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REPORT

of the

LOCAL BOARD OF HEALTH

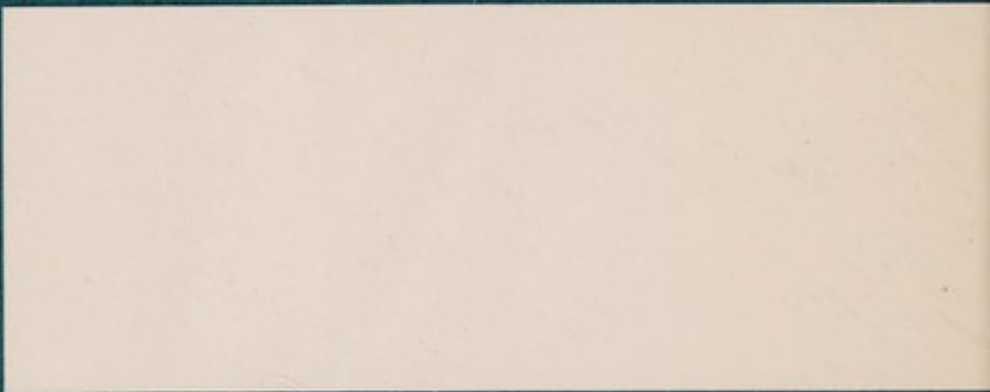


CITY OF EDMONTON

ALBERTA

1941

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BOARD OF HEALTH, 1941

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 Mr. A. E. Ottewell (Public School Board)
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 Dr. G. M. Little, M.O.H. Mr. A. W. Haddow, City Engineer
 S. Main, Secretary

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Dr. R. M. Shaw, Chairman
 Ald. S. Parsons Ald. C. E. Gariepy Dr. L. P. Mousseau
 Mr. A. E. Ottewell (Public School Board)
 Mr. A. J. Crowe (Separate School Board)

EX-OFFICIO MEMBERS:

Mayor J. W. Fry
 Dr. G. M. Little, M.O.H. Mr. A. W. Haddow, City Engineer
 S. Main, Secretary

STAFF:

Medical Officer of Health.....	Dr. G. M. Little, D.P.H.
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Health Inspector.....	A. P. Methuen, A.R. San. I.
Health Inspector.....	J. D. Williams, A.R. San. I.
Quarantine Officer.....	R. T. Anderson, A.R. San. I.
Chief Food Inspector.....	J. H. Part, V.S., M.D.V.
Meat Inspector.....	D. Morrison, V.S.
Dairy Supervisor.....	C. Ellinger, M.R. San. I.
Chemist and Milk Inspector.....	H. C. Graham, B.A.
Junior Inspector.....	G. L. Alexander
Statistician.....	Miss B. B. Murray
Public Health Nurse (Senior).....	Miss M. Griffith, R.N.
Public Health Nurse.....	Miss S. C. Christensen, R.N.
Clerk.....	Miss C. R. Rose
Stenographer.....	Miss K. D. Derbyshire

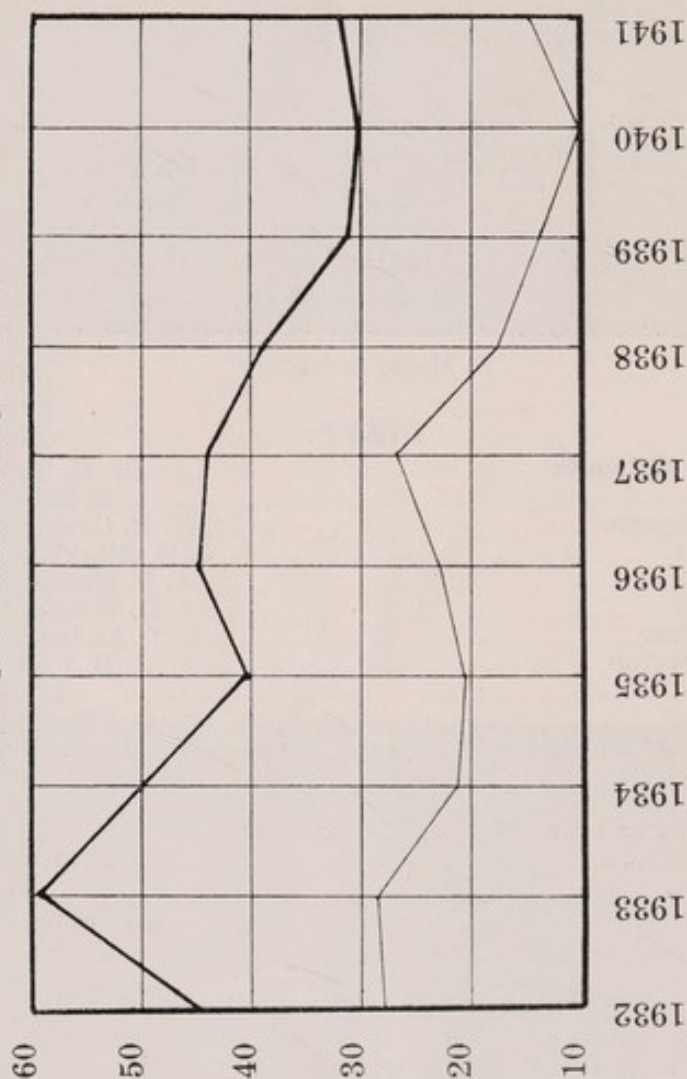
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INFANT MORTALITY

Rate per 1,000 Living Births



Light Line: "Diseases largely preventable"

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1941

Annual Report of Medical Officer of Health

Chairman and Members of the
Local Board of Health,
City of Edmonton.

Gentlemen:

Herewith are submitted reports of the various activities conducted by the Board during 1941, and also a brief summary report of work accomplished by certain co-operating health agencies during this period.

Birth Rate:

There were 1,805 live babies born to our citizens during the year. This completes a five-year period of steadily increasing birth rate. Economic conditions appear to remain a strong factor in determining this rate.

Death Rate:

The death rate from all causes shows a slight decrease. The most common cause, however, diseases of the heart, gave a sharp increase. Of 166 deaths from this cause, only 18 cases were under 50 years of age. Two contributing factors present themselves in this matter. First, the saving of lives in the younger age-groups brings a higher percentage of our population to later life when heart disease is more common. Secondly, the increasing physical and mental effort being undertaken by many of this older group on account of war demands brings disaster to certain damaged hearts unless their activity is properly limited by medical advice.

Deaths from cancer showed a notable decrease. The provincial cancer clinic was in operation during 1941. With the assistance of this facility available, it now remains for our citizens to report to their family physician when those earliest symptoms of cancer appear, in order that many more may be saved from this disease.

Deaths from pneumonia were reduced 41% below the previous year. Fatality from this cause varies considerably in relation to such occurrences as epidemics of influenza, but with the widening use of newer treatment for the disease the death rate has shown a sharp decrease.

Communicable Disease:

Epidemic infantile paralysis gave fifteen cases but no deaths during the year. Cerebro-spinal meningitis was also unusually prevalent, giving sixteen cases with one fatality. Pulmonary tuberculosis continues to be our most deadly communicable disease. With the co-operation of our provincial services, however, we believe that we have the means for gradually improving this condition by hospitalization of sources of infection. Incidence of venereal disease has been maintained below that of pre-war years. Two cases of undulant fever were reported in a mother and her son. Raw milk appeared to be the source of this infection.

The Isolation Hospital has continued to render valuable service to both our citizens and to the military authorities.

Immunization against certain communicable diseases has been carried on daily in the office of the Health Department.

Child and Maternal Welfare:

Despite cessation of clinics on account of fire in the clinic building, and again because of an outbreak of infantile paralysis, the Child Welfare Clinic admitted more new cases for examination than the previous year. The value of this preventive service is beyond calculation, and is reflected in our favorable infant death rate.

Skilled supervision in private medical practice, in the pre-natal clinic operated by the out-door department of the University Hospital, and the home visiting by trained nursing personnel has made child bearing very safe for the mothers of our city. The three maternal deaths reported might all have been prevented by adequate care and proper medical supervision during pregnancy.

Sanitation:

General sanitation of the city has been fairly satisfactory, and with few exceptions our citizens have given excellent co-operation in keeping their own premises and adjacent lanes clean. By so doing, many areas have almost eliminated the health hazard of flies. With extension of our dwelling areas, however, it is obvious that certain garbage dumps must receive increasing supervision to eliminate a danger to health.

The year has shown a definite improvement in the sanitary handling and keeping of foodstuffs. We believe that this has been beneficial to both food vendors and citizens.

The considerable quantity of diseased meats necessarily condemned by our inspectors constitute a matter of concern for farmers and government veterinarians. It is recorded that one of every ten hogs inspected suffered from tuberculosis.

Important quantities of fruits and fish were found unfit for food upon their arrival in the city. Much of this waste might be eliminated by proper care and inspection at the point of origin.

With the active co-operation of dairymen, officials of our department have maintained a high standard of safety in our milk supply. This has been an important factor in bringing about our low infant death rate.

Despite the considerable number of homes built during the past year insufficient living accommodation for our citizens remains a pressing problem. This condition has been increased by the many families who have come from rural areas to reside in the city since the beginning of the war.

We have continued to make our facilities available to Nurses' Training Schools and to other official teaching institutions of the city.

The Provincial Laboratory and other departments of the University have rendered to us much technical advice and assistance during the year.

The general health of our citizens has been good despite war conditions. I believe that the greatest single step in health improvement possible at the present time lies in the hands of our housewives. Especially at this time of increasing restrictions, a study of the available information regarding nutrition will repay themselves and their families manifold in both health and economy.

Respectfully submitted,

G. M. LITTLE,
Medical Officer of Health.

EXPENDITURE

	1941	1940
1. Salaries	\$ 39,970.17	\$ 32,012.08
2. Supplies	971.17	938.83
3. Transportation	4,737.33	4,520.38
4/6 Sundries (Phones and Uniforms)	541.98	588.15
7. Pensions	1,539.10	1,231.28
(Bath House included under a/c's 1 and 2).		
	<u>\$ 41,759.75</u>	<u>\$ 39,290.72</u>

REVENUE

Meat Inspection	1,044.95	
Inspection Fees	\$ 882.25	
	<u>\$1,927.20</u>	<u>1,927.20</u>
		<u>1,838.70</u>
	<u>\$ 39,832.55</u>	<u>\$ 37,452.02</u>

EXPENDITURE—CLASSIFIED—1941

	Administration	Food Inspection	Communicable Disease	Laboratory Service	Dairy Inspection	Sanitation	Public Health Nursing	Vital Statistics	Bath House	TOTALS
Salaries.....	\$7,979.04	\$4,495.54	\$2,498.11	\$2,582.38	\$2,427.71	\$ 9,344.04	\$3,045.33	\$1,375.89	\$ 222.13	\$33,970.17
Supplies.....	474.87	5.52	100.69	31.07	10.69	51.90	25.33	54.10	217.00	971.17
Transportation	488.00	520.00	617.00	521.00	780.00	1,375.33	436.00			4,737.33
Phones.....	105.00	15.00	61.20	15.00	18.00	78.00	18.00			310.20
Sundries.....	83.26	45.93	5.85	37.84		24.82	10.75			208.45
Uniforms.....						23.33				23.33
Pensions.....	1,539.10									1,539.10
	<u>10,669.27</u>	<u>\$5,081.99</u>	<u>\$3,282.85</u>	<u>\$3,187.29</u>	<u>\$3,236.40</u>	<u>\$10,897.42</u>	<u>\$3,535.41</u>	<u>\$1,429.99</u>	<u>\$ 439.13</u>	<u>\$41,759.75</u>
Per Cent.....	25.55	12.17	7.85	7.63	7.75	26.09	8.48	3.43	1.05	100%

SUMMARY OF STATISTICS

Area of City (including 1,000 acres of water), 26,778 and 2,147 acres in Parks.

	1941	1940	1939	1938	1937
Population.....	92,404	91,722	90,419	88,887	87,034
Persons per acre of land.....	3.6	3.5	3.5	3.42	3.34
School enrolment.....	17,563	17,918	18,346	18,243	17,885
Natural increase of population.....	1,083	988	1,048	893	892
Cost per capita.....	.43	.41	.43	.44	.43
Births, excluding Stillbirths.....	1,805	1,727	1,678	1,602	1,565
Rate per 1,000 population.....	19.9	19.2	18.6	18.	18.4
Stillbirths.....	28	27	29	30	42
Rate per 1,000 births.....	15.5	15.6	17.3	18.7	26.8
Deaths, excluding Stillbirths.....	722	739	630	703	673
Rate per 1,000 population.....	7.8	8.2	7.	7.97	7.9
Deaths under 1 year of age.....	58	53	53	63	68
Infant Mortality rate per 1,000 living births.....	32.13	30.6	31.6	39.3	43.45
Deaths from Childbirth.....	3	5	7	4	3
Maternal mortality per 1,000 births.....	1.66	2.8	4.17	2.5	1.9
Marriages.....	1,995	2,085	1,860	1,653	1,492
Rate per 1,000 population.....	21.6	22.7	20.7	18.57	17.55
Non-resident births in city.....	1,425	1,388	1,240	1,203	1,132
Non-resident deaths in city.....	483	438	425	472	480
Non-resident deaths under 1 year.....	52	49	52	40	52

VITAL STATISTICS

Births

There were 1,805 City births in 1941, 958 males and 847 females; an increase of 78 over 1940, when there were 1,727 births, 901 males and 826 females.

Born in institutions 1,785 or 98.9%; elsewhere 31 of which 11 were attended by the Victorian Order of Nurses.

Attended by physician 1,797; attended by nurse 5; unattended 3; double births, 12.

Maternal Parentage:

	1941	1940
Canada.....	1,409 or 78. %	1,283 or 74.3%
British Isles.....	176 or 9.7%	206 or 11.9%
Europe.....	125 or 7. %	137 or 8. %
U.S.A.....	90 or 5. %	93 or 5.4%
Other Countries.....	5 or 3. %	7 or .4%
Unknown.....		1 or

Stillbirths

Male, 17; Female, 11; Total, 28.

Born in institutions, 27; elsewhere, 1.

Causes of foetal deaths:

Dystocia, 9.

Prematurity, 4.

Toxaemia, 2.

Other conditions, 13.

Deaths

Male, 416; females, 306; total, 722; a decrease of 17 from 1940 when there were 739 deaths.

	1941	1940
Canada.....	347 or 48. %	355 or 38. %
British Isles.....	204 or 28.3%	203 or 27.5%
Europe.....	97 or 13.4%	99 or 14.4%
U.S.A.....	49 or 6.8%	69 or 9.4%
Other Countries.....	12 or 1.7%	9 or 1.2%
Unknown.....	13 or 1.8%	4 or .5%

Infant Mortality

Deaths under 1 year of age—

Male, 34; Female, 24; total, 58.

Infant mortality rate per 1,000 living births—32.13.

In 1940 there were—

Male, 36; Female, 17; total, 53.

Infant mortality rate per 1,000 living births—30.6.

Classification from standpoint of preventability:

Class I—To a great extent non-controllable—premature (under 7 months), congenital debility, congenital malformation.

Class II—Capable of reduction by hygiene, sanitation, isolation and treatment—tuberculosis, syphilis, acute respiratory diseases, acute infectious diseases.

Class III—Capable of considerable reduction through care, proper feeding and pre-natal care—marasmas, acute gastro enteritis, injuries at birth, premature (over 7 months).

Class I—26 or 44.8%.

Class II— 6 or 10.4%.

Class III—26 or 44.8%.

ABRIDGED INTERNATIONAL CAUSES OF DEATH, 1941—(Continued)

	Total	M	F	Under 1 Year	1	2	3	4	5	10	15	20	25	30	36	40	46	50	55	60	65	70	75	80	85	90	95	100
31. Diseases of the liver and biliary passages.....	M	6	2																1									
32. Other diseases of the digestive system.....	F	14	12	4														1	2	2	1	1						
33. Nephritis.....	F	31	14	2														1	1	1	3	4		2	1			
34. Other diseases of the urinary and genital systems.....	F	17											1				4	1	1	1	2	4	1		2			
35. Puerperal infection.....	M	13	11																1	2	2	1	1	1	1	2		
36. Other diseases of pregnancy, childbirth and the puerperium.....	F	2		2																1	1							
37. Diseases of the skin, cellular tissue, bones and organs of movement.....	M	5	3	1									1						1			1		1				
38. Congenital malformations and debilities, premature birth and diseases peculiar to first year of life.....	F	42	26	16	16																							
39. Senility.....	M	14	5																				2	2	1	2	1	
40. Suicide.....	F	10	7	9									1				1	1	1	1	2							
41. Homicide.....	F	1		3								1																
42. Automobile accidents (all motor driven road vehicles).....	M	1		1																								
43. Other violent or accidental deaths.....	F	10	9												3		1		2		1				1			
44. Causes of death ill-defined or unknown.....	M	32	21	11								2	4		1	3	3	1	1	1	1	1	1	1	1	1	1	
	F	1		1																								
Total Male.....		416		34	2				5	2	4	8	7	5	17	14	19	34	47	48	38	54	32	30	9	5		1
Total Female.....		306		24	2	1		1	2	1	7	2	9	8	5	7	21	18	38	22	32	32	27	26	15	4	2	
Total Deaths.....		722		58	4	1	1	1	7	3	11	10	16	13	22	21	40	52	85	70	86	59	56	24	9	2	1	

PRINCIPAL CAUSES OF DEATH, 1941

	MONTHS												1941				1940			
													Male	Female	Total	Percent of Total Deaths	Rate per 100M Population	Total, 1940	Percent of Total Deaths	Rate per 100M Population
	January	February	March	April	May	June	July	August	September	October	November	December								
90—95 Diseases of the heart.....	M 11	4	7	11	7	7	7	11	4	8	7	4	98	68	166	23.	179.4	141	19.08	156.6
45—55 Cancer.....	F 5	3	4	4	3	6	6	4	5	4	8	3	55	50	105	14.5	113.5	124	16.77	138.
83 Intracranial lesions of vascular origin.....	F 2	5	3	5	4	2	5	2	3	2	1	2	42	30	72	10.	77.8	(Re-classified)		
163—196 External causes.....	F 5	2	1	4	5	1	2	1	4	2	1	1	37	16	53	7.3	57.3	51	6.9	56.6
107—109 Pneumonia.....	M 1	2	2	2	2	1	6	1	3	1	1	1	22	9	31	4.3	33.5	53	7.17	59.
130—131 Nephritis.....	F 1	2	2	1	1	3	1	1	1	2	2	2	14	17	31	4.3	33.5	19	2.57	21.1
158—161 Early infancy.....	M 1	1	1	1	3	3	1	2	2	2	2	3	19	12	31	4.3	33.5	25	3.38	28.
13—22 Tuberculosis.....	M 1	1	1	2	2	1	1	1	2	1	1	1	16	10	26	3.6	28.1	18	2.43	20.
157 Malformation.....	M 1	1	1	1	1	1	1	2	1	1	1	1	8	4	12	1.7	13.	5	.67	5.5
119—120 Diarrhea.....	M 1	1	1	1	1	1	1	1	1	1	1	2	6	5	11	1.5	12.	3	.40	3.3
33 Influenza.....	M 1	1	1	1	1	1	1	1	1	1	1	1	5	4	9	1.2	9.7	25	3.38	28.
121 Appendicitis.....	M 1	1	1	1	1	1	1	2	1	1	2	1	5	4	9	1.2	9.7	9	1.21	10.
140—150 Puerperal state.....	M 1	1	1	1	1	1	1	1	1	1	1	1	3	3	6	.4	3.2	5	.67	5.5
Total Male.....	M 24	21	20	31	26	25	29	27	23	22	25	19	326	232	559	77.4	603.2			
Other causes.....	F 23	16	17	15	16	21	18	14	21	26	18	18	90	74	163	22.8	177.6			
Total.....	M 29	29	24	41	29	33	35	34	27	34	35	27	416	306	722					
Total per month.....	F 27	21	22	17	25	29	29	24	26	27	22	24	722							

"X" denotes Edmonton citizens dying outside the city.

MORTALITY FROM HEART DISEASE

Year	Total Deaths	Deaths From Heart Disease	Percentage of Total Deaths	Rate Per 100M Population
1941.....	722	166	23.0	179.4
1940.....	139	141	18.8	156.6
1939.....	630	149	18.8	156.6
1938.....	709	128	18.0	143.8
1937.....	673	115	17.8	135.8

There were 166 deaths (98 male and 68 female) from heart disease. This is an increase in the rate per 100M population of 22.8 over that in 1940.

MORTALITY FROM CANCER

Year	Total Deaths	Deaths From Cancer	Percentage of Total Deaths	Rate Per 100M Population
1941.....	722	105	14.8	113.5
1940.....	739	124	16.77	138.0
1939.....	630	95	13.1	105.5
1938.....	709	99	13.9	111.2
1937.....	673	82	12.2	96.5

There were 105 deaths (55 male and 50 female) from cancer, a decrease of 24.5 per 100M from the 1940 rate.

MORTALITY FROM INTRACRANIAL LESIONS OF VASCULAR ORIGIN

Year	Total Deaths	Deaths From This Cause	Percentage of Deaths	Rate Per 100M Population
1941.....	722	72	10.0	77.8

RE-CLASSIFIED

There were 72 deaths (42 male and 30 female) from Intracranial lesions of vascular origin.

MORTALITY FROM PNEUMONIA

Year	Total Deaths	Deaths From Pneumonia	Percentage of Total Deaths	Rate Per 100M Population
1941.....	722	31	4.3	33.5
1940.....	739	53	7.17	59.0
1939.....	630	26	4.1	28.9
1938.....	709	58	8.2	65.2
1937.....	673	35	5.2	21.2

There were 31 deaths (22 male and 9 female) from Pneumonia (all forms). This shows a decrease of 23.5 in the rate per 100M from 1940, and a decrease of 15.1 from the average rate per 100M for 1937 to 1940. Of the 31 deaths 7 were due to Lobar Pneumonia (5 male and 2 female), and 2 were under one year of age.

MORTALITY FROM TUBERCULOSIS

Year	Total Deaths	Deaths From Tuberculosis	Percentage of Total Deaths	Rate Per 100M Population
1941.....	722	26	3.6	28.1
1940.....	739	18	2.4	20.0
1939.....	630	8	1.3	8.8
1938.....	709	26	3.7	29.2
1937.....	673	25	3.7	29.4

There were 26 deaths (16 male and 10 female) from Tuberculosis (all forms), showing an increase of 8.1 in the rate per 100M population. There were 50 new cases of Tuberculosis reported, a decrease of 3 from 1940.

MORTALITY FROM EXTERNAL CAUSES

Year	Total Deaths	Deaths from External Causes	Male	Female	Suicide	Homicide	Accidental	Percentage Of Deaths	Rate Per 100M Population
1941	722	53	37	16	10	1	42	6.9	57.3
1940	739	51	37	14	11	4	36	6.9	56.7
1939	630	42	29	13	11	1	30	6.7	46.7
1938	709	41	31	10	12	6	23	5.8	46.0
1937	673	52	39	13	14	1	37	7.7	61.0

Of the 42 accidental deaths in 1941 (9 male and 1 female) were due to automobile accidents.

ISOLATION HOSPITAL

Seven hundred and eighty-eight patients were admitted and 71 carried over from 1940 making a total of 859. There were 765 discharged; 24 died and 70 remained at the end of the year.

The diseases hospitalized included:

Scarlet Fever	212	Erysipelas	36
Diphtheria	10	Measles	72
Meningitis	40	Rubella	104
Tuberculosis	24	Mumps	71

The deaths included:

Tuberculosis	5	Diphtheria	2
Scarlet Fever	1	Pneumonia	3
Meningitis	5	Other conditions	5
Poliomyelitis	3		

SCHOOL MEDICAL SERVICES

Although schools were closed for three weeks during September of 1941, on account of epidemic infantile paralysis, the Public School and R.C. Separate School Board Medical Services accomplished an extensive amount of work in examination and immunization of school children. The extent of this work is indicated by the following summaries:

	Public School Board	R.C. Separate School Board
Complete physical examinations	4207	533
Number reported with defects	3778	117
Number reported without defects	9093	416
Parents present at examination	3210	260
Home visits by nurses	1247	86
Health talks to classes	490	
Examinations special dental survey	29442	

IMMUNIZATIONS

	Smallpox	Diphtheria	Scarlet Fever	Whooping Cough	Schick Test	Dick Test	Typhoid
1941							
Local Board of Health (Cases)	263	469	53	46	69	28	30
Public School Board (Cases)		1184					
R.C. Sep. School Board (Cases)	313	327					
	576	1980	53	46	69	28	30
Doses	576	5110	265	138	69	28	90
1940							
Local Board of Health	268	806	233	142	11	2	5
Public School Board	2025	1300					
R.C. Sep. School Board	224	212					
	2517	2318	233	142	11	2	5

COMMUNICABLE DISEASE REPORT, 1941-1937

	POPULATION, 1941—92,500									
	1941		1940		1939		1938		1937	
	C	D	C	D	C	D	C	D	C	D
Anterio Poliomyelitis.....	15	...	2	...	1	...	7	2	7	...
Cerebrospinal Meningitis.....	16	1	6	1	1	1	4	...	1	1
Diphtheria.....	4	...	16	5	3	...	18	4	3	1
Diphtheria Carriers.....	1	...	8	...	...	...	9	...	1	...
Encephalitis Lethargica.....	...	...	1	...	1	...	2	...	1	2
Scarlet Fever.....	198	...	151	...	311	...	484	2	684	4
Chickenpox.....	1039	...	1634	...	608	...	1083	...	1132	...
Measles.....	1631	...	2995	1	20	...	465	...	2562	3
Mumps.....	499	...	199	...	118	...	5725	...	350	...
Rubella.....	3266	...	20	...	11	...	28	...	330	...
Whooping Cough.....	166	...	483	1	1351	3	49	1	257	2
Actinomycosis.....	...	...	...	...	...	...	...	...	1	...
Dysentery.....	...	...	1	...	9	...	...	...	...	...
Erysipelas.....	31	...	36	1	27	...	28	...	49	4
Pneumonia (Lobar).....	3	7	6	19	4	10	17	28	6	14
Puerperal Septicaemia.....	...	1	...	...	...	...	...	...	1	1
Septic Sore Throat.....	23	1	54	...	3	...	7	...	4	...
Trachoma.....	...	...	...	...	...	...	...	...	1	...
Tuberculosis (Pulmonary).....	47	23	48	10	31	4	34	17	60	20
Tuberculosis (other forms).....	3	3	5	8	3	4	3	9	1	5
Typhoid Fever.....	3	1	2	...	1	...	5	1	...	...
Paratyphoid Fever.....	4	1	2	...	...	...	4	...	2	...
Undulant Fever.....	2	...	2	...	...	...	2	...	8	...
Venereal Diseases:										
Gonorrhoea.....	218	...	238	...	242	...	282	...	287	...
Syphilis.....	79	8	39	1	74	4	61	4	66	1
Totals.....	7248	46	5945	50	2818	27	8315	70	5814	58
Morbidity rate per 1,000 population.....	78.3	...	66.8	...	31.3	...	93.4	...	68.4	...
C—Cases.										
D—Deaths.										

During 1941 reportable disease was responsible for 46 or 6.37% of the 722 city deaths.

COMMUNICABLE DISEASE REPORT BY AGE AND SEX FOR 1941

	Total	Out- Side City	M	F	Under 1 Year	1	2	3	4	5	6- 14	15- 24	25- 44	45- 69	50- 69	70 Over
Anterior Polymyelitis.....	40	25	15	5	10						2	8	3			
Cerebrospinal Meningitis.....	41	25	16	9	7		1			1	2	1	4			
Deaths.....	10	6	4	2	2			1			1	2	1			
Diphtheria.....	3	2	1	1						1						
Diphtheria Carriers.....	228	30	198	107	91	3	8	13	6	16	53	67	28	3		
Scarlet Fever.....	1040	1	1039	502	537	32	34	67	78	72	636	49	16			
Chickenpox.....	1675	44	1631	789	842	64	84	110	142	151	685	203	70	2		
Measles.....	501	2	499	262	237	5	7	5	12	18	301	119	32			
Mumps.....	3283	17	3266	1369	1897	45	42	75	96	100	1811	746	233	10		
Rubella.....	168	2	166	83	83	15	26	19	17	18	55		1			
Whooping Cough.....	44	13	31	19	12	2					1	2	12	5	4	5
Erysipelas.....	6	3	3	3	2							2			1	2
Pneumonia (Lobar).....										1						
Deaths.....			7	5	2	1										
Puerperal Septicaemia.....																
Deaths.....	27	4	23	9	14	1					4	8	1	1		
Septic Sore Throat.....																
Deaths.....	72	25	47	26	21			1	1		2	9	26	8	2	1
Tuberculosis (Pulmonary).....			23	14	9							3	9	8		
Deaths.....	9	6	3	3	3							2	1			
Tuberculosis (other forms).....											1	2				
Deaths.....	1	1		2	1											
Tularemia.....	12	9	3	2	1							3				
Typhoid Fever.....			1	1								1				
Deaths.....	6	2	4	2	2							1	2		1	
Paratyphoid Fever.....			1	1												
Deaths.....	2		2	1	1							1		1		
Undulant Fever.....																
Veneral Disease:																
Gonorrhoea.....	218		218	108	110			1			2	122	86	7		
Syphilis.....	79		79	50	29	1		1			2	32	29	10	1	2
Deaths.....		8		7	1									6		1
Totals.....	7465	217	7248	3349	3899	155	185	294	325	364	378	3557	1377	552	47	7
Deaths.....		46		31	15	2	1				1	1	6	12	15	4

COMMUNICABLE DISEASES BY SEASON AND SEX

	Total	Out- side	City	M	F	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Anterior Polymyeltis.....	40	25	15	5	10							1	12	2			
Cerebrospinal Meningitis.....	41	25	16	9	7	3	3	1	1	1	1	2		1		1	2
Deaths.....																	2
Diphtheria.....	10	6	4	2	2	1					1						
Diphtheria Carriers.....	3	2	1	1													
Scarlet Fever.....	228	30	198	107	91	7	17	27	11	18	18	7	13	8	23	21	28
Chickenpox.....	1040	1	1039	502	537	122	40	60	82	104	217	129	36	19	36	99	95
Measles.....	1675	44	1631	789	842	669	513	252	81	47	33	13	11	3	4	2	3
Mumps.....	501	2	499	262	237	52	70	55	38	23	15	10	5	14	49	63	105
Rubella.....	3283	17	3266	1369	1897	193	561	1058	764	415	181	31	2	3	9	16	33
Whooping Cough.....	168	2	166	83	83	28	13	20	27	21	12	9	8	3	6	8	11
Erysipelas.....	44	13	31	19	12	5	4	2	1	3	5	4		2	3	1	1
Pneumonia (Lobar).....	6	3	3	3	2								1		2	2	
Deaths.....																	
Puerperal Septicaemia.....				7	5			1	3		1				1	1	
Deaths.....																	
Septic Sore Throat.....	27	4	23	9	14	5	3	2	4	1	1			1		4	2
Deaths.....																	
Tuberculosis (Pulmonary).....	72	25	47	26	21	8	3	5	3	8	3	1	1	4	4	3	4
Deaths.....																	
Tuberculosis (other forms).....	9	6	3	3	3	1	1	1	1	1	1			1			
Deaths.....																	
Tularemia.....	1	1															
Typhoid Fever.....	12	9	3	2	1							1	1		1		
Deaths.....																	
Paratyphoid Fever.....	6	2	4	2	2						1		3				
Deaths.....																	
Undulant Fever.....	2		2	1	1								1		1	1	
Veneral Disease:																	
Gonorrhoea.....	218		218	108	110	22	28	16	30	14	14	14	24	13	22	10	11
Syphilis.....	79		79	50	29	5	5	3	7	5	6	6	6	8	11	9	8
Deaths.....																	1
Totals.....	7465	217	2748	3349	3899	1121	1261	1502	1049	650	508	228	123	83	170	238	305
Deaths.....			46	31	15	1	6	6	2	3	4	1	6	4	5	3	5

"KINSMEN'S" TUBERCULOSIS NURSING SERVICE

Visits:

Total visits made by nurse.....	2,610
Visits to T.B. cases.....	783
Visits to suspect cases.....	228
Visits to contact cases.....	1,439
Co-operative visits.....	111
Not seen, moved, etc.....	195

Clinic Report—New Cases:

Active Cases.....	63
Suspects.....	81
Contact.....	319
Non-contact.....	521
Total X-Rays.....	1,218

Ex-sanatorium patients are watched carefully from the time they leave hospital, until they are again established in an active normal mode of living. This may take months or years, depending on the severity of the case. Those patients who are continuing treatment at home require time and tact. One of the most difficult phases of the cure is the readjustment to one's former life. There is a wide field of teaching and supervision, which is found most interesting. Then there are those who while waiting for a sanatorium bed are taught the preliminaries of "cure taking."

PUBLIC HEALTH NURSING**CHILD WELFARE**

Clinics are held twice weekly with physicians in attendance. A weighing clinic is held once a week under the direction of the Provincial Department of Health nurse in charge.

	1941	1940	1939	1938	1937
Number of clinics held.....	83	101	100	100	95
Babies in attendance.....	3,783	4,743	3,672	3,860	3,567
Pre-school attendance.....	972	1,135	1,010	1,103	1,167
Total.....	4,755	5,878	4,682	4,963	4,734
Average.....	49.78	58	47	49.6	49.8
New cases admitted (babies).....	899	866	749	860	817
New cases admitted (pre-school).....	202	156	152	148	189
Babies referred to family doctor.....	28	38	32	22	65
Pre-school referred to family doctor.....	20	33	32	49	75

Dr. F. J. Follinsbee, Dr. J. Calder and Dr. Mildred Newell were in attendance for examination of babies and pre-school children, and to advise parents regarding general care and diet.

Nurses from the Royal Alexandra, the University, the General and the Misericordia Hospitals received Clinic and Field training. Medical students were also in attendance at Clinics.

One hundred and forty-one out-of-town cases visited the Clinic during the year and 65 letters from rural districts for advice were received and replies sent.

Two thousand and nineteen home visits were made by the nursing staff.

WEIGHING CLINICS

	1941	1940	1939	1938	1937
Number of weighing clinics held.....	42	49	48	50	46
Total attendance	623	796	779	675	501
Average	14.83	16	16	13.5	10.9

Forty-two weighing clinics were held. No new cases are admitted at these clinics as no doctors are in attendance. Parents are given advice on matters of routine care by the nurse on duty.

Attendance According to Age at Both Child Welfare and Weighing Clinics

	1941	1940	1939	1938	1937
Babies under 1 year.....	2,945	3,815	4,327	3,426	3,047
Pre-school	1,810	2,063	1,134	2,212	2,188
Totals	4,755	5,878	5,461	5,638	5,235

PRE-NATAL VISITS

	1941	1940	1939	1938	1937
City Nurse	346	396	429	460	404
V.O.N.	314	242	259	257	250

One hundred and forty-four pre-natal cases were added to our roll. The slight decrease is due no doubt to many families becoming self-supporting and so not being eligible for Outdoor Clinic service.

The pre-natal classes organized in 1940 are now being conducted solely by the V.O.N. From these classes much help is derived.

Our best thanks are again gratefully given to the Junior Hospital League for providing layettes and other useful services.

Mrs. Marshall, the Red Cross representative has come to our aid many times in helping soldiers' families to maintain themselves until delayed separation allowances were received. We thank her for her willing co-operation.

POST-NATAL VISITS

	1941	1940	1939	1938	1937
City Nurse	173	193	212	270	239
V.O.N.	586	588	836	603	352

Reporting to family doctor within six weeks after delivery for post natal examination is stressed at these visits.

DISTRICT VISITS

	1941	1940	1939	1938	1937
Visits to Homes.....	777	882	1,191	1,170	2,775
Special Investigations	64	92	135	154	113

Eight hundred and sixty babies were seen by your senior nurse during district visits.

INFANT MORTALITY, 1941

	BY SEASON												BY AGE										
	TOTAL	January	February	March	April	May	June	July	August	September	October	November	December	1st Day	1st Week	2nd Week	3rd Week	4th Week	Total Under 1 Month	1-3 Months	4-6 Months	7-9 Months	10-12 Months
64—Status Thymicolymphaticus.....	1	1									1									1			
86—Convulsions.....	1																						
94a—Infarction, cardiac coronary occlusion.....	1	1								1					1				1				
107—Broncho pneumonia.....	3	1						1		1									1	2			
108—Lobar pneumonia.....	2		1	1													1		1				1
119a—Enteritis or Diarrhoea.....	7	1					1	1	1				2					1	1	2	3	1	
157a—Congenital Hydrocephalus.....	3	1	1									1		1				1	2	1			
157b—Spina bifida.....	2		1									1						1	1	1			
157c—Congenital malformation of heart.....	4				1					1	1			2	1				3	1			
157g—Congenital malformation, digestive system.....	3			1		1				1					2				2		1		
158—Congenital debility.....	2												2	2	2				2				
159—Premature birth.....	19	1			2	2	2	4	2	2	2	1	3	10	4	1			15	4			
160a—Intracranial haemorrhage.....	5						1												5				
160b—Injury at birth.....	1											1	1	2	2		1						
160c—Rupture of Tentorium cerebelli, cross birth, breech.....	1											1			1				1				
161a—Atelectasis.....	1								1										1				
161c—Scleroma.....	1																		1				
161d—Sepsis Neonatorum.....	1	1																	1				
TOTALS.....	58	5	3	2	3	4	5	2	8	6	5	7	8	17	14	3	2	3	39	12	5	1	1

HEALTH INSPECTIONS

INSPECTIONS:

	1941	1940
Dwellings	6,776	6,568
Hotels, lodging houses, apartment blocks	459	538
Schools, blocks, public buildings	213	100
Stores, business establishments	559	793
Food handling establishments	3,101	3,225
Garbage cans, etc.	1,921	1,224
Streets, lanes, yards, dumps, etc.	2,876	2,019
Miscellaneous	2,416	1,989
	18,321	16,456
Re-inspections	4,101	3,107
Visits assisting Quarantine Officer	1,458	1,451

NOTICES:

Written	1,539	1,888
Verbal	6,788	5,947
Garbage	1,325	673
	9,652	8,508

COMPLAINTS:

Received from the public	851	768
Justified	711	633
Received from other Departments	26	20
Referred to other Departments	122	119

The complaints were made up as follows:

Garbage, streets, lanes, etc.	233	202
Vermin	167	210
Housing, plumbing and drainage	185	157
Food and drink	69	62
Miscellaneous	197	137
	851	768

LICENSES:

License applications investigated	1,610	1,529
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PLUMBING:

Sewer and water notices issued	31	3
Sewer and water installed, buildings removed, etc.	60	19
Extension of time granted	19	14
Plumbing permits issued	617	507
Plumbing permits issued for old buildings	52	51
Alterations to existing plumbing	65	230
Privies eliminated through installation of plumbing	52	

DISINFESTING STATION:

Baths	10,263	15,255
Verminous	37	71
Scabies	371	525
Men washed clothing	7,705	12,253
Units washed	23,305	36,868
Articles sterilized for the Army	14,700	4,004

SCAVENGING CLEAN UP WORK:

Refuse removed during Clean-up Week (cu. yds.)	9,724	9,904
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ANIMALS, BARNs, STYEs, INSPECTIONS:

Cows	546	556
Hogs	189	189
Mink, fox ranches, etc.	62	57

FOOD:

Samples submitted to Provincial Laboratory	20	37
Foodstuffs condemned (lbs.)	4,674	2,538

WATER:

Water samples taken	89	49
Negative	71	32
*Positive	16	17
*Suspicious	2	1
Wells chlorinated	18	
Ice samples		7

*Wells condemned or further samples taken after chlorination.

HOUSING:

During the year, 6,776 dwellings and 459 hotels, lodging houses, apartment blocks, etc., were inspected for overcrowding, vermin or other sanitary conditions and notices were issued where necessary.

POISON GAS FUMIGATION:

During the year 261 dwellings and blocks were fumigated with hydrocyanic acid gas for the elimination of vermin. These fumigations took place under our supervision and all premises were inspected both before and after fumigation. The inhabitants were warned and all foodstuffs removed.

RELIEF:

Applications for relief were all referred to the Provincial and City Relief Departments.

SOCIAL HYGIENE:

Four hundred and fifty-three visits were made in connection with this branch of the work, and 160 cases were investigated.

ENFORCEMENT OF REGULATIONS:

Prosecutions	3	1
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Two convictions were secured, one defendant being fined \$25 and costs and the other \$5 and costs. The third case was withdrawn.

FOOD INSPECTION

There has been no change during 1941 in the number of abattoirs under City Inspection. There are two on full time operation and one still under construction.

The percentage of hogs affected with Tuberculosis after being stationary for two years shows a satisfactory decline for 1941.

MEATS INSPECTED AND CONDEMNED

Beef:

	1941	1940	1939
No. of carcasses inspected.....	2,379	2,440	2,640
Carcasses condemned	35	44	28
Portions condemned	231	277	312
Weight (lbs.) of carcasses and portions condemned.....	19,655	22,000	17,265

Veal:

No. of carcasses inspected.....	1,938	2,818	3,271
Carcasses condemned	2	4	17
Portions condemned	35	71	73
Weight (lbs.) of carcasses and portions condemned	490	1,775	2,815

Mutton:

No. of carcasses inspected.....	677	498	874
Carcasses condemned	4	1	6
Portions condemned	20	22	31
Weight (lbs.) of carcasses and portions condemned.....	217	90	425

Pork:

No. of carcasses inspected.....	4,839	4,055	3,050
Carcasses condemned	27	19	25
Portions condemned	866	684	587
Weight (lbs.) of carcasses and portions condemned.....	16,520	11,970	12,875

Totals:

No. of carcasses inspected.....	9,833	9,811	8,835
Carcasses condemned	68	68	76
Portions condemned	1,152	1,054	1,003
Weight (lbs.) of carcasses and portions condemned.....	36,882	35,835	33,380

CARCASSES FOUND TO BE INFECTED WITH T.B.

Beef:

Infected	4	18	20
Percent	.168	.737	.757

Pork:

Infected	507	453	359
Percent	10.47	11.17	11.77

CHIEF CAUSES OF CONDEMNATION, 1941

Beef:

	Carcases	Portions	Weight
Abscess	1	95	1,745 lbs.
Abscess Multiple	4		1,750
Actinomycosis		89	1,650
Adhesions		28	390
Haemolytic Streptococci	3	1	1,340
Parasites		13	100
Pneumonia	17		7,175
Tuberculosis	3	1	1,340
Miscellaneous (improper bleeding, overheating, Metritis, etc.)	7	4	4,140
	35	231	19,655

Veal:

Abscess		17	180
Actinomycosis		6	85
Immature	2		100
Parasites		12	125
	2	35	490

Mutton:

Abscess multiple	2		95
Parasites		20	32
Pneumonia	2		90
	4	20	217

Pork:

Abscess multiple	6		1,035
Adhesions		58	880
Bruised	1	29	595
Contamination		55	830
Parasites		135	270
Peritonitis	3		550
Tuberculosis	15	587	11,740
Miscellaneous	2	2	620
	27	866	16,520

Totals:

Beef	35	231	19,655
Veal	2	35	490
Mutton	4	20	217
Pork	27	866	16,520

DISEASED ANIMALS

	1941	1940	1939
Beef	217	262	325
Veal	41	75	79
Mutton	24	23	30
Pork	663	559	547

FOODSTUFFS CONDEMNED

	—Pounds—		
	1941	1940	1939
Meat	36,882	35,835	33,380
Poultry	160	163	184
Fish	1,848		115
Sundries	6	3	702

Foodstuffs Condemned by Health Inspectors:

Canned goods	45	160	257
Meat	115	38	46
Fruit and vegetables	3,540	833	2,767
Cereal		472	566
Fish	500		
Ice Cream	160		
Sundries	125	60	38
Damaged by fire	182	820	
Total (lbs.)	43,563	38,055	39,661
Inspection visits	5,112	4,664	5,415

Complaints:

Received from the public	36	35	25
Justified	33	25	13

DAIRY INSPECTION

The average percentage of compliance with all items of sanitation listed, in the requirements of the milk regulations of the Provincial Board of Health, the Local Board of Health and the requirements of the milk ordinance of the United States Public Health Service has reached over 90 per cent. Although there is still much improvement to look forward to, the present status in milk sanitation is gratifying.

Certificates issued Producer-distributors, milk	34
Certificates issued Producer-shippers, milk	192
Certificates issued Cream Producer-shippers	78
Certificates issued Pasteurization plants	5
Inspections of Dairies	1,090
Inspections of Pasteurization plants	131
New Dairy Barns erected	8
Dairy Barns remodelled	1
New Milk Houses erected	7
New Pasteurization plant erected	1
Certificates suspended temporarily	90
Certificates suspended indefinitely	3
Certificates issued to retail distributors	407
Permits issued to cowkeepers in the city	546
Reduction tests, milk	10,632
Reduction tests, cream	1,589
Sediment tests	1,265
Butterfat tests	1,479
Phosphatase tests	333
Bacterial plate counts, milk	1,109
Bacterial plate counts, ice cream	115
Chlorine tests at farms	79
Cattle tested for Bang's Disease	141
Well water samples taken at farms	3
Milk cans condemned	40
Written notices	558
Educational circulars to cream producers	693
Prosecutions	0

During the summer an educational circular stressing the importance of the care in the production of cream during the summer months was written and mailed to all producers of inspected cream.

On account of the war, the intensive dairy-farm building programme that has been in progress for several years is now almost at a standstill. Early in the year a type of construction for walls known as "rammed earth" was introduced to the dairymen. The method is centuries old but has been almost forgotten with the introduction of modern machinery and materials. It is, nevertheless, a durable, hygienic and inexpensive form of construction.

LABORATORY REPORT

During the year there were 1,286 retail samples of milk taken for examination. Of these 763 were submitted to bacterial examination. Those with official plate count of 15 thousand or under we have classified as special. This class makes up over 50 per cent of our total samples counted during the year. The tabulation gives the results classified according to count. The 12 samples in which the examination was spoiled by spreaders are not included in calculating the percent in each group.

	Special	15,000/ 40,000	40,000/ 100,000	100,000/ 400,000	Over	Spr.	Total
January	39	15	9	5	1	...	69
February	35	14	12	7	1	1	70
March	41	10	4	...	...	1	56
April	39	14	3	3	5	...	64
May	35	10	10	9	...	1	65
June	36	12	7	3	1	1	60
July	29	16	12	5	4	1	67
August	22	19	12	8	3	3	67
September	26	24	9	5	1	...	65
October	26	22	9	3	...	1	61
November	15	19	11	11	3	1	60
December	39	11	6	...	1	2	59
	382	186	104	59	20	12	763
Percentage	*50.9	24.8	13.8	7.8	2.7	...	100

*(Special class, under 15,000 bacteria per cubic centimetre).

As our retail milk handled by some 36 raw milk vendors and 6 pasteurizing plants is sold in various forms it is interesting to reclassify these results grouping similar milks together as follows:

Ordinary

	Spec.	%	15,000/ 40,000	%	40,000/ 100,000	%	100,000/ 400,000	%	Over	%	Spr.	Total
Raw Milk	200	41.1	132	27.2	87	17.9	53	10.9	14	2.9	6	492
Pasteurized	89	66.4	33	24.6	9	6.7	2	1.5	1	.8	3	137
Jersey	51	70.8	13	18.1	4	5.5	2	2.8	2	2.8	1	73
Homogenized	42	72.1	8	13.2	4	6.7	2	3.0	3	5.0	2	61
	382		186		104		59		20		12	763

It might be noted that if any milk sample gives a count of 50 thousand or over a repeat sample is examined as soon as possible. Were it not for this over-emphasis on the poorer producers our proportion of low test samples would be still higher.

The methylene blue reduction test was run on all these 1,286 samples and 17 were found not satisfactory, reducing the blue in less than 5½ hours. Also all these samples were tested for specific gravity and butter fat and the solids not fat were calculated therefrom. In addition sediment tests were run on them and all were tasted to detect off flavours, etc. The phosphatase test which is one of our newer tests has been used at least twice a month on all pasteurized samples to detect any defect in pasteurization and the tests are followed by checkup at the plants of the control thermometers, use being made in this connection of our government standardized referee thermometer. The charts from the recording pasteurizers are also submitted to this office for review and criticism.

Methylene blue tests were also run weekly on samples of milk delivered by 193 producers to the pasteurizing plants and retests run on any of these which failed to pass the regular test. There were 9,336 such tests made during the year, and of these 268 or 2.87 per cent failed to make class one. These along with 1296 distributor samples gave a total of 10,632 for the year, of which 285 failed to make the first grade.

Special samples of milk and cream are regularly examined for the C.N.R. purchasing department in connection with their dining car and hotel service, as well as various odd samples for individuals in town seeking special information.

Another time consuming activity is the checking of the ice creams sold in the city. Many of these are frozen in the so-called counter freezers throughout the city and the operators often lack the training in dairy technique, such as our plant operators are supposed to have. The fact that they buy their "mix" already compounded makes it difficult to allocate the blame in case of a slip up. Our provincial requirement of not more than fifty thousand bacteria is rather more stringent than is enforced in most other places and more trouble is found in meeting this standard than in any of our other lines of work.

As a check up on equipment cans and bottles have been taken from time to time as occasion demands from the washing machines in the various dairy plants. Results are generally quite good.

A summary of these various activities follows:

Tests:

	Number	Average
Butterfat	1267	4.09%
Solids not fat	1267	8.87%
Sediment	1265	9 (out of a possible 10)
Special Creams	44	25%
Special Milks	88	3.9%
Chocolate Milks	80	2.2%
Phosphatase tests	333	

Bacteria counts were also done on the following:

Special Creams	44—13 in special class
Special Milks	67—36 in special class
Chocolate Milks	79—41 in special class
Ice Creams	115—12 in special class
Rinse Bottles	41

In addition to the milk work several other matters have been dealt with. General supervision has been given to the swimming pools both city owned and private. Test solutions and outfits were made up and supplied as required to regulate the filtering and sterilization. Bacteria samples are taken at regular intervals and tests for chlorine alkalinity, etc., made, as a check on the results for the operators. A total of 259 samples were examined—142 from the city pools and 117 from private ones. For some reason or other our counts were not on the whole as favourable as in previous years. One factor probably is that the change in our water necessitates corresponding changes in our pool operations. I can certainly give every assurance that more pains were taken by the operators than ever before and that I personally spent considerable time working with them trying to work out necessary improvements.

The tap water was examined for us by the Provincial Laboratory almost every working day throughout the year. Two hundred and ninety-two samples were thus examined. The highest count obtained was 40 organisms per c.c and only 19 were over 10.

Other activities included examination on several occasions of brine from the artificial ice plant at the arena to be sure there was no unnecessary corrosion of plant or piping, examination of sludge from air conditioner at military air school, examination of water for the waterworks department re possible theft of water, examination of several water samples and pipe samples re corrosion, testing of 3 samples of alum for use in swimming pool filters, testing for butter fat in cottage cheese for use in low fat diets. Two trips were made to the airport at Cooking Lake with regard to the water from the new well there. Four samples of water were examined. There was considerable dissolved iron in the water when the well was first put into use but it seems to have decreased considerable since.

The sewage plants are under supervision and a trip was made down the river some miles to investigate complaint of nuisance from bedding of sludge from our plants. Nothing objectionable was found. Three samples of water from deep wells were examined for fluorides. All showed from 3 to 6 parts per million, enough possibly to cause trouble in tooth formation of small children.



