms have been recorded of which 7,728 have been corrected at the end of 1942. 4,160 rooms have, moreover, been placarded. Due to the numerous corrections made in previous years, we found less defects in existing buildings and seldom in dwellings built since 1921.

(c) The building and plumbing defects found and the cases of uncleanness are included in table No. III (b).

— III —

SANITARY INSPECTIONS

(a) **Investigation of complaints:—**

Total number.....	9,179
Founded.....	5,992
Unfounded.....	3,187

The measures ordered and executed after investigation have been classified as follows:—

Plumbing and drainage.....	1,882
Structural insalubrity (owners).....	716
Insalubrity of dwellings (tenants).....	1,505
Insalubrity of yards and out-houses (tenants).....	1,889

Total number of complaints founded.....	5,992
Water leakage.....	1,946

(b) **Routine inspections:—**

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

	Inspections (a)	Defects (b)	Unclean
Dwellings.....	39,569	4,111	611
Boarding houses for children, clinics, hospitals (c).....	37	3	1
Public buildings, stores and other establishments.....	6,570	106	100
Theatres, movies, public halls, etc.....	163	4	39
Industrial establishments.....	1,395	181	190
Educational establishments (d).....	841	22	98
Laundries (By-law 1009).....	978	75	88
Barber-shops, hairdressing parlors, etc. (By-law 1006).....	5,879	58	210
Establishments: Manufacturing of mattresses, filling materials, etc. (By-law 1089).....	284	3	30
Public baths (By-law 1252).....	519	...	...
Fumigation (By-law 1275).....	888	...	...
Massage establishments (By-law 1573).....	185	1	5
Funeral directors' establishments (By-law 1631).....	290	2	5

- (a) These figures include the number of dwellings visited in 1942, exclusive of second visits. 24,742 records of dwellings have been filled, revised and indexed.
- (b) In many places defects were found after a smoke test or an oil of mint test, which was necessary in 67 cases.
- (c) The supervision of this work is under the jurisdiction of the Division of Child Hygiene, with which we co-operate.
- (d) General inspections of all schools are made in the course of the school year. The medical inspection of schools has been placed under the direction of the Division of Child Hygiene.

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

This work can be summarized as follows:

	Inspections
Lanes.....	1,353
Yards.....	32,934
Vacant lots.....	620
Sheds.....	28,659
Stables, manure boxes (nuisance).....	208
Noxious weeds (By-law 1622).....	11,806

(d) Privy vaults and cesspools:

At the end of 1942 there were 385 privy vaults and cesspools in the City of Montreal, nearly all of which were located in the outlying wards of the City.

(e) Claims:

34 investigations have been made by our inspectors during 1942, following claims made to the claims office of the Legal Department. A written report and a sketch have been made in each case.

— IV —

PLUMBING AND DRAINAGE

(New or altered buildings)

	Inspections
1—Drains.....	1,467
2—Piping (before installation of fixtures).....	3,695
3—Piping (after installation of fixtures).....	3,800
4—Water tests.....	1,626
5—Works completed and accepted.....	1,615
6—Calls for inspections.....	4,869
7—Inspections (new constructions).....	19,828
8—Inspections (existing constructions).....	45,441
9—Total number of fixtures installed.....	15,333
10—Special investigations.....	34
11—Plumbing inspection certificates granted.....	68

— V —

BOARD OF EXAMINERS FOR PLUMBERS

(a) Number of sittings.....	20
(b) Number of candidates.....	72
(c) Certificates of competency granted.....	62
(d) Number of examinations.....	134

— VI —

LICENSES

(a) Master plumbers (By-law 1341).....	393
(b) Journeymen-plumbers (By-law 1341).....	954
(c) Barber shops (By-law 1006).....	1,483
(d) Laundries (By-law 1009).....	316
(e) Establishments: Manufacturing of mattresses, filling materials, etc. (By-law 1089).....	100
(f) Public baths (By-law 1252).....	12
(g) Master-fumigators (By-law 1275).....	3
(h) Fumigators (By-law 1275).....	3
(i) Journeymen-fumigators (By-law 1275).....	3
(j) Undertakers (By-law 1631).....	78
(k) Embalmers (By-law 1631).....	63
(l) Massage establishments (By-law 1573).....	32
(m) Masseurs (By-law 1573).....	101

— VII —

NOTIFICATIONS AND PROSECUTIONS

Notifications by inspectors.....	9,797
Official notices served.....	5,373
Second notices.....	1,929
Final notices.....	385
Actions (Recorder's Court).....	33
Actions maintained.....	33
Action in abeyance.....	0

— VIII —

ENFORCEMENT OF SPECIAL BY-LAWS

The statistics relating to the enforcement of by-laws concerning barber-shops (No. 1006), laundries (No. 1009), mattresses and other stuffed articles, etc. (No. 1089) and plumbing installations in buildings (piping, appliances, etc.) (No. 1341), are contained in the table relating to routine inspections: 111 (b).

(a) By-law No. 1203, concerning the water supply of establishments located in the City of Montreal:

This by-law is enforced jointly with the Public Works Department.

The following data summarize the work accomplished:

I — Establishments drawing water from a source other than the City System:

(a) Total number of cases studied (1933-42) in....	157	establish.
(b) New cases (1942) in.....	15	"
(c) One or more cross-connections removed in.....	5	"
(d) Work under way at the end of 1942 in.....	10	"
(e) Inspections.....	32	"

NOTE.—11 samples of water have been collected in connection with the above work.

II — Establishments surveyed in which there were hazards as to the contamination of the City water system:

(a) Number of cases studied (1933-42) in.....	295	establish.
(b) New cases (1942) in.....	48	“
(c) Alterations to the plumbing system in.....	23	“
(d) Alterations under way in.....	25	“
(e) Inspections in.....	69	“

(b) By-law No. 1252 concerning public baths and bathing:

Swimming pools within City limits may be classified as follows at the end of 1942:—

	Municipal baths	Semi- public baths	Total
(a) Filters and automatic chlorination.....	5	3	8
(b) Filters and intermittent disinfection.....	12	6	18
(c) Intermittent disinfection only.	1	2	3
(d) Beaches and open air pools . . .	18	4	22
Total.....	36	15	51

The control of pool water required 534 inspections and the collection of 416 water samples. 529 tests for residual chlorine have been made and it has been found to vary in 490 cases or 93% between .2 and .5 p.p.m.

The number of admissions in 1942 in municipal and semi-public baths, except beaches, etc., amounted to 1,396,099.

**(c) By-law No. 1275, concerning the use of fumigants
for the destruction or control of vermin:**

(a) Number of master-fumigators.....	3
(b) " " fumigators.....	3
(c) " " journeymen-fumigators.....	3
(d) " " fumigations.....	95
(e) " " fumigations calcelled.....	5
(f) " " dwellings fumigated.....	281
(g) " " rooms fumigated.....	1,353
(h) Inspections regarding the above work.....	888
(i) Infiltrations of fumigant in dangerous zones.....	27
(j) Dwellings affected.....	33
(k) Contraventions (By-law No. 1275).....	3
(l) Notifications.....	3
(m) Actions in the Recorder's Court.....	0

(d) By-law No. 1622, concerning noxious weeds:

(a) Complaints registered.....	90
(b) Number of inspections.....	11,806
(c) Lots on which weeds have been removed.....	2,040
(d) Official notices served.....	1,066

— IX —

SUPERVISION OF INSPECTORS' WORK

Number of inspections.....	3,430
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Division of Laboratories

Report of the
DIVISION OF LABORATORIES
for the year 1942

by

Doctor R. BÉRARD
 Superintendent

The total number of analyses made during the year was 69,914 divided among the different Divisions of the Department of Health, the Police Department and the private practitioners of Montreal.

We must add the preparation of one litre and a half of convalescent serum for the treatment of poliomyelitis.

A brief statement of the work performed by the Division under my supervision will be found in the following tables:

A. Specimens analyzed for the Department of Health.

Division of Food Inspection:

I — Solid Foods:

1. Natural:	
Bacteriological examination.....	179
Chemical examination.....	42
Physical examination.....	425
2. Canned:	
Bacteriological examination.....	127
Chemical examination.....	7
Physical examination.....	15
3. Prepared:	
Chopped meat (re: adulterations).....	15
Sausage (re: adulterations).....	414

II — Liquid Foods:

Milk and cream:

1. Natural:

(a) Samples brought by our inspectors:

Bacteriological examination:

Plate count..... 7,753

B. coli-test..... 7,753

Chemical analysis:

Acidity test..... 8

Completed (1)..... 363

Summary (2)..... 4,439

Research of colostrum, blood, streptococcus... 7

Preservative test..... 4,338

(b) Samples brought by citizens:

Summary chemical analysis plus preservative test. 250

2. By-products:

Chocolate drink (plate count)..... 196

Chocolate drink (B. coli-test)..... 196

Chocolate drink (chemical analysis)..... 99

Ice cream (plate count)..... 451

Ice cream (B. coli-test)..... 451

Ice cream (chemical analysis)..... 290

III — Miscellaneous:

Antiseptic (chemical analysis)..... 1

Butter-milk (chemical analysis)..... 2

Controls in nurseries, hospitals (milk, water) (bacteriological examination)..... 1,636

Flour (chemical analysis)..... 1

Fermented milk (chemical analysis)..... 2

Skimmed milk (chemical analysis)..... 1

(1) Completed chemical analysis comprises specific gravity, butter fat, dry extract, defatted extract, water.

(2) Summary chemical analysis comprises specific gravity by "QUEVENNE" lacto-densimeter, butter fat by "BABCOCK" test, preservative test.

Thermometers (checking).....	3
Wash test (apparatus and recipients).....	1,266
Wash water (dining room) (bacteriological examination).....	46
Water from the Montreal Aqueduct (bacteriological examination).....	968
Water from various sources (bacteriological examination).....	218
Water (chemical analysis).....	3

IV — Biological examination (3)

Blood: agglutination test re: B. Typhosum and B. Paratyphosum A and B.....	801
Stools: re: B. Typhosum and B. Paratyphosum A and B.....	1,547
Urines: re: B. Typhosum and B. Paratyphosum A and B.....	1,546
	<hr/>
	39,217

Division of Sanitation:

Water from public swimming pools (bacteriological examination).....	760
Water from public swimming pools (chemical examination).....	380
Water from various sources (bacteriological examination).....	118
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	1,258

Division of Contagious Diseases:

Blood: re: agglutination test—B. Typhosum and B. Paratyphosum A and B.....	25
re: Brucella abortus.....	25
Stools: re: B. Typhosum and B. Paratyphosum A and B.....	72
Throat swabs: re: diphtheria.....	6,185
Urines: re: B. Typhosum and B. Paratyphosum A and B.....	74

(3) These tests are carried out for the detection of typhoid "germ carriers" among the employees of dairies and other food handlers.

Tuberculosis Section:

Sputum re: tubercle bacilli.....	3,161
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	9,542

Division of Child Hygiene:

Thermometer (checking).....	1
Throat swabs: re: whooping cough.....	1
Urines: chemical and microscopical examination..	4,541
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	4,543

Division of Medical Control:

Stools: re: B. dysenteriae.....	12
Sputum: re: tubercle bacilli.....	6
Urethral and vaginal swabs.....	180
Urines: chemical and microscopical examination..	675
Wound pus.....	8
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	881

B. Specimens analyzed for the Police Department:

Narcotic drugs.....	31
Urethral and vaginal swabs (prostitutes).....	1,925
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	1,956

C. Specimens analyzed for Physicians:

Blood: agglutina- tion test	re: B. Aertrycke.....	24
	re: Brucella abortus.....	121
	re: B. dysenteriae Flexner.....	24
	re: B. dysenteriae Shiga.....	24
	re: B. dysenteriae Sonne.....	24
	re: B. enteritidis Gaertner.....	24
	re: B. Paratyphosum A.....	121
	re: B. Paratyphosum B.....	121
	re: B. Paratyphosum C.....	24
	re: Proteus X19.....	24
	re: B. Typhosum.....	121
	re: Salmonella group.....	24
	re: Salmonella Newport.....	24

Blood: culture.....	44
re: determination of cholesterol.....	19
of creatinine.....	34
of hemoglobin.....	132
of sugar.....	1,083
of urea.....	701
of uric acid.....	16
differential blood count.....	124
red and white cells count.....	132
Cerebro-spinal fluid.....	2
Hair: re: tinea.....	8
Mother's milk.....	3
Pleural fluid.....	8
Sputum: re: tubercle bacilli.....	2,215
re: pneumococcus.....	3
Stools: bacteriological examination (blood, protozoa, tubercle bacilli, worms, etc.).....	122
re: B. dysenteriae.....	89
re: B. Typhosum and B. Paratyphosum A and B.....	227
re: entamoeba histolytica.....	207
Throat swabs: re: diphtheria.....	94
re: Vincent's angina.....	69
Urethral and vaginal swabs.....	223
Urines: bacteriological examination (B. coli, gonococcus, tubercle bacilli).....	223
chemical and microscopical examination... ..	9,294
re: B. Typhosum and B. Paratyphosum A and B.....	68
Worms (identification).....	8
Wound pus.....	25
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	15,875
	<hr/>
Total.....	69,914

Contagious diseases

Department of Health
Division of Laboratories

Year 1942

Diseases	Number of specimens	Positive	Negative	Suspected	Unsatis- factory	Percentage			
						Positive	Negative	Suspected	Unsatis- factory
Diphtheria.....	6,279	496	5,783	0	0	7.89	92.11	0.00	0.00
Rabies.....	0	0	0	0	0	0.00	0.00	0.00	0.00
Tuberculosis.....	5,380	419	4,961	0	0	11.50	88.50	0.00	0.00
Typhoid fever; Physicians of the City.....	627	52	575	0	0	8.27	91.73	0.00	0.00
Detection of "germ carriers" (food handlers).....	3,894	0	3,894	0	0	0.00	100.00	0.00	0.00
Gonorrhea: Physicians of the City.....	223	68	155	0	0	30.49	69.51	0.00	0.00
Food handlers.....	180	7	173	0	0	3.88	96.12	0.00	0.00
Prostitutes (*).....	1,925	245	1,680	0	0	12.72	87.28	0.00	0.00
Amoebic dysentery.....	208	15	193	0	0	7.21	92.79	0.00	0.00

(*) Women arrested in disorderly houses.

**Bacteriological analysis of milk, cream, ice-cream,
water, etc.**

A. Quantitative analysis (Standard Plate Count):

Division of Food Inspection:

Pasteurized milk (delivered to consumers).....	2,827
Special milk (delivered to consumers).....	1,743
Chocolate drink.....	196
Cream.....	607
Ice-cream.....	456
Controls in pasteurizing plants and special milk establishments.....	2,566
Controls in nurseries, hospitals.....	818
Tests on washing of utensils (dairies).....	633
Water from various sources, eggs, oysters, etc....	109
Water from the Montreal Aqueduct.....	484
Wash water (dining room).....	90
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	10,529

Division of Sanitation:

Water from public swimming pools.....	380
Water from various sources.....	63
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	443

**B. Qualitative analysis (fermentation test for the
detection of bacteria of the B. Coli group in
the above samples).....**

10,791

Grand total..... 21,763

**Bacteriological analysis of the water from
the Montreal Aqueduct, year 1942**

Month	Number of samples	Number of colonies	B. Coli 10 c.c. portions
January	33	7,437	0/165
February	30	10,360	0/150
March.....	40	17,643	0/200
April.....	35	7,084	5/175
May	29	33,739	0/145
June	40	17,729	5/200
July.....	33	14,911	13/165
August.....	43	10,130	61/215
September.....	74	12,111	209/370
October.....	52	13,954	36/145
November	42	9,580	18/210
December.....	32	2,147	0/160
Total.....	483	156,825	347/2300
Mean.....	40	324	10.73%

Bacteriological Analyses, 1942
Pasteurized milk—Plate count

Number of samples	Numeration					Percentage				
	Less than 10,000 colonies per c.c.	From 10,000 to 50,000 colonies per c.c.	From 50,000 to 100,000 colonies per c.c.	More than 100,000 colonies per c.c.	Samples void	Less than 10,000 colonies per c.c.	From 10,000 to 50,000 colonies per c.c.	From 50,000 to 100,000 colonies per c.c.	More than 100,000 colonies per c.c.	Samples void
From January to May inclusive:— 1,207	536	527	74	70	0	44.4	43.8	6.1	5.7	0.0
From June to September inclusive:— 828	430	317	34	47	0	51.9	38.3	4.1	5.7	0.0
From October to December inclusive:— 792	353	358	37	44	0	44.6	45.2	4.7	5.5	0.0
For the year:— 2,827	1,319	1,202	145	161	0	46.8	42.5	5.1	5.6	0.0

Bacteriological Analyses, 1942—(Continued)

Pasteurized milk—B. Coli Group

Number of samples	Fermentation test					Percentage			
	B. Coli Group					B. Coli Group			
	Present				Samples void	Present			Absent Samples void
	0.01 c.c.	0.1 c.c.	1 c.c.	Absent 1 c.c.		0.01 c.c.	0.1 c.c.	1 c.c.	
From January to May inclusive:— 1,207	13	20	45	1,129	0	1.1	1.6	3.7	93.6
From June to September inclusive:— 828	24	21	69	714	0	2.9	2.5	8.3	86.3
From October to December inclusive:— 668	2	6	24	636	0	0.3	0.9	3.6	95.2
For the year:— 2,703	39	47	138	2,479	0	1.4	1.7	5.1	91.8

Bacteriological Analyses, 1942—(Continued)

Special milk—Plate Count

Number of samples	Numeration			Percentage		
	Less than 25,000 colonies per c.c.	More than 25,000 colonies per c.c.	Samples void	Less than 25,000 colonies per c.c.	More than 25,000 colonies per c.c.	Samples void
From January to May inclusive:— 748	648	100	0	86.7	13.3	0.0
From June to September inclusive:— 567	490 (a)	77 (b)	0	86.4	13.6	0.0
From October to December inclusive:— 428	373	55	0	87.2	12.8	0.0
For the year:— 1,743	1,511	232	0	86.7	13.3	0.0

(a) Less than 50,000. (b) More than 50,000.

Bacteriological Analyses, 1942—(Continued)

Special milk—B. Coli Group

Number of samples	Fermentation test					Percentage				
	B. Coli Group				Samples void	B. Coli Group				Samples void
	Present			Absent c.c.		Present			Absent c.c.	
	0.01 c.c.	0.1 c.c.	1 c.c.			0.01 c.c.	0.1 c.c.	1 c.c.		
From January to May inclusive:— 748	38	52	142	516	0	5.1	6.9	19.2	68.8	0.0
From June to September inclu- sive:— 567	152	85	141	189	0	26.8	14.9	24.9	33.4	0.0
From October to December inclu- sive:— 371	38	37	94	202	0	10.3	9.9	25.3	54.5	0.0
For the year:— 1,686	228	174	377	907	0	13.5	10.3	22.3	53.9	0.0

Bacteriological Analyses, 1942—(Continued)

Raw milk

Year	Number of samples	Numeration				Percentage			
		Less than 100,000	From 100,000 to 500,000	From 500,000 to 1,000,000	More than 1,000,000	Less than 100,000	From 100,000 to 500,000	From 500,000 to 1,000,000	More than 1,000,000
1942	227	21	99	40	67	9.3	43.6	17.6	29.5

Year	Number of samples	B. Coli Group				Percentage			
		Present			Absent	Present			Absent
		0.0001 c.c.	0.001 c.c.	0.01 c.c.	0.01 c.c.	0.0001 c.c.	0.001 c.c.	0.01 c.c.	0.01 c.c.
1942	221	140	39	22	20	63.3	17.7	9.9	9.1

Division of Medical Control

Report of the
DIVISION OF MEDICAL CONTROL
for the year 1942

by
 Doctor J. A. CHARRON
 Superintendent

The report of the division of Medical Control is divided into four parts, as follows:

- I MEDICAL EXAMINATIONS
- II HEALTH CARDS
- III VACCINATION AGAINST SMALL-POX
- IV MEDICO-LEGAL OFFICE

I — MEDICAL EXAMINATIONS

This first part includes medical examination of and visits made to employees who are absent through illness, and the medical examination of those seeking employment.

The work of this section of the division of Medical Control for the year 1942, may be summed up as follows:

Examinations of employees

1. New employees.....	122
2. Employees absent through illness.....	3,590
3. Special examinations: re: State of health.....	69
	<hr/>
Total.....	3,781

A physician of the division of Medical Control gives a half-time contribution to the division of Municipal Assistance. With the physician of this last division, he looks after the examination of the refugees at Meurling Refuge. He replaces him when absent.

On account of the physician's sickness during all of last year, we had to do all the work of the division.

The doctors of the Medical Control had to answer many urgent calls due to a certain number of persons falling sick inside the City Hall; we took no account of these calls.

II — HEALTH CARDS

In conformity with city by-law No. 926, concerning food establishments and restaurants, and with by-law No. 1394, concerning barber shops, hairdressing parlors, etc., employees working in these places must procure a health card which is issued to them by this division, after complete medical examination supplemented by laboratory tests. The number of these establishments in Montreal is around 5,000.

Medical inspection of food handlers

1. Food handlers:

Number of examinations:

- a) at the office
- b) in plants

Total..... 35,028

During the year 1942, a smaller number of food handlers acted in conformity with by-law 926, that is to say 5,889.

Medical inspection of barbers, hairdressers, etc.

2. Barbers, hairdressers, etc.:

Number of examinations:

- a) at the office
- b) in shops

Total..... 4,690

III — VACCINATION AGAINST SMALL-POX

The health by-law demands that employees who work in food establishments, in barber shops, hairdressing parlors, etc., must

procure a certificate of vaccination showing that they have been successfully vaccinated within less than seven years.

Following is a summary of the work of this section:

Vaccination against small-pox:

1. Food handlers vaccinated:

a) at the office.....	8,049
b) at plants.....	1,893
Total.....	9,942

2. Barbers, hairdressers, etc.

a) at the office.....	252
b) in shops.....	46
Total.....	298

3. Other vaccinations..... 852

Total.....	11,092
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Vaccinations against small-pox done by the physicians of the division of Medical Control

Ages	1937	1938	1939	1940	1941	1942	Total
Under 1 year.....	30	30	21	7	8	5	101
1 year.....	43	37	25	30	24	26	185
2 years.....	60	31	42	22	26	32	213
3 years.....	53	37	35	33	30	20	208
4 years.....	91	49	42	45	44	42	313
5 years.....	170	104	99	114	108	120	715
6 years.....	299	226	214	236	231	193	1,399
7 years.....	108	77	78	100	91	80	534
8 years.....	33	24	28	24	25	16	150
9 years.....	22	7	13	25	15	11	93
10 years and over...	8,640	5,003	5,898	12,938	11,123	10,547	54,149
Total.....	9,549	5,625	6,495	13,574	11,725	11,092	58,060

CLASSIFICATION OF HEALTH CARDS — 1942

I — Food establishments:

Number of cards issued.....	35,028
Number of cards refused.....	184
Reasons: Pyorrhea.....	9
Tuberculosis.....	10
Skin diseases.....	30
Venereal diseases.....	48
Uncleanliness.....	87

II — Barber shops, hairdressing parlors, etc.:

Number of cards issued.....	4,690
Number of cards refused.....	9

Vaccinations and Verifications

Number of vaccinations.....	11,092
Number of verifications.....	10,043

IV — MEDICO-LEGAL OFFICE

Following is the report of the medico-legal counsel for the year 1942.

Workmen injured:

Examinations at the Medico-Legal office.....	1,368
Examinations at home.....	64
First reports.....	462
Subsequent reports.....	303

Expert reports for the Legal Department:

Examinations at the Medico-Legal office.....	35
Examinations at home.....	481
First reports.....	363
Subsequent reports.....	172

Examinations on account of pension fund—

(Employees and constables):

Examinations re: Admission.....	319
Examinations re: Superannuated and departures.	79
Examinations re: Future employees.....	206

Examinations made for the Fire Department:

Examinations re: New cadets.....	110
Examinations re: Revision of cadets.....	50
Examinations re: Superannuated.....	52

There are in addition visits to hospitals to consult records, examine radiographs, etc., and appearance before the courts of justice and the examinations at the Accident Compensation Board's office, which we have not taken into account.

Division of Vital Statistics

Report of the
DIVISION OF VITAL STATISTICS
for the year 1942

by
Dr. ANT. B. VALOIS
Demographer and Superintendent

COMMENTS OF THE DEMOGRAPHER

I — Population

**POPULATION ESTIMATES FOR THE CITY
OF MONTREAL
1942**

According to the present extent of our knowledge in regard to demography, only a close approximation can ever be obtained by any one theory relative to estimating changes of population in a large city. Whatever the method or the system, one must take into account a coefficient of probable error.

The Census, taken every ten years by trained statisticians of the Dominion Bureau of Statistics, is recognized universally as the best method for counting an urban population.

An annual census by the City, such as recommended in 1938 by the Director of the Health Department, Dr. Ad. Groulx, or even every three years, such as foreseen by the Charter of the City of Montreal (Section XII, paragraph 3), would solve this problem for the City. Until these projects are tried, the vital statistician must use the latest census figures to compute his estimates. The annual estimates gradually lose some of their ac-

curacy as one moves further away from the year of the Census. For the year 1942, our estimated figure will be more precise due to the fact that the Census has just been taken.

The following table shows the mean percentage of increase in the population of Montreal, every ten years, from 1871 to 1941. The same table is represented in the form of a graph (graph No. I).

Table I

Year of the Census	Population	Increase	
		Number	%
1871.....	107,225	.....	.....
1881.....	140,747	33,522	31.26
1891.....	216,650	75,903	53.93
1901.....	267,730	51,080	23.58
1911.....	467,986	200,256	74.80
1921.....	618,506	150,520	32.16
1931.....	818,577	200,071	32.35
1941.....	903,007	84,430	10.31

The peaks on graph No. I show the largest increases of the population between 1871 and 1941. These increases are due to heavy immigration, annexations, plus a high birth-rate. The declines resulted from a decrease in immigration and annexations while the birth-rate remained high, up to 1931.

At three different periods, 1881 to 1891, 1901 to 1911 and from 1921 to 1931, the population of Montreal increased suddenly. The first time, this upward trend was caused by the railroad workers who flocked back to the City after the completion of the C.P.R. in 1886. The increases registered between 1901 and 1911, 1921 and 1931, were characterized by a cityward movement of the immigrants from abroad and from the rural districts towards Montreal; a movement that took place at the same time in other large cities of Canada.

A large share of those increases can also be imputed to the fact that, between 1881 and 1891, 1901 and 1921, several towns and municipalities were annexed to Old Montreal (see Table No. XVI). Close to 30% of the largest increase that swelled the population of Montreal between 1901 and 1911, is due to the annexations that occurred during that decade. Since then, there has been no annexation, if we except a fraction of St. Laurent Parish that was added to Montreal in 1932. The population was so slim however that it is not worth mentioning.

Now let us center our attention upon the marked decline, characterized by a pause, that followed the second peak. Three factors contributed to the increase of the population in the past: annexations, immigrations and natural increase. The important annexations stopped in 1918, while immigration and natural increase fell off at about the same time. Thus is explained the decline that ends the plotted line, also the small percentage of increase that was recorded between 1931 and 1941.

METHODS FOR COMPUTING POPULATION ESTIMATES

I — The natural increase method for computing population:

If we watch the growth of an urban agglomeration of the size of Montreal, we notice that every population's progress is related not only to natural increase but also to a migration factor. Compulsory declaration of registered births and deaths allows us to determine with accuracy the natural increase of a population and to follow its evolution from one year to another, on condition that the registration and the declaration are complete and their records reconciled.

The following table shows the evolution of the natural increase of Montreal's population from 1931 to 1942 included.

Table II

Year	Births	Deaths	Natural increase	Proportion per 100 population
1931.....	20,699	9,886	10,813	1.33
1932.....	19,997	9,728	10,269	1.23
1933.....	18,431	8,975	9,456	1.12
1934.....	18,433	8,955	9,478	1.11
1935.....	17,361	9,162	8,199	0.95
1936.....	16,725	8,934	7,791	0.89
1937.....	17,180	9,738	7,442	0.84
1938.....	17,062	9,125	7,937	0.89
1939.....	17,116	9,191	7,925	0.88
1940.....	18,713	9,296	9,417	1.04
1941.....	19,011	9,711	9,300	1.03
1942.....	20,606	9,532	11,074	1.20

Graph No. II illustrates this table. We observe that, aside from the years during the first World War and the epidemic of influenza, the natural increase, which represents the excess of births over deaths, remained high from 1911 to 1931. From 1931 to 1941, the natural increase touched its lowest level since 1885 (when the number of deaths exceeded the total births, following an epidemic of smallpox). This is due to the fact that the birth-rate exhibited a marked downward trend while the death-rate, after decreasing during the first two years of the decade, was brought to a standstill and even increased some in 1940. In 1941 and 1942, the natural increase shifted back to its upward trend, on account of the increase in the number of births while the deaths do not reveal a striking decrease.

To natural increase, we must add an excess of immigration over emigration or deduct an excess of emigration over immigration, whatever the case may be. In these eventful times, the complete collection of this data offers the most difficulties.

Here are the figures of the foreign immigrants in the province of Quebec and the City of Montreal from 1901 to 1940.

Table III

Decade	Immigration in the Province of Quebec	Immigration Montreal (1)	% (2)
1901-10.....	215,908	33,297	16.63
1911-20.....	317,885	40,447	26.87
1921-30.....	169,260	58,160	29.07
1931-40.....	29,011	10,833 (3)	12.83

(1) Figures drawn from table 26, vol. IV, Federal Census 1931.

(2) Percentage that represents the proportion of immigration in Montreal compared to the total increase of the population.

(3) Official figure published by the Dominion Bureau of Statistics in Bulletin No. A-7.

Graph No. III throws a different light on the data in the above table.

The bars express the total number of foreign immigrants entering the province of Quebec during four consecutive decades, from 1901 to 1940. This does not mean necessarily that the new arrivals settled themselves permanently in the province; on the contrary, a large number did nothing else but pass through Quebec and established themselves among our neighbours in Ontario and especially in the Western provinces.

The portion in black illustrates the proportion of immigration from abroad that settled in Montreal during the same period. A close study of the diagram discloses an increase in the number of immigrants from decade to decade up to 1930, in opposition to the general trend of that population in the province. In fact, the number of immigrants increase by one-third in Montreal from 1921 to 1930, while in the province it shows roughly a 50% decrease when compared to the preceding decade.

From 18,405 in 1930, the number of foreigners entering the province fell to 1931 in 1941. That decline is credited in a large measure to the strict regulations that were adopted by the Dominion Government and which are still enforced.

II — The geometrical and arithmetical increase method for computing population:

"Conditions change from one decade to another to such a degree that it is incorrect to compute an annual population with the geometrical increase method based upon the rhythm of prior decades" (1871-1941).

That quotation, taken from the foreword of a documentary analysis concerning the population increases of Montreal, published in 1940, was from Mr. Valmore Gratton and Mr. Geo. S. Mooney, co-directors of the Montreal Industrial Bureau.

On account of heavy local migrations due to the shifting of men to military camps and laborers to war industries, these remarks agree moreso with conditions in the years 1941 or 1942.

One can also apply this quotation to the figures calculated with the arithmetical increase method based upon the difference of the population between the two preceding Censuses.

Here is a table that shows the populations that one obtains for the years 1891 to 1941 from the arithmetical and geometrical increase compared to the population enumerated by the Dominion Census.

Table IV

Year	Dominion Census population	Population according to the	
		Arithmetical increase method	Geometrical increase method
1871.....	107,225	.....	.....
1881.....	140,747	.....	.....
1891.....	216,650	— 174,269	+ 272,047
1901.....	267,730	— 292,553	+ 370,043
1911.....	467,986	— 318,810	— 456,012
1921.....	618,506	+ 668,242	+ 642,786
1931.....	818,577	— 769,026	— 750,726
1941.....	903,007	+ 1,018,648	+ 950,927
1951.....	.....	987,437	1,013,327

With regard to this table, we may evidently express the following comment: at each decade the Census figures differ from the estimates based upon the arithmetical and geometrical progression.

For these reasons, this paper does not advise the use of the arithmetical and geometrical increase method for computing our population. Our opinion is in agreement with that of Henry S. Shryock, Jr., Ph. D., from Princeton University, N.J., expressed in the American Journal of Public Health, in September 1938.

III — Method for estimating the population with Lovell's Directory:

Table V

Population of Montreal and its suburbs for the year 1941
according to the Lovell's estimate and the
census figures

	Lovell's estimate	Dominion Census	Difference	Probable error (1)
Montreal.....	1,307,592	903,007	+ 404,585	44.8%
Other municipalities (2)	185,600	187,101	- 1,501	0.8%
Greater Montreal..	1,493,192	1,090,108	+ 403,084	

(1) If we accept as accurate the figures published by the Dominion Bureau of Statistics.

(2) Lovell includes within Greater Montreal: Longueuil, St-Lambert, Montreal South, Montreal East, Montreal West, Lachine, Ville LaSalle, Ville St-Pierre, Hampstead, Mount-Royal, St-Laurent, Outremont, Verdun and Westmount.

How can one explain that Lovell's estimate for the City of Montreal is higher by 400,000 compared to the Dominion Census figure when his estimate of the suburbs surrounding Montreal falls

short by 1,500 in comparison with the same figure enumerated by the Dominion Census? (The probable error is 44.8% and 0.8% respectively.)

Evidently these two results are not consistent with each other. Mr. Lovell tells us he figures his estimate of the population by using as an index 3.5 persons per occupied dwelling. (This index is confidential and cannot be published.)

In the table below, we compare the number of dwellings we should have in Montreal according to Mr. Lovell and the figures given to us by the Assessors of the City.

Table VI

Year	Population according to Lovell	Number of occupied dwellings (Pop. \div 3.5) according to Lovell	Number of occupied dwellings according to the Assessors	Difference
1941.....	1,307,592	373,598	200,260	+ 173,338
1942.....	1,318,595	376,741	203,420	+ 173,321

The overstatement of these figures, conceded by Mr. W. Lovell, proves this method to be erroneous. Moreover in Lovell's directory, one finds duplications of the same person; for instance, the same individual can be listed both at his residence and at his business address. For these reasons, we do not advise the use of this method for estimating the population of Montreal.

IV — Method for computing the population according to the index of occupied dwellings:

This method is founded upon the following hypothesis: "the number of occupied dwellings is in proportion to the size of an urban population." This hypothesis cannot always be put to a

practical use however. For instance, during depression years or when there is a shortage of dwellings, people live in smaller homes or two families live together in the same household. When there is an adequate number of dwellings or when prosperity returns, each family sets out to lodge in its own home. Now, if other factors are added, such as an abnormal increase in the number of marriages, a heavy rural immigration, etc., a serious need for dwellings may result. Young married people are living with their in-laws, others must board with private families. Thus you have an increase in the population while the number of dwellings remains the same.

On the other hand, there actually exists a tendency to build small dwellings as in apartment houses; this does not necessarily mean an increase in the population: the size and the small number of rooms in these apartments increase the difficulties of large families in finding suitable lodging quarters. This trend will not encourage population growth as long as small dwellings tend to restrain large families and natural increase.

At the present time, Montreal, since 1939, is recording a notable rise in the number of marriages and births; a slight increase in the number of newly built dwellings, especially in the prosperous wards; and an overcrowding of households partly due to the increase in the number of lodgers and young married couples.

We have reason to believe that these different factors are corrected and adjusted one by the other and that the index of occupied dwellings: that is, the result of the division of the population enumerated at the Census (less the population of institutions) by the number of occupied dwellings, as published by the Assessors' Bureau, can be used to estimate the population of Montreal.

Before considering the results arrived at with our latest indices, it might be worth while to know those that were given to us at the last Census.

Table VII

**Mean number of persons per dwelling in Canada,
Eastern Canada, the Province of Quebec and Montreal,
from 1911 to 1941 censuses**

Year	Canada Urban population	Eastern Canada Urban population	Province of Quebec	Montreal
1911.....	4.85	4.87	5.20	5.18
1921.....	4.63	4.61	5.06	4.94
1931.....	4.55	4.54	5.04	4.76
1941.....	4.10	Figures not known yet		4.40

Let us examine in the table on page 210 the populations resulting from the use of these different indices.

V — Method for estimating the population according to the electors' index:

The number of persons per elector listed on the electoral rolls, can be used as an index for computing an estimate of the population on condition the electoral rolls are revised regularly. The common practice in Montreal is to strike off the list the name of an elector a few days after his death.

However, one can question the accuracy of this index for several reasons. As long as one is a proprietor or pays taxes to the City, one has the right to vote in Montreal. There exists no obligation to be a resident. Moreover the name of a proprietor is listed as an elector as often as he owns a house, land, etc., located in different electoral districts. In 1942, the constant increase in the number of proprietors, resulting from an increase in the number of new buildings, contributes to the inaccuracy of this index.

On the other hand (I refer to these facts somewhere else), we have a great number of young married couples who live with their

Table VIII
Estimates of the population of Montreal for 1941-1942
according to the federal and municipal indices for dwelling

Year	Total number of dwellings	Number of vacant dwellings	Number of occupied dwellings	Pop. based upon the federal index per occupied dwelling—4.40 (1)	Pop. based upon the federal index per occupied dwelling—4.40 (1)	Pop. based upon the municipal index per occupied dwelling—4.36 (2)	Pop. based upon the municipal index per occupied dwelling—4.31 (3)	Arithmetical mean of these four populations
1	2	3	4	5	6	7	8	9
1941	201,897	1,637	200,260	911,144	921,144	903,007	903,007	909,576
1942	204,091	671	203,420	925,048	935,048	916,783	916,624	923,376 (4)

(1) Official figure published by the Dominion Bureau of Statistics in Bulletin No. 28.

(2) Index that results from the division of the population enumerated in 1941, after subtracting 30,000 (the population of the institutions) by the number of occupied dwellings, issued by the municipal Assessors in 1941.

(3) Index resulting from the division of the population enumerated in 1941, after subtracting 40,000 (the population of the institutions) by the number of occupied dwellings, issued by the municipal Assessors in 1941.

(4) To this figure, one must add about 3,000 people who lodge in stores and haphazard shelters (700 households \times 4.5 persons).

in-laws and boarders rooming with private families. These people do not pay taxes to the City; their names are not listed on the electoral rolls, though they really represent a portion of our population that is growing every day.

If the factors quoted above correct each other, and we have reason to believe so, the electors' index can very well be compared to other indices and methods of estimating and be used to compute population estimates. The figures in the table that appears below, show the results of the electors' index applied to our population.

Table IX

**Population of Montreal estimated with the electors' index
for the years 1931, 1941 and 1942**

Years	Number of electors	Population based upon 3.85 (1) per elector
1931.....	212,617	818,577
1941.....	241,844	931,099
1942.....	243,350	936,898

- (1) Index taken from a documentary analysis of the population increases in Montreal, written by Mr. Jean Delage in 1940, under the direction of Messrs. Valmore Gratton and George S. Mooney, co-directors of the Montreal Industrial Bureau. This index results from the division of the enumerated population in 1931 by the number of electors in 1931.

VI—Method of estimating the population with the Sugar Rationing Commission data:

According to Mr. Paulen, 1,200,294 people are rationed in the island of Montreal and 986,501 in Montreal City proper. This last figure results from the subtraction of 213,793 (total enumerated population of the other municipalities on the island of Montreal) from the total counted by the Sugar Rationing Commission. Mr.

Paulen admits, however, that duplications crept into his figures. Some people received more than one ration card; while others did not claim any at all. He estimates their mean positive error at 1.25%.

In the table below, the results of calculations with their figures show the population of Montreal to be 985,001.

Table X

**Crude and corrected number of persons rationed in 1942
on the Island of Montreal and in the City proper**

	Crude number	Corrected number (Crude number — 1.25%)
Island of Montreal.....	1,200,294	1,198,794
Montreal.....	986,501	985,001 (1)

- (1) The Superintendent of the Montreal Rationing Division gave me the total number of ration books distributed in 1943. These figures, dated March 11, give to Montreal proper, 925,659. If we add the sick, the absentees, the travellers, who were unable to provide themselves with a ration book during the prescribed time, we have a grand total of 935,447, up to the 8th of April 1943.

**VII — Method for estimating the population according to
the Catholic parishes annual census:**

In general, the parochial census is well enumerated by the clergy. Here is proof. In 1931, a difference of 4,274, or 0.82%, was found between the figure of the French-Canadian Catholic population as enumerated by the Dominion Bureau of Statistics and those counted by the clergymen.

Moreover, the late Dr. Eugène Gagnon always founded his estimates of the population of Montreal upon the annual census of the French-Canadian Catholic parishes. Twice in succession (which eliminates chance as a factor) the estimates of Dr. Gagnon slightly disagreed with the Dominion Census figures (—0.69% in 1931 and +0.43% in 1941).

Table XI

Comparison between the Dominion census figures and the estimates of the Health Department for 1931 and 1941

Year	Dominion Census	Department of Health estimates	Probable error %
1931.....	818,577	813,000	-0.68
1941.....	903,007	907,000	+0.44

Every year, the Parish Priests count their Catholic population when they visit the home of each parishioner. Some visit them during the month of May, but most of them prefer the Fall. The total Catholic parishes within the limits of Montreal are 108. If we subtract from this figure the parishes of other nationalities, which number 31, we are left with 77 French-Canadian parishes. We cannot include the parishes of other nationalities because the Priests meet with great difficulties if they wish to visit every one on account of the extent of their territory and the dispersion of their population.

A few French-Canadian parishes, that are located in the suburbs and overlap the City limits, are not counted in the total 77. The loss of these groups is compensated by the inclusion of Montreal parishes that extend into municipalities surrounding Montreal.

The French-Canadian Catholics of Montreal have represented, these late years, about 64% of the total population. Any population changes of importance that occurred in the City cannot pass unnoticed in this environment. One is better impressed by the importance of the French-Canadian Catholic population in Montreal after referring to this table:

Table XII

Comparison between the population enumerated and interpolated by the Dominion Bureau of Statistics and the population enumerated by the French-Canadian Catholic clergy—1931 to 1941—Montreal

Year	Population according to the Dominion Bureau of Statistics	Population enumerated by the French-Canadian Catholic clergy
1931.....	818,577 (1)	514,491 (518,745) (1)
1932.....	827,000 (2)	522,467
1933.....	835,500	531,931
1934.....	843,900	534,498
1935.....	852,300	544,134
1936.....	860,800	549,454
1937.....	869,200	560,119
1938.....	877,700	560,483
1939.....	886,100	569,392
1940.....	894,600	576,267
1941.....	903,007 (1)	580,058 (3)
1942.....	920,227 (4)	591,117

(1) Figures of the Dominion Census.

(2) The population of each year between 1932 and 1941 results from interpolation based upon the Dominion Census figure of 1941.

(3) The correct number of French-Canadian Catholics at the last federal Census is still unknown.

(4) The computations of this figure are explained hereinafter. As the exact number of the French-Canadian Catholic population has not been published by the Dominion Bureau of Statistics, it is impossible for us to calculate the percentage of that population in regard to the whole population of Montreal enumerated in 1941.

We must take the percentage that is represented by the population counted by the Clergy from 903,007 (Ottawa's official population of Montreal): that is, 64.236%.

If we admit that this percentage has not changed since last year, and we apply it to the population enumerated by the Clergy in 1942 (591,117) we get the following result:

$$\frac{591,117 \times 100}{64,236} = 920,227.$$

Finally, one good reason that encourages us to base at least one of our estimates upon the parochial census comes from the fact that the Catholic population is the most prolific. If an increase in the birth-rate appears in that 64%, necessarily it will affect the total population.

The curve drawn on graph No. IV represents the natural increase percentage of all nationalities during the last decade. We have only to compare it to that of each nationality taken separately, to be convinced. The shape of the curve representing the French-Canadian nationality fits in most closely with the slope illustrating all nationalities.

The following table shows the correlation that exists between the increase of the population and the increase of the parochial population during 1911-1921 and 1931-1941 decades.

Table XIII

Number and percentage of increases between the three last Dominion censuses and those of the French-Canadian Catholic parishes—Montreal

Year	Dominion Census Population	Increase at each Census		Number of French-Canadian Catholics	Increase at each Census		Parishes founded between each Census
		Number	%		Number	%	
1921	618,506	150,520	32.2	459,624 (1)	103,828	29.18	19
1931	818,577	200,071	32.3	518,745 (1)	59,121	12.86	22
1941	903,007	87,430	10.3	580,058 (2)	61,313	11.82	5

(1) Dominion Census figure.

(2) Parochial census figure: the federal Census data are still unknown.

SUMMARY

The increase of the population in Montreal during the last decade, is the smallest recorded during the three preceding decades for the following reasons:

From 1931 to 1938:

1. The natural increase touched the lowest level since 1885; that is 8.41 in 1937 instead of 18.21 in 1923 per 1,000 population.

2. One must go as far back as 1901 to find a year with a lighter foreign immigration.

3. The growth of the neighboring suburbs; such as, town of Mount-Royal, Hampstead, St-Laurent, Verdun, etc., was at the expense of the Montreal population.

4. The strict regulations that were enforced following the City's relief measures put a stop to the rural immigration and compelled the recent arrivals to go back to their rural districts.

5. The "return to the land" policy encouraged the urban population to colonize other parts of the province, and a certain number of residents left Montreal to settle in these lands.

6. Finally, the stagnation of construction in Montreal is evident from the following comparison:

From 1925 to 1931: new dwellings..... 41,447

From 1932 to 1938: new dwellings..... 5,943

From 1939 to 1941, many conditions have changed:

1. The crude number of the natural increase has reached the high figure of 1931, but the rate per 1,000 population has not touched that of 1932. Our population growth tends to surpass 1.1%, the mean rate of increase, computed by George C. Whipple, renowned professor of Harvard University, for 19 countries in the Western Civilization from 1800 to 1920. In spite of calamities of all kinds over a period of 120 years, the annual rate of increase

has remained constant and has wavered slightly above and below the rate of natural increase. It is my opinion, as may be seen in Graph No. V, that since 1931, this observation can be applied to Montreal.

2. The establishment of new war industries and the constant development of existing ones result in a striking increase of the rural immigration. Ex., Defense Industries, Angus Shops.

3. Refugees of different nationalities entered the country and settled temporarily in Montreal: English, French, Jewish refugees . . .

4. Outsiders, enrolled as volunteers and draftees often accompanied by their families, are stationed permanently in the City: for instance at the Longue Pointe depot.

5. Finally, the growth of the transportation systems shows in relief a notable increase in the urban population. Ex., C.N.R. and Montreal Tramways.

We must however admit that these factors are partly counter-balanced by:

1. A gradual migration of our prosperous citizens towards the suburbs, though this trend has slowed down due to war restrictions.

2. The permanent establishment of laborers in the neighborhood of the war industries located outside Montreal: for instance, St-Paul l'Ermite and Ste-Thérèse.

3. Volunteers and draftees leaving Montreal more and more frequently.

From the first of July 1941 to the first of July 1942, conditions have remained practically the same with the exception of two, that correct each other — on the one hand, the opening of new war industries and, on the other hand, a gradual increase in the number of volunteers and draftees leaving Montreal.

The Table No. XIV shows the population of Montreal estimated according to eleven different methods of computations.

Table XVI
Comparison of the population of Montreal calculated according to eleven different methods
for the years 1931, 1941, 1942

Year	Popula- tion enumer- ated by the Dominion Bureau of Statistics	Population estimated								Total enumer- ated and estimated popula- tions	Arith- metical mean of all these popula- tions		
		Based upon the Fr.-Can. Cath. Parishes census	By the provin- cial demo- grapher	By the Dominion demo- grapher	By the Sugar Ration- ing Commis- sion	By the Catholic Schools Commis- sion	By the Bell Tele- phone	With the occupied dwelling index				With the electors' index	
								According to the number of dwelling issued by the Mtl. L. H. & Power	According to the number of dwelling issued by the Post Office				According to the number of dwelling issued by the Assessors
1931	818,577	813,000	818,500	818,570	829,000	818,577	818,577		5,734,801	819,257
1941	903,007	907,000	903,007	903,000	.....	897,000	913,800	914,456	.....	931,099	8,171,945	907,994
1942	.....	920,227	920,000	903,000	983,929	data not available	925,442	924,824	930,718	936,898	8,368,414	929,824

Final estimate of the population residing permanently in Montreal, the first of July 1942: **926,000** (a round figure)

Evidently these figures do not take into account the floating population. If we look at this problem from every angle, we should define the terms "floating population" and "permanent population." In my opinion, a permanent population includes residents living within the city limits for at least one year. A floating population is divided into a population residing temporarily and a transient population. A population residing temporarily occupies a residence for several months: such as, students, who attend universities and boarding schools during eight or nine months; officers, soldiers, flyers stationed in depots for a period of six weeks to six months. A transient population, as its name indicates, only passes through Montreal; travellers, tourists, salesmen, holidaying soldiers and flyers, are included in this group.

In Montreal, I believe we may estimate the actual floating population at more than 75,000, if we rely upon the figures of the Sugar Rationing Commission in 1942.

Always according to Professor Whipple, if we wish to consider, from a geographical point of view, the population figures, we must enumerate every person where found within the limits of a city, for instance, without taking into account reallocation by residence. This system is known as the "de facto" method.

But if we want to know the population of a certain locality, as a community of persons, from a social point of view . . . if we wish to take population figures as an index of the hygienic, sanitary or economic conditions of this city, we must study it within its own environment. For that purpose, we must count those persons who have a permanent residence within the city even if they happen to be temporarily absent, not taking into account the floating population. This second system, called the "de jure" method, was

used by the Dominion of Canada Bureau and by the Federal American Bureau at the last Census. It is frequently adopted by Health Departments and Vital Statistics Divisions. The table below indicates also that the city of Toronto uses this method to enumerate and estimate their population.

Table XV

Population of Toronto, enumerated by the Assessors' Bureau and enumerated by the Dominion Bureau of Statistics

Years	Assessors' Bureau figures	Figures of the Dominion Bureau of Statistics
1931.....	627,231 (1)	631,207
1941.....	655,751 (1)	667,457

- (1) Since the figures from the Assessors' Bureau in Toronto are smaller than those from the Dominion Bureau of Statistics, the floating population must be excluded necessarily.

In order that we may compare our death-rates, marriage-rates, morbidity rates and natality rates, to those of other Canadian municipalities, we must use the same method all over Canada, that is, the "de jure" method of the Dominion Bureau of Statistics.

In Table XIV, we did not include the method of estimating populations founded upon natural increase nor the method based upon the elementary enrolment of school children, due to incomplete data. Following serious considerations, the military personnel was excluded.

CONCLUSIONS

In my opinion, the estimate of the population of the city of Montreal, based upon the Dominion Census taken every ten years, and the parochial census taken every year, and the index of occupied dwellings, actually is the most accurate one.

With these methods, based upon the "de jure" method, we estimate the population for the City of Montreal at 926,000 for the year 1942. The arithmetical mean of nine different methods is a figure slightly higher: 929,824. We believe the best policy is to adopt 926,000 as this figure is so close to that of the mean. We also choose the "de jure" method for computing our vital statistics, as this method is acknowledged as more accurate by expert statisticians.

According to the "de facto" method, a floating population of 75,000 persons (based upon the figures issued by the Sugar Rationing Commission in 1942), added to 926,000, reached a grand total of 1,001,000 persons in Montreal on the first of July 1942.

Table XVI

Table showing the areas and the populations annexed to the City of Montreal—1871-1941

Decades	Dates	Towns, municipalities, parishes, etc.	Annexed areas Acres	Annexed population (1)	Total area Acres	Total population (2)
1871-1880	1871	OLD MONTREAL			6,298.74	107,225
1881-1890	1881	OLD MONTREAL			6,298.74	140,747
	1883	Hochelega (Town of)	1,230.00	2,457		
	1886	Jean-Baptiste (Town of St.)	308.00	5,874		
	1887	Gabriel (Mun. Village of St.)	330.00	4,506		
1891-1900	1891	MONTREAL			8,166.74	216,650
	1893	Louis (Town of St.)	850.00	2,972		
1901-1910	1901	MONTREAL			9,016.74	267,730
	1905	Cunegonde (City of St.) Henri (Town of St.) Villeray (Mun. Village of)	124.00 450.00 60.00	10,912 21,192 509		
	1906	Rosemont (part of Village of) Sault-au-Récollet (part of Parish of)	185.00 863.60	315 1,576 (3)		
	1907	Laurent (part of Parish of St.)	960.00	512 (4)		
	1908	Notre-Dame des Neiges (Town of) Rosemont (part of Village of) Sault-au-Récollet (part of Parish of)	1,131.07 249.00 313.60	401 816 (5) (3)		
	1909	De Lorimier (Village of) Outremont (part of Town of)	391.00 17.23	1,279 -- (8)		

1901-1910							
	1910	Ahuntsic (Mun. Village of).....	736.50	366			
		Bordeaux (Town of).....	868.28	491			
		Beaurivage de la Longue-Pointe (Corp. of the Village of).....	46.20	873			
		Emard (Mun. Town of).....	951.00	1,737 (6)			
		Laurent (part of Parish of St.).....	877.30	(4)			
		Louis (Town of St.).....	720.00	10,933			
		Notre-Dame de Grâces (Town of).....	2,536.00	2,225 (7)			
		Neiges (Town of Cote des).....	1,402.17	1,156			
		Paul (Town of St.).....	263.00	(6)			
		Rosemont (Village of).....	1,431.50	(5)			
		Tetrealville (Mun. Village of).....	311.30	2,510			
		Longue-Pointe (Town of).....	4,193.70				
	1911	MONTREAL.....			28,088.19		467,986
1911-1920	1912	Luc (part of Cote St.).....	373.00	(7)			
	1914	Laurent (part of Parish of St.).....	92.70	.....		
	1916	Cartierville (Town of).....	1,293.00	905			
		Sault-au-Récollet (Town of).....	1,150.00	1,311			
	1918	Maisonnette (Town of).....	1,157.00	18,684			
		Laurent (part of Montée St.).....	1.26	.....		
1921-1930	1921	MONTREAL.....			32,155.15		618,506
1931-1940	1931	MONTREAL.....					
	1932	Laurent (part of Parish of St.).....	98.92	.....	32,155.15		818,577
	1941	MONTREAL.....			32,254.07		903,007

(1) Dominion Census figures.

(2) This figure includes not only the permanent population residing in Montreal but also the increases due to natural increase, immigrations and annexations.

(3) Population of both parts of Sault-au-Récollet annexed respectively in 1906 and 1910.

(4) This figure includes the population of both parts of St. Laurent annexed in 1907 and 1910.

(5) Population of both parts of Rosemont annexed respectively in 1908 and 1910.

(6) This figure includes both populations of Ville-Emard, annexed in 1910 and Ville St. Paul, annexed in the same year.

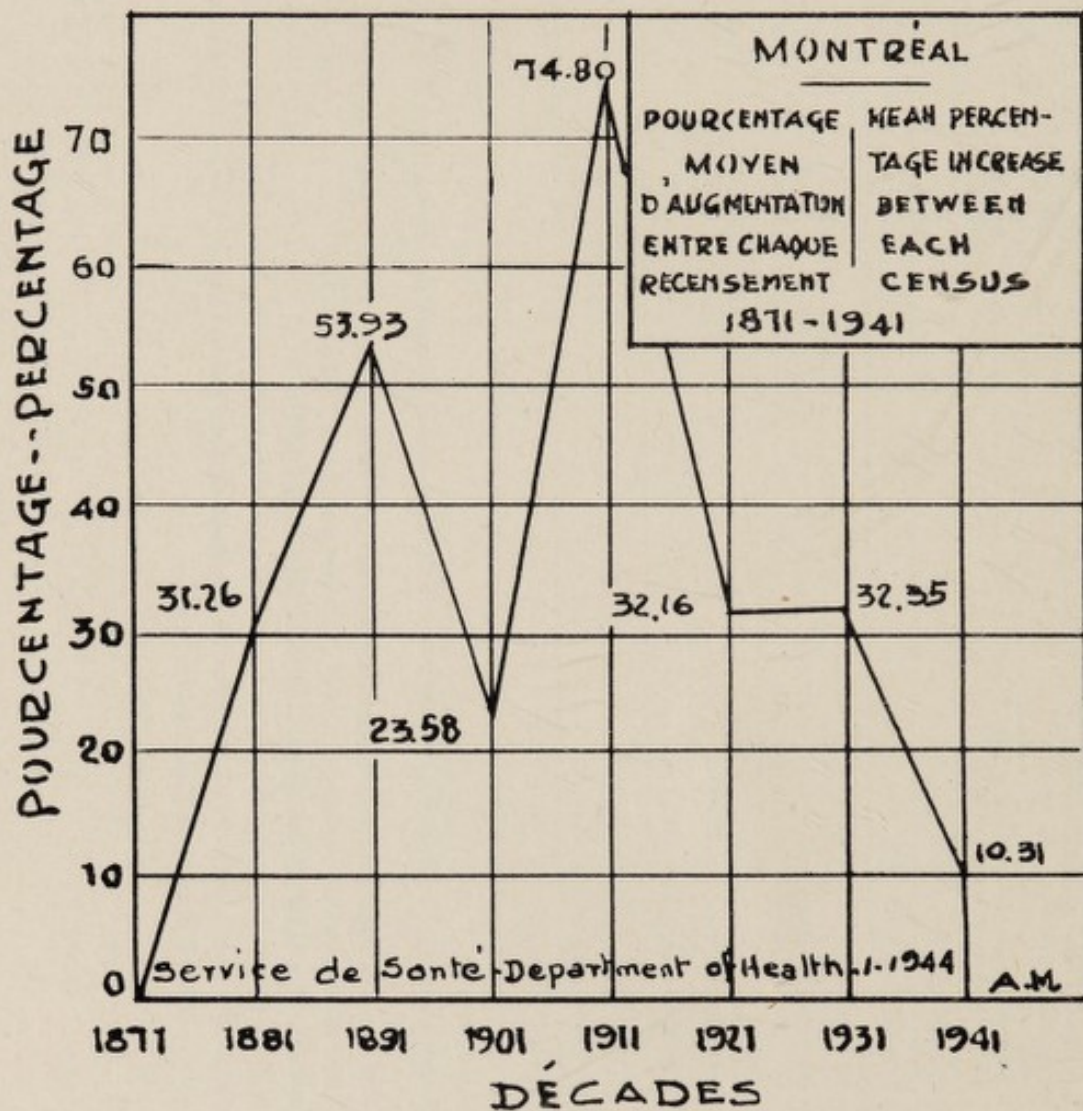
(7) This figure includes both populations of Notre-Dame de Grâces annexed in 1910 and part of Cote St. Luc, annexed in 1912.

(8) Those dashes — — — indicate a small population not worth mentioning.

Graph No. I

Mean percentage increase between
each census

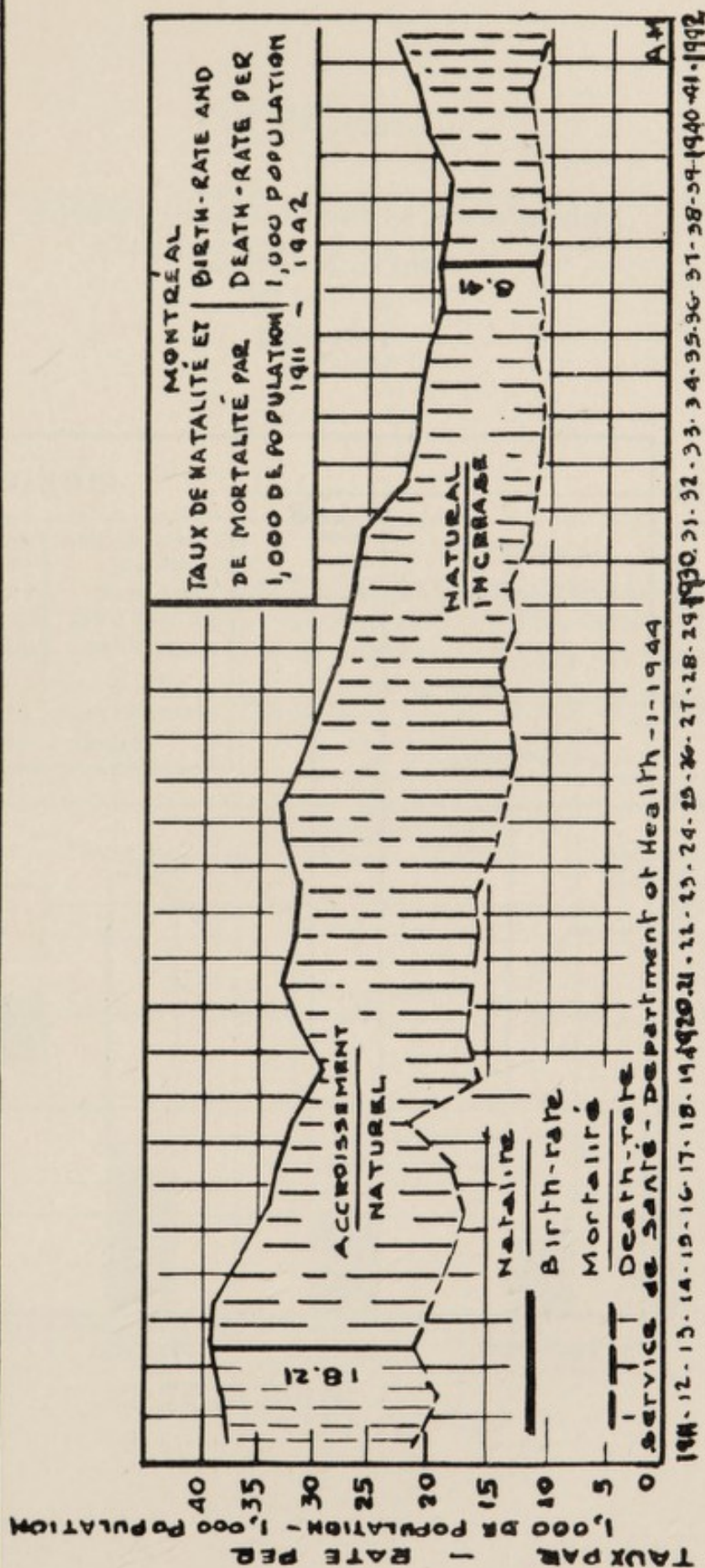
1871-1941



Graph No. II

Birth-rate and death-rate per 1,000 population

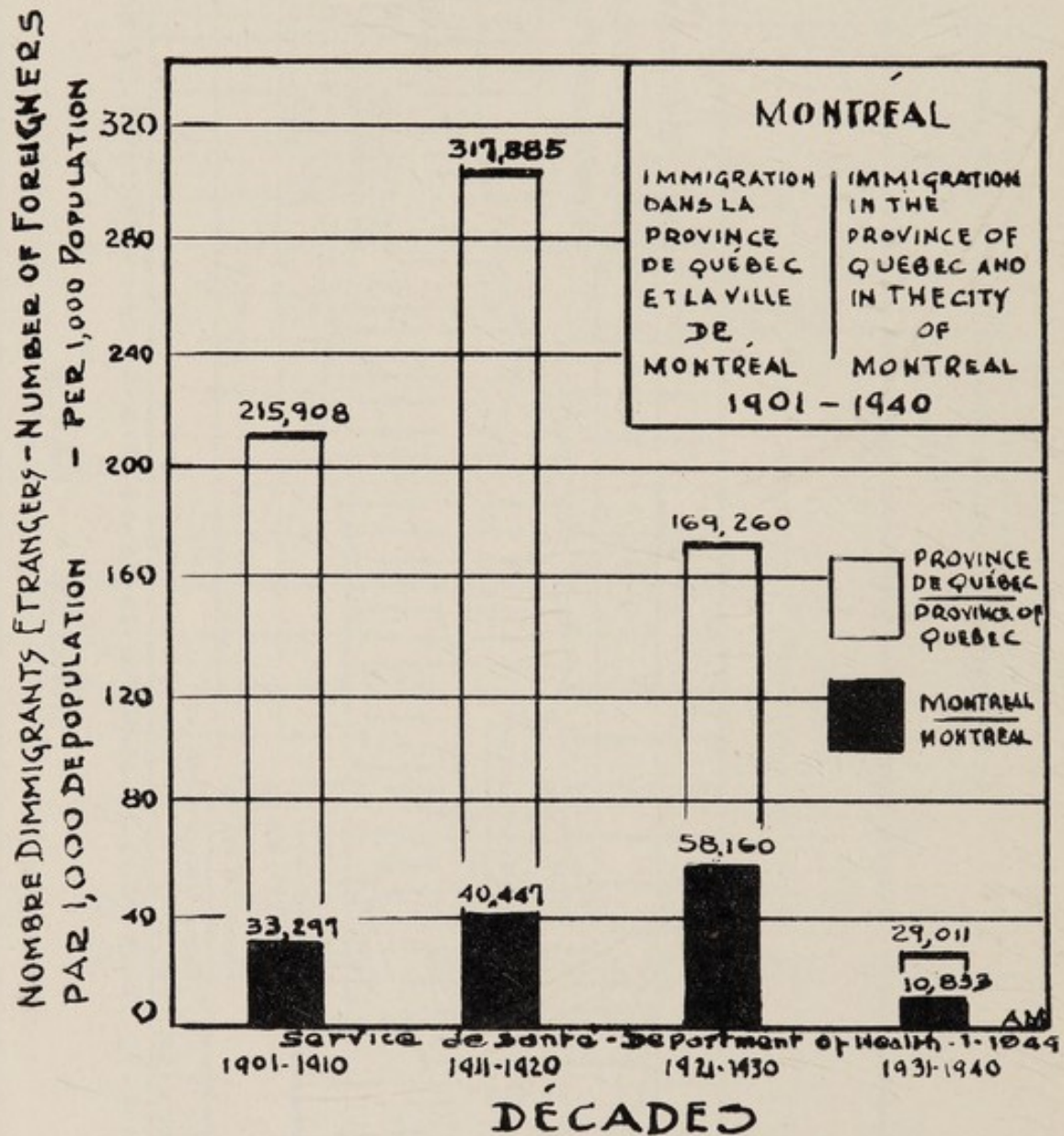
1911-1941



Graph No. III

Immigration in the Province of Quebec
and in Montreal

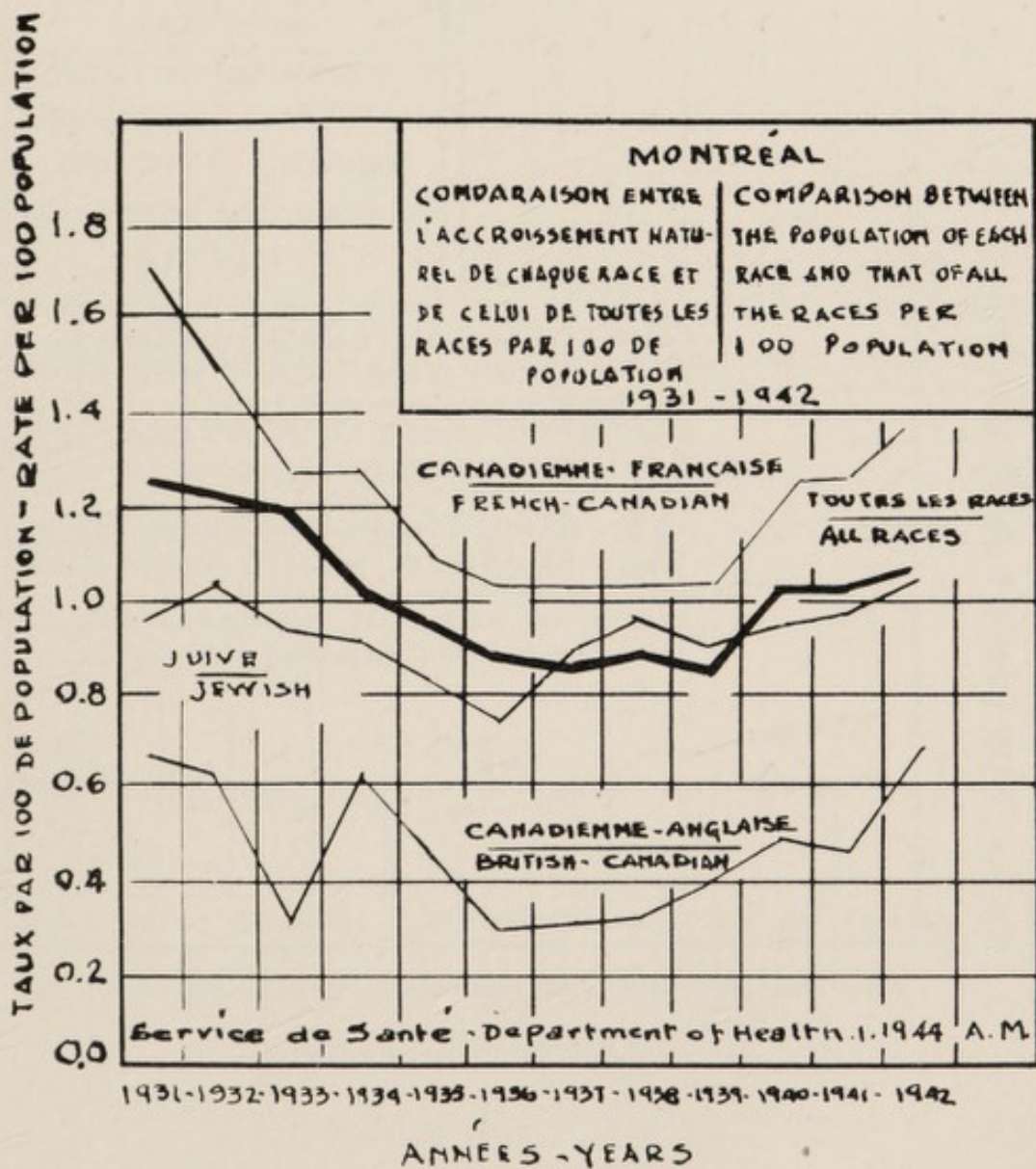
1901-1941



Graph No. IV

Comparison between the natural increase of each
race and that of all the races per
100 population

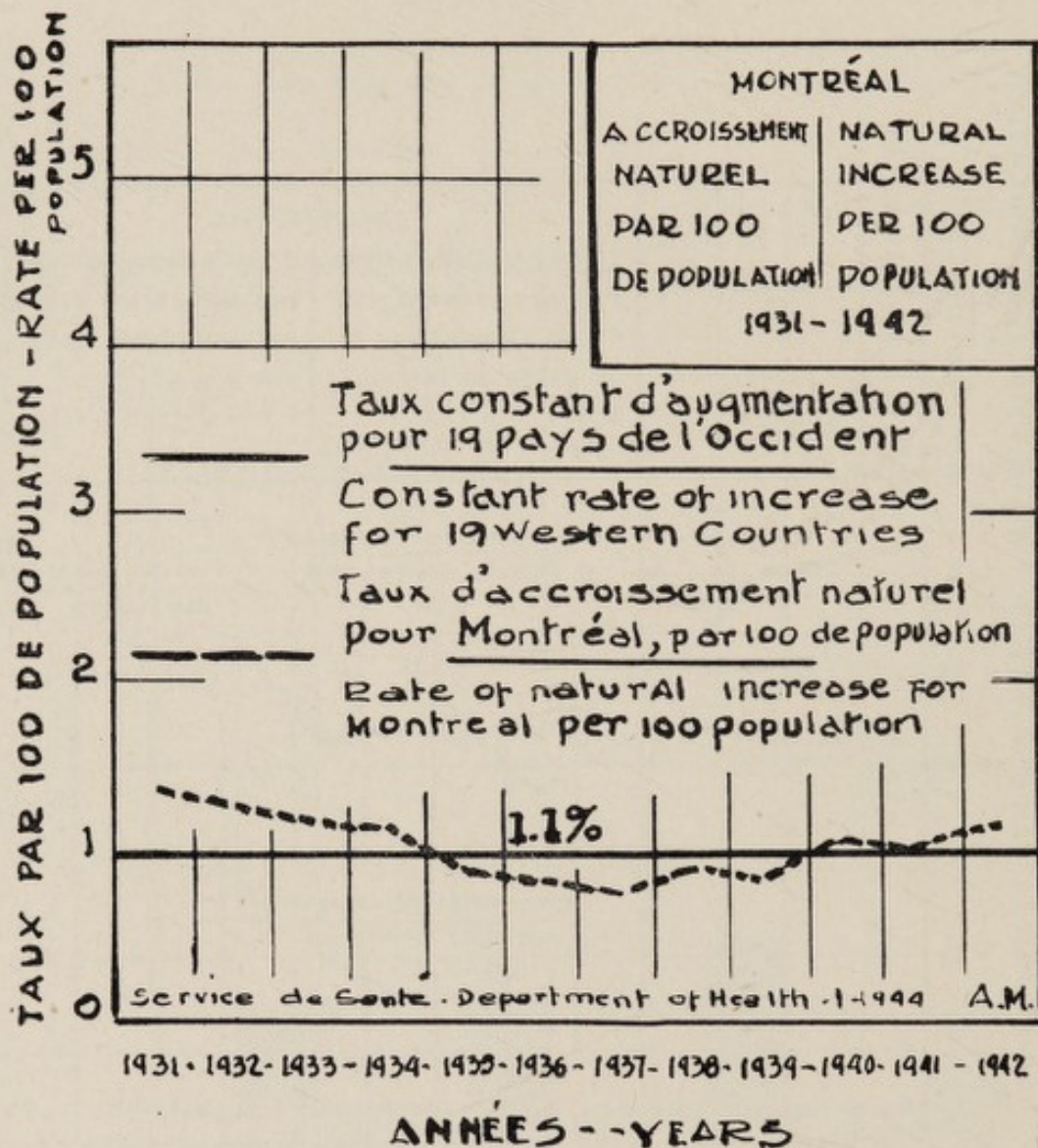
1931-1941



Graph No. V

Natural increase per 100 population

1931-1941



Before concluding, I am very pleased to thank the personnel of the Division for their full co-operation that was granted to me under the trying circumstances that followed the premature death of the regretted Dr. Eugène Gagnon, assistant-director, demographer and superintendent of the division of vital statistics.

II — Vital statistical tables — 1942

Population:

Table	I — Population of Montreal by sex, race and percentage corresponding to each race.
"	II — Excess of live births over deaths and rate of natural increase per 1,000 population by race.

Births:

Table	III — Number of live births and rates per 1,000 population by sex and race.
"	IV — Number of registered and recorded births and percentage represented by the difference between these two numbers, by religious denominations.
"	V — Number of live births, legitimate and illegitimate, classified according to religious denomination, by sex and race. Legitimate births. Illegitimate births.

Marriage:

Table	VI — Number of marriages and rates per 1,000 population classified according to race.
"	VII — Number of marriages and live births classified according to religious denomination, by sex and race.

Deaths:

Table	VIII — Number of deaths classified according to month, annual mean for each year and by period of five years, and annual rates per 1,000 population. 1937-1942.
"	IX — Number of deaths by age and age groups, classified according to sex, legitimacy, racial origin, and percentage of the total corresponding to each group.
"	X — Deaths classified according to age groups, months, seasons and years. 1937-1942.
"	XI — Number of births (exclusive of stillbirths) and deaths under one year, legitimate and illegitimate and death rates per 1,000 live births for each year and by periods of five years. 1915-1942.
"	XII — Number and percentage of deaths by age groups and by months, classified according to racial origin.
"	XIII — Number of deaths, classified according to wards, sex and age groups and percentage of each group corresponding to the total deaths.
"	XIV — Number of deaths among embryos and foetus (under six months and a half of gestation), classified according to cause, sex and duration of pregnancy.
"	XV — Number of stillbirths legitimate and illegitimate, classified according to cause of death, sex and duration of pregnancy.
"	XVI — Number of deaths of infants under one year classified according to cause, age and month.
"	XVII — Number of deaths among illegitimate infants, classified according to cause, age and place of death.
"	XVIII — Deaths of infants under one year, classified according to cause and by periods of six months, for the years 1941 and 1942.
"	XIX — Number of live births and rates per 1,000 population by sex and race.

Deaths: (Continued)

Table	XX	Number of live births and deaths (exclusive of stillbirths) of infants under one year and rates per 1,000 live births, classified according to race.
"	XXI	Number of deaths and their percentage, classified according to civil status, by sex and race.
"	XXII	Population by racial origin, percentage of each group corresponding to the total, deaths by cause and percentage of each racial group corresponding to the total.
"	XXIII	Number of deaths, classified according to cause, by age groups, sex and race.
"	XXIV	Number of non-resident deaths, dying in Montreal, distributed by cause, age groups, sex and race.
"	XXV	Deaths by wards and by cause.
"	XXVI	Number of deaths classified according to wards, age groups and civil status.
"	XXVII	Number and rates per 100,000 population of deaths caused by certain diseases, by five year periods from 1875 to 1939 and per year for 1940, 1941 and 1942.
"	XXVIII	Number of deaths in Montreal, classified according to sex, place of occurrence and place of residence.
"	XXIX	Deaths by certain contagious and diarrhetic disease classified according to months.
"	XXX	Population, number of births, marriages, deaths and principal causes of deaths, and rates per 1,000 live births or per 1,000 population for the years 1941 and 1942.
"	XXXI	Deaths by certain diseases and groups of diseases, and rates per 1,000 population or per 1,000 live births for the years 1940, 1941 and 1942.
"	XXXII	Mean number of deaths, births and marriages and rates per 1,000 population by periods of five years from 1872-1939, with the exception of a period of three years from 1872-1874, and for each year 1940, 1941, 1942.
"	XXXIII	Classification of deaths according to the International List of causes of deaths by sex and age groups.

Table I

**Population of Montreal by sex, race and percentage
corresponding to each race—1942
(residents only)**

Nationalities	Sex		Total	Proportion per 100
	M	F		
French-Canadians	295,024	319,100	614,124	66.32
British-Canadians	90,192	96,026	186,218	20.11
Jews	26,226	26,208	52,434	5.66
Other nationalities	38,223	35,001	73,224	7.91
Total	449,665	476,335	926,000	100.00

Table II

Excess of live births over deaths and rate of natural
increase per 1,000 population by race—1942
(residents only, born and dying in and out of
Montreal)

Nationalities	Births	Deaths	Excess of births over deaths	Natural increase per 1,000 of population
French-Canadians	15,165	6,556	8,609	14.02
British-Canadians	3,240	2,016	1,224	6.57
Jews	979	389	590	11.25
Other nationalities	1,222	571	651	8.89
Total	20,606	9,532	11,074	11.96

Table III

Number of live births and rates per 1,000 population
by sex and race—1942
(residents only, born in and out of Montreal)

Nationalities	Sex		Total	Proportion per 1,000 population
	M	F		
French-Canadians	7,945	7,220	15,165	24.69
British-Canadians	1,642	1,598	3,240	17.40
Jews	505	474	979	18.67
Other nationalities	628	594	1,222	16.69
Total	10,720	9,886	20,606	22.25

Table IV

Number of registered and reported births, and percentage represented by the difference between these two numbers, by religious denominations
(residents only, born in and out of Montreal)

Religious denominations	Births reported	Births registered	Difference	Percent of total
1. Roman Catholic churches:				
(a) French.....	15,461	15,497	36	0.23
(b) English.....	1,112	1,126	14	1.24
(c) Others.....	465	472	7	1.48
2. Anglican churches.....	582	624	42	6.73
3. United churches.....	484	523	39	7.46
4. Presbyterian churches . .	178	192	14	7.29
5. Baptist churches.....	37	42	5	11.90
6. Other Protestant churches.....	89	93	4	4.30
7. Synagogues.....	733	739	6	0.81
8. Greek Orthodox churches.....	98	104	6	5.77
9. Municipal registrar.....	622	622	...	...
10. Transfers to Montreal...	572	572	...	...
Total.....	20,433	20,606	173	0.84

Number of live births, legitimate and illegitimate, classified by religious denomination
(residents only, born in Montreal)

Legitimate

Religious denominations	Grand total	TOTAL		Sex	French
		Male	Female		
Roman Catholics:					
French.....	14,627	7,617	7,010	M F	7,228 6,628
English.....	1,094	573	521	M F	82 54
Others.....	467	229	238	M F	11 2
Anglicans.....	603	306	297	M F	19 12
Baptists.....	41	18	23	M F	2 2
Presbyterians.....	191	111	80	M F	9 3
United.....	502	260	242	M F	26 15
Other Protestants.....	79	41	38	M F	7 5
Synagogues.....	739	463	276	M F	....
Greek Orthodox.....	104	57	47	M F	....
Transfers to Montreal.....	565	268	297	M F	45 51
Municipal registrar.....	579	239	340	M F	62 49
Total—Legitimate.....	19,591	10,182	9,409	M F	7,491 6,821

according to religious denomination, by sex and race
(and out of Montreal)

Births

English	Scotch	Irish	Other British	Jews	Italian	Ruthenian Polish	Tzecho- Slovak	Other races	Race unknown
99 127	30 23	88 76	.. 1	7 2	96 85	6 8	1 3	62 57	....
146 140	48 53	249 237	3 4	1 1	10 12	4 1	2 ..	28 19	....
2 4	1 1	1 1	.. ..	.. ..	122 127	29 35	7 4	56 64	....
204 179	31 55	26 29	8 4	.. 4	2 3	2 1	.. ..	14 10	....
9 13	3 6	2 1	.. ..	.. ..	.. ..	.. ..	.. ..	2 1	....
38 35	41 28	12 7	3 1	.. ..	4 4	.. ..	.. ..	4 2	....
106 109	52 59	25 21	1 1	.. ..	6 9	3 3	3 ..	38 25	....
13 13	.. 2	2 1	.. 1	.. ..	3 7	.. ..	2 2	14 7	....
.. ..	.. ..	.. ..	.. ..	463 276	....	....	....	....	....
.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	4 2	.. ..	53 45	....
124 100	40 46	21 24	.. 1	22 49	5 14	.. 1	.. ..	11 11	....
98 84	32 29	18 15	.. 1	10 142	9 ..	2 2	.. 1	8 17	....
839 804	278 302	444 412	15 14	503 474	257 261	50 53	15 10	290 258	....

Table

Number of live births, legitimate and illegitimate, classified
(residents only, born
Illegitimate

Religious denominations	Grand Total	TOTAL		Sex	French
		Male	Female		
Roman Catholics:					
French.....	870	465	405	M F	448 392
English.....	32	20	12	M F	4 1
Others.....	5	2	3	M F	.. 1
Anglicans.....	21	11	10	M F	....
Baptists.....	1	1	..	M F	....
Presbyterians.....	1	..	1	M F	....
United.....	21	10	11	M F	.. 1
Other Protestants.....	14	5	9	M F	.. 1
Synagogues.....	..	..	..	M F	....
Greek Orthodox.....	..	..	..	M F	....
Transfers to Montreal.....	7	1	6	M F	....
Municipal registrar.....	43	23	20	M F	2 3
Total—Illegitimate.....	1,015	538	477	M F	454 399
Grand total.....	20,606	10,720	9,886	M F	7,945 7,220

According to religious denomination, by sex and race
(in and out of Montreal)
Births

English	Scotch	Irish	Other British	Jews	Italian	Ruthenian Polish	Tzecho- Slovak	Other races	Race unknown
5 7	1 ..	7 3	.. ..	.. ..	2 ..	2 ..	.. ..	.. 3	....
5 2	3 3	8 3	.. 3	....	....	....	....	....	....
.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	.. ..	1 2	....
10 8	1 1	.. ..	.. ..	.. ..	.. 1	....	....	....	....
1..	....	....	....	....	....	....	....	....	....
.. 1	....	....	....	....	....	....	....	....	....
3 3	.. 3	2 1	.. ..	.. ..	1 ..	.. ..	.. ..	4 3	....
3 3	1 2	1 1	.. 1	.. ..	.. ..	.. ..	.. ..	.. 1	....
..
..
.. 3	.. 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 1	....
7 10	7 3	1 3	.. ..	2 ..	.. ..	1 1	.. ..	3..	....
34 37	13 14	19 11	.. 4	2 ..	3 1	4 1	.. ..	9 10	....
873 841	291 316	463 423	15 18	505 474	260 262	54 54	15 10	299 268	....

Table VI
Number of marriages and rates per 1,000 population
classified according to race—1942

Nationalities	Total	Proportion per 1,000 population
French-Canadians.....	7,724	12.58
British-Canadians.....	2,995	16.08
Jews.....	534	10.18
Other nationalities.....	528	7.21
Total.....	11,781	12.72

Table VII
Number of marriages and live births classified according to
religious denomination, by sex and race—1942
(residents only, born in and out of Montreal)

	Births		Total	Marriages
	M	F		
Catholic Churches:				
French-Canadians.....	8,082	7,415	15,497	7,724
British-Canadians.....	593	533	1,126	1,065
Others.....	231	241	472	371
Total.....	8,906	8,189	17,095	9,160
Protestant Churches:				
Anglicans.....	317	307	624	672
Presbyterians.....	111	81	192	256
United Churches.....	270	253	523	919
Other Protestants.....	65	70	135	153
Total.....	763	711	1,474	2,000
Other denominations:				
Synagogues.....	463	276	739	534
Orthodox Churches.....	57	47	104	87
Births registered at the City Hall.....	262	360	622	...
Transfers to Montreal....	269	303	572	...
Total.....	1,051	986	2,037	621
Grand total.....	10,720	9,886	20,606	11,781

Table VIII

Number of deaths classified according to month, annual mean for each year and by period of five years, and annual rates per 1,000 population—1937-1942

(residents only, dying in and out of Montreal)

Months	1937	1938	1939	1940	1941	Mean 5 years	1942
January	868	795	785	762	922	826	861
February	946	758	879	761	812	831	811
March	883	863	1,021	819	881	893	854
April	876	876	821	782	766	824	816
May	925	829	833	778	805	834	818
June	750	734	663	730	807	737	721
July	738	653	731	760	779	732	765
August	748	679	616	659	768	694	755
September	754	701	680	698	735	714	680
October	727	730	714	750	828	750	804
November	676	746	657	773	802	731	759
December	847	761	791	1,024	806	846	888
Total	9,738	9,125	9,191	9,296	9,711	9,412	9,532
Mean	811.5	760.4	765.9	774.7	809.2	784.3	794.3
Per 1,000 population	11.2	10.4	10.4	10.4	10.8	10.6	10.3

Number of deaths by age and age groups, classified according to corresponding nationality
(residents only, dying in the city)

AGES		Legitimates					Total
		French-Canadians	British-Canadians	Jews	Other nationalities	Unknown	
Premature children.....	M	126	11	2	6	1	146
	F	101	6	.....	5	.....	112
From 0 to 1 month.....	M	134	19	4	4	.....	161
	F	96	16	1	5	.....	118
From 1 month to 6 months.....	M	137	13	1	5	.....	156
	F	93	19	2	2	.....	116
From 6 months to 1 year.....	M	69	10	.....	2	.....	81
	F	63	4	1	2	.....	70
Total under 1 year.....	M	466	53	7	17	1	544
	F	353	45	4	14	.....	416
From 1 year to 2 years.....	M	48	5	2	1	.....	56
	F	47	3	.....	4	.....	54
From 2 years to 3 years.....	M	18	3	1	.....	.....	22
	F	20	1	.....	3	.....	24
From 3 years to 4 years.....	M	8	1	.....	.....	.....	9
	F	15	2	.....	.....	.....	17
From 4 years to 5 years.....	M	17	3	.....	.....	.....	20
	F	14	1	2	2	.....	19
Total under 5 years.....	M	557	65	10	18	1	651
	F	449	52	6	23	.....	530
From 5 years to 9 years.....	M	40	6	.....	1	.....	47
	F	27	7	1	5	.....	40
From 10 years to 14 years.....	M	43	4	2	2	.....	51
	F	25	4	.....	3	.....	32
From 15 years to 19 years.....	M	62	12	.....	7	.....	81
	F	47	10	1	7	.....	65
From 20 years to 24 years.....	M	65	19	2	11	.....	97
	F	79	13	2	4	.....	98
From 25 years to 29 years.....	M	79	20	2	8	.....	109
	F	93	15	2	7	.....	117
From 30 years to 34 years.....	M	99	14	4	11	.....	128
	F	92	26	7	7	.....	132
From 35 years to 39 years.....	M	98	20	2	15	1	136
	F	105	24	2	7	.....	138
From 40 years to 44 years.....	M	141	25	14	24	.....	204
	F	113	23	10	5	.....	151
From 45 years to 49 years.....	M	201	51	12	35	.....	299
	F	140	49	7	17	.....	213
From 50 years to 54 years.....	M	236	92	8	54	2	392
	F	168	50	11	13	.....	242
From 55 years to 59 years.....	M	269	116	23	47	.....	455
	F	187	64	23	11	.....	285
From 60 years to 64 years.....	M	278	137	28	57	.....	500
	F	252	80	25	17	.....	374
From 65 years to 69 years.....	M	266	140	31	41	.....	478
	F	280	97	22	18	.....	417
From 70 years to 79 years.....	M	567	231	39	31	.....	878
	F	573	240	51	21	.....	885
From 80 years to 89 years.....	M	251	101	21	11	.....	384
	F	342	160	16	13	.....	531
90 years and over.....	M	35	12	2	1	.....	50
	F	55	21	2	1	.....	79
Total over 5 years.....	M	2,730	1,000	190	366	3	4,289
	F	2,578	883	182	156	.....	3,799
Grand total.....	M	3,287	1,065	200	384	4	4,940
	F	3,027	935	188	179	.....	4,329

sex, legitimacy, racial origin, and percentage of the total
 ch group—1942
 and out of Montreal)

Illegitimates					Total	Sex		Grand total	Percentage of total deaths
Canadians	British-Canadians	Jews	Other nationalities	Unknown		Male	Female		
16	...	...	...	...	16				
15	1	...	...	...	16	162	128	290	3.04
23	3	...	...	...	26				
27	1	...	...	1	29	187	147	334	3.50
69	6	...	1	...	76				
44	2	...	...	...	46	232	162	394	4.13
8	2	...	...	...	10				
9	1	...	1	...	11	91	81	172	1.81
116	11	...	1	...	128				
95	5	...	1	1	102	672	518	1,190	12.48
16	...	...	1	...	17				
3	...	...	...	...	3	73	57	130	1.36
6	...	...	...	...	6				
...	...	...	...	...	...	28	24	52	0.55
1	...	1	...	...	2				
1	...	...	...	...	1	11	18	29	0.31
4	...	...	...	...	4				
...	...	...	...	...	...	24	19	43	0.45
143	11	1	2	...	157				
99	5	...	1	1	106	808	636	1,444	15.15
...	...	...	...	...	...	47	40	87	0.91
...	...	...	...	...	...	51	32	83	0.87
...	...	...	...	...	...	81	65	146	1.53
...	...	...	...	...	...	97	98	195	2.05
...	...	...	...	...	...	109	117	226	2.37
...	...	...	...	...	...	128	132	260	2.73
...	...	...	...	...	...	136	138	274	2.88
...	...	...	...	...	...	204	151	355	3.72
...	...	...	...	...	...	299	213	512	5.37
...	...	...	...	...	...	392	242	634	6.65
...	...	...	...	...	...	455	285	740	7.76
...	...	...	...	...	...	500	374	874	9.17
...	...	...	...	...	...	478	417	895	9.39
...	...	...	...	...	...	878	885	1,763	18.50
...	...	...	...	...	...	384	531	915	9.60
...	...	...	...	...	...	50	79	129	1.35
...	...	...	...	...	...	4,289	3,799	8,088	84.85
143	11	1	2	...	157				
99	5	...	1	1	106	5,097	4,435	9,532	100.00

Table X

Deaths classified according to age groups, months, seasons and years—1937-1942
(residents only, dying in and out of Montreal)

AGES	1st quarter (Winter)				2nd quarter (Spring)				3rd quarter (Summer)				4th quarter (Autumn)				Grand total
	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.....	46	53	66	165	53	49	51	153	44	60	47	151	51	50	54	155	624
From 1 to 6 months.....	42	21	50	113	31	27	29	87	25	43	45	113	24	25	32	81	394
From 6 months to 1 year.....	10	17	18	45	18	14	14	46	12	17	13	42	14	8	17	39	172
From 1 to 2 years.....	13	13	12	38	14	12	12	38	13	6	7	26	6	9	13	28	130
From 2 to 3 years.....	2	1	6	9	3	5	3	11	3	5	4	12	6	7	7	20	52
From 3 to 4 years.....	2	1	2	5	2	3	1	6	2	3	1	6	4	5	3	12	29
From 4 to 5 years.....	5	4	2	11	1	2	3	6	5	6	5	16	3	6	1	10	43
Total under 5 years.....	120	110	156	386	122	112	113	347	104	140	122	366	108	110	127	345	1,444
Over 5 years.....	741	701	698	2,140	694	706	608	2,008	661	615	558	1,834	696	649	761	2,106	8,088
Grand total.....	861	811	854	2,526	816	818	721	2,355	765	755	680	2,200	804	759	888	2,451	9,532
Grand total in 1941.....	922	812	881	2,615	766	805	808	2,379	779	768	735	2,282	827	802	806	2,435	9,711
" " in 1940.....	762	761	819	2,342	782	778	730	2,290	760	659	698	2,117	750	773	1,024	2,547	9,296
" " in 1939.....	785	879	1,021	2,685	821	833	663	2,317	731	616	680	2,027	714	657	791	2,162	9,191
" " in 1938.....	795	758	863	2,416	876	829	734	2,439	653	679	701	2,033	730	746	761	2,237	9,125
" " in 1937.....	868	946	883	2,697	876	925	750	2,551	738	748	754	2,240	727	676	847	2,250	9,738

Table XI

Number of births (exclusive of stillbirths) and deaths under one year, legitimate and illegitimate, and death rates per 1,000 live births for each year and by periods of five years
1915-1942

(residents only born or dying in and out of Montreal)

Years	Number of births		Number of deaths 0 to 1 year		Rate per 1,000 births		Total Mortality per 1,000 births
	Legitimate	Illegitimate	Legitimate	Illegitimate	Legitimate	Illegitimate	
1	2	3	4	5	6	7	8
1915.....	19,945	747	3,233	546	162.1	730.9	182.6
1916.....	19,084	675	3,134	538	164.2	797.0	185.8
1917.....	19,038	626	2,872	616	150.8	984.0	177.4
1918.....	19,654	719	3,256	646	165.7	898.4	191.5
1919.....	19,159	800	2,945	598	153.7	747.5	177.5
Average.....	19,376	713	3,088	589	159.4	826.1	183.0
1920.....	20,305	875	3,375	697	166.3	796.6	192.2
1921.....	20,221	925	2,599	690	128.5	745.9	155.6
1922.....	19,663	1,057	2,538	766	129.1	724.7	159.4
1923.....	19,435	1,092	2,238	819	115.2	750.0	148.9
1924.....	20,386	1,114	2,273	878	111.5	788.1	146.5
Average.....	20,002	1,013	2,605	770	130.2	760.1	160.6
1925.....	20,805	1,171	2,221	469	106.8	400.4	122.4
1926.....	19,986	1,112	2,088	433	104.5	389.4	119.5
1927.....	19,893	847	2,031	394	102.1	465.2	116.9
1928.....	19,374	933	2,488	431	128.4	461.9	143.7
1929.....	19,417	998	2,239	462	115.3	462.9	132.3
Average.....	19,895	1,012	2,213	438	111.2	432.8	126.8
1930.....	19,974	1,019	2,162	458	108.3	449.4	124.8
1931.....	19,634	1,065	1,824	521	92.9	489.2	113.3
1932.....	18,965	1,032	1,525	454	80.4	439.9	98.9
1933.....	17,388	1,043	1,316	501	75.7	480.3	98.6
1934.....	17,495	938	1,375	299	78.6	318.8	90.8
Average.....	18,691	1,019	1,640	447	87.7	438.7	105.9
Average 20 years.....	19,491	939	2,386	561	122.4	597.4	144.2
1935.....	16,288	1,073	1,268	334	77.8	311.3	92.3
1936.....	15,761	964	1,053	351	66.8	364.1	83.9
1937.....	16,072	1,108	1,226	321	76.3	289.7	90.0
1938.....	16,075	987	1,057	263	65.8	266.5	77.4
1939.....	16,050	1,066	916	307	57.1	288.0	71.5
Average.....	16,049	1,040	1,104	315	68.8	302.9	83.0
1940.....	17,668	1,045	921	189	52.2	179.9	59.3
1941.....	18,011	1,000	977	359	54.2	359.0	70.3
1942.....	19,591	1,015	960	230	49.0	226.6	57.8

Table XII

Number and percentage of deaths by age groups and by months, classified
according to racial origin—1942
(residents only, dying in and out of Montreal)

Nationalities	French-Canadians		British-Canadians		Jews		Other nationalities		Unknown		Grand total	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
January:												
Under 5 years.....	102	17.74	10	5.13	2	5.26	6	11.54	....	....	120	13.94
Over 5 years.....	473	82.26	185	94.87	36	94.74	46	88.46	1	100.00	741	86.06
Total.....	575	100.00	195	100.00	38	100.00	52	100.00	1	100.00	861	100.00
February:												
Under 5 years.....	98	17.85	11	5.88	1	3.03	....	....	....	....	110	13.56
Over 5 years.....	450	82.15	177	94.12	32	96.97	42	100.00	....	....	701	86.44
Total.....	548	100.00	188	100.00	33	100.00	42	100.00	....	....	811	100.00
March:												
Under 5 years.....	140	22.76	9	5.62	1	4.00	5	9.43	1	100.00	156	18.27
Over 5 years.....	475	77.24	151	94.38	24	96.00	48	90.57	....	....	698	81.73
Total.....	615	100.00	160	100.00	25	100.00	53	100.00	1	100.00	854	100.00
April:												
Under 5 years.....	112	19.82	7	4.35	1	2.50	2	4.00	....	....	122	14.95
Over 5 years.....	453	80.18	154	95.65	39	97.50	48	96.00	....	....	694	85.05
Total.....	565	100.00	161	100.00	40	100.00	50	100.00	....	....	816	100.00
May:												
Under 5 years.....	92	16.43	13	7.30	2	7.41	5	9.62	....	....	112	13.69
Over 5 years.....	468	83.57	165	92.70	25	92.59	47	90.38	1	100.00	706	86.31
Total.....	560	100.00	178	100.00	27	100.00	52	100.00	1	100.00	818	100.00

June:	Under 5 years.....	99	21.06	11	6.36	....	100.00	3	6.00	....	....	113	15.67
	Over 5 years.....	371	78.94	162	93.64	28	100.00	47	94.00	....	....	608	84.33
	Total.....	470	100.00	173	100.00	28	100.00	50	100.00	....	....	721	100.00
July:	Under 5 years.....	89	16.01	10	7.04	2	8.33	3	7.14	....	....	104	13.59
	Over 5 years.....	467	83.99	132	92.96	22	91.67	39	92.86	1	100.00	661	86.41
	Total.....	556	100.00	142	100.00	24	100.00	42	100.00	1	100.00	765	100.00
August:	Under 5 years.....	119	22.54	13	8.12	1	3.70	7	17.50	....	....	140	18.54
	Over 5 years.....	409	77.46	147	91.88	26	96.30	33	82.50	....	....	615	81.46
	Total.....	528	100.00	160	100.00	27	100.00	40	100.00	....	....	755	100.00
September:	Under 5 years.....	105	22.10	12	8.57	2	6.90	3	8.33	....	....	122	17.94
	Over 5 years.....	370	77.90	128	91.43	27	93.10	33	91.67	....	....	558	92.06
	Total.....	475	100.00	140	100.00	29	100.00	36	100.00	....	....	680	100.00
October:	Under 5 years.....	92	17.04	12	7.02	2	5.41	2	3.57	....	....	108	13.43
	Over 5 years.....	448	82.96	159	92.98	35	94.59	54	96.43	....	....	696	86.57
	Total.....	540	100.00	171	100.00	37	100.00	56	100.00	....	....	804	100.00
November:	Under 5 years.....	92	17.83	10	6.37	1	3.03	6	11.54	1	100.00	110	14.49
	Over 5 years.....	424	82.17	147	93.63	32	96.97	46	88.46	....	....	649	85.51
	Total.....	516	100.00	157	100.00	33	100.00	52	100.00	1	100.00	759	100.00
December:	Under 5 years.....	108	17.76	15	7.85	2	4.17	2	4.88	....	....	127	14.30
	Over 5 years.....	500	82.24	176	92.15	46	95.83	39	95.12	....	....	761	85.70
	Total.....	608	100.00	191	100.00	48	100.00	41	100.00	....	....	888	100.00
Total:	Under 5 years.....	1,248	19.03	133	6.60	17	4.37	44	7.77	2	40.00	1,444	15.15
	Over 5 years.....	5,308	80.97	1,883	93.40	372	95.63	522	92.23	3	60.00	8,088	84.85
	Total.....	6,556	100.00	2,016	100.00	389	100.00	566	100.00	5	100.00	9,532	100.00

Tab

Number of deaths, classified according to ward
corresponding to th
(residents only, dyin

WARDS	DEATHS							
	Grand total	0 to 1 year			Per- centage of total deaths	1 to 5 years		
		M	F	Total		M	F	Total
Ahuntsic.....	147	6	4	10	6.8	4	4	8
Bourget.....	267	22	9	31	11.6	6	5	11
Crémazie.....	224	13	15	28	12.5	4	4	8
Delorimier.....	427	28	23	51	11.9	5	2	7
Hochelaga.....	218	19	13	32	14.7	3	7	10
Lafontaine.....	90	2	2	4	4.4	...	...	...
Laurier.....	224	11	6	17	7.6	3	5	8
Maisonneuve.....	335	23	19	42	12.5	7	4	11
Mercier.....	218	17	9	26	11.9	2	5	7
Montcalm.....	167	14	10	24	14.4	2	...	2
Mount Royal.....	134	8	4	12	9.0	2	...	2
Notre Dame de Grace.....	507	16	14	30	5.9	1	...	1
Papineau.....	253	18	16	34	13.4	8	6	14
Préfontaine.....	177	13	15	28	15.8	...	7	7
Rosemount.....	384	36	27	63	16.4	3	9	12
St. Andrew.....	283	4	6	10	3.5	1	1	2
St. Ann.....	153	11	4	15	9.8	1	...	1
Ste. Cunégonde.....	249	21	11	32	12.8	4	4	8
St. Denis.....	257	13	10	23	8.9	4	2	6
St. Edward.....	326	21	22	43	13.2	4	2	6
St. Eusèbe.....	168	20	15	35	20.8	4	1	5
St. Gabriel.....	200	14	14	28	14.0	3	4	7
St. George.....	180	4	4	8	4.4	...	...	...
St. Henry.....	300	26	20	46	15.3	6	5	11
St. James.....	336	26	17	43	12.8	5	2	7
St. John.....	234	10	18	28	12.0	4	4	8
St. Jean Baptiste.....	310	18	16	34	11.0	2	1	3
St. Joseph.....	152	8	8	16	10.5	3	3	6
St. Lawrence.....	272	14	5	19	7.0	...	1	1
St. Louis.....	228	14	12	26	11.4	4	1	5
St. Mary.....	168	20	13	33	19.6	2	5	7
St. Michael.....	219	6	5	11	5.0	2	2	4
St. Paul.....	251	21	13	34	13.5	...	1	1
Villemarie.....	120	13	6	19	15.8	1	2	3
Villeray.....	546	37	24	61	11.2	11	11	22
Unknown.....	14	1	2	3	21.4	...	...	...
Institutions.....	794	104	87	191	24.0	24	4	28
Total.....	9,532	672	518	1,190	12.5	136	118	254

II

sex and age groups, and percentage of each group
 total deaths—1942
 (and out of Montreal)

DEATHS								
Per- centage of total deaths	0 to 5 years			Per- centage of total deaths	Over 5 years			Per- centage of total deaths
	M	F	Total		M	F	Total	
5.4	10	8	18	12.2	76	53	129	87.8
4.1	28	14	42	15.7	107	118	225	84.3
3.6	17	19	36	16.1	123	65	188	83.9
1.6	33	25	58	13.5	193	176	369	86.5
4.6	22	20	42	19.3	84	92	176	80.7
...	2	2	4	4.4	41	45	86	95.6
3.6	14	11	25	11.2	109	90	199	88.8
3.3	30	23	53	15.8	147	135	282	84.2
3.2	19	14	33	15.1	108	77	185	84.9
1.2	16	10	26	15.6	74	67	141	84.4
1.5	10	4	14	10.5	55	65	120	89.5
0.2	17	14	31	6.1	243	233	476	93.9
5.5	26	22	48	18.9	101	104	205	81.1
4.0	13	22	35	19.8	78	64	142	80.2
3.1	39	36	75	19.5	164	145	309	80.5
0.7	5	7	12	4.2	136	135	271	95.8
0.6	12	4	16	10.4	70	69	137	89.6
3.2	25	15	40	16.0	109	100	209	84.0
2.3	17	12	29	11.2	107	121	228	88.8
1.8	25	24	49	15.0	136	141	277	85.0
3.0	24	16	40	23.8	67	61	128	76.2
3.5	17	18	35	17.5	97	68	165	82.5
...	4	4	8	4.4	108	64	172	95.6
3.7	32	25	57	19.0	115	128	243	81.0
2.1	31	19	50	14.9	157	129	286	85.1
3.4	14	22	36	15.4	107	91	198	84.6
1.0	20	17	37	12.0	148	125	273	88.0
3.9	11	11	22	14.4	83	47	130	85.6
0.4	14	6	20	7.4	164	88	252	92.6
2.2	18	13	31	13.6	116	81	197	86.4
4.2	22	18	40	23.8	69	59	128	76.2
1.8	8	7	15	6.8	99	105	204	93.2
0.4	21	14	35	13.9	120	96	216	86.1
2.5	14	8	22	18.3	63	35	98	81.7
4.0	48	35	83	15.2	244	219	463	84.8
...	1	2	3	21.4	11	...	11	78.6
3.5	128	91	219	27.5	261	314	575	72.5
2.7	808	636	1,444	15.2	4,289	3,799	8,088	84.8

Table XIV

Number of deaths among embryos and foetus (under six months and a half of gestation),
classified according to cause, sex and duration of pregnancy—1942*

Causes of stillbirths	Under 4 months				4 months				5 and 6 months				Grand total			
	M.		F.		M.		F.		M.		F.		M.		F.	
	Tot.		Tot.		Tot.		Tot.		Tot.		Tot.		Tot.		Tot.	
I—Caused by disease in, or accident to, the mother:																
1—Chronic disease in the mother																
(a) Syphilis.....	..	..	..	..	..	..	1	1	1	1	1	1	1	1	2	3
(b) Other (tuberculosis, chronic nephritis, chronic heart disease, diabetes mellitus, chronic poisoning, etc.)...	13	2	2	17	11	2	2	13	11	9	13	2	35	13	2	50
2—Acute disease in, or accident to, the mother	3	1	..	4	9	3	3	12	11	7	11	..	23	11	..	34
(a) Toxemia during pregnancy.....	9	3	2	14	4	3	3	7	7	4	11	2	20	10	2	32
(b) Other (retroplacental hemorrhage, detachment of normally inserted placenta).....	7	3	1	11	7	..	..	7	5	6	11	1	19	9	1	29
3—Over-exertion.....	3	1	1	5	6	6	6	12	9	..	9	7	18	7	1	26
4—External violence.....	14	5	5	24	26	14	14	40	67	46	113	65	107	65	5	177
5—Others.....	1	..	..	1	1	..	..	1	1	5	6	5	3	5	..	8
II—Anomalies of the fetus, placenta, or cord:	2	..	..	2	..	6	6	6	7	6	13	..	9	12	..	21
6—Congenital malformations incompatible with life.....	1	..	..	1	1	..	..	1	2	1	3	1	4	1	..	5
7—Vicious insertion of placenta.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8—Other anomalies of the placenta and cord.....	..	..	..	..	..	..	..	..	1	1	2	1	1	1	..	2
III—Death of the fetus by injury or other causes:	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9—Abnormal presentation of the fetus.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10—Malformations of pelvis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11—Prolapse of the cord.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12—Prolonged labor or uterine inertia.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13—Obstetrical operations.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14—Other causes (malformations of the genital organs, pelvic tumors, ruptured uterus, etc.).....	..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	1
IV—Stillbirth due to other causes:	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15—Other and unspecified causes.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	53	15	11	79	65	35	100	123	86	209	241	136	11	388	..	..

*These deaths are not included in the total of stillbirths.

Table XV

Number of stillbirths legitimate and illegitimate, classified according to cause of death,
sex and duration of pregnancy—1942
(residents only, dying in and out of Montreal)

Causes of stillbirths	6½ months			7 months			8 months			At full term			Grand total		
	M.		Tot.	M.		Tot.	M.		Tot.	M.		Tot.	M.		Tot.
	F.			F.			F.			F.			F.		
I—Caused by disease in, or accident to, the mother:															
1—Chronic disease in the mother															
(a) Syphilis	2	1	3		3	3		1	1	2	2	1	3	8	13
(b) Other (tuberculosis, chronic nephritis, chronic heart disease, diabetes mellitus, chronic poisoning, etc.)	3	7	10		4	4	6	7	13	4	4	5	9	13	36
2—Acute disease in, or accident to, the mother															
(a) Toxemia during pregnancy	8	9	17	9	18	27	15	12	27	17	14	31	49	53	102
(b) Other (retroplacental hemorrhage, detachment of normally inserted placenta)	5	3	8	3	3	6	5	1	6	4	5	9	17	12	29
3—Over-exertion	2	2	4	1	1	2		1	1	1	1	1	2	4	9
4—External violence	7	2	9	1	3	4	4	4	8	3	3	6	15	12	27
5—Others	6	12	18	10	9	19	9	13	22				25	34	59
II—Anomalies of the fetus, placenta, or cord:															
6—Congenital malformations incompatible with life	5	15	20	9	18	27	13	19	32	10	18	28	37	61	98
7—Vicious insertion of placenta	2	2	4	2	4	6	4	5	9		1	1	8	10	18
8—Other anomalies of the placenta and cord	2	1	3	4	4	8	4	8	12	8	8	16	18	17	35
III—Death of the fetus by injury or other causes:															
9—Abnormal presentation of the fetus	1	1	2	2	1	3	5	8	13	15	10	25	23	20	43
10—Malformations of pelvis							1	1	2			1	1	1	2
11—Prolapse of the cord		1	1	1	1	2	3	3	6	9	6	15	13	10	23
12—Prolonged labor or uterine inertia	1	3	4	2	2	4	22	18	40	26	16	42	51	39	90
13—Obstetrical operations							1	1	2	3	1	4	4	1	5
14—Other causes (malformations of the genital organs, pelvic tumors, ruptured uterus, etc.)							1	1	2				1		1
IV—Stillbirth due to other causes:															
15—Other and unspecified causes							2	3	5	27	21	48	29	24	53
Total	44	59	103	48	54	102	98	103	201	130	111	241	320	327	647

Table

**Number of deaths of infants under one year
(residents only, dying**

Month	January			February			March			April			May		
DISEASES	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
Whooping cough.....	2		2		2	2	2		2		1	1	1	1	
Tuberculosis.....							2		2						
Syphilis.....	3		3	3	1	4	1		1	1		1	1		
Influenza.....	1	1	2		1	1	1	1	2		1	1			
Measles.....		2	2		4	4					1	1	1		
Other epidemic diseases.....				1	2	3	1	1	2	1		1			
General diseases (Nos. 45 to 79).....							2	1	3	1		1	2		
Meningitis.....	3		3	1		1	1		1				1	1	
Convulsions.....							2		2	1	1	2			
Other diseases of the nervous system.....	11	1	12	5	4	9	21		21	7	2	9	7	2	
Diseases of the circulatory system.....															
Bronchitis.....				2		2	1		1						
Broncho-pneumonia.....	5		5	8	1	9	7	9	16	11	7	18	8	1	
Pneumonia.....	2	1	3	1		1	1		1	3		3		2	
Other diseases of the respiratory system.....															
Diseases of the stomach.....				1		1				1		1	1	1	
Diarrhoea.....	9	2	11	6	1	7	4	4	8	6	1	7	5	1	
Other diseases of the digestive system.....														1	
Diseases of the genito-urinary system.....															
Diseases of the skin, etc. (Nos. 151 to 156).....	1		1				2		2	2	1	3			
Malformations.....	5	3	8	8		8	14	1	15	13	2	15	9	4	13
Congenital debility.....	11		11	2		2	12		12	7		7	8		8
Premature birth.....	31		31	19		19	31		31	19		19	24		24
Result of confinement.....	3		3	10		10	8		8	7		7	1		1
Other diseases peculiar to early infancy.....	1		1	6	1	7	3		3	4		4	7		7
External causes.....				1		1		1	1		1	1			
Ill-defined causes.....															
Total.....	88	10	98	74	17	91	116	18	134	84	18	102	76	14	90

classified according to cause, age and month—1942
(and out of Montreal)

Line	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	
...	2	1	3	2	3	5	2	1	3	1	...	1	...	...	...	1	...	1	15	9	24
1	1	...	...	...	1	1	...	...	...	...	1	1	...	...	...	...	1	1	2	4	6
1	4	1	1	3	1	4	1	...	1	...	...	...	3	...	3	1	1	2	21	4	25
...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	1	1	3	5	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	7	8
1	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	2	3	5	6	11
...	1	...	...	1	...	1	3	...	3	3	1	4	2	...	2	3	1	4	19	3	22
...	...	1	1	1	...	1	...	...	...	1	1	2	...	...	...	...	...	...	8	3	11
...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	1	4	2	6
3	9	3	3	8	1	9	8	2	10	2	4	6	1	2	3	5	1	6	84	22	106	
...	
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	5	...	5
2	7	2	5	6	1	7	7	1	8	5	3	8	8	2	10	13	5	18	85	35	120	
...	2	...	2	2	...	2	...	...	...	...	...	...	...	1	1	1	1	2	12	5	17
...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	2	1	...	1	3	1	4
...	1	1	2	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1	6	2	8
3	11	14	19	13	7	20	22	8	30	15	3	18	7	2	9	6	...	6	115	37	152	
...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	...	3	3
...	
...	2	1	1	1	...	1	...	...	...	2	...	2	...	...	...	...	1	1	11	2	13
3	12	7	8	12	...	12	11	...	11	14	...	14	17	1	18	14	1	15	133	16	149	
...	5	4	4	14	...	14	3	...	3	6	...	6	4	...	4	1	...	1	77	...	77	
...	30	18	18	28	...	28	25	...	25	20	...	20	22	...	22	24	...	24	291	...	291	
...	4	7	7	6	...	6	5	...	5	4	...	4	3	...	3	5	...	5	63	...	63	
...	5	5	5	3	...	3	4	...	4	1	...	1	6	...	6	8	...	8	53	1	54	
...	...	...	...	1	2	3	...	1	1	...	...	...	...	...	...	...	...	...	2	5	7
...	
14	94	69	12	81	103	17	120	92	13	105	75	14	89	75	8	83	86	17	103	1018	172	1190

Table

Number of deaths among illegitimate infants, classified

Place of death	Miséricorde's foundling home and maternity hospital					St. Paul's foundling home					L'Aide à la Femme				
	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
Whooping-cough.....															
Diphtheria.....															
Tuberculosis.....															
Syphilis.....	6	2	2		10						2				
Influenza.....												1			
Measles.....															
Meningitis.....		1		2	3										
Bronchitis.....															
Broncho-pneumonia..	5	1	1	1	8	1		1	1	3	1		1	3	
Pneumonia.....				1	1				1	1	1				
Diarrhœa.....	6	2			8	2		1		3	7	1	1	1	1
Malformations.....	1	1		1	3	1	1			2	1		1		
Premature birth.....	14	1			15						2				
Congenital debility...	36	1			37										
Other diseases of early infancy.....	7				7										
Infanticide.....															
Other causes.....	54	11	6	10	81		1	1		2				1	
Total.....	129	20	9	15	173	4	2	3	2	11	14	2	3	5	24
Per cent (%).....	74.6	11.6	5.2	8.6	100.0	36.4	18.2	27.2	18.2	100.0	58.4	8.3	12.5	20.8	100.0

Number of births at "Misericorde"..... 599
 Number of deaths at "Misericorde" and "St. Paul"..... 167
 Proportion per 1,000 births..... 278.8

Table XVIII

Deaths of infants under one year, classified according to
cause and by periods of six months, for the years
1941 and 1942

(residents only, dying in and out of Montreal)

Causes	1941			1942		
	0 to 6 mos.	6 to 12 mos.	Total	0 to 6 mos.	6 to 12 mos.	Total
Whooping cough.....	7	12	19	15	9	24
Tuberculosis.....	1	..	1	2	4	6
Syphilis.....	17	..	17	21	4	25
Influenza.....	11	9	20	3	5	8
Measles.....	..	8	8	1	7	8
Other epidemic diseases.....	15	6	21	5	6	11
General diseases (Nos. 45 to 77)...	10	4	14	19	3	22
Meningitis.....	15	10	25	8	3	11
Convulsions.....	..	1	1	4	2	6
Other diseases of the nervous sys- tem.....	41	32	73	84	22	106
Diseases of the circulatory system.....	5	..	5	..	..	..
Bronchitis.....	1	3	4	5	..	5
Broncho-pneumonia.....	131	32	163	85	35	120
Pneumonia.....	33	10	43	12	5	17
Other diseases of the respiratory system.....	10	1	11	3	1	4
Diseases of the stomach.....	13	4	17	6	2	8
Diarrhœa.....	145	54	199	115	37	152
Other diseases of the digestive sys- tem.....	14	2	16	..	3	3
Diseases of the genito-urinary sys- tem.....	2	1	3	..	..	..
Diseases of the skin (Nos. 151 to 156).....	12	2	14	11	2	13
Malformations.....	128	6	134	133	16	149
Debility, etc. (Nos. 158 to 161)...	147	1	148	130	4	131
Premature birth.....	306	..	306	291	..	291
Result of confinement (No. 160)...	58	..	58	63	..	63
Accidents.....	15	..	15	2	5	7
Ill-defined causes.....	1	..	1	..	..	..
Total.....	1,138	198	1,336	1,018	172	1,190

Table XIX

Number of deaths (exclusive of stillbirths) and rates per 1,000 population, classified according to race and sex—1942

(residents only, dying in and out of Montreal)

Nationalities	Sex		Total	Proportion per 1,000 population
	M	F		
French-Canadians	3,430	3,126	6,556	10.68
British-Canadians	1,076	940	2,016	10.83
Jews	201	188	389	7.42
Other nationalities and race unknown	390	181	571	7.80
Total	5,097	4,435	9,532	10.29

Table XX

Number of live births and deaths (exclusive of stillbirths) of infants under one year and rates per 1,000 live births, classified according to race—1942

(residents only, born and dying in and out of Montreal)

Nationalities	Births	Deaths	Proportion per 1,000 Births
French-Canadians	15,165	1,030	67.92
British-Canadians	3,240	114	35.18
Jews	979	11	11.24
Other nationalities and race un- known	1,222	35	28.64
Total	20,606	1,190	57.75

Table XXI

Number of deaths and their percentage, classified according to civil status,
by sex and race—1942
(residents only, dying in and out of Montreal)

Civil status	French- Canadians		British- Canadians		Jews		Other nationalities and unknown nationalities		Total		Grand total	%
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Married.....	1,503 43.81	1,122 35.87	554 51.58	330 35.11	142 70.65	85 45.22	229 58.72	78 43.33	2,428 47.64	1,615 36.41	4,043 42.41	42.41
Single.....	549 16.00	529 16.91	226 21.04	185 19.68	12 5.97	12 6.38	87 22.31	26 14.45	874 17.15	752 16.95	1,626 17.06	17.06
Widowers and widows...	588 17.14	874 27.94	201 18.72	356 37.87	34 16.91	83 44.15	38 9.74	42 23.33	861 16.90	1,355 30.55	2,216 23.25	23.25
Unknown.....	8 0.23	2 0.06	7 0.65	1 0.11	.....	1 0.53	12 3.08	1 0.56	27 0.53	5 0.11	32 0.34	0.34
Children under 15 years.....	783 22.82	601 19.22	86 8.01	68 7.23	13 6.47	7 3.72	24 6.15	33 18.33	906 17.78	709 15.98	1,615 16.94	16.94
Total.....	3,431 100.00	3,128 100.00	1,074 100.00	940 100.00	201 100.00	188 100.00	390 100.00	180 100.00	5,096 100.00	4,436 100.00	9,532 100.00	100.00

Table XXII

Population by racial origin, percentage of each group corresponding to the total, deaths by cause and percentage of each racial group corresponding to the total—1942
(residents only, dying in and out of Montreal)

Population.....	614,124	186,218	52,434	73,247	926,000
Proportion.....	66.32	20.11	5.66	7.91	100.00
Causes of death	French- Canadians	English- Canadians	Jews	Other nationalities or unknown	Total
Typhoid.....	8	1	.....	.....	9
Scarlet fever.....	2	.....	.....	1	3
Whooping cough.....	33	3	.....	4	40
Diphtheria.....	25	1	.....	.....	26
Tuberculosis, pulmonary.....	468	103	10	58	639
Tuberculosis, other forms.....	59	15	2	10	86
Influenza.....	48	4	2	1	55
Measles.....	11	1	.....	.....	12
Other contagious diseases.....	125	44	5	15	189
Cancer.....	756	321	69	80	1,226
Diabetes.....	179	45	19	12	255
Cerebral hemorrhage embolism.....	106	57	11	15	189
Diseases of the heart.....	1,239	487	110	116	1,952
Pneumonia.....	267	64	12	18	361
Diarrhoea and enteritis.....	191	16	1	9	217
Nephritis.....	896	158	11	54	1,119
Diseases of early infancy.....	555	72	7	21	655
Violent deaths and accidental.....	289	113	12	43	457
Total.....	5,257	1,505	271	457	7,490
Other causes of death.....	1,300	509	119	114	2,042
Grand total.....	6,557	2,014	390	571	9,532
					100.0

Table

Number of deaths, classified according to
(residents only, dying

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.....	...	...	...	...	4	4	...	...	...	...	1	...
Scarlet fever.....	4	3	2	2	...	...	1	...	...	...	...	...
Whooping-cough.....	1	...	...	...	...	1	...	...	...	...	...	...
Diphtheria.....	11	9	5	8	...	...	1	2	...	...	...	...
Tuberculosis, all forms.....	...	2	6	10	5	2	...	...	...	...	...	1
Syphilis.....	5	1	5	5	278	233	...	...	1	1	77	39
Influenza.....	9	11	...	...	61	18	4	...	...	...	23	6
Measles.....	4	3	1	1	9	30	1	...	...	...	...	3
Other infectious and parasitic diseases.....	4	3	5	1	7	6	...	1	2	...	7	1
Cancer and malignant tumors..	1	...	3	3	339	410	...	...	...	...	150	171
Diabetes.....	1	...	1	1	57	119	...	...	...	...	16	29
Other tumors and other general diseases.....	3	8	1	2	39	70	5	1	...	...	26	40
Diseases of the nervous system..	79	39	25	16	108	93	1	2	3	1	46	46
Diseases of the heart (90 to 95) ..	...	...	...	...	666	573	...	...	...	...	266	221
Other diseases of the circulatory system.....	...	...	...	...	174	133	...	...	...	...	90	101
Pneumonia (107 to 109).....	65	52	24	15	70	41	7	9	1	...	30	17
Other diseases of the respiratory system.....	6	3	3	3	18	17	...	...	...	1	9	5
Diarrhoea and enteritis (119, 120)	75	63	13	6	15	19	5	2	1	...	3	5
Other diseases of the digestive system.....	3	5	8	4	182	158	...	1	...	1	61	43
Diseases of the genito-urinary system.....	...	...	1	1	465	525	...	...	...	...	109	88
Diseases of pregnancy, childbirth and puerperal state.....	...	...	...	...	...	54	...	...	...	...	...	3
Diseases of the skin and cellular tissue.....	8	5	...	1	12	5	...	...	...	...	2	3
Congenital malformation and early infancy.....	302	237	5	7	3	1	37	31	1	...	1	2
Senility.....	...	...	...	...	11	10	...	...	...	...	11	23
Automobile accidents.....	...	...	2	2	56	16	...	...	2	...	13	7
Violent and accidental deaths..	1	4	8	12	148	40	2	...	1	3	57	28
Ill-defined causes of deaths.....	...	...	...	...	3	1	...	...	...	...	2	...
Total.....	582	448	118	100	2,730	2,579	64	49	12	7	1,000	882

XIII

use, by age groups, sex and race—1942
(and out of Montreal)

Jews						Other nationalities or unknown						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			
												5	4	9
												7	5	12
											1	1	2	3
						1			3			18	22	40
												11	15	26
		1		6	5					49	19	422	303	725
				3			1			14		114	36	150
		1		1						1		18	37	55
		1			1							26	13	39
			1	33	35				2	51	27	577	649	1,226
				8	11					4	8	87	168	255
	2		1	2	10		1			6	8	82	143	225
1				13	10	1		1		21	11	299	218	517
				53	57					89	27	1,074	878	1,952
				21	26					20	11	305	271	576
				7	5	2	2			9	5	215	146	361
				3	2					9	1	48	32	80
				1		3	4	1			1	117	100	217
	1	1		11	5					15	5	281	223	504
				19	5					46	20	640	639	1,279
					2						3		62	62
					1					1	1	23	16	39
6	1					12	8		1			367	288	655
				3	2						1	25	36	61
				3	2					3	1	79	28	107
			1	3	3				3	31	5	251	99	350
											1	5	2	7
7	4	4	3	190	182	19	16	2	9	369	156	5,097	4,435	9,532

Table

Number of non-resident deaths, dying in Montreal

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 13.....	...	1	...	1	32	35	...	...	...	...	9	10
Tuberculosis, other forms 14-22.....	...	...	...	...	4	8	...	...	...	...	4	6
Other infectious and parasitic diseases 1-44	3	...	3	4	29	10	2	...	1	1	7	5
II—Cancers and other tumors 45-47.....	...	...	...	1	72	56	1	...	...	...	68	56
III—Rheumatismal diseases, etc. 58-71.....	1	...	...	...	8	12	...	1	...	...	4	11
IV—Diseases of the blood, etc. 72-76.....	...	...	...	...	11	3	...	...	...	...	6	6
V—Chronic poisoning, etc. 77-79.....	...	...	...	...	...	...	...	...	...	...	2	...
VI—Diseases of the nervous system, etc. 80-89.....	6	1	3	5	14	11	1	...	1	...	10	10
VII—Diseases of the circulatory system 90-103..	...	...	...	...	74	38	...	...	...	...	48	49
VIII—Diseases of the respiratory system 104-114..	6	1	5	2	10	8	2	...	...	...	11	9
IX—Diseases of the digestive system 115-129...	12	5	4	2	42	24	1	...	...	...	36	22
X—Diseases of the genito-urinary system 130-139.	...	...	1	...	81	29	...	...	1	...	29	13
XI—Diseases of pregnancy, childbirth and puerperal state 140-150.....	...	...	...	...	...	15	...	...	...	...	...	5
XII—Diseases of the skin, etc. 151-153.....	...	...	...	...	4	3	...	...	...	...	3	...
XIII—Diseases of the bones 154-156.....	...	...	1	...	1	...	...	...	...	1	1	1
XIV—Congenital malformation 157.....	11	6	3	1	...	...	6	2	...	...	...	2
XV—Diseases of early infancy 158-161.....	28	17	...	...	...	...	13	7	...	...	...	...
XVI—Senility 162.....	...	...	...	...	...	...	...	...	...	...	2	...
XVII—Violent and accidental deaths 163-198.....	1	...	3	2	35	4	...	...	...	...	16	8
XVIII—Ill-defined causes of deaths 199-200.....	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	68	31	23	18	417	256	26	10	3	2	256	213

IV

tributed by cause, age groups, sex and race—1942

Jews						Other nationalities or unknown						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		M	F	M	F	M	F			
...	5	1	46	48	94
...	1	1	9	15	24
...	1	...	...	...	...	...	3	...	49	20	69
...	8	8	...	...	...	...	8	3	157	124	281
...	1	1	...	...	...	...	2	...	16	25	41
...	1	17	10	27
...	2	...	2
...	1	...	...	35	28	63
...	17	11	...	...	...	...	7	2	146	100	246
...	1	1	...	...	...	1	...	36	21	57
...	2	1	...	...	...	...	...	2	97	56	153
...	7	...	...	...	...	...	5	4	124	46	170
...	1	...	21	21
...	1	...	...	...	1	...	...	...	9	3	12
...	3	2	5
...	20	11	31
...	1	1	...	...	...	...	42	25	67
...	2	...	2
...	1	3	...	...	...	...	...	3	2	61	17	78
...
...	1	40	22	2	1	1	1	35	17	871	572	1,443

Table
Deaths by wards and
(residents only dying in

WARDS	Typhoid fever	Scarlet fever	Whooping cough	Diphtheria	Tuberculosis, pulmonary	Tuberculosis, other forms	Influenza	Measles	Other contagious diseases	Cancer
	1	2	3	4	5	6	7	8	9	10
1—Ahuntsic	3	...	13	2	...	...	2	16
2—Bourget	2	...	2	2	18	2	4	...	7	33
3—Crémazie	3	1	28	4	...	1	5	32
4—Delorimier	2	...	40	4	3	...	4	63
5—Hochelaga	2	1	20	6	3	...	1	23
6—Lafontaine	8	1	...	...	...	17
7—Laurier	4	12	1	1	...	5	30
8—Maisonneuve	2	...	3	...	26	2	2	...	7	39
9—Mercier	3	...	22	5	1	...	2	21
10—Montcalm	1	1	11	1	2	...	3	27
11—Mount Royal	5	...	...	...	6	21
12—Notre Dame de Grace	2	...	...	...	15	...	2	...	10	94
13—Papineau	1	4	15	3	2	...	3	34
14—Préfontaine	1	...	2	1	18	2	...	1	1	26
15—Rosemount	1	...	3	1	28	1	2	1	5	52
16—St. Andrew	9	2	1	...	6	39
17—St. Ann	1	...	...	10	...	...	...	4	18
18—Ste. Cunégonde	2	...	...	18	4	...	...	4	34
19—St. Denis	1	...	13	1	4	1	3	36
20—St. Edward	22	5	2	1	7	31
21—St. Eusèbe	1	3	13	...	1	...	...	15
22—St. Gabriel	13	1	1	3	3	18
23—St. George	11	1	...	...	5	23
24—St. Henry	2	1	14	2	...	1	7	48
25—St. James	1	...	20	5	4	1	11	50
26—St. John	2	...	14	2	1	1	7	33
27—St. Jean Baptiste	1	...	14	5	5	...	1	40
28—St. Joseph	12	2	...	...	1	18
29—St. Lawrence	2	22	4	...	...	9	41
30—St. Louis	1	3	17	3	2	...	2	33
31—St. Mary	1	1	10	...	...	...	4	20
32—St. Michael	1	...	10	4	...	...	4	35
33—St. Paul	2	...	13	...	4	...	6	30
34—Villemarie	5	...	1	...	2	15
35—Villeray	1	...	2	1	42	4	3	...	9	62
36—Unknown
37—Institutions	58	7	4	1	33	59
Total	9	3	40	26	639	86	55	12	189	1,226

XV

by cause—1942

and out of Montreal)

Diabetes	Cerebral hemorrhage	Endocarditis and myocarditis	Pneumonia	Enteritis	Nephritis	Pregnancy, childbirth and puerperal state	Diseases of early infancy	Violence			Others	Total
								Suicide	Homicide	Accidents		
1	12	13	14	15	16	17	18	19	20	21	22	23
5	1	17	3	...	21	1	6	...	...	8	49	147
6	4	25	7	6	44	2	12	...	...	7	84	267
2	3	25	4	6	17	1	13	4	...	17	58	224
11	9	55	4	13	54	3	22	2	...	17	121	427
5	3	21	5	7	32	...	11	...	1	11	66	218
2	1	6	2	...	13	1	2	...	...	4	33	90
8	6	22	5	4	17	1	7	1	...	4	96	224
8	2	37	6	6	46	4	21	1	...	10	113	335
4	2	29	6	4	35	2	11	...	...	8	63	218
3	3	15	2	2	19	4	14	...	...	5	54	167
2	1	19	4	...	8	1	5	1	...	5	56	134
18	11	57	6	1	44	...	10	2	...	24	211	507
9	5	28	...	4	34	3	10	...	...	11	87	253
3	1	19	6	3	22	3	10	1	...	7	50	177
8	2	40	5	3	37	2	33	1	1	17	141	384
16	4	36	4	...	12	1	2	3	1	13	134	283
2	1	19	8	3	22	1	7	...	...	8	49	153
4	7	26	7	3	28	3	9	1	...	16	83	249
14	1	29	6	3	42	2	10	...	...	8	83	257
11	3	48	5	2	39	5	26	2	...	13	104	326
4	3	19	3	6	21	1	17	1	1	11	48	168
8	4	18	4	5	18	1	16	...	...	12	75	200
2	3	16	5	...	16	...	4	2	...	6	86	180
10	3	22	4	8	49	3	14	2	2	20	88	300
7	5	36	5	11	42	2	13	2	...	18	103	336
9	3	19	2	5	28	1	7	1	...	10	89	234
8	8	39	5	6	39	2	14	1	...	10	112	310
6	...	18	3	3	15	...	4	...	1	13	56	152
6	7	29	6	3	27	1	7	2	1	10	95	272
6	1	16	3	7	12	1	6	3	1	12	99	228
4	1	20	1	7	20	3	10	...	...	8	58	168
8	5	30	3	1	20	1	2	1	...	3	91	219
7	1	38	5	2	41	3	23	1	1	16	58	251
4	1	11	2	2	10	...	9	1	...	10	47	120
13	8	74	8	9	74	3	29	2	...	20	182	546
...	...	...	...	...	1	...	2	2	...	3	6	14
12	11	82	7	20	100	...	67	2	...	10	321	794
255	134	1,060	161	165	1,119	62	485	42	10	405	3,349	9,532

Table

Number of deaths classified according to
(residents only dying in

WARDS	0 to 5 months	6 months to 1 year	1 year to 4 years	5 years to 14 years	15 to 49 years			
					Married	Widowed	Single	Unknown
Ahuntsic-Bordeaux	9	1	8	1	12	...	22	...
Bourget	24	7	11	4	30	2	32	...
Crémazie	20	8	8	6	30	4	27	...
Delorimier	42	9	7	12	50	3	36	...
Hochelaga	27	5	10	7	31	2	22	...
Lafontaine	4	...	1	2	12	2	6	...
Laurier	12	5	8	4	23	...	18	...
Maisonneuve	37	5	11	1	54	2	34	...
Mercier	22	4	7	2	29	3	17	...
Montcalm	22	2	5	7	18	1	10	...
Mount Royal	11	1	2	1	18	2	8	...
Notre Dame de Grace	29	1	1	6	48	1	37	...
Papineau	25	9	14	8	32	3	10	...
Préfontaine	22	6	7	3	26	1	19	...
Rosemount	56	7	12	6	55	1	28	...
St. Andrew	8	2	2	...	26	2	19	...
St. Ann	14	1	1	2	14	4	7	...
Ste. Cunégonde	27	5	8	5	42	3	18	...
St. Denis	19	4	6	5	26	2	23	...
St. Edward	40	3	6	13	35	4	32	...
St. Eusèbe	27	8	5	4	23	1	13	...
St. Gabriel	21	7	7	6	24	1	19	...
St. George	8	...	1	...	12	1	15	...
St. Henry	40	6	11	9	37	2	30	...
St. James	36	7	7	8	40	1	32	...
St. John	25	3	8	2	30	...	16	...
St. Jean Baptiste	25	9	3	6	31	...	28	...
St. Joseph	14	2	6	1	14	3	15	...
St. Lawrence	18	1	1	4	37	5	22	1
St. Louis	19	7	5	6	33	2	20	...
St. Mary	27	6	7	7	26	2	12	...
St. Michael	7	4	4	3	28	1	15	...
St. Paul	29	5	1	5	28	...	28	...
Villemarie	16	3	3	2	11	1	9	...
Villeray	57	4	22	8	78	7	47	1
Unknown	3	...	...	...	1	...	2	1
Institutions	176	15	28	4	19	2	63	1
Total	1,018	172	254	170	1,083	71	811	4

XVI

ards, age groups and civil status—1942
and out of Montreal)

50 to 69 years				70 years and over				Total				Grand total
Married	Widowed	Single	Unknown	Married	Widowed	Single	Unknown	Married	Widowed	Single	Unknown	
30	8	3	...	20	28	5	...	62	36	49	...	147
52	21	10	...	26	38	9	1	108	61	97	1	267
42	14	21	2	5	25	11	1	77	43	101	3	224
102	23	11	...	46	79	7	...	198	105	124	...	427
44	11	5	...	18	33	3	...	93	46	79	...	218
17	9	9	...	12	11	4	1	41	22	26	1	90
56	22	8	1	24	35	8	...	103	57	63	1	224
72	28	9	...	26	50	6	...	152	80	103	...	335
55	8	4	...	25	42	...	...	109	53	56	...	218
42	5	3	...	19	31	1	1	79	37	50	1	167
36	8	3	...	21	18	5	...	75	28	31	...	134
145	40	16	...	74	87	22	...	267	128	112	...	507
56	14	5	...	23	45	9	...	111	62	80	...	253
43	11	4	...	15	19	1	...	84	31	62	...	177
95	18	7	...	40	59	...	...	190	78	116	...	384
62	19	29	...	44	52	18	...	132	73	78	...	283
39	15	8	1	15	28	4	...	68	47	37	1	153
46	18	10	...	23	39	5	...	111	60	78	...	249
65	15	15	...	33	41	3	...	124	58	75	...	257
69	22	15	...	31	52	4	...	135	78	113	...	326
34	6	4	...	14	27	2	...	71	34	63	...	168
37	12	4	...	22	36	4	...	83	49	68	...	200
37	17	23	1	17	35	12	1	66	53	59	2	180
58	14	15	1	28	45	4	...	123	61	115	1	300
67	32	21	...	23	49	13	...	130	82	124	...	336
60	17	5	2	28	36	2	...	118	53	61	2	234
86	18	14	1	39	40	10	...	156	58	95	1	310
23	13	22	...	11	20	8	...	48	36	68	...	152
62	21	28	4	19	31	16	2	118	57	90	7	272
57	14	20	...	20	24	1	...	110	40	78	...	228
30	8	6	...	20	16	1	...	76	26	66	...	168
63	16	8	...	21	45	4	...	112	62	45	...	219
59	14	3	1	30	44	3	1	117	58	74	2	251
20	8	11	1	11	19	5	...	42	28	49	1	120
118	32	9	...	52	99	12	...	248	138	159	1	546
...	...	4	1	...	1	1	...	1	1	10	2	14
56	34	92	3	31	160	109	1	106	196	487	5	794
1,035	605	484	19	926	1,539	332	9	4,044	2,215	3,241	32	9,532

Table

Number and rates per 100,000 population of deaths caused by
and per year for
(residents only, dying

Periods of years	Typhoid		Smallpox		Measles		Whooping cough		Scarlet fever	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1875-1879.....	86	67.5	584	458.4	27	21.2	42	33.0	65	51.0
1880-1884.....	94	63.0	29	19.4	32	21.4	37	24.8	39	26.1
1885-1889.....	85	45.6	647	347.2	74	39.7	48	25.8	20	10.7
1890-1894.....	53	24.0	.....	.....	48	21.7	61	27.6	146	66.0
1895-1899.....	53	21.4	3	1.2	38	15.4	80	32.4	38	15.4
1900-1904.....	105	36.1	5	1.7	65	22.4	89	30.6	104	35.8
1905-1909.....	129	33.3	.....	.....	71	18.3	76	19.6	45	11.6
1910-1914.....	121	25.1	1	0.2	78	16.2	102	21.2	107	22.2
1915-1919.....	101	18.1	1	0.2	72	12.9	114	20.4	47	8.4
1920-1924.....	58	9.1	.....	.....	43	6.7	94	14.7	82	12.8
1925-1929.....	141	19.1	.....	.....	45	6.1	91	12.3	50	6.8
1930-1934.....	32	3.9	.....	.....	27	3.3	72	8.7	30	3.6
1935-1939.....	15	1.7	.....	.....	49	5.6	59	6.8	22	2.5
1940.....	15	1.7	.....	.....	2	0.2	72	8.0	8	0.9
1941.....	13	1.4	.....	.....	20	2.2	27	3.0	3	0.3
1942.....	9	1.0	.....	.....	12	1.3	40	4.3	3	0.3

(1) From 1895-1903, the total deaths per pulmonary tuberculosis includes the deaths per other forms of tuberculosis.

XVII

certain diseases, by five year periods from 1875 to 1939
 40, 1941 and 1942
 and out of Montreal)

Diphtheria		Tuberculosis				Cancer		Diarrhoea		Chronic nephritis	
		Pulmonary (1)		Other forms							
No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
137	186.0	416	322.3	.....	.....	45	35.3	517	405.8	.....	.....
172	182.3	435	291.6	.....	.....	57	38.2	569	381.4	.....	.....
178	256.5	491	263.5	.....	.....	85	45.6	734	393.9	.....	.....
165	74.6	545	246.3	.....	.....	99	44.7	871	393.6	.....	.....
170	109.2	643	260.0	.....	.....	156	63.1	754	304.9	.....	.....
104	35.8	644	221.5	222	69.8	177	60.9	1,073	369.1	118	37.1
106	27.3	641	165.2	183	47.2	222	57.2	1,705	439.6	231	59.6
144	29.9	853	177.0	181	37.5	322	66.8	2,125	440.8	382	79.2
172	30.8	904	161.9	208	37.3	407	72.9	1,709	306.1	484	86.7
157	24.6	807	126.2	178	27.8	502	78.5	1,451	226.9	590	92.3
146	19.8	798	108.1	148	20.0	641	86.8	973	131.8	713	96.5
51	6.2	713	86.4	133	16.1	855	103.7	697	84.5	760	92.2
22	2.5	583	67.1	101	11.6	1,091	125.5	266	30.6	979	112.6
11	1.2	510	57.0	71	7.9	1,249	139.6	128	14.3	1,125	125.8
31	3.4	584	64.7	94	10.4	1,251	138.5	210	23.3	1,100	121.8
26	2.8	639	69.0	86	9.3	1,226	132.4	165	17.8	1,099	118.7

Table XXVIII

Number of deaths in Montreal, classified according to sex,
place of occurrence and place of residence—1942

Place of death	Residents		Non-residents		Total		Grand total
	Male	Fem.	Male	Fem.	Male	Fem.	
Residences	2,024	2,120	27	31	2,051	2,151	4,202
GENERAL HOSPITALS:							
1—Notre Dame Hospital.....	272	208	91	43	363	251	614
2—St. Luc Hospital.....	290	192	44	18	334	210	544
3—Pasteur Hospital.....	30	36	3	4	33	40	73
4—Hotel Dieu Hospital.....	119	85	84	41	203	126	329
5—Du Sacre Cœur Hospital.....	171	155	67	61	238	216	454
6—Ste. Jeanne d'Arc Hospital.....	88	82	18	22	106	104	210
7—Ste. Justine Hospital.....	205	142	72	40	277	182	459
8—Misericorde Hospital.....	26	32	6	8	32	40	72
9—Montreal General Hospital.....	210	84	67	53	277	137	414
10—Montreal General Hospital West....	48	50	29	26	77	76	153
11—Royal Victoria General Hospital....	161	90	121	76	282	166	448
12—Royal Victoria Maternity.....	12	11	6	2	18	13	31
13—Children's Memorial Hospital.....	41	35	14	12	55	47	102
14—Montreal Children's Hospital.....	8	6	1	1	9	7	16
15—Homoeopathic Hospital.....	39	40	20	22	59	62	121
16—Grace Dart Home Hospital.....	42	13	6	3	48	16	64
17—Catherine Booth Hospital.....	1	5	2	1	3	6	9
18—St. Mary's Hospital.....	54	48	30	19	84	67	151
19—Alexandra Hospital.....	2	4	3	1	5	5	10
20—Jewish General Hospital.....	78	44	24	19	102	63	165
21—Private Hospitals & Maternities...	25	30	5	6	30	36	66
22—Others.....	11	9	2	7	13	16	29
Total General Hospitals.....	1,933	1,401	715	485	2,648	1,886	4,534
INFANT HOMES:							
1—Misericorde.....	104	69	..	..	104	69	173
2—St. Paul.....	1	..	..	..	1	..	1
3—Aide à la Femme.....	17	19	1	1	18	20	38
4—Boarding Homes.....	..	1	..	..	..	1	1
Total.....	122	89	1	1	123	90	213

Table XXVIII

Number of deaths in Montreal, classified according to sex, place of occurrence and place of residence—1942—(Continued)

Place of death	Residents		Non-residents		Total		Grand total
	Male	Fem.	Male	Fem.	Male	Fem.	
OTHER HOMES:							
1—Notre Dame de la Merci	265	..	59	..	324	..	324
2—Aide à la Femme	2	19	1	1	3	20	23
3—Convalescent Homes	4	11	2	3	6	14	20
4—Notre Dame de Lourdes .....	..	153	..	24	..	177	177
5—Others	119	197	25	23	144	220	364
Total	390	380	87	51	477	431	908
MISCELLANEOUS:							
1—Religious communities	4	72	..	..	4	72	76
2—Public places	156	31	26	4	182	35	217
Total	160	103	26	4	186	107	293
PENAL ESTABLISHMENTS:							
1—Bordeaux Hospital	30	..	15	..	45	..	45
2—Others .....	..	..	..	..	..	..	..
Total	30	..	15	..	45	..	45
MONTREAL RESIDENTS DECEASED ELSEWHERE:							
1—St. Jean de Dieu Asylum	124	100	..	..	124	100	224
2—Verdun Insane Asylum	31	40	..	..	31	40	71
3—T. B. C. Sanatoria	13	9	..	..	13	9	22
4—Other hospitals	123	151	..	..	123	151	274
5—Other places	147	42	..	..	147	42	189
Total	438	342	..	..	438	342	780

Recapitulation

Residences.....	2,024	2,120	27	31	2,051	2,151	4,202
General Hospitals.....	1,933	1,401	715	485	2,648	1,886	4,534
Infant homes.....	122	89	1	1	123	90	213
Other homes.....	390	380	87	51	477	431	908
Miscellaneous.....	190	103	41	4	231	107	338
Total deaths in Montreal.....	4,659	4,093	871	572	5,530	4,665	10,195
Montreal residents deceased elsewhere..	438	342	..	..	438	342	780
Grand total.....	5,097	4,435	871	572	5,968	5,007	10,975

Table XXIX

Deaths by certain contagious and diarrheic diseases
classified according to months—1942
(residents only, dying in and out of Montreal)

Causes of deaths	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid fever.....	2	1	1	3	..	..	1	..	1	..	..	..	9
Scarlet fever.....	..	..	1	..	..	..	..	..	..	..	1	1	3
Whooping cough.....	3	2	2	1	4	2	8	7	3	1	2	5	40
Diphtheria.....	2	2	1	..	2	..	3	3	2	5	4	2	26
Erysipelas.....	..	1	..	..	..	..	..	..	..	..	..	..	1
Influenza.....	9	8	9	9	1	..	..	1	..	6	4	8	55
Measles.....	4	4	1	1	1	..	..	1	..	..	1	..	12
Polio-myelitis.....	..	..	..	..	..	..	1	..	..	2	..	1	5
Meningococcal meningitis.....	..	1	1	..	1	1	..	..	..	1	..	..	5
Pulmonary tuberculosis.....	57	49	66	62	62	54	56	41	42	53	37	60	639
Tuberculosis, other forms.....	8	5	13	8	7	7	8	6	6	9	4	5	86
Mumps.....	..	..	..	..	..	..	..	..	..	..	..	..	..
German measles.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Varicella.....	1	2	..	1	..	..	..	..	..	..	..	2	6
Others.....	13	23	12	15	13	15	15	14	11	13	14	14	172
Total.....	99	98	107	100	91	79	92	73	65	90	67	98	1,059
Diarrhoea and enteritis.....	13	10	8	9	7	12	19	20	33	18	10	6	165
Grand total.....	112	108	115	109	98	91	111	93	98	108	77	104	1,224

Table XXX

Population, number of births, marriages, deaths and principal causes of deaths, and rates per 1,000 live births or per 1,000 population for the years 1941 and 1942

(residents only, born and dying in and out of Montreal)

	1941	1942	Increase or decrease in 1942
1. Population (estimated).....	903,007	926,000	+22,993
2. Births.....	19,011	20,606	+ 1,595
Rate per 1,000 population.....	21.05	22.25	+ 1.20
3. Marriages.....	10,897	11,781	+ 884
Rate per 1,000 population.....	12.07	12.72	+ 0.65
4. Deaths (1).....	9,711	9,532	- 179
Rate per 1,000 population.....	10.75	10.29	- 0.46
5. Influenza.....	126	55	- 74
Rate per 1,000 population.....	0.14	0.06	- 0.08
6. Tuberculosis (all forms).....	678	725	+ 47
Rate per 1,000 population.....	0.75	0.78	+ 0.03
7. Infectious and parasitic diseases (T.B. excepted).....	277	334	+ 57
Rate per 1,000 population.....	0.31	0.36	+ 0.05
8. Pneumonia and broncho-pneu- monia.....	445	361	- 84
Rate per 1,000 population.....	0.49	0.39	- 0.10
9. Cancer.....	1,251	1,226	- 25
Rate per 1,000 population.....	1.38	1.32	- 0.06
10. Deaths from violence.....	438	457	+ 19
Rate per 1,000 population.....	0.48	0.49	+ 0.01
11. Deaths under 1 year.....	1,336	1,190	- 146
Rate per 1,000 births.....	70.28	57.75	- 12.53
12. Malformations and diseases of early infancy.....	646	655	+ 9
Rate per 1,000 births.....	33.98	31.79	- 2.19
13. Diarrhoea under 1 year.....	199	152	- 47
Rate per 1,000 births.....	10.47	7.38	- 3.09

- (1) The total deaths occurring in Montreal number 10,278 in 1941 and 10,195 in 1942; their rate, per 1,000 population, are 11.9 in 1941 and 11.00 in 1942.

Table XXXI

Deaths by certain diseases and group of diseases, and rates per 1,000 population or per 1,000 live births for the years 1940, 1941 and 1942

(residents only, dying in and out of Montreal)

Causes	Years			Per 1,000 population		
	1940	1941	1942	1940	1941	1942
I—Epidemic diseases:						
Typhoid.....	15	13	9	0.02	0.01	0.01
Diphtheria.....	11	31	26	0.01	0.04	0.03
Influenza.....	116	129	55	0.13	0.14	0.06
Tuberculosis (pulmonary).....	510	584	639	0.57	0.65	0.69
Other infectious diseases.....	321	327	330	0.36	0.36	0.56
Total.....	973	1,084	1,059	1.09	1.20	1.43
II to V—General diseases:						
Cancer.....	1,249	1,251	1,226	1.39	1.38	1.32
Other general diseases.....	464	469	480	0.52	0.52	0.52
Total.....	1,713	1,720	1,706	1.91	1.90	1.84
VI—Diseases of nervous system.....	417	409	517	0.47	0.45	0.56
VII—Diseases of circulatory system.....	2,595	2,668	2,528	2.90	2.96	2.73
VIII—Diseases of respiratory system.....	568	544	441	0.63	0.60	0.48
IX—Diseases of the digestive system:						
Diarrhoea, 0 to 2 years.....	128	210	165	0.14	0.23	0.18
Other dis. of the digestive sys.....	494	529	556	0.55	0.59	0.60
Total.....	622	739	721	0.69	0.82	0.78
X—Diseases of genito-urinary system...	1,283	1,280	1,279	1.43	1.42	1.38
XI—Diseases of pregnancy, childbirth and the puerperal state.....	70	66	62	0.08	0.07	0.07
XII—Diseases of the skin.....	22	28	21	0.02	0.03	0.02
XIII—Diseases of the bones.....	14	13	18	0.02	0.01	0.02
XIV—Congenital malformations.....	142	143	170	0.16	0.16	0.18
XV—Diseases of early infancy:						
Debility, etc. (158-160-161).....	187	206	194	0.21	0.23	0.21
Premature birth (159).....	274	306	291	0.31	0.34	0.31
Total.....	461	512	485	0.52	0.57	0.52
XVI—Senility.....	45	57	61	0.05	0.06	0.07
XVII—Violent or accidental deaths:						
Suicides.....	60	53	42	0.07	0.06	0.04
Homicides.....	12	18	10	0.01	0.02	0.01
Other violent deaths.....	293	367	405	0.33	0.41	0.44
Total.....	365	438	457	0.41	0.49	0.49
XVIII—Cause of death not determined....	6	10	7	0.01	0.01	0.01
Grand total.....	9,296	9,711	9,532	10.39	10.75	10.29

Table XXXII

Mean number of deaths, births and marriages and rates per 1,000 population by periods of five years from 1872-1939, with the exception of a period of three years from 1872-1874, and for each year 1940, 1941, 1942

(residents only, born and dying in and out of Montreal)

Years	Population	Deaths	Proportion per 1,000	Births	Proportion per 1,000	Marriages	Proportion per 1,000
Average from:							
1872 to 1874.....	113,967	4,249	37.2	6,462	50.7	1,310	10.3
1875 to 1879.....	127,400	4,285	33.6	6,728	45.1	1,513	10.1
1880 to 1884.....	149,170	3,953	26.5	8,043	43.2	1,944	10.4
1885 to 1889.....	186,340	5,836	31.3	9,699	43.8	2,159	9.8
1890 to 1894.....	221,290	5,728	25.9	9,584	38.8	2,051	8.3
1895 to 1899.....	247,300	6,066	24.5	10,074	34.6	2,630	9.0
1900 to 1904.....	290,746	6,878	23.6	13,296	34.3	3,616	9.3
1905 to 1909.....	387,880	8,144	21.0	19,047	39.5	5,370	11.1
1910 to 1914.....	482,037	10,330	21.4	20,089	36.0	5,258	9.4
1915 to 1919.....	558,280	11,089	19.9	21,013	32.9	6,175	9.7
1920 to 1924.....	639,481	10,305	16.1	20,907	28.3	6,542	8.9
1925 to 1929.....	738,500	10,153	13.7	19,711	23.9	6,224	7.6
1930 to 1934.....	824,695	9,560	11.6	17,089	19.7	8,446	9.7
1935 to 1939.....	869,220	9,230	10.6	18,713	20.9	12,326	13.8
1940.....	894,600	9,296	10.4	19,011	21.0	10,897	12.1
1941.....	903,007	9,711	10.8	20,606	22.2	11,781	12.7
1942.....	926,000	9,532	10.3				

Classification of deaths according to
causes of deaths by sex and age

No. of 1929	No. of 1939	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	
		I.—Infective and Parasitic Diseases.														
1	1	DUE TO BACTERIA: Typhoid fever (Abdominal typhus)...	9	5	4							1	1			
2	2	Paratyphoid fevers (Paratyphus).....														
14	3	Plague.....														
		a) Bubonic, septicaemic and secondary pulmonary plague.....														
		b) Primary pneumonic plague.....														
		c) Unspecified plague.....														
12	4	Cholera.....														
5	5	Undulant fever (Brucellosis).....														
		a) Infection by <i>Brucella melitensis</i> (<i>Melitococcus</i>).....														
		b) Infection by <i>Brucella abortus</i> Bang.....														
		c) Unspecified.....														
18	6	Cerebral-spinal meningococcal meningitis.....	5	4	1			1	4							
20	7	Malignant pustule and anthrax (<i>Bacillus anthracis</i>).....														
		a) Malignant pustule.....														
		b) Septicaemic and visceral anthrax.....														
		c) Unspecified anthrax.....														
8	8	Scarlet fever.....	3	1	2	1						2				
9	9	Whooping-cough.....	40	18	22	8	7	5	4	5	11					
10	10	Diphtheria.....	26	11	15			2	6	10	5	1		1		
15	11	Erysipelas.....	1	1												
22	12	Tetanus.....	2	2												
23	13	Tuberculosis of the respiratory system.....														
		a) With mention of occupational disease of lung.....	4	4												
		b) Without mention of occupational disease of lung.....	633	379	254			3		1	1	3	4	4	22	2
		c) Tuberculosis of unspecified site.....	2	2						1						
24	14	Tuberculosis of the meninges and central nervous system.....														
		a) Meninges.....	30	15	15	1	1			4	4	2	1	1	3	3
		b) Other sites.....														
25	15	Tuberculosis of the intestines and peritoneum (including mesenteric and retroperitoneal glands).....														
		a) Intestines.....	9	4	5											
		b) Other sites.....	4	1	3											
26	16	Tuberculosis of the vertebral column.....	6	3	3											
27	17	Tuberculosis of the bones and joints (excluding vertebral column).....														
		a) Bones (except vertebral column).....	3	1	2											
		b) Joints.....	2	2						1						
28	18	Tuberculosis of the skin and subcutaneous cellular tissue.....														
		Carried over.....	779	453	326	10	8	8	7	22	26	8	8	6	8	27

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the International List of
e groups, year 1942

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 1939	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
			1	2						1						1	1		1								
																											2
																											3
																											a)
																											b)
																											c)
																											4
																											5
																											a)
																											b)
																											c)
																											6
																											7
																											a)
																											b)
																											c)
																											8
																											9
																											10
					1																						11
										1														1			12
																											13
												3				1											a)
40	47	42	35	38	27	25	34	15	49	15	31	8	41	4	22	10	19	13	10	5	2	2					b)
																			1								c)
1	2	1	1	1						1																	14
																											a)
																											b)
			1		1		1		1	1		1				1	1	1									15
			1			1												1									a)
																											b)
					1			1				1					1	1			1						16
																											17
									1		1																a)
				1																							b)
																											18
41	49	46	39	42	27	27	35	17	53	16	36	8	41	4	25	13	21	15	11	6	2	2	1				

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		Carried	779	453	326	10	8	8	7	22	26	8	8	6	8	27	3
29	19	Tuberculosis of lymphatic system (excluding mediastinal mes- enteric, retroperitoneal glands)															
30	20	Tuberculosis of the genito-uri- nary system	10	5	5												
31	21	Tuberculosis of other organs															
		a) Addison's disease specified as tuberculosis	1		1												
		b) Others	1	1													
32	22	Disseminated tuberculosis															
		a) Acute generalized miliary tuberculosis	13	3	10			1		1		2	1	3			
		b) Chronic gen. tuberculosis	6	1	5									1	1		
		c) Unspecified	1	1													
33	23	Leprosy															
36	24	Purulent infection and sepi- caemia (non puerperal)															
		a) Septicaemia	4	3	1					1							
		b) Pyaemia	1	1													
		c) Gas gangrene															
		d) Generalized infection by Bacillus coli															
35	25	Gonococcal infections (all sites)	2	1	1	1											
nil	26	Other bacterial diseases															
		a) Glanders															
		b) Tularaemia															
		c) Others															
13	27	Dysentery															
		a) Bacillary dysentery	1	1						1							
		b) Amoebic dysentery	1		1												
		c) Other protozoal dysentery															
		d) Other or unspecified forms of dysentery	3		3		1										
38	28	DUE TO PROTOZOA:															
		Malaria															
39	29	Other diseases due to parasitic protozoa (except spirochaetes)															
34	30	DUE TO SPIROCHAETES:															
		Syphilis															
		a) Locomotor ataxia (tabes dorsalis)	6	6													
		b) General paralysis of the insane	50	46	4												
		c) Aneurysm of the aorta	20	15	5												
		d) Other forms of syphilis															
		da) Congenital syphilis	25	13	12	12	9	1	3								
		db) Syphilis of nervous system (except tabes and general paralysis of the insane)	6	4	2												
		dc) Syphilis of the circu- latory system (except aneurysm of the aorta)	29	21	8												
		dd) Other or unspecified forms of syphilis	14	9	5												
4	31	Relapsing fever															
ntl	32	Other diseases (spirochaetes)															
		a) Spirochaetosis ictero-hae- morrhagica (Weil's dis.)															
		b) Others															
		Carried over	973	584	389	23	18	10	10	24	27	8	10	7	12	28	3

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the International List of
ups, year 1942—(Continued)

s	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 1939
	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	
41	49	46	39	42	27	27	35	17	53	16	36	8	41	4	25	13	21	15	11	6	2	2	1	...		19
..	1	..	..	..	..	2	..	..	2	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	21
..	a)
..	b)
..	1	2	..	..	1	..	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	a)
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	b)
..	c)
..	23
1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	a)
..	b)
..	c)
..	25
..	1	..	..	..	..	..	..	..	26
..	a)
..	b)
..	c)
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
..	a)
..	b)
..	c)
..	2	..	..	..	..	..	d)
..	28
..	29
..	30
..	1	..	..	..	2	..	1	..	2	..	..	..	..	..	..	..	..	..	..	a)
..	1	2	..	3	..	10	1	9	..	10	1	6	1	5	..	1	..	..	..	..	..	..	b)
..	2	1	2	2	..	1	..	3	..	3	2	1	..	2	..	1	1	..	1	..	..	..	c)
..	d)
..	1	..	..	..	..	..	1	..	..	2	..	..	1	..	..	..	1	..	..	..	..	..	..	db)
..	1	..	4	1	2	1	2	..	4	1	5	2	2	2	1	1	..	..	..	..	..	de)
..	..	1	..	..	..	1	1	..	2	1	1	1	..	..	4	..	..	..	1	..	..	..	..	..	..	dd)
..	31
..	32
..	a)
..	b)
42	51	50	40	43	33	33	47	20	71	21	57	14	59	9	45	16	30	18	16	10	2	3	1	...		

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		Carried	973	584	389	23	18	10	10	24	27	8	10	7	12	28	
11	33	DUE TO VIRUSES: Influenza															
		a) With respiratory compli- cations specified	38	12	26		2	3	1		1		1		1		
		b) Without respiratory compli- cations specified	17	6	11	1		1		2							
6	34	Smallpox															
		a) Variola major															
		b) Variola minor (alastrim) ..															
		c) Unspecified															
7	35	Measles	12	7	5	1		4	3	2	2						
16	36	Acute poliomyelitis and polio- myelitis and polioencephalitis.	5	5						2		1		1		1	
17	37	Acute infectious encephalitis (lethargic or epidemic)															
		a) Acute lethargic (or epi- demic) encephalitis															
		b) Sequelae of encephalitis lethargica (Parkinson- ism)															
		c) Unspecified encephalitis lethargica															
nil	38	Other diseases due or attributed to viruses															
37		a) Yellow fever															
21		b) Rabies															
		c) Herpes zoster (Zona)															
		d) German measles															
		e) Varicella (chicken pox) ..	6	3	3	2		1	2		1						
		f) Others															
3	39	DUE TO RICKETTSIA: Typhus and typhus-like diseases (Rickettsioses)															
		a) Louse-borne exanthematic typhus															
		b) Typhus-like diseases trans- mitted by other vectors ..															
		c) Other and unspecified typhus-like diseases															
40	40	DUE TO HELMINTHS: An- kylostomiasis															
41	41	Hydatid disease															
		a) Hydatid disease of liver ..															
		b) Hydatid disease of other and unspecified organs ..															
42	42	Other diseases due to helminths.															
43	43	DUE TO FUNGI: Mycoses	2	2													
44	44	Other infective or parasitic diseases															
		a) Venereal diseases (other than syphilis and gonor- rhea)															
		b) Pernicious lymphogranu- lomatosis (Hodgkin's disease)	6	3	3												
		c) Mumps															
		d) Other infective or parasitic diseases															
		Total	1059	622	437	27	20	19	16	30	31	9	11	8	13	29	

XIII

the International List of
ups, year 1942—(Continued)

s	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 1939
	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
42	51	50	40	43	33	33	47	20	71	21	57	14	59	9	45	16	30	18	16	10	2	3	1	...	33
..	1	1	..	..	1	..	..	..	..	..	2	1	2	..	6	3	5	3	1	1	2	a)
1	1	..	1	1	1	..	4	..	1	..	1	b)
..	34
..	a)
..	b)
..	c)
..	35
..	36
..	37
..	a)
..	b)
..	c)
..	38
..	a)
..	b)
..	c)
..	d)
..	e)
..	f)
..	39
..	a)
..	b)
..	c)
..	40
..	41
..	a)
..	b)
..	42
..	43
..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	44
..	a)
2	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	b)
..	c)
..	d)
45	51	50	41	44	34	33	47	21	71	21	59	14	60	12	46	19	32	25	19	20	5	5	2	3	

**Classification of deaths according to
causes of deaths by sex age and**

No. of 1929	No. of 1939	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	
		II.—Cancer and other Tumours.														
45	45	Cancer and other malignant tumours of the buccal cavity and pharynx														
		a) Lips	4	4												
		b) Tongue	30	28	2											
		c) Other and unspecified sites	48	40	8											
46	46	Cancer and other malignant tumours of the digestive organs and peritoneum														
		a) Oesophagus	32	24	8											
		b) Stomach and duodenum	211	122	89											
		c) Intestines	160	73	87					1						1
		d) Rectum	61	30	31											
		e) Liver and biliary passages	92	37	55					1						
		f) Pancreas	31	20	11											
		g) Peritoneum	6	1	5											
		h) Other organs														
47	47	Cancer and other malignant tumours of the respiratory system														
		a) Larynx and trachea	14	13	1											
		b) Bronchi, lungs and pleura	51	38	13											2
		c) Other organs	5	3	2							1				
48	48	Cancer and other malignant tumours of the uterus														
		a) Cervix uteri	43		43											
		b) Other or unspecified sites	88		88						1					
49	49	Cancer and malignant tumours of other female genital organs	40		40											
50	50	Cancer and malignant tumours of the breast	107	4	103											
51	51	Cancer and malignant tumours of the male genital organs														
		a) Scrotum	1	1												
		b) Prostate	39	39												
		c) Other or unspecified male genital organs	11	11												
nil	52	Cancer and other malignant tumours of the male and female urinary organs	52	39	13	1				1	2	2				
52	53	Cancer and other malignant tumours of the skin (scrotum excepted)	20	6	14						1		1			
nil	54	Cancer and malignant tumours of the brain and other parts of the nervous system														
		a) Glioma (not specified as benign)	6	3	3											
		b) Sarcoma														
		c) Other and unspecified malignant tumours	12	6	6											
nil	55	Cancer and other malignant tumours of other or unspecified organs														
		a) Adrenal glands	2	1	1						1					
		b) Bones	19	10	9							1				
		c) Thyroid gland	5		5											
		d) Other and unspecified	36	24	12					1					1	
		Carried over	1226	577	649	1				3	6	4	1		1	3

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 1939	
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		
																									45	
													1						3							a)
									1		2		6		4	1	4		6	1	5					b)
					1				2	1	2		3	1	11	1	6	3	14		2	1				c)
							1	1			1		6	1	5	3	7		4	2						46
				1	3		4	5	7	4	12	4	8	7	21	14	22	15	37	28	7	11		1		a)
		2	1	1	2	5	3	2	5	7	7	7	3	6	6	12	14	15	24	21	6	9				b)
			1			1	1	2	3	3	3	2	4	3	8	1	5	5	3	7	2	6			1	c)
			1			1	1	1	3		5	4	4	8	7	8	4	4	8	20	3	6	1	2		d)
					1		1	1	1	1	2		1	2	3	3	3	3	6	1	2					e)
							1				1		2			1			1							f)
																										g)
																										h)
									2	1	2		3		2		1		3							47
				1	2		1	1	5		6		1	4	3	10	2	7	4	1						a)
					1							1					2									b)
																										c)
		1			3		2		7		4		12		3		2		5		4					48
				2		8		10		17		10		5		16		10		8		1				a)
	1						4		2		7		6		4		4		4		6		2			b)
					2		7		9		9		10		8	1	14		13	2	21	1	8		2	49
																										50
																										51
											3		2		3		1		20		4					a)
			1				1		2		1		1				1		3							b)
																										c)
					1				1	1	4	2														

Table

**Classification of deaths according to
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		Carried	1226	577	649	1				3	6	4	1		1	3	
54	56	Non-malignant tumours (including dermoid cysts)															
		a) Ovaries	9		9												
		b) Uterus	16		16												
		c) Other female genital organs	1		1												
		d) Brain and other parts of the nervous system	5	3	2												
55	57	e) Other and unspecified	5	1	4												
		Tumours of undetermined nature															
		a) Ovaries															
		b) Uterus															
		c) Other female genital organs															
		d) Brain and other parts of the nervous system	3	2	1												
		e) Other and unspecified	1	1													
		Total	1266	584	682	1				3	6	4	1		1	3	
		III.—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, other General Diseases and Vitamin Deficiency Diseases.															
56	58	Rheumatic fever															
		a) Acute rheumatic pericarditis	1		1							1					
		b) Acute rheumatic endocarditis	11	7	4							2	2	2	2	1	
		c) Acute rheumatic myocarditis	1		1												
		d) Other forms	6	2	4							2		2			
57	59	Chronic rheumatism and other rheumatic diseases															
		a) Rheumatoid arthritis															
		aa) Chronic rheumatic polyarthritis	8	2	6												
		ab) Arthritis deformans	7	3	4												
		ac) Others															
		b) Other forms of chronic articular rheumatism	8	7	1												
		c) Other forms of chronic rheumatism	3		3												
58	60	Gout	1	1													
59	61	Diabetes mellitus															
		a) Simple or with mention of coma	73	30	43			1	1	1				1		3	
		b) With mention of cardiovascular complications	119	40	79												
		c) With mention of renal complications	63	17	46												
65	62	Diseases of the pituitary gland															
		Carried over	301	109	192			1		1	1	2	5	3	4	4	

XXIII

to the International List of
Groups, year 1942—(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 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
2	2	1	4	7	10	12	30	17	46	37	60	55	63	61	58	87	88	96	87	152	132	38	53	1	8	
			1				3						1				2				2					56
			1		2		2		4		2		1		2						1		1			a)
											1															b)
																										c)
							1							2	1						1					d)
					1		1								1								1			e)
																										57
																										a)
																										b)
											1			1					1							c)
												1														d)
																										e)
2	2	1	6	7	13	14	35	17	50	38	63	56	65	64	62	87	90	96	88	152	136	38	55	1	8	
																										58
																										a)
		1												1												b)
																					1					c)
1																		1								d)
																										59
									1						3	1			2				1			a)
					1							1					1		1	2	1					aa)
																										ab)
																										ac)
									1		1					2				1	1	2				b)
													1				1						1			c)
																		1								60
																										61
	1		1		1		1	1	1	1	3	2	3	5	5	4	7	3	6	7	13	1				a)
											1	3	6	11	7	8	8	20	6	12	10	21	2	4		b)
			1	1		2	1	1			1	2	1	3	4	6	2	7	2	12	5	9		3		c)
																										62
1	1	2	2		4	1	2	3	1	4	8	10	18	17	22	17	36	13	33	25	46	5	9			

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
		Carried	301	109	192	...	...	1	...	1	1	2	5	3	4	4	...
66	63	Diseases of the thyroid and parathyroid glands															
		a) Simple goitre															
		b) Exophthalmic goitre	9		9												
		c) Myxoedema and cretinism	5		5												
		d) Other diseases of the thy- roid gland															
		e) Diseases of the para- thyroid glands															
67	64	Diseases of the thymus	17	7	10	6	10	1									
68	65	Diseases of the adrenal glands (not described as tuberculous)															
		a) Addison's disease, not spec- ified as tuberculous	4		4												
		b) Others	1		1			1									
69	66	Other general diseases															
		a) Osteomalacia	1		1												
		b) Other general diseases	2		2		1										
60	67	VITAMIN DEFICIENCY:															
		a) Infantile scurvy (Barlow's disease)															
		b) Other forms															
61	68	Beri-beri															
69	69	Pellagra															
63	70	Rickets															
nil	71	Other vitamin-deficiency dis- eases															
		Total	340	117	223	6	11	3	...	1	1	2	5	3	4	4	...
		IV.—Diseases of the Blood and Blood-Forming Organs.															
70	72	Haemorrhagic conditions															
		a) Primary purpura	3	1	2												
		b) Haemophilia	3	2	1												
		c) Other and unspecified															
71	73	Anaemias (excluding splenic anaemia)															
		a) Pernicious anaemia	31	8	23							1					
		b) Other hyperchronic anaemias	2		2		1										
		c) Hyperchromic anaemias															
		d) Other and unspecified anaemias	7	4	3					1	2			1			
72	74	Leukaemias and aleukaemias															
		a) Leukaemia	30	12	18					1	2				2	1	
		b) Aleukaemia															
73	75	Diseases of the spleen															
		a) Splenic anaemia	1	1													
		b) Banti's disease	2	2													
		c) Other diseases of the spleen	1	1													
74	76	Other diseases of the blood and blood-forming organs															
		a) Agranulocytosis	5	1	4							1					
		b) Erythrocytosis															
		c) Hemoglobinaemia															
		d) Other diseases															
		Total	85	32	53		1			1	3	2	2	1	2	1	

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the International List of
Groups, year 1942—(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 1939
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	2	2	...	4	1	2	3	1	4	8	10	18	17	22	17	36	13	33	25	46	5	9	...	...
...	2	...	...	...	...	...	1	...	4	...	2	...	...	...	...	...	...	63
...	1	...	...	...	...	...	...	...	4	...	...	...	...	a)
...	b)
...	c)
...	d)
...	e)
...	64
...	65
...	1	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	1	...	...	a)
...	b)
...	1	...	...	...	...	...	...	66
...	1	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	b)
...	67
...	a)
...	b)
...	68
...	69
...	70
...	71
1	2	2	...	5	1	2	3	3	4	9	10	20	17	23	17	41	13	36	25	50	5	10	...	...
...	
...	1	...	...	...	1	...	...	...	...	...	...	72
...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	a)
...	b)
...	c)
...	1	...	...	1	1	...	...	1	...	2	...	...	...	2	1	2	...	4	6	8	...	1	...	...	73
...	1	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	b)
...	c)
...	1	...	...	...	...	1	...	...	d)
...	1	1	...	1	...	2	...	2	1	1	1	3	1	1	3	1	1	...	1	...	...	1	...	...	74
...	a)
...	b)
...	1	...	...	...	...	...	...	...	...	75
...	1	...	...	...	...	...	...	a)
...	b)
...	1	...	...	1	...	...	...	...	c)
...	1	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	76
...	a)
...	b)
...	c)
...	d)
2	1	3	1	1	3	...	2	...	5	3	3	1	4	1	4	5	3	3	5	8	9	...	3	...	

Table

**Classification of deaths according
causes of deaths by sex**

No. of 1929	No. of 1939	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
		V.—Chronic Poisoning and Intoxication.															
75	77	Chronic or acute alcoholism (ethylism)															
		a) Acute alcoholism	6	5	1												
		b) Chronic alcoholism	6	5	1												
		c) Unspecified alcoholism	2	2													
76	78	Lead poisoning															
		a) Specified as occupational	1	1													
		b) Not occupational															
77	79	Chronic poisoning by other mineral and organic substances															
		a) Occupational poisoning															
		b) Poisoning by narcotic and soporific drugs															
		ba) Narcotics															
		bb) Soporifics															
		c) Other non-occupational															
		d) Unspecified poisoning															
		Total	15	13	2												
		VI.—Diseases of the Nervous System and Sense Organs.															
78	80	Encephalitis (non-epidemic)															
		a) Intra-cranial abscess	6	4	2					1						2	
		b) Other forms	3	2	1	1				1							
79	81	Meningitis (non-meningococcal)															
		a) Simple meningitis	30	19	11	5	2	1	2	5	5			2			1
		b) Acute cerebro-spinal meningitis (not due to meningococcus)	9	6	3	1				2	1	1					1
80	82	Diseases of the medulla and spinal cord	16	10	6											1	
81	83	Intra-cranial lesions of vascular origin															
		a) Cerebral haemorrhage	134	68	66												
		b) Cerebral embolism and thrombosis	26	16	10												
		c) Softening of the brain	10	6	4												
		d) Hemiplegia and other paralyses	19	8	11												
		e) Other effusions															
nil	84	Mental disorders and deficiency															
		a) Mental deficiency	3	1	2					1					1		
		b) Schizophrenia	4	2	2												
		c) Manic-depressive psychosis	7	3	4												
		d) Other mental disorders	6	2	4												
85	85	Epilepsy	36	27	9					1		1				2	
86	86	Convulsions in children under 5 years of age	10	7	3	4		2		1	3						
87	87	Other diseases of the nervous system															
		a) Chorea	1	1										1			
		b) Neuritis (non-rheumatic)	1		1												
		c) Paralysis agitans (Parkinson's disease)	34	17	17												
		d) Disseminated sclerosis	15	8	7												
		e) Others	8	4	4					1	1						
		Carried over	378	211	167	11	2	3	2	13	10	2		3	1	5	2

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the International List of
and age groups, year 1942—(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 1939
F	M	F	M	F	M	F	M	F	M	F	M	F	
			1		1			1		1			77
					1			1					a)
								1					b)
								1					c)
													78
					1								a)
													b)
													79
													a)
													b)
													ba)
													bb)
													c)
													d)
			1		2		1	2		1	3	1	
	1				1	1							80
					1								a)
													b)
				1		1		1		2		1	81
													a)
	1						1			1			b)
			1		1			1	1	1	1	2	82
							1	3	1				
	1		1		2	1		1	4	5	1	5	83
													a)
						1							b)
								1	2	2	1	3	c)
								1	1	1	1	1	d)
													e)
								1	1	2			84
													a)
			1		1							1	b)
				1		2	1			1	2		c)
	1	1	2	1	5	3	1	3	2	2	1	2	d)
													85
													86
													87
												1	a)
													b)
				1	1		1	1	1	2	6	4	c)
			1	1			1	3		1	1	2	d)
1						1		1				1	e)
2	4	3	2	11	2	8	7	10	4	13	8	13	15

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
		Carried	378	211	167	11	2	3	2	13	10	2	...	3	1	5	2
88	88	Diseases of the organs of vision.	3	...	3	...	1	...	...	...	...	...	...	...	...	...	...
89	89	Diseases of the ear and of the mastoid process															
		a) Otitis and other diseases of the ear	62	39	23	27	12	4	5	6	3	...	...	...	...	1	...
		b) Diseases of the mastoid process	74	49	25	28	15	9	4	10	4	...	...	...	...	...	...
		Total	517	299	218	66	30	16	11	29	17	2	...	3	1	6	2
		VII. — Diseases of the Circulatory System.															
90	90	Pericarditis															
		a) Chronic pericarditis speci- fied as rheumatic	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
		b) Others	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
91	91	Acute endocarditis excluding rheumatic endocarditis															
		a) Acute bacterial endocar- ditis	8	3	5	...	...	...	...	...	...	1	1	1	1	...	...
		b) Sub-acute bacterial en- docarditis	8	5	3	...	...	...	...	...	...	...	...	...	...	...	...
		c) Other forms	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
92	92	Chronic affections of the valves and endocardium															
		a) Aortic valvular disease without mitral lesion	10	4	6	...	...	...	...	...	...	...	...	...	...	...	...
		b) Other specified valvular diseases of rheumatic origin	57	28	29	...	...	...	...	...	...	...	...	1	1	1	1
		c) Unspecified valvular le- sions or endocarditis	342	147	195	...	...	...	...	...	...	2	...	1	2	1	4
93	93	Diseases of the myocardium, including aneurism of heart															
		a) Acute myocarditis	18	9	9	...	...	...	...	...	...	...	...	...	...	...	...
		b) Chronic myocarditis speci- fied as rheumatic	27	8	19	...	...	...	...	...	...	...	...	...	...	...	...
		c) Myocardial degeneration, sclerosis and non-rheu- matic myocarditis	520	264	256	...	...	...	...	...	...	...	...	...	...	1	...
		d) Other myocarditis	69	35	34	...	...	...	...	...	...	...	...	...	...	...	...
94	94	Diseases of the coronary arteries and angina pectoris															
		a) Diseases of the coronary arteries	480	350	130	...	...	...	...	...	...	...	...	...	...	...	1
		b) Angina pectoris	134	99	35	...	...	...	...	...	...	...	...	...	...	...	...
95	95	Other diseases of the heart															
		a) Functional heart disease without mention of or- ganic lesion	51	17	34	...	...	...	...	...	...	...	...	...	...	...	...
		b) Heart diseases specified as rheumatic	21	7	14	...	...	...	...	...	...	1	...	1	1	...	1
		c) Other and unspecified	204	96	108	...	...	...	...	...	...	...	...	1	...	1	1
96	96	Aneurism, except of heart	3	1	2	...	...	...	...	...	...	...	...	...	...	...	...
97	97	Arteriosclerosis															
		a) Excluding diseases of the coronary arteries, renal sclerosis and cerebral haemorrhage	282	152	130	...	...	...	...	...	...	...	...	...	...	...	...
		b) With cerebral haemorrhag	206	101	105
		Carried over	2443	1328	1115	3	1	5	5	5	9

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to the International List of
Groups, year 1942—(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 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
2	4	3	2	11	2	8	7	10	4	13	8	13	15	14	12	15	15	27	23	42	46	15	12	1	...	
			1										1													88
																										89
											2	1			1											a)
1	...	1			1								1													b)
3	4	4	3	11	3	8	7	10	4	13	10	14	17	14	13	15	15	27	23	42	46	15	12	1	...	
																										90
														1												a)
																										b)
																										91
	1	...	2													1										a)
1	...		1		1	1			1			1		1				1								b)
														1												c)
																										92
								1				1					2			2	2		2			a)
		1	1	2	3	2	1	4	4	7	3		2	3	1	2	2	1	2	2	6	2	2			b)
6	4	3	4	3	8	6	14	7	7	3	12	15	6	15	20	15	14	21	19	26	44	21	34	2	3	c)
								1		3	1			2						2	3	1	5			93
	1									1	3	1	1	1			3		1	4	3	1	4		3	b)
2	1	...	2	4	4	2	1	13	8	16	12	20	10	16	17	42	24	30	28	79	79	34	55	5	15	c)
	1					1			3	3	1	5	1	7	5	1	2	6	7	9	7	3	5		2	d)
																										94
			1	1	1	10		23	3	42	3	64	5	48	13	65	26	37	13	46	45	14	19			a)
				1		3		9		9		16	1	17	5	10	9	13	6	19	12	2	2			b)
																										95
1	...		1				1	1		1	2	1	1	1	1	2	4	1	4	6	9	2	11	1		a)
1	...				3							1	2	1	3	1	1		2	1	1					b)
1	2	2	1	2	1	2	1	5	2	4	3	7	6	14	6	13	10	10	20	23	30	11	24		1	c)
																				1	1		1			96
																										97
				1				1		1		5	2	9	1	13	9	14	11	57	48	44	50	7	9	a)
										2	2	6	7	10	8	16	11	13	12	30	35	19	26	5	4	b)
12	10	6	13	14	21	27	18	65	28	92	42	143	44	147	80	181	117	147	125	307	325	154	240	20	37	

Table

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		Carried	2443	1328	1115							3	1	5	5	5	9
98	98	Gangrene															
		a) Senile	39	23	16												
		b) Others	3	1	2												
99	99	Other diseases of the arteries ..	32	24	8												
100	100	Diseases of the veins: varices, haemorrhoids, phlebitis, etc.															
		a) Varices	4	1	3												
		b) Other diseases of the veins ..	3	2	1												
101	101	Diseases of the lymphatic sys- tem, lymphangitis, etc.	1		1												
102	102	High blood pressure (idiopathic)	3		3												
103	103	Other diseases of the circulatory system															
		Total	2528	1379	1149							3	1	5	5	5	9
		VIII.—Diseases of the Respiratory System.															
104	104	Diseases of the nasal fossae and annexa															
		a) Diseases of the nasal fossae ..															
		b) Others, including sinusitis ..	6	3	3			1									
105	105	Diseases of the larynx	8	6	2	2				2	1						
106	106	Bronchitis:															
		a) Acute	4	3	1	3	1										
		b) Chronic	4	1	3												1
		c) Unspecified	1		1		1										
107	107	Bronchopneumonia (including capillary bronchitis)	200	116	84	48	37	17	18	18	9	2		1			
108	108	Lobar pneumonia (pneumococ- cal)	126	82	44	3	2	1		5	5		2	1	1		
109	109	Pneumonia (unspecified) includ- ing acute congestion of the lung	35	17	18	3	4	2	2	2	1		2				
110	110	Pleurisy															
		a) Empyema	7	4	3					1	2		1				
		b) Other or unspecified forms of pleurisy	3	2	1												
111	111	Congestion, oedema, embolism, haemorrhagic infarction and thrombosis of the lungs															
		a) Haemorrhagic infarction of the lung	2		2												
		b) Acute oedema of the lung ..	20	9	11												
		c) Chronic or unspecified con- gestion of the lung															
112	112	Asthma	11	9	2												
113	113	Pulmonary emphysema	3	2	1												
114	114	Other diseases of the respiratory system, except tuberculosis															
		a) Silicosis	2	2													
		b) Other occupational respir- atory diseases															
		c) Gangrene of the lung	1	1													
		d) Abscess of the lung	7	6	1		1										
		e) Other diseases of the res- piratory system	1		1						1						
		Total	441	263	178	59	46	21	20	28	19	2	5	2	1		1

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the International List of
groups, year 1942—(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 1939	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
2	10	6	13	14	21	27	18	65	28	92	42	143	44	147	80	181	117	147	125	307	325	154	240	20	37	
																		3	1	11	10	8	5	1	...	98
																1	1		1							a)
					1					1		2	1	1	1	4		2	2	7	1	7	1		1	99
											1					1					2					100
						1		1									1									a)
																										b)
											1		1		1		1									101
																	1									102
																										103
2	10	6	13	14	22	28	18	66	28	93	44	145	46	148	82	187	120	152	129	325	338	169	246	21	38	
																										104
			1	1									1			1					1					a)
													1													b)
					1	1						1														105
																										106
					1															1					1	a)
																										b)
	1	2	...	...	2	1	1	2	1	1	...	2	...	...	1	4	1	6	2	11	7	1	3	...	1	107
3	2	1	...	3	2	4	...	2	...	5	1	14	4	8	4	4	4	8	7	14	6	5	4	1	...	108
						1						2	...		1	3	2	1	1	2	1	1	4	...		109
																2						1				110
											1	1	1													a)
																										b)
																										111
	1				2	1					1		1	1	1	1	1	2	2	2	2		1			a)
																										b)
											1		3	1	1			2		2	1					c)
														2							1					112
																						1				113
											1							1								114
																										a)
																	1									b)
																										c)
					2					1					1			1								d)
																										e)
3	4	4	1	7	7	7	1	6	1	10	3	23	7	13	7	16	8	21	13	32	20	8	12	1	2	

Table

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		IX.—Diseases of the Digestive system.															
115	115	Diseases of the buccal cavity and annexe and of the pharynx and tonsils (including adenoid vegetations)															
		a) Diseases of the teeth and gums	4	3	1												
		b) Septic sore throat															
		c) Other diseases of the phar- ynx and tonsils	15	8	7			3	1	1	4	1	2	1			
		d) Diseases of other and un- specified sites	4	3	1												
116	116	Diseases of the oesophagus	4	2	2												
117	117	Ulcer of the stomach or duo- denum															
		a) Stomach	44	34	10												
		b) Duodenum	21	21													
118	118	Other diseases of the stomach (except cancer and other ma- lignant tumours)	53	36	17	2	1			1	2						
119	119	Diarrhoea, enteritis (under 2 years of age)	165	94	71	67	48	16	21	11	2						
120	120	Diarrhoea, enteritis and ulceration of the intestines (2 years of age and over)															
		a) Diarrhoea and enteritis	48	22	26					4	4	2		4			
		b) Ulceration of the intes- tines	4	1	3												
121	121	Appendicitis	68	44	24						1	3	2	8	2	6	
122	122	Hernia, intestinal obstruction															
		a) Hernia	37	18	19					1							
		b) Intestinal obstruction	46	22	24					1	1						
123	123	Other diseases of the intestines (including intestinal infection by B. Coli)															
		a) Diverticulitis	4	3	1												
		b) Other diseases of the in- testines	7	6	1												
124	124	Cirrhosis of the liver															
		a) With mention of alcohol- ism	3	1	2												
		b) Without mention of al- coholism	68	40	28												
125	125	Other diseases of the liver															
		a) Acute yellow atrophy (not associated with pregnan- cy or the puerperium)	1		1												
		b) Other diseases of the liver	37	16	21					2	1			1			
126	126	Biliary calculi	41	14	27												
127	127	Other diseases of the gall-blad- der and bile ducts															
		a) Cholecystitis without re- cord of biliary calculi	30	6	24												
		b) Others															
128	128	Diseases of the pancreas	12	3	9						1						
129	129	Peritonitis without stated cause	5	1	4										1		
		Total	721	398	323	69	52	17	25	24	11	7	3	13	3	6	

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to the International List of
Groups, year 1942—(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 1939
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	
																										115
									1	1						1		1								a)
																										b)
			1							1																c)
												1		1				1					1			d)
								1										1	1	1						116
1				4		3	1	3	1	5	2	2		7	1	2	1	2	2	4		1	2			117
1								4		4		1		3		5		1		2						a)
																										b)
	1	2	2	2		3		4		4	2	4		2		5	2	1	2	3	5	3				118
																										119
1				1	1			2		1	1		1	3	2			1		3	10	1	4			120
																										a)
3	1	5		1		1	1	1	1		2	1	1	1	4	5	5	2	2	1		1		1		b)
																										121
1								1	2		1	3		3		1	2	1	2	1	4	7	5	2		122
1				2	1	1		1	3	1	2	2	1	5	2	1	3	2	1	1	5	5	1		1	a)
																										b)
												1	1					1		1						123
																										a)
1								1				1			1		1			2						b)
																										124
						1								1				1								a)
		1						1			2	4	1	6	6	7	3	5	3	7	3	9	9		1	b)
																										125
						1																				a)
		2		1				3				2	3	3	4	1	1	2	1		2	7		1		b)
	1		1					2		2		3	3	2	2	3	1	2	2	5	2	6		4		126
																										127
	1			2				2				1	1	2	1	5		2	1		1	8		3		a)
																										b)
				2	1			1	1	1		1		1	1			1						1		128
				2		1																				129
9	4	10	16	14	5	10	12	22	7	27	19	25	26	38	22	31	18	25	16	39	60	11	20	1		

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
		X.—Diseases of the Urinary and Genital Systems.															
130	130	Acute nephritis	20	8	12							1					
131	131	Chronic nephritis															
		a) Secondary to acute ne- phritis	911	425	486					1	1		1	2			
		b) Arteriosclerotic kidney...	188	99	89												
		c) Chronic nephritis not otherwise specified															
132	132	Nephritis not stated to be acute or chronic															
133	133	Other diseases of the kidneys and ureters (not connected with pregnancy)															
		a) Pyelitis, pyelonephritis and pyelocystitis	16	9	7							1	1				
		b) Others	11	8	3												
134	134	Calculi of the urinary passages															
		a) Calculi of the kidneys and ureters	13	8	5												
		b) Calculi of the bladder	2	2													
		c) Calculi of unstated site...															
135	135	Diseases of the bladder (except tumours)															
		a) Cystitis	7	2	5												
		b) Other diseases of the blad- der	2	2													
136	136	Diseases of the urethra, urinary abscess, etc.															
		a) Structure of the urethra...	1	1													
		b) Others	5	4	1												
137	137	Diseases of the prostate															
		a) Hypertrophy of the pros- tate	71	71													
		b) Others	1	1													
138	138	Diseases of other male genital organs (not specified as vene- real)															
139	139	Diseases of the female genital organs (not specified as vene- real, or connected with preg- nancy or the puerperal state)															
		a) Diseases of the ovaries, fallopian tubes and parametria	16		16												
		b) Diseases of the uterus	14		14												
		c) Diseases of the breast															
		d) Other diseases of the female genital organs...	1		1												
		Total	1279	640	639					1	1	3	3				4

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to the International List of
groups, year 1942—(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 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
						2	...	1	1	1	...	2	1	...	2	...	1	1	1	...	2	1	...	1	...	130
																										131
3	2	1	4	7	4	8	8	12	12	16	21	32	32	48	44	48	45	61	64	114	126	63	101	9	19	a)
								1	1	1	...	2	2	5	3	9	2	6	7	40	39	32	32	3	3	b)
																										c)
																										132
																										133
						1	...			1	1	1	...	1	...	1	1	1	1	2	3	...		1	...	a)
1						1	...			2	...			3	...	1		2	1							b)
																										134
						1	1					1	1	1	2	1	1		1	1	2					a)
																		2								b)
																										c)
						1														2	1		3			135
																										a)
																		1		1						b)
														1		1				1		1	1			136
																										b)
																										137
												1		3		4		10		30		19		4		a)
		1																								b)
																										138
																										139
	3			1		4		1		2		2		1							2					a)
				2						3		1		2		5				1						b)
																										c)
										1																d)
4	5	2	7	7	11	11	11	14	20	18	30	38	38	65	53	66	49	85	75	194	172	115	138	17	22	

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to the International List of
Groups, year 1942—(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 1939
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	
																										140
			3		1																					a)
																										aa)
																										ab)
																										b)
			1		1																					ba)
																										bb)
																										bc)
																										141
																										a)
																										aa)
					1																					ab)
																										b)
																										ba)
																										bb)
																										bc)
																										142
	1								1																	a)
																										b)
																										c)
																										143
			1		1				1																	a)
																										b)
	1				1																					c)
		1		2		2		2		1																144
					2		1		1																	a)
																										b)
																										c)
										1																d)
																										145
	3			7		9		3		4		1														

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
		Carried	29		29												
...	146	Haemorrhage of childbirth and the puerperium															
		a) From placenta praevia...	1		1												
		b) From premature separation of placenta	1		1												
		c) Other haemorrhages during childbirth	2		2												
		d) Other haemorrhages after childbirth	5		5												
nil	147	Infection during childbirth and the puerperium															
		a) General or local puerperal infections (including tetanus) with pyelitis ..	13		13												
		b) Ditto, without pyelitis ..															
		c) Thrombophlebitis	2		2												
		d) Embolism and sudden death	2		2												
nil	148	Puerperal toxæmias															
		a) Puerperal eclampsia															
		b) Albuminuria and nephritis ..															
		c) Acute yellow atrophy of liver															
		d) Other puerperal toxæmias ..															
149	149	Other accidents of childbirth															
		a) Laceration, rupture or other trauma (without haemorrhage)															
		b) Cesarean section	1		1												
		c) Other accidents of childbirth ..	6		6												
150	150	Other or unspecified diseases of childbirth and the puerperium															
		a) Mastitis during the puerperium and lactation ..															
		b) Puerperal psychoses															
		c) Other diseases															
		Total	62		62												
		XII.—Diseases of the Skin and Cellular Tissue.															
151	151	Carbuncle, boils	2	2		1											
152	152	Cellulitis, acute abscess	12	5	7	4	4										
153	153	Other diseases of the skin and annæa, and of the cellular tissue	7	4	3			1	1								
		Total	21	11	10	5	4	1	1								
		XIII.—Diseases of the Bones and Organs of Movement.															
154	154	Osteomyelitis and periostitis															
		a) Acute	3	2	1					1						1	
		b) Chronic	1	1													
		c) Unspecified	2	1	1	1											
155	155	Other diseases of the bones, except tuberculosis	7	6	1												
156	156	Diseases of the joints and other organs of movement															
		a) Joints (except tuberculosis and rheumatism)	4	1	3	1						1					
		d) Diseases of other organs of movement	1	1													
		Total	18	12	6	2				1		1				1	

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to the International List of
Groups, year 1942—(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 1939
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	
...	3	...	7	...	9	...	3	...	4	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	2	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147
...	5	...	1	...	...	...	6	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	148
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	149
...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	2	...	1	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	15	...	14	...	12	...	11	...	6	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	151
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	152
...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	1	...	...	...	153
...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	1	...	1	...	...	...	...	...	...	154
...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	1	1	...	1	...	2	...	1	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	3	...	1	...	1	1	...	...	...	...	155
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	b)
...	...	1	...	1	...	...	...	...	...	...	...	1	...	...	1	3	...	2	1	1	1	...	1	...	...	...

Table

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		XIV.—Congenital Malformations.															
157	157	Congenital malformations															
		a) Congenital hydrocephalus.	19	11	8	8	7	2	1	1							
		b) Spina bifida and meningocele.	28	12	16	9	13	2	3	1							
		c) Congenital malformation of heart.	75	40	35	33	29	4	1	1	4	1					
		d) Monstrosities.	6	3	3	3	3										
		e) Congenital pyloric stenosis.	4	4		4											
		f) Cleft palate, harelip.	4	3	1	2		1					1				
		g) Imperforate anus.	1		1		1										
		h) Cystic disease of kidney.	1	1		1											
		i) Other stated congenital malformations															
		ia) Central nervous system.	8	5	3	2	1	2		1	2						
		ib) Circulatory system.	2	1	1												
		ic) Digestive system.	11	6	5	6	4				1						
		id) Genito-urinary system.	4	2	2		1			1	1						
		ie) Other sites.	6	5	1	4	1			1							
		j) Unspecified.	1		1		1										
		Total.	170	93	77	72	61	11	5	6	8	1	1				
		XV.—Diseases Peculiar to the First Year of Life.															
158	158	Congenital debility.	77	44	33	44	33										
159	159	Premature birth.	291	163	128	163	128										
160	160	Injury at birth															
		a) Intra-cranial or spinal hæmorrhage															
		aa) With operation.	11	4	7	4	7										
		ab) Without operation.	13	11	2	11	2										
		b) Other intra-cranial or spinal injuries															
		ba) With operation.	4	2	2	2	2										
		bb) Without operation.	2		2		2										
		c) Other birth injuries															
		ca) With operation.	6	3	3	3	3										
		cb) Without operation.	27	14	13	14	13										
161	161	Other diseases peculiar to the first year of life															
		a) Asphyxia during or after birth, atelectasis.	27	14	13	14	13										
		b) Intoxication due to maternal toxæmia.	1	1		1											
		c) Infections of the newborn, including non-syphilitic pemphigus.	3	3		3											
		d) Melaena neonatorum.															
		e) Other specified diseases.	23	15	8	15	7		1								
		Total.	485	274	211	274	210		1								

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to the International List of
Groups, year 1942—(Continued)

[illegible]

Table

**Classification of deaths according
causes of deaths by sex and age**

No. of 1929	No. of 1939	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
		XVI.—Senility, Old Age.									
162	162	Senility, old age									
		a) Old age	11	4	7						
		b) Senility with mention of senile dementia	14	4	10						
		c) Senility without mention of senile dementia	36	17	19						
		Total	61	25	36						
		XVII.—Violent or Accidental Deaths.									
163	163	Suicide by poisoning									
		a) Solid or liquid toxic or corrosive substances									
		aa) By corrosive sub.	5	3	2						
		ab) By analgesic and narcotic drugs									
		ac) By soporific drugs (not liquid anaesthetics)	3		3						1
		ad) By other substances									
		b) Suicide by poisonous gas									
		ba) By coal-gas	4	1	3						
		bb) By motor exhaust gases	1	1							
		bc) By other gases									
171	164	Other forms of suicide									
		a) By hanging or strangulation	7	5	2						
		b) By drowning	11	9	2						
		c) By fire-arms and explosives	6	6							1
		d) Suicide by cutting or piercing instruments	1	1							
		e) Suicide by jumping from high places	3	3							
		f) Suicide by crushing									
		fa) Suicide on railways									
		fb) Other suicide by crushing	1		1						
		g) Other or unspecified									
172	165	Infanticide (infants under 1 year)									
173	166	Homicide by fire-arms (ages 1 year and over)									
174	167	Homicide by cutting or piercing instruments (ages 1 year and over)	3	1	2						
175	168	Homicide by other or unspecified means (ages 1 year and over)	7	6	1						1
nil	169	Accidents on railways and tramways	15	15					1		
...	170	Automobile accidents									
		a) Collisions with trains	1		1						
		b) Collisions with trams	101	75	26			4	2	5	5
		c) Other auto. accidents	5	4	1				1		4
		d) Motor cycles									3
		Carried over	174	130	44			4	2	7	5

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the International List of
Groups, year 1942—(Continued)

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 1939
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	
																									162
																			1	3	4	1	2		a)
																1	2	6	2	2	...	1			b)
																		4	5	8	12	5	2		c)
																	1	6	12	13	18	6	5		
																									163
	1						1		2	1															a)
																									aa)
																									ab)
			1		1																				ac)
																									ad)
			1		2							1													b)
																									ba)
						1																			bb)
																									bc)
																									164
1		1		2		1		1	2	1		1			1		1								a)
2		1				1		1		1		1			1	1									b)
																									c)
								1																	d)
1		1			1																				e)
																									f)
																									fa)
							1																		fb)
																									g)
																									165
																									166
			1	1									1												167
	1	2				1			1						1										168
		2				1		2		1		1		2		3			2						169
																									170
			1																						a)
4		2		6	1	3	1	2	1	6		1	2	6	1	10	3	5		11	5	2	1		b)
	1	1		1															1						c)
8	3	10	4	10	4	8	2	8	1	12	4	5	2	11	2	15	4	6		14	5	2	1		d)

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
		Carried	174	130	44					4	2	7	5	4	1	6	
...	171	Other transport accidents															
		a) Tramway accidents on roads	12	9	3									1			
		b) Other accidents	3	2	1												
...	172	Water transport accidents															
...	173	Air transport accidents	13	13												2	
...	174	Accidents in mines and quarries	1	1													
...	175	Agricultural and forestry accidents															
		a) Accidents from farm machinery															
		b) Injuries by animals in farming, etc.															
		ba) By venomous animals															
		bb) By other animals															
		c) Other accidents															
...	176	Accidents caused by machinery, excluding accidents due to transport, agricultural or forestry machinery, or in mines or quarries	13	13												2	
177	177	Food poisoning															
178	178	Accidental absorption of poisonous gases	7	4	3											1	
179	179	Other acute accidental poisoning (not by gas)	6	3	3					1							
180	180	Conflagration	19	11	8					1		1					
181	181	Accidental burns (conflagration excepted)	20	9	11			1	1	3	8						
182	182	Accidental mechanical suffocation	6	3	3		2	1	1	1							
183	183	Accidental drowning	54	48	6						1	3		4	1	12	1
184	184	Accidental injury by fire-arms (except war injuries)	8	8										1			
185	185	Accidental injury by cutting or piercing instruments (except war injuries)	2	2										1			
186	186	Accidental injury by fall, crushing, landslide, etc.	98	58	40			1		2	5	3	1	1			1
187	187	Cataclysm (all deaths, whatever their cause)															
188	188	Injury by animals															
189	189	Hunger and thirst	1	1													
190	190	Excessive cold															
191	191	Excessive heat	1		1					1							
192	192	Lightning															
193	193	Other accidents due to electric currents	7	7								1				2	
176	194	Attack by venomous animals															
		Carried over	445	322	123		2	3	2	12	17	15	6	12	2	25	6

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the International Lists of
Groups, year 1942—(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 1939
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	
8	3	10	4	10	4	8	2	8	1	12	4	5	2	11	2	15	4	6	...	14	5	2	1	...	171
				1										1			1	...	5	2	1	...			a)
								1									1	1	...						b)
5		4		2																					172
1																									173
																									174
																									175
																									a)
																									b)
																									ba)
																									bb)
																									c)
2				1		2		1				2		1			2								176
																									177
	1													1			1	1	1		1				178
								1				1		1			1			1					179
	1			1	2	2	1	1	3	3					1		1			1					180
		1				2					1	1		1			1								181
														1											182
4		4		4				3	2	2		3		5		2		1		1			1		183
3		1		1										2											184
								1																	185
1	1	2		3		5	1	2		4		7	2	7		5	6	4	3	10	11	1	8	1	186
																									187
																									188
																	1								189
																									190
																									191
																									192
2		1												1											193
																									194
26	6	23	4	23	6	19	5	17	6	21	6	18	4	30	4	24	11	17	5	32	20	5	10	...	1

Table

Classification of deaths according
causes of deaths by sex and age

No. of 1929	No. of 1939	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
194	195	Carried	445	322	123	...	2	3	2	12	17	15	6	12	2	25	6
		Other accidents															
		a) Vaccinia and other sequelae of vaccination against smallpox															
		aa) Vaccine B.C.G.	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...
		b) Other accidents due to medical or surgical intervention															
		ba) Anaesthetic accidents	3	2	1	...	...	...	...	1	...	...	...	1	...	1	...
		bb) Other accidents .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		c) Lack of care of the newborn .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		d) Explosion	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...
		e) Other accidents	6	4	2	...	...	...	...	1	1	...	...	...	...	...	...
nil	196	Deaths of persons in military serving during operations of war															
		a) From poison gas .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		b) From wounds .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		c) From other causes .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
nil	197	Deaths of civilians due to operations of war															
		a) From poison gas .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		b) From wounds .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		c) From other causes .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
198	198	Legal executions .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total	457	330	127	...	2	3	2	13	20	15	6	13	2	26	6
		XVIII.—Ill-defined Causes of Death.															
199	199	Sudden death	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...
200	200	Causes of death unstated or ill-defined															
		a) Ill-defined causes	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
		b) Found dead, cause unknown .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		c) Other deaths from unknown causes	3	2	1	...	...	...	...	...	...	1	...	...	...	...	...
		Total	7	5	2	...	...	...	...	...	...	1	...	...	...	...	...
		Total M	5097	...	581	...	91	...	136	...	47	...	51	...	81
		Total F	4435	...	437	...	81	...	118	...	40	...	32	...	65	...
		Grand total	9532	...	1018	...	172	...	254	...	87	...	83	...	146

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to the International List of
Groups, year 1942—(Concluded)

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 1939
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
6	6	23	4	23	6	19	5	17	6	21	6	18	4	30	4	24	11	17	5	32	20	5	10	...	1	195
																										a) aa)
																										b) ba) bb)
1		1																								c) d) e)
1		1					1							1												196
																										a)
																										b)
																										c)
																										197
																										a)
																										b)
																										c)
																										198
8	6	25	4	23	6	19	6	17	6	21	6	18	4	31	4	24	11	17	5	32	20	5	10	...	1	
							1		1						1											199
															1											200
																										a)
																										b)
											1					1										c)
							1		1		1				1	1	1									
7	...	109	...	128	...	136	...	204	...	299	...	392	...	455	...	500	...	478	...	878	...	384	...	50	...	
	98	...	117	...	132	...	138	...	151	...	213	...	242	...	285	...	374	...	417	...	885	...	531	...	79	
195	226	260	274	355	512	634	740	874	895	1763	915	129														

Meteorological Service of
 Observations made at McGill University, Montreal,
 Height above

Month	Thermometer					*Barometer			
	†Mean	(a) Deviation from 68 years means	Maximum	Minimum	Mean daily range	†Mean	Maximum	Minimum	Mean daily range
January	15.08	+1.46	41.9	-13.9	16.65	30.025	30.47	29.18	.312
February	17.08	+1.71	41.8	-10.9	13.16	29.863	30.45	29.22	.250
March	33.37	+7.28	46.8	17.0	10.90	29.862	30.45	28.91	.301
April	45.86	+4.67	80.1	26.5	14.71	30.012	30.47	29.59	.192
May	59.93	+4.79	82.8	42.1	17.48	29.994	30.35	29.69	.172
June	66.46	+1.72	90.0	49.0	16.68	29.934	30.29	29.61	.147
July	69.14	-0.17	89.4	51.5	15.42	29.939	30.38	29.58	.160
August	67.29	+0.44	86.0	49.0	15.35	30.013	30.42	29.58	.151
September	59.95	+1.16	84.9	36.0	15.73	30.023	30.51	29.47	.230
October	49.70	+2.90	69.9	31.9	15.44	30.034	30.65	29.50	.257
November	35.03	+1.58	60.4	13.7	12.29	30.013	30.57	29.29	.275
December	16.07	-3.56	35.1	-23.9	12.50	29.994	30.93	28.45	.333
Sums for 1942 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means for 1942	44.58	+2.00	.....	.....	14.69	29.975	.....	.....	.232
Means for 68 years ending December 31st, 1942	42.58	.....	.....	.....	15.28	29.982	.....	.....	.235

*Barometer readings reduced to sea level and 32° F. †The monthly Thermometer and Barometer means are from bi-hourly readings from self-recording instruments. (a) "+" indicates that the temperature has been higher, "-" that it has been lower than the average for 68 years. ‡Humidity relative, saturation being 100. Means of readings every four hours from recording hygrometer. §For 61 years only.

The greatest heat was 90.0 Fah. above zero, on June 12, the greatest cold was 23.9 below zero on December 20. The extreme range of temperature was therefore 113.9 degrees. The greatest temperature range in one day was 36.2 on January 17; the least range was 2.1 on April 11. The warmest day was July 19 when the mean temperature was 79.7 above zero. The coldest day was December 20 when the mean temperature was

Canada, abstract for year 1942

Canada.—Latitude 45° 30' N.—Longitude 75° 35' W.

Sea level 187'

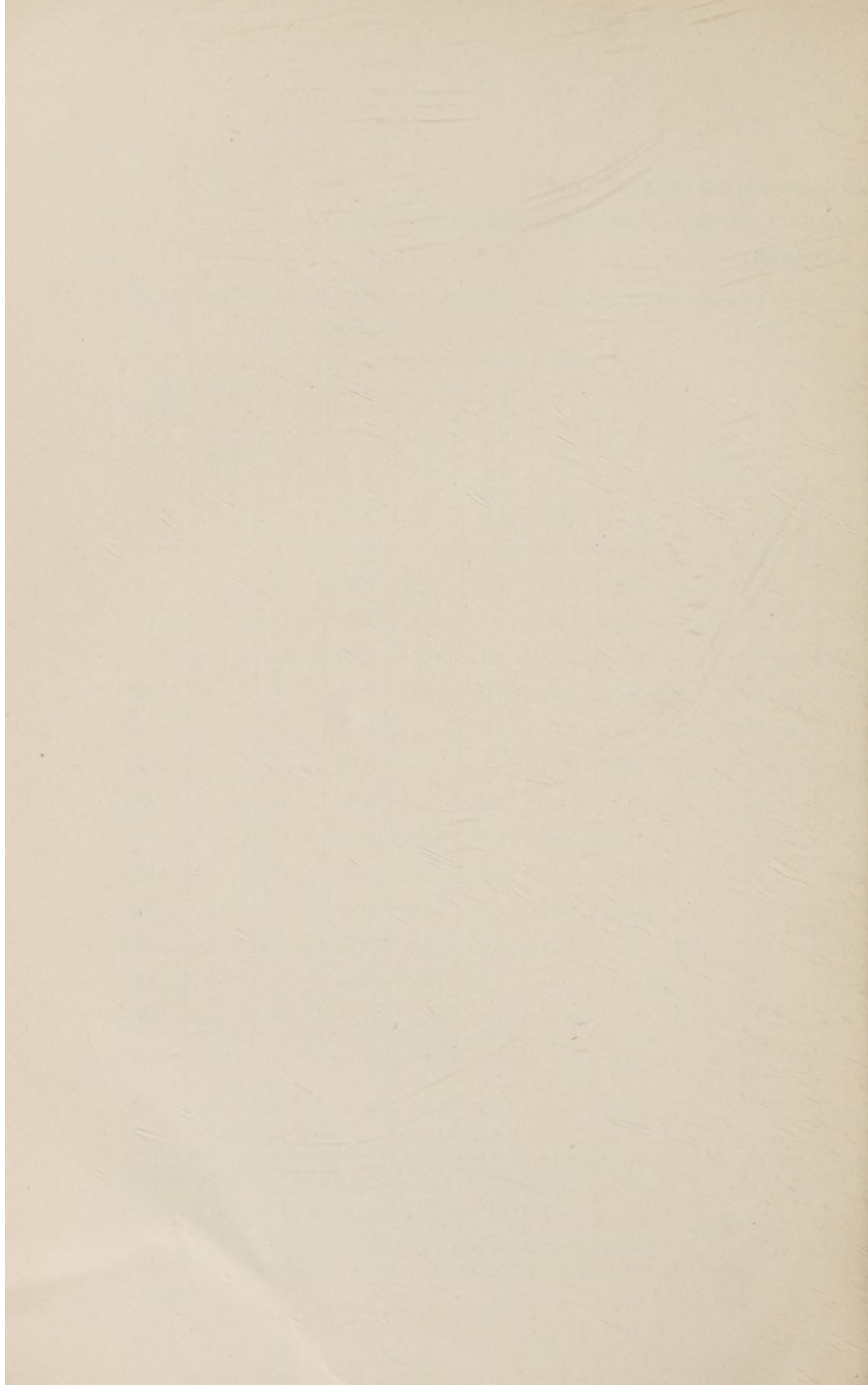
‡Mean relative humidity	Wind		§Percent possible sunshine	Précipitation						
	Resultant direction	Mean velocity, M.P.H.		Inches rain	No. of days on which rain or sleet fell	Inches, snow	Inches of rain and melted snow	No. of days on which snow fell	No. of days on which rain and snow fell	No. of days on which rain or snow fell
71.6	35.4	0.95	3	21.4	2.67	16	1	18
73.7	33.2	0.76	1	33.4	3.87	18	1	18
76.9	30.1	1.99	11	17.5	4.35	14	6	19
70.0	36.9	1.85	11	8.7	2.96	7	4	14
69.9	35.6	2.77	13	.....	2.77	.....	.....	13
72.7	44.3	2.61	8	.....	2.61	.....	.....	8
69.5	50.0	2.07	12	.....	2.07	.....	.....	12
73.6	50.1	3.44	10	.....	3.44	.....	.....	10
76.1	51.4	5.35	12	.....	5.35	.....	.....	12
77.1	51.5	3.08	12	0.6	3.29	2	2	12
75.0	36.5	2.09	11	9.8	2.99	5	0	16
74.8	28.8	1.24	3	33.2	4.88	19	3	19
.....	28.20	107	124.6	41.25	81	17	171
73.4	40.3	.....	.....	.....	.....	.....	.....	.....
73.9	43.26	29.78	108	113.2	41.63	76	15	169

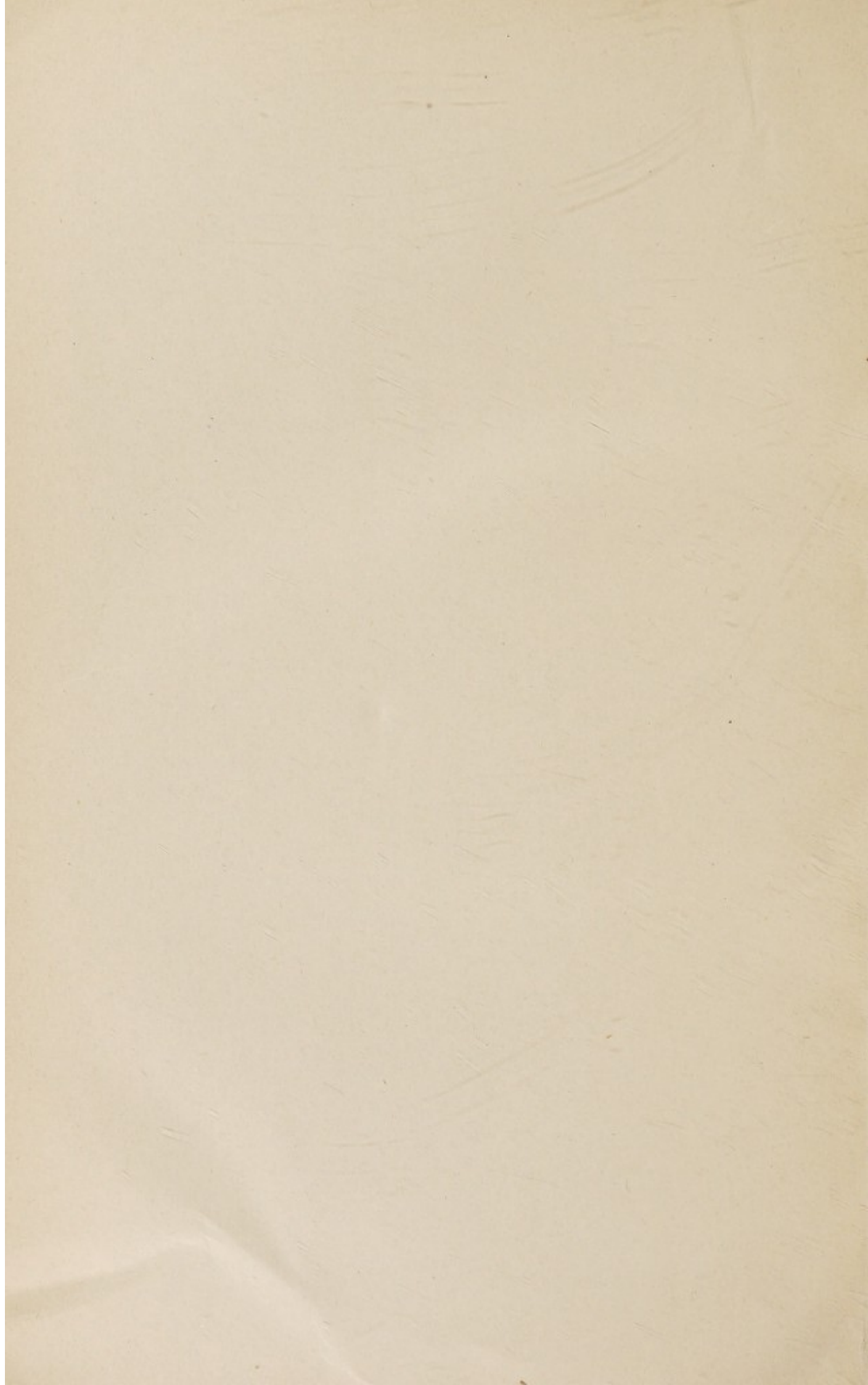
8.9 below zero. Hail on 1 day. Fog on 9 days. Thunderstorms on 23 days. Auroras observed on 2 nights. First trace of snow on October 26. First appreciable snowfall on October 26. First zero weather on December 1. The greatest rainfall in one day was 1.75 inches on October 26. The heaviest snowfall was on March when 8.2 inches fell.

The unusually low Barometric Pressure of 28.45 ins. (reduced to sea level) was recorded on December 2. maximum of 30.93 on December 26.

The wind velocity reached 74 m.p.h. (in gusts) on Dec. 2.

Note:—Yearly means are averages of Monthly means.







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Library.