#### Report / Board of Health, City of Edmonton, Alberta.

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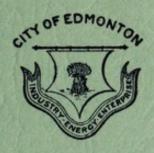


Library.

## REPORT

of the

## LOCAL BOARD OF HEALTH



CITY OF EDMONTON
ALBERTA

1939



## BOARD OF HEALTH, 1939

Dr. R. M. Shaw, Chairman

Dr. E. A. Roe Ald. F C. Casselman Dr. W. Morrish (Public School Board)
Ald. S. Parsons Mr. C. E. Gariepy (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

#### 1940

Dr. R. M. Shaw, Chairman

Dr. E. A. Roe Ald. F. C. Casselman Ald. S. Parsons Mr. A. E. Ottewell (Public School Board) Mr. H. Currie (Sep. School Board)

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Mayor J. W. Fry

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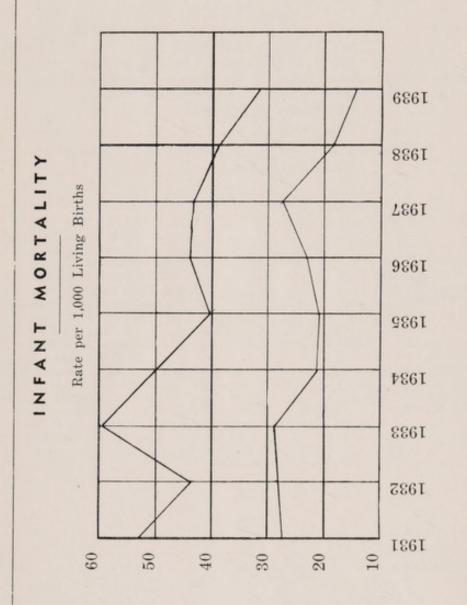
#### STAFF:

Medical Officer of Health Secretary Chief Health Inspector Health Inspector	Dr. C. M. Little, M.D. D.D.II
Secretary	Dr. G. M. Little, M.D. D.P.H.
Chi e Tr 111 T	S. Main, A.R. San. I.
Unier Health Inspector	W. R. Graham AR San I
Health Inspector	J H Blackburn A P Son I
nealth Inspector	A P Mothuon A D Com I
Health Inspector	T. D. William, A.R. San. I.
Ownersting Occi	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.
Chief Food Inspector Meat Inspector Dairy Supervisor	D Morrison VS
Dairy Supervisor	C Filinger M D Con I
Chemist and Mills Inqueston	
Chemist and Mik Inspector	H. C. Graham, B.A.
Chemist and Milk Inspector  Junior Inspector  Statistician	G. L. Alexander
Statistician	Miss B B Murray
Public Health Nurse (Sr.) Public Health Nurse	Miss M Griffith P N
Public Health Nurse	Miss C C Chit
Clerk Stenographer	miss S. C. Christensen, R.N.
Cierk	Miss C D D
Stenographer .	Mice K D Dorbychive
	Miss K. D. Derbyshire

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Light line—"Diseases largely preventable."

WA28

## 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 1939, and of certain health agencies which have worked in co-operation with us during the year.

The birth rate for the city shows a slight increase to 18.6 per thousand population as compared to 18 per thousand for 1938. A total of 1,678 babies were born to citizens during 1939.

The general death rate shows a reduction from the previous year. Deaths from pneumonia were reduced by more than half, apparently due to the increasing use of new methods of treatment. Tuberculosis deaths were reduced by more than two-thirds of those reported for 1938. This I believe to be an indication of the increased activity of city and provincial workers in this field. The increased number of new cases of the disease reported I consider not as a bad omen, but as proof that greater supervision is bringing to light more cases at an early stage when treatment is most effective. The Kinsmen's Club maintains a valuable worker in this field. A further marked reduction brought the infant mortality rate to the lowest point in the history of the city. This infant death rate compares most favourably with reports received from other centres in Canada and abroad. The result indicates that an increasing number of our mothers and babies are receiving adequate pre-natal and post-natal care as well as proper care at the time of their confinement. It is an outstanding credit to the physicians and other health workers of our city.

Deaths from heart disease, on the other hand, have again shown an increase. Two-thirds of these deaths were among males. The death rate from this cause has shown a marked and fairly steady increase since the year 1929, without any significant change in the age-grouping of our population during that time. It appears that in this we are reaping a harvest from in the increased physical and mental hazards of depression years.

Of thirteen citizens dying following automobile accidents, ten occurred within the city. This is the highest death rate from this cause since 1931.

The incidence of communicable disease was greatly reduced from the previous year, an epidemic of whooping cough accounting for nearly half the number reported. Only three cases of diphtheria occurred, none of whom had accepted the protection against this disease. There were no deaths from this cause.

Immunizations against smallpox and diphtheria were increased in number during the year.

The Child Welfare clinic continued a valuable work, and the attendance of babies and pre-school children showed a satisfying increase.

I regret that it is not possible to report improvement in the general housing situation. It is not possible to over-emphasize the deteriorating effect of overcrowding on the mental and physical well-being of many citizens.

Regarding general sanitation of the city, it has been gratifying to note an increased co-operation from citizens. This is reflected by the increasing numbers of clean and well-kept properties.

Supervision of foodstuffs during the year revealed a considerable amount of canned meats, fruits and vegetables in which the cans were bulging with gas. The Provincial Laboratory reported contaminating organisms in many of these, and much of this food was unfit for human use. Mild poisoning was reported in the members of one family from canned meat. Such material found on the market is condemned, and as all these products were processed and distributed under the approval of the Dominion food inspectors, we have presented this information to them with a request that steps be taken to remedy the situation at the factories.

Despite a lesser number of carcasses being examined than in the previous year's fresh meat inspection, there was an increase of 10,539 lbs. in carcasses and portions condemned. The most common single cause was tuberculosis in hogs, accounting for the rejection of 6,825 lbs. of pork.

An exceptionally high standard has been maintained in our city milk supply. We are pleased to acknowledge the effective assistance of dairymen's associations and the co-operation of individual dairymen in maintaining this standard.

During the last three months of the year the Medical Officer of Health was given leave-of-absence while on military service. During this period all routine duties of the office were efficiently carried on by Dr. W. Morrish, acting Medical Officer of Health.

We have made our facilities available for teaching purposes to the University, nurses' training schools, and other educational bodies in the city; we have endeavoured to co-operate fully with these groups.

The Provincial Laboratory has given a large amount of technical service in connection with supervision of water, milk and other food supplies; we are grateful for their advice and assistance on many occasions. The generous co-operation of City Relief Departments has been of great assistance in our supervision of the health of citizens on relief rolls. Many agencies interested in the public health have worked closely with us on such work as is included in their programmes.

The war brings to our citizens an increased physical, mental and financial burden. In order that this burden may be effectively carried through an indefinite period of struggle, and through the perhaps trying period of reconstruction which must follow, it is of major importance to multiply to the limit of our economy our efforts to maintain the health of our people, and to see that no essential health factor is neglected.

Respectfully yours,

G. M. LITTLE, Medical Officer of Health.

#### EXPENDITURE

	1939	1938
1. Salaries \$	32,796.99	\$ 31,106.77
1a. Retirement Allowance		1,000.00
2. Supplies	1,353.80	1,196.08
3. Transportation	4,931.86	5,061.74
4/6 Sundries (phones and uniforms)	600.96	950.54
7. Pensions	923.50	
Bath House now included under a/c's No. 1 and 2.		
\$	40,607.11	\$ 39,884.49
REVENUE		
Inspection Fees	1,824.31	729.75
\$	38,782.80	\$ 39,154.74

#### DIVISION OF EXPENDITURE

Administration	Food	Communicable Disease	Laboratory Service	Dairy Inspection	Sanitation	Public Health Nursing	Vital	Disinfesting Station	Totals
Salaries\$7,443	50 \$4,194.40	\$2,648.38	\$3,296.94	\$2,251.10	\$8,057.43	\$3,292.81	\$1,375.92	\$ 236.47	\$ 32,796.99
Supplies 417	80 34.3	5 174.37	72.25	66.78	178.40	35.62	27.32	346.87	1,353.80
Transportation 510	19 620.0	509.22	445.47	925.00	1,419.97	502.01		***********	4,931.86
Phones 105	00 15.0	0 61.20	15.00	18.00	77.40	18.00			309.60
Sundries 146	51 39.9	5 3.52	22.73		29.45	28.62			270.78
Uniforms	20.5	8							20.58
Pensions 923	50			***************************************					923.50
	50 \$4,924.32		\$3,852.39	\$3,260.88	\$9,762.65	\$3,877.06	\$1,403.28	\$ 583.34	\$ 40,607.11

#### SUMMARY OF STATISTICS

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

	1939	1938	1937	1936	1935
Population	90,419	88,887	87,034	85,696	81,621
Persons per acre of land	3.9	3.42	3.34	3.32	3.16
School enrolment	18,346	18,245	17,885	18,396	18,241
Natural increase of population	1,048	893	892	738	776
Cost per capita	.43	.44	.43	.42	.39
Births, excluding stillbirths	1,678	1,602	- 1,565	1,432	1,394
Rate per 1,000 population	18.6	18.	18.4	16.84	17.42
Stillbirths	29	30	42	50	23
Rate per 1,000 births	16.9	18.7	26.13	33.75	16.23
Deaths, excluding stillbirths	630	703	673	694	618
Rate per 1,000 population	7.	7.97	7.9	8.16	7.7
Deaths under 1 year of age	53	63	68	63	56
Infant mortality rate per 1,000 living					
births		39.3	43.45	44.	40.17
Deaths from childbirth	7	4	3	6	7
Maternal mortality per 1,000 births.	4.17	2.5	1.9	4.18	5.02
Marriages	1,860	1.653	1,492	1,414	1,312
Rate per 1,000 population	20.7	18.57	17.55	16.63	16.40
Non-resident births in city	1,240	1,203	1,132	948	936
Non-resident deaths in city	425	472	480	443	402
Non-resident deaths under 1 year	52	40	52	33	36

## VITAL STATISTICS

#### Births

There were 1,678 City births in 1939, 854 males and 824 females, an increase of 76 over 1938 when there were 1,602 births, 789 males and 813 females.

Born in institutions 1,645 or 98%; elsewhere 33 (of these 17 attended by V.O.N.)

Attended by physician 1,672, unattended 6, double births 22.

Maternal parentage:

		19	39	1938	
Canada 1	,184	or	70.6%	1,073 or 67	%
British Isles	226	or	13.5%	211 or 13.5	2%
Europe	161	or	9.6%	197 or 12.	3%
U.S.A.				113 or 7.	0%
Other countries	2	or		8 or	5%

#### Stillbirths

Male, 14; Female, 15; total, 29.

Born in institutions, 26; elsewhere, 3; unattended, nil.

Causes of foetal deaths:

Dystocia, 9. Malformation, 7. Prematurity, 5.

Other diseases, or conditions of mother, 8.

#### Deaths

Male, 376; females, 254; total, 630; a decrease of 79 from 1938 when there were—male, 414; female, 295; total, 709.

	193	39	1938
Canada	306 or	48.6%	303 or 42.7%
British Isles	171 or	27.1%	213 or 30.0%
Europe	84 or	13.3%	123 or 17.4%
U.S.A.	46 or	7.3%	55 or 7.8%
Other countries	23		15 or 2.1%

#### Infant Mortality

Deaths under 1 year of age-

Male, 34; female, 19: total, 53.

Infant mortality rate per 1,000 living births-31.6%.

In 1938 there were-

Male, 34; female, 29; total 63.

Infant mortality rate per 1,000 living births-39.3%.

Classifying the causes of death under one year of age from standpoint of preventability:

- Class 1—Causes to a great extent non-controllable—premature birth (under 7 months), congenital debility, congenital malformation.
- Class 2—Capable of reduction by hygiene, sanitation, isolation and treatment Tuberculosis, Syphilis, acute respiratory diseases, acute infectious diseases.
- Class 3—Capable of great reduction through care, proper feeding, pre-natal care—marasmas, acute gastro enteritis, injuries at birth, premature (over seven months).
- Of the 53 deaths under one year of age for 1939:

Class 1-17 or 32.0%.

Class 2-13 or 24.6%.

Class 3-23 or 43.4%.

<sup>53 100. %.</sup> 

ABRIDGED INTERNATIONAL LIST OF CAUSES OF DEATH FOR 1939

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119-120	Diarrhoea	11		1	1	1	64	111	1	11	11	01		00	10	00	1.3	8.8	56	00	29.2
140-150	Puerperal State	-	1	-			1		61	11	11	11			4	t-	1.1	7.8	t-	1.	7.9
	Totals	26	17			: 1-	-		20	2 2		1 0	. 0	000	1-	-	1.1	7.8	7	9.	4.5
	F Other Causes M	13	118	15 1		3 9	01 10	000	22	122	14	20	on so	108	165	433	68.7	481.	502	70.8	564
	Total				0 0	1 00	c		00 6	4 00		-	10 0	0 20 0	68	197	31.3	219.	202	29.5	131.5
	S. S.	21	15		101	1 1	8 16	15	19	16	17	27	14	376	254	630					
	Total Per Month	00	01	58 6	2 4	80	8 40	60	44	49	7.4	200									
"X—0u	"X"-Outside deaths of Edmonton Citizens.																				

#### MORTALITY FROM HEART DISEASE 1939-1935

Year	Total Deaths	Deaths from Heart Diseases	Percent of Total Deaths	Rate Per 100M Population
1939	630	149	23.7	165.5
		128	18.	143.8
1937	673	115	17.8	135.3
1936	694	119	17.2	140.
1935	618	100	16.2	125.

Deaths from heart disease for 1939 show an increase of 21 over 1938. Of the 149, 1939 deaths 100 were male and 49 female.

#### MORTALITY FROM CANCER 1939-1935

Year	Total Death		Percent of Total Deaths	Rate Per 100M Population
1939		95	13.1	105.5
1938		99	13.9	111.2
1937	673	82	12.2	96.5
1936 .		93	13.4	109.4
1935	618	87	14.	108.7

Of the 95 deaths for 1939 52 were male and 43 female.

#### MORTALITY FROM PNEUMONIA 1939-1935

Year	Tota Deatl			
1939		0 26	4.1	28.9
1938		9 58	8.2	65.2
1937	67	3 35	5.2	41.2
1936	69	4 41	6.	48.2
1935	61	8 34	5.5	42.5

Deaths from pneumonia show a decrease of 22 from 1938. Of the 1939 deaths 17 were male and 9 female.

#### MORTALITY FROM TUBERCULOSIS 1939-1935

Year	Total Deaths	Deaths from Tuberculosis	Percent of Total Deaths	Rate Per 100M Population
1939	630	8	1.3	8.8
1938	709	26	3.7	29.2
1937	673	25	3.7	29.4
1936	694	22	2.1	23.9
1935	618	27	4.4	33.7

Eight deaths from Tuberculosis (all forms) in 1939 is a decrease of 18 from 1938. Three were male and five female. There were 34 new cases of tuberculosis reported during the year, making an increase of 26 cases.

#### MORTALITY FROM EXTERNAL CAUSES 1939-1935

Year	Total Deaths	Deaths External Causes	Male	Female	Suicide	Homicide	Accidental	Percentage of Total Deaths	Rate per 100M Population
1939	630	42	29	13	11	1	30	6.7	46.7
1938	709	41	31	10	12	6	23	5.8	46.
1937	673	52	39	13	14	1	37	7.7	61.
1936	694	51	40	11	8		43	7.3	60.
1935	618	39	27	12	10	1	28	3.3	50.

In the 30 accidental deaths 13 were auto accidents.

#### MATERNAL MORTALITY 1939-1935

Year	No. of Birth	No. Maternal Deaths	Rate Per 1000 Living Births
1939	1,678	7	4.17
1938	1,602	4	2.5
1937	1,565	3	1.9
1936	1,432	6	4.18
1935	1,394	7	5.02

Of the 7 maternal deaths in 1939, 4 were abortion, 1 no birth, 1 stillbirth and 1 living birth.

#### COMMUNICABLE DISEASE DEATHS

There were 2,818 cases of communicable disease reported during the year 1939, of which 1,473 were males and 1,345 were females; compared with 8,315 cases in 1938, of which 4,214 were males and 4,101 were females.

The morbidity rate per thousand of population was 31.3 compared with 93.3 for 1938.

201 2000.	1:	939	1	938
	Cases	Deaths	Cases	Deaths
Poliomyelitis	1	0	7	2
Diphtheria	3	0	18	4
Encephalitis Lethargica		1		2
Scarlet Fever	311	0	484	2
Whooping Cough	1,351	3	49	1
Pneumonia (lobar)	4	10	17	28
Tuberculosis	34	8	37	26
Syphilis	74	4	61	4
Meningitis	1	1	4	
Measles	20	1	465	10.
Erysipelas	27	0	28	

Altogether reportable disease was responsible for 6.35% of the total deaths, 630.

#### ISOLATION HOSPITAL

Five hundred and eighty-three patients were admitted and 69 carried over from 1938, making a total of 652. There were 534 discharged; 26 died, and 92 remained at the end of the year.

Scarlet Fever	.327	Typhoid	3
Diphtheria	. 11	Poliomyelitis	6
Erysipelas		Polio-suspects	10
Tuberculosis		Whooping Cough	21
and many complications of infection	ous cone		
The deaths included:			
Tuberculosis	7	Scarlet Fever	2
Influenzal meningitis	3	Poliomyelitis	1
Meningococcic meningitis	. 1	Diphtheria	1
Strepococcic meningitis	1	Whooping Cough	

IMMU	NIZAT	TION					
	Smallpox	Diphtheria	Scarlet Fever	Whooping	Schick Test	Dick Test	Typhoid
1939-Local Board of Health	619	612	347	683	218	9	12
Public School Board	4,895	1,374					
R.C. Sep. School Board	178	168		10000	******	4.	
	5,692	2,154	347	683	218	9	12
1938—Local Board of Health	180	1,014	622	14	86	3	7
Public School Board		1,733			*****		
R.C. Sep. School Board	159	172					
	339	2,919	622	14	86	3	7

## COMMUNICABLE DISEASE 1939-1935

			PO	PULA	TION	193	9—90,	000		
	193	39	19	38	19		19		19	
	С	D	С	D	С	D	C		C	
Anterio Poliomyelitis	1		7	2	7		3	1	34	2
Cerebrospinal Meningitis	1	1	4		1	1	1		1	
Diphtheria	3		18	4	3	1	6	1	7	1
Diphtheria Carriers			9		1				19	
Encephalitis Lethargica		1		2	1	2		1	********	
Scarlet Fever	311		484	2	684	4	362	4	148	2
Smallpox		******					1			
Chickenpox	608	2021	1083		1132		1268	1	994	
Measles	20		465		2562	3	1176	1	3105	1
Mumps	118		5725		350	*****	123		236	
Rubella	11		28	*****	330		5384	1	10	
Whooping Cough1	351	3	49	1	257	2	1243	10	190	******
Actinomycosis					1					******
Dysentery	9	******			******			******		
Erysipelas	27		28		49	4	58	5	42	4
Ophthalmia Neonatorum							1			
Pneumonia Lobar	4	10	17	28	6	14		15	6	19
Puerperal Septicaemia					1	1	********			
Septic Sore Throat	3		7		4		5		4	
Trachoma					1					******
Tuberculosis (Pulmonary)	31	4	34	17	60	20	63	15	72	21
Tuberculosis (other forms)	3	4	3	9	1	5	5	7	7	6
Typhoid Fever			5	1			21	4	3	2
Typhoid Fever Para			4		2		*******		1	1
Undulant Fever			2		8		1			
Venereal Disease—										
Chancroid						******	********	203311	15	
Gonorrhoea							252		250	
Syphilis	74	4	61	4				11	102	8
	-	-		-						-
Totals	818	27	8315	70	5814	58	10082	78	5246	68
=			-			-		-	**********	-
			1				232			
Morbidity rate per 1,000 population 3	1.3		93.4		68.4		118.6		65.6	
C—Cases.										

C—Cases. D—Deaths.

COMMUNICABLE DISEASE REPORT BY AGE AND SEX FOR 1939

	Total	M	E4	Under	1	64	00	4	10	11.6	15	25	50	69	Over Over
Anterio Poliomyelitis Cerebrospinal Meningitis Diphtheria Froeshellis I othereda			01						1		01				
		149	162	10	2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	20	111	20	36	162	15 22	133			-
ig Cough eaths	-	681	670	123	N 1 6	149	191	167	1 9 156	60 473 473	27.2	0 - 0	64	1	
Brysentery Erysipelas Erysipelas Preumonia (Lobar) Deaths Septic Sore Throat Tuberculosis, pulmonary Deaths Tuberculosis, other forms	0.0000000000000000000000000000000000000	44000000	0004 80000	H   184						M0	HE-00	182	00 €4 60 H 60	4 6 1	60 60 F
Veneral Diseases— Gonorrhoea Syphilis Deaths	2 2 4 4 2 2 4	172 50 3	242								1 89	1822	19 11	61 00 61	
Total Cases Deaths	2818	1473	1345	146	1112	217	252	242	217	1069	244	63 80 80	45 CO F-	11 4	F-10
Pre-school cases. School age. Adult								1186	1186 or 42%	10	1069 or 37.5%	7.5 %	10	560 or 20.5	0.0

COMMUNICABLE DISEASE REPORT BY SEASON AND SEX FOR 1939

	Total	M	H	Jan.	Feb.	Mar.	Apr.	May J	June J	July A	Aug.	Sept.	Oet.	Nov.	Dec.
Anterio Poliomyelitis Cerebrospinal Meningitis											1				
Diphtheria	4 60		0.0	1		-									03
		140	162	3.4	6.6	120	60	27			11	14	15	61	37
Chickenpox		299	309	143	8	40 10 00	23	61	26	34	21	25	34	t	99
Mumps Rubella	118	67-	51	38	21	63		00	t	00	60 01	7		7	10
ng Cough	-	681	670	53	25	09	99	127	186	267	297	152	99	31	100
	6 (-	14	13		4	1	-	-	6 =	1	01	01	.00	1	1
Pneumonia (Lobar)		61 49	01 4		1	- 01	1		01 01					61	
oat ulmonary		133	188	1		19	10	- C1	H 10 H	-	7	7	1	61	61-
Tuberculosis, other forms	. १० च	1	00 00 +				61	-	-				1		-
		172	7.0	63	01	26	19	20	19	21	45	11	16	11	01 00
Syphilis Deaths	-1- -2-4	3 3	24	9	œ	00	6	9	Į= !	11	00 -1	4	9	*	00
Total Cases.	2818	1474	1344	264	200	61 61 62	170	215	5-1-1	922	367	216	151	157	218

During the year there were 630 deaths (all causes) of which 40 or 6.35% were due to communicable disease.

#### "KINSMEN'S" TUBERCULOSIS NURSING SERVICE

Visits-		
		2,739
	es	
	cases	
		1,378
	s	
	etc.	
Contacts of T.B.	visits	
Total number of	cases at end of month	
Clinic Report—		
New Cases:		
Active Case		
9		
Suspects	City	30
0-1-1	Country	
Contact	City	
N- C-start	Country	
No Contact		
		72.5
Total		
Total Examinati	ons	1,150
		913
Tuberculin:		*/
Total tests ma	de	375

## 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.

Number of clinics held Babies in attendance Pre-school atendance	3,672	1938 100 3,860 1,103	1937 95 3,567 1,167	1936 100 3,686 1,261	1935 92 3,306 1,022
Total Average	1,682	4,963 49.6	4,734 49.8	4,947 49.47	4,328 47.0
New cases admitted (babies) New cases admitted (pre-school)	749 152	860 148	817 189	808 178	714 142
Babies referred to family doctor Pre-school referred to family doctor		22 49	65 75	35 63	46 27

Dr. George Long relieved during the holiday period.

Dr. J. Calder, Dr. F. J. Follinsbee and Dr. Mildred Newell were in attendance to examine and advise parents regarding infants' care and feeding.

Public Health Nurses, Senior nurses from the University and Royal Alexandra Hospitals have received both Clinic and Field work. Medical and Home Economic students were in attendance during the academic year.

One hundred and twenty out of town cases visited the Clinic during the year. Sixty-seven letters were received and answered from rural districts requesting information regarding the care and feeding of infants.

We are grateful to the Red Cross Society and to all the Relief Officers for their co-operation at all time. Also to the many organizations and private citizens who donate so generously clothing and knitted articles for our needy families.

Visits have been made to diabetic cases, children's shelters and private nursing homes. Creche meetings have been attended and cases investigated as to eligibility of Creche services.

Two thousand six hundred and fifty-three home visits were made.

#### WEIGHING CLINICS

1939	1938	1937	1936	1935	1934
Number of weighing clinics held 48	50	46	47	45	50
Total attendance	675	501	485	615	743
Average 16	13.5	10.9	10.3	13.7	14.8

Forty-eight 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

Babies under 1 year Pre school		1938 3426 2212	1937 3047 2188	1936 3152 1791	1935 2697 2735
Total	5461	5638	5235	4943	5432
PRE-NATA	L VISITS				
City Nurse	1939	1938 460	1937 404	1936 318	1935 388
V.O.N.		257	250	222	251

There were 174 new pre-natal cases in 1939 added to our roll.

The following comparison is made of the infant mortality rate of 1930 and 1939, a decennial period. These figures are:

Total Births Infant Mortality rate per 1,00 living births
1930 49.
1939 1678 31.5

The mortality rate of 31.5 constitutes an all time record for this Department and will probably compare favorably with other cities in our Dominion.

Rosenau states "The lowest rates are from New Zealand where in 1930 less than 35 babies died in the first year of every 1,000 born," and when our mixed population is remembered the comparison with New Zealand is highly creditable. It is difficult to attribute this year's improvement to any particular factor.

The Junior Hospital League has given much time and assistance in providing layettes for many families in straitened circumstances and this opportunity is taken for recording our appreciation of the services so generously given.

Much valuable aid was rendered by the Red Cross Society to many of the emergency cases that came under our notice. In several instances, visiting housekeepers were provided when there was illness in the home. Their cooperation has been deeply appreciated.

#### POST-NATAL VISITS

1	939	1938	1937	1936	1935
City Nurse	212	270	239	172	201
V.O.N.	836	603		620	

It is encouraging to find more mothers are responding to post-natal instruction and are reporting to their family physician for an examination at the end of six weeks following confinement. Mothers are encouraged to breast feed their babies, but in spite of this teaching many babies are weaned when very young and bottle feedings resorted to. Much work still remains to be done along this line.

#### DISTRICT VISITS

Visits to homes		1938 1170 154	1937 2775 113	1936 2508 94	1935 3753 64
Total	1326	1324	2888	2602	3817

On a half day weekly, as in the past, your Senior Nurse was accompanied by an Intern from the Household Economics Department of the University Hospital who gave valuable assistance in drawing up diets and directing budgeting.

Many of the 135 special investigations made required the attendance of a physician and in some cases hospitalization was found to be necessary.

We are grateful to both Civic and Provincial Relief Departments for the assistance readily given by them to special cases.

		Z	INFANT MORTALITY, 1939	MO.	RTAI	LITY,	1938														
					BY		SEASON									BY	AGE				
	JATOT	January	March	lingA	May	nue	nga	ysn.8n <b>y</b>	September	October	Мочетрег	Ist Day	1st Week	2nd Week	3rd Week	4th Week	Total Under I Month	1- 3 Months	4- 6 Months	squow 6 -4	sdraoM 21-01
9 -Whooping Cough	60		-			1		67									1		1	100	1
21.0	1			-		*****	*****			*****		1000			*****		*****		1		
79 —Meningitis	-			*****	*****	****	*****	****						*****	*****		*****		Janes .	-	
89a-Otitis Media	63					*****			-					*****		****		03		2000	
he I	1			1		****								*****	*****			*****			-
07a-Broncho Pneumonia	1		1	-	*****	*****	-	-		* ****		*****			*****	****	*****		-	1	****
8 "D" Type Lobar Pneumonia	61		1	1		*****									:	:	****			1	1
09Pneumonia	-						****	****					1				-	Care .		1	
19 Diarrhoea or Enteritis	00		ole in			****	-	-	63				-		1	-		61	1	1	
29 —Peritonitis	-							*****			1	1	-	-	-	****		-	*****	-	
57a—Congenital Hydrocephalus	01 .		1	-							1			-			01				
orbina Bilida			****	-		-		-								1010		4 .	-		-
orc-Congenital Malformation of Heart.					4						****				*		0 -	7			
Concental Malformations	4 7				0	-	:					1		1	-	1000	4 00	-			
58 —Concenital Debility	-		-													-	-				
1	21	4	2 2			-	-	-	04	60		4 1	00	63	-		20	-			
	1				*****	1	*****		-		0 00			-	-	-	-	1	-		
61a-Atelectasis	1											1	1	17		-	1	1	1		****
53 —Accidental Drowning	-			100	*****		*****										-	1			
	8.8	w	8 8	6	0	*	0	*	t	0	0	01 9		-	,		00	1.1	e		

## HEALTH INSPECTIONS

INSPECTIONS		
	1939	1938
Dwellings	5398	5862
Hotels, lodging house, apartment blocks	451	423
Schools, blocks, public buildings	138	70
Stores, business establishments	818	718 2511
Foodhandling establishments Garbage, streets and lanes, etc.		5902
Miscellaneous		-X
	16300	15486
x-Miscellaneous included.		
Re-inspections	2966	3037
The state of the s		-
NOTICES		
Weitten	1000	1555
Written		1555
Verbal		4594
Garbage	1480	
	8381	6149
	0001	0140
COMPLAINTS		
Descined from the public	700	909
Received from the public Justified	783 635	803 667
Received from other departments	12	20
Referred to oher departments		95
The complaints for 1939 were made up as follows:		
Garbage, streets and lanes, etc.	275	
Vermin Housing, plumbing and drainage	171	
Food and Drink	156	
Miscellaneous		
TAISCEIL STATE OF THE STATE OF		
	783	
LICENSES		
License applications investigated	1990	1318
License applications investigated	1389	1018
PLUMBING		
Sewer and water notices issued	128	63
Sewer and water installed, buildings removed, etc.	44	24
Extension of time granted Nothing done		32 22
Plumbing permits issued	340	158
Plumbing permits issued for old buildings	66	110
Alterations to existing plumbing		60
DISINFESTING STATION		
Baths	16768	20898
Verminous		78
Scabies	WOW	539
Disinfested  Man washed slething		612 18162
Men washed clothing Units washed		57786
Carried Control of the Control of th		0.100

SCAVENGING CLEAN-UP WORK		
Refuse removed from North Side (cu. yds.)	7400	5168
	1392	1280
Treated Tellion 2000 Place (car yabi)		1200
ANIMALS, BARNS, STYES, ETC.		
Cows	532	535
Hogs	115	
Mink, foxes, etc.	62	*****
FOOD		
Samples submitted to Provincial Lab.	25	12
Foodstuffs condemned (lbs.)	3674	16679
WATER		
	1939	1938
Water samples taken	32	62
Negative	17	43
Postive	7	8
Suspicious	8	11
Ice Samples	2	5
Rinse water samples, ice cream dippers etc.	140x	55

All stores with samples over 50,000 were issued written notices warning them to improve their rinse waters.

#### HOUSING

Five thousand three hundred and ninety eight dwellings were visited and 451 hotels, lodging houses and apartment blocks were also inspected. Where overcrowding was taking place or sanitary conditions were not up to standard notices were issued to the parties responsible. Owing to the shortage of houses many buildings are being used as dwellings which in normal times would not be permitted for that purpose.

#### POISON GAS FUMIGATION

Two hundred and two buildings were fumigated for the elimination of Vermin during the year. The inspector visits the premises and warns the householder regarding the removal of foodstuffs etc. A thorough check-up is made of the premises and a written notice issued to the fumigator before the work is commenced.

#### RELIEF

All applicants for relief, made at this office, were instructed to take their cases up with the Provincial or City Relief Departments.

ENFORCEMEN	T OF REGULATIONS		
		1939	1938
Prosecutions		2	2

Percent

## FOOD INSPECTION

January 1st, 1939, there were three abattoirs under city inspection. On July 18th one of these ceased to operate for human food and was converted into a slaughter house for horses and the production of food for fur bearing animals. Of the remaining two abattoirs under City Inspection, one is still undergoing extensive alterations. Nothing has been done in the way of repairs or alterations at the third establishment, although urgently needed. In October the plans were approved for a new abattoir which is still under construction.

It is regrettable that the decline in the percentage of Tubercular hogs, which heretofore has been quite consistent, has not been maintained during 1939.

MEATS INSPECTED AND CONDER	MNED		
Deel	1939	1938	1937
No. of carcases inspected		3,327	2,806
Carcases condemned	28	12	14
Portions condemned	312	379	396
Weight (lbs.) of carcases and portions condemned	17,265	12,597	15,216
Veal			
No. of carcases inspected		2,901	2,373
Carcases condemned		5	7
Portions condemned		37	43
Weight (lbs.) of carcases and portions condemned	2,815	1,006	1,489
Mutton			
No. of carcases inspected	874	1,387	1,701
Carcases condemned		3	5
Portions condemned		93	151
Weight (lbs.) of carcases and portions condemned		410	612
Pork			
No. of carcases inspected		2,534	2,068
Carcases condemned	25	20	28
Portions condemned		404	493
Weight (lbs.) of carcases and portions condemned	12,875	8,828	9,801
and the second of the second o			
Totals No. of carcases inspected	9,835	10,152	8,948
Carcases condemned		40	54
Portions condemned		913	1.083
Weight (lbs.) of carcases and portions condemned		22,841	27,118
Weight (10s.) of carcases and portions condemned	00,000	22,041	21,110
CARCASES FOUND TO BE INFECTED WITH	TUBERCU	LOSIS	
Beef			
Infected	20	13	5
Percent	757	.390	.019
Pork	050	001	050
Infected	359	264	253

10.46

12.23

## CHIEF CAUSES OF CONDEMNATION, 1939

Beef	C.	D /	777	
Absence multiple	Carcases	Portions		ight
Abscess multiple		72		lbs.
Abscess liver	2	16	1,065	
Actinomycosis		134	3,930	
Adhesions		51	630	
Tuberculosis	3	18	1,565	
Parasites		14	140	
Bruised	5	2	2,245	
Emaciation	3	****	1,075	
Pneumonia	7	1	3,010	
Miscellaneous (Peritonitis, Metritis, Imperfect		100	The Value of	
Bleeding, Pleurisy, Putrification)	5	4	2,725	
	-			
	28	312	17,265	
Veal				
Abscess	1	35	495	lbs.
Actinomycosis		16	185	100.
Immature			320	
Parasites		14	125	
Tuberculosis		5	50	
Pneumonia	2		425	
Peritonitis	2	****	380	
Bruised	2	1	410	
Miscellaneous (Adhesions, Empyema, Emaciation		1	410	
Inflamation)		2	425	
Innamation)	4	4	420	
	17	73	2,715	
	11	10	2,110	
Mutton				
Parasites		23	30	lbs.
Peritonitis	2		145	
Pneumonia	2		110	
Miscellaneous (Putrification, Emaciation, Bruised		8	140	
	6	31	425	
Pork				
		48	con	lbs.
Adhesions				108.
Bruised	2	32	1,050	
Contaminated		47 59	705	
Parasites			95	
Tuberculosis		392	6.825	
Abscess Multiple		2	325	
Pneumonia			545	
Peritonitis	4	3	935	
Putrification		3	55	
Miscellaneous (Sexual odor, Emaciation, Jaundice			1 000	
Hernia, Imperfect Bleeding)	7	1	1,660	
	07	FOR	10.055	
	25	587	12,875	
Totals				
7 4	00	210	17.265	Ibe
Beef		312		
Veal		73	2.815	
Mutton		31	425	
Pork	25	587	12.875	
	70	1.003	33.380	
	76	1.008	00.000	
DISEASED ANIMALS				
DISEASED ANIMALS		19	39	1938
Beef			25	396
77 1			79	(*)
			30	72
			47	372
			41	012
(*) Veal included in Beef.				

Meat   1939   1938   1937
Meat       33,380       22,841       27,118         Poultry       184       113       158         Fish       115       27         Sundries       702       380       3         Foodstuffs condemned by Health Inspectors         Canned Goods       257       13       120         Meat       46       230       22         Fruit and Vegetables       2,767       1,620       10,111
Poultry       184       113       158         Fish       115       27       27         Sundries       702       380       3         Foodstuffs condemned by Health Inspectors         Canned Goods       257       13       120         Meat       46       230       22         Fruit and Vegetables       2,767       1,620       10,111
Fish       115       27         Sundries       702       380       3         Foodstuffs condemned by Health Inspectors         Canned Goods       257       13       120         Meat       46       230       22         Fruit and Vegetables       2,767       1,620       10,111
Fish       115       27         Sundries       702       380       3         Foodstuffs condemned by Health Inspectors         Canned Goods       257       13       120         Meat       46       230       22         Fruit and Vegetables       2,767       1,620       10,111
Sundries       702       380       3         Foodstuffs condemned by Health Inspectors         Canned Goods       257       13       120         Meat       46       230       22         Fruit and Vegetables       2,767       1,620       10,111
Canned Goods     257     13     120       Meat     46     230     22       Fruit and Vegetables     2,767     1,620     10,111
Meat     46     230     22       Fruit and Vegetables     2,767     1,620     10,111
Meat     46     230     22       Fruit and Vegetables     2,767     1,620     10,111
Fruit and Vegetables 2,767 1,620 10,111
D # 101 10
Butter and Cheese 19
Cereal 566 6
Ice Cream 60
Sundries 38 30
Damaged by Fire 14,401 18,500
38,055 39,661 56,111
Inspections 5,415 5,345 5,557
Complaints
Received from the public 25 30 35
Justified 13 26 25

## DAIRY INSPECTION

The results of the reduction tests carried out weekly throughout the year of raw milk which is shipped to pasteurization plants have shown a consistent improvement each month during 1939 over the corresponding periods of 1938.

During 1939, 54 per cent of the producers always shipped milk which met the reduction standard of  $5\frac{1}{2}$  hours as revealed by the weekly tests. In comparison in 1936 the proportion was 33 per cent.

The following table shows the average percentage of improvement reached and relates, approximately to 10,638 samples of raw milk tested from 200 producers after arrival at the pasteurization plants. The average difference in the high degree of compliance with the reduction time standard of  $5\frac{1}{2}$  hours and the higher standard of 6 hours being but 1.3 per cent, which is a further improvement over 1938. Space does not permit the results of the weekly tests being given and they are therefore, shown as a monthly average.

	5½ Hours	6 Hours
January	99.53	98.46
February	00.00	99.29
March	99.13	98.65
April	98.34	97.40
Mav	00.01	94.54
June	07.40	94.78
July	00.00	92.42
August	00 11	96.57
September	00 50	97.40
October	00 50	99.65
November	00 41	98.59
December	100.00	99.76
Average	98.6	97.3

Improvement is continuing in the bacteriological quality of raw cream which is produced at nearly a hundred inspected farms and is shipped to pasteurization plants. During 1939, 1.620 samples of cream were tested, reduction times of 6 hours and longer being much more frequent than in 1938.

Appreciation is expressed of the co-operation and active assistance of the four producer organizations, whose members ship milk or cream to pasteurization plants. This co-operation is reflected in the further improvement obtained during 1939 both in the sanitary conditions under which the milk is produced and in the bacteriological quality of milk and milk products.

Since 1922 all milk and cream which is consumed in fluid form within the City of Edmonton has been produced from cows which are tuberculin tested. One disadventage of the plan being that non-tested cattle occasionally come in contact with tubercular-free cattle. During 1939 the Dominion Department of Agriculture extended the control under what is known as the Restricted Area Plan whereby all cattle in the municipal districts of Strathcona and Clover Bar were tested.

Of the 9,971 head of cattle tested in the Strathcona area the percentage of reaction was .31 percent and of the 6,005 animals tested in the Clover Bar area the reaction was 1.1 percent. A large portion of the Edmonton milk supply is produced in the above mentioned areas and the low percentage of reacting cattle found during 1939 speaks well for the efficiency with which the tests were conducted in past years. A point of no little importance in the plan is that cattle from accredited areas are also permitted export without further test.

Seven producers' certificates of registration were temporarily suspended on account of the violation of items of sanitation. The milk, meanwhile, being rejected for consumption in fluid form and used in the making of butter.

Seventy-five shipments of milk were rejected which involved the suspension of fifty-five producers' certificates of registration for a period of three or four days on account of the milk not meeting the reduction standard of five and one-half hours. During such periods the milk was rejected for consumption in fluid form and used in the making of butter. In comparison in the year 1938, it was necessary to suspend 212 certificates of registration, including many which were suspended on several occasions.

The average sanitary conditions at the premises of some 47 producer-distributors remain at a high level. Two certificates of registration were suspended temporarily on account of the continued violation of items of sanitation and one certificate was suspended temporarily on account of the continued high bacterial content of the milk as determined by the reduction test.

One unregistered retailer of raw milk was prosecuted and convicted under the Public Health Act of Alberta.

More than a hundred, eight-gallon milk cans and lids were condemned and replaced by new ones.

Considerable time was given to the supervision of construction of new dairy barns and it is expected that the remainder of the poorer buildings will have been replaced within the next year.

332 applications for registration were approved.

1 application for registration was refused renewal.

1,225 inspections were made.

## LABORATORY REPORT

During the year 847 samples of retail milk were taken. The following table shows the results of the bacterial examination.

S	pecial.	15,000/ 40,000	40,000/ 100,000	100,000/ 400,000	Over	Spr.	Total
January	57	7	6	3	2	1	68
February	55	8	2	2	1		68
March	59	4	2		1		66
April	54	12	3	1		2	72
May	59	10	5	2	1		71
June	58	4	1	1		1	65
July	44	14	5	5	2	5	75
August	40	8	9	4		1	71
September	53	9	7			1	70
October	47	14	6	2	1		70
November	47	14	2	4		7	74
December	54	9	2	1		3	69
	630	113	50	25	8	21	847
Percentage	76.3	13.7	6.1	3.0	.9		100

Twenty-one samples of the 847 samples shown above were spoiled by "spreaders." Of the remaining 826 samples, 630 or 76.3 per cent were under 15,000 bacteria per cubic centimeter.

The Edmonton milk supply is obtained from 41 raw milk distributors and 187 dairymen who ship to six pasteurizing plants. The results arranged in these classes are as follows:

Raw Milk Ord. Pasteurized		% 4 68.2 89.4	5,000/ 0,000 91 14	% 1 17.7 7.8	40,000/ 00,000 43 2	$8.3 \\ 1.1$	100,000 400,000 22 3	% 4.3 1.7	Over 8 0	% 1.5 	11 6	Total 527 185
Jersey Past Homogenized	68 50	91.8 87.7	3 5	4.1 8.8	3 2	$\frac{4.1}{3.5}$	0	****	0		0 4	74 61
	630	76.3	113	13.7	50	6.1	25	3.0	8	1.5	21	847

While only 847 samples were given a bacterial examination, actually 1,512 street samples were taken. All of these 1,512 samples were submitted to the methylene blue test and only 16 did not grade No. 1, i.e., did not stand up for 5½ hours or longer under the above test.

The average butterfat of 1,512 samples was 4.07 per cent, which varies little from the 4.02 per cent of 1938.

The average solids not fat of 1,510 samples was 8.90 per cent compared to 8.92 per cent of 1938.

The average sediment mark, out of a possible 10, was 8.9 as compared to 9.0 of 1938.

Beside the above, 84 samples of special milks were tested. Of these 77 were given a bacterial examination and 53 or 71.5 per cent were in the special class, i.e., under 15,000 bacteria per cubic centimetre. The average butterfat for 84 samples was 4.1 per cent.

Forty-seven samples of cream were tested for butterfat and bacteria. Of these, 16 were in the special class. The average butterfat was 26 per cent.

Eighty-seven samples of chocolate dairy drink were taken. Of these, 85 were given bacterial examination. Thirty-nine or 49.7 per cent were in the special class; 23 or 29.2 per cent were 15,000 to 40,000; 10 or 12.5 per cent were 40,000 to 100,000; 3 or 3.6 per cent were 100,000, to 400,000, and 4 or 5.0 were over 400,000. The average butterfat out of 87 samples was 2.2 per cent.

Fifty-eight ice cream samples were taken and the results of the bacterial examinations are as follows: 13 were in the special class, 13 were 15,000 to 40,000, 12 were 40,000 to 100,000, and 20 were over 100,000.

One sample of goat's milk was tested, the butterfat being 4.5 per cent.

All the milk from the individual producers coming into the city was submited to the methylene blue test. The number of samples examined was 9,975 of which about 184 or 1.7 per cent failed to grade Class 1 under the test. These along with the 1,512 distributor samples gives a total of 11,487 samples of which 200 failed to grade Class 1.

During the year regular examination was made for us of the city tap water. No samples gave positive colon test and there were only four count of over 10 per cubic centimetre. Two were spoiled by spreaders.

Samples of water were taken from all the swimming pools for bacterial examination. Of these, 146 gave counts of 10 or under and 36 were above the 200 mark. No samples gave a positive colon test.

General supervision was given to the swimming pools throughout the year. Solutions were made up and supplied for testing the water for the amount of free chlorine, and for copper and suitable standards furnished as required. Little trouble was experienced with the "Algae."

Regular supervision was given to the sewage disposal plants during the year.

