

## **Annual report of the Department of Public Health, Province of Alberta.**

### **Contributors**

Alberta. Department of Public Health.

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ANNUAL REPORT  
OF THE  
**Department of Public Health**  
PROVINCE OF ALBERTA  
INCLUDING  
**Vital Statistics Branch**  
1940

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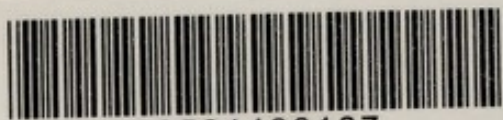
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Edmonton, December 15, 1941.

TO HIS HONOUR

J. C. BOWEN,

*Lieutenant Governor of the Province of Alberta.*


SIR:

I have the honour to transmit herewith the Annual Report of the Department of Public Health for the year 1940.

I have the honour to be, Sir,

Your obedient servant,

WALLACE WARREN CROSS,  
*Minister of Health.*



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Edmonton, December 15, 1941.

TO THE HONOURABLE DR. W. W. CROSS,  
*Minister of Health,*

Administration Building, Edmonton, Alberta.

SIR:

I have the honour to submit herewith the Twenty-second Annual Report of the Department of Health.

I have the honour to be, Sir,

Your obedient servant,

MALCOLM R. BOW, B.A., M.D., C.M., D.P.H.,  
*Deputy Minister.*



October 1941

To the Honorable W. W. [Name]

[Address]

Administration Building [Address]

Sir,

I have the honor to acknowledge the receipt of your letter of the 14th instant.

Reference is made to the [Subject]

I have the honor to [Action]

Very respectfully,

[Signature]

[Title]

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TWENTY-SECOND ANNUAL REPORT OF THE  
PROVINCIAL DEPARTMENT OF PUBLIC HEALTH  
INCLUDING THE VITAL STATISTICS BRANCH

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THE DEPARTMENT

*Divisions:*

1. Communicable Diseases.
2. Public Health Education.
3. Hospital Inspection.
4. Laboratory.
5. Public Health Nursing.
6. Municipal Hospitals.
7. Social Hygiene.
8. Sanitary Engineering and Sanitation.
9. Dental Hygiene.
10. Mental Health.
11. Institutions: Provincial Mental Hospital, Ponoka.  
Provincial Auxiliary Hospital, Claresholm.  
Provincial Auxiliary Hospital, Raymond.  
Provincial Mental Institute, Oliver.  
Provincial Training School, Red Deer.  
Central Alberta Sanatorium, Calgary.
12. Child Welfare.
13. Vital Statistics.

A report giving a summary of the work of each of these divisions is included herewith.

PROVINCIAL BOARD OF HEALTH

Four meetings of the Provincial Board of Health were held during the year.

REGULATIONS PASSED DURING THE YEAR

Regulation O.C. 1041-40—Relating to Contagious Diseases.

Regulation O.C. 1042-40—Relating to Typhoid Fever and Paratyphoid Fever Carriers.

Regulation O.C. 1264-40—Relating to Burial and Conduct of Funerals.

LEGISLATION PASSED DURING THE YEAR

*The Cancer Treatment and Prevention Act.*

This Act authorizes and empowers the Minister to promote and encourage the formulation of schemes, plans and measures for the diagnosis, treatment or prevention of cancer, and in connection therewith the Minister is thereby authorized to provide that persons with limited means may have the full benefit of the said schemes, plans and measures without fee or charge.

This Act came into force on February 16th, 1940.



*The Public Health Act Amendment Act.*

This Act defines the term "Municipality" in relation to Full-Time Public Health Districts.

This Act came into force on February 16th, 1940.

DEPARTMENT OF PUBLIC HEALTH				
REVENUE AND EXPENDITURE FOR THE FISCAL YEAR ENDED MARCH 31, 1941				
Div. Vote.		Salaries.	Expenses.	Revenue.
1.	605. Communicable Diseases .....	\$ 2,680.50	\$ 28,286.22	\$ 1,087.73
2.	605. Public Health Education .....	2,000.00	2,208.37	.....
3.	603. Hospital Inspection .....	2,695.65	645.43	235.00
	Grants .....	.....	487,580.70	.....
4.	626. Laboratory .....	.....	4,750.00	.....
5.	606. Public Health Nursing and	.....	.....	.....
	621. Travelling Clinic .....	62,968.33	21,913.42	8,359.81
6.	608. Municipal Hospitals .....	2,668.69	974.04	.....
7.	610. Social Hygiene .....	8,900.05	8,422.81	.....
8.	605. Sanitary Engineering and Sani- tation .....	7,525.81	3,902.05	1,372.10
9.	621. Dental Hygiene .....	.....	.....	.....
10.	622. Mental Hygiene .....	5,211.23	6,567.86	.....
<b>Institutions:</b>				
11.	(612-1. ....	.....	.....	.....
	(613-2. Prov. Mental Institute, Oliver ...	121,273.24	63,382.93	61,780.09
	612-2. Prov. Training School, Red Deer	52,873.12	24,865.30	46,086.49
	(612-3. ....	.....	.....	.....
	(613-1. Prov. Mental Hospital, Ponoka ..	287,548.71	169,649.28	151,683.18
	612-4. Prov. Aux. Hospital, Claresholm	15,524.57	10,796.03	6,305.70
	612-5. Prov. Aux. Hospital, Raymond ..	17,322.83	11,593.66	6,871.35
	604. Central Alberta San., Calgary.....	135,477.75	240,639.44	53,669.42
	619. University of Alberta Hospital....	.....	35,739.77	.....
12.	607. Vital Statistics .....	20,250.25	6,171.75	68,262.30
	609. Insulin .....	.....	12,626.51	.....
	611. Grants to Homes .....	.....	3,950.00	.....
	605. Full Time Health Districts.....	.....	27,557.74	.....
	631. Poliomyelitis .....	600.00	8,261.41	.....
	Administration .....	18,242.43	3,638.60	750.27
	627-28. Child Welfare .....	\$ 763,763.16	\$1,184,123.32	\$ 406,463.44
	.....	13,051.06	56,918.12	25,954.91
	.....	\$ 776,814.22	\$1,241,041.44	\$ 432,418.35
Total Expenditure: Public Health Department		\$2,017,855.66		
Less: Expenditure Child Welfare Branch.....		69,969.18		
		\$1,947,886.48		
Less: Public Health Revenue .....		406,463.44		
		\$1,541,423.04		

## VITAL STATISTICS

Vital statistics registrations during 1940 were as follows:

Births .....	17 359
Marriages .....	8,782
Deaths .....	6,203

In all cases in which rates are shown they are based on an estimated population of 790,000 (the estimate of the Dominion Bureau of Statistics). In the following table the number of births and the birth rate, the number of marriages and the marriage rate, and the number of deaths and the death rate are shown for each of the years from 1935 to 1940:

Year	No. of Births	Birth Rate	No. of Marriages	Marriage Rate	No. of Deaths	Death Rate
1935 .....	16,183	21.00	6,010	7.80	5,729	7.40
1936 .....	15,786	20.40	6,020	7.80	6,147	8.00
1937 .....	15,901	20.40	6,345	8.20	6,261	8.00
1938 .....	15,891	20.30	6,973	8.90	5,871	7.50
1939 .....	16,470	20.90	7,838	9.90	5,789	7.30
1940 .....	17,359	21.84	8,782	11.00	6,203	7.80

The birth rate for 1940, 21.84, is the highest recorded since 1932. The marriage rate for 1940, 11.00, is the fourth highest in Canada. The death rate for 1940 is 7.80 as compared with 7.30 for 1939.



### *General Health Conditions.*

There is an increase of 409 deaths in 1940 as compared with the number registered in 1939. Deaths due to contagious diseases increased 15% as compared with the previous year. An increase in the number of deaths due to Influenza and Whooping Cough accounted for 65% of the increased deaths from contagious diseases. The following chief causes of death showed increases as compared with the previous year: Cancer, Diseases of the Heart, Accidents, Influenza, Whooping Cough and Tuberculosis.

The infantile mortality rate for 1940 (48) is slightly higher than the rate for the previous year (46.3). Special reference is made to the chief causes of infant deaths in another section of this report.

The maternal mortality rate for 1940 is 3.97, which is a slightly higher rate than for 1939 (3.6).

Fifty-six deaths were reported as due to Whooping Cough in 1940 as compared with 33 deaths from this cause in 1939. Of these 56 deaths, 52 were children under three years of age and 44 were infants under one year of age. Whooping Cough is a disease which is not treated by the public with the respect it deserves. The new vaccine now in use is proving much more effective in the prevention of the disease, and much greater care should be taken to protect young children against this highly dangerous disease.

The combined death rate (deaths per 100,000 population) for Diphtheria, Scarlet Fever, Measles and Whooping Cough is 10.3 as compared with 8.2 for 1939. The increase in this rate is due to the increased number of deaths from Whooping Cough and Diphtheria.

Fifty two cases of Diphtheria with 12 deaths were reported in 1940 as compared with 36 and 7 deaths in 1939. Of the 52 cases in 1940, 18 were reported by cities, 3 by towns and villages, and 31 by rural districts.

Two outbreaks of Diphtheria affecting Indian Reserves accounted for 14 cases and 2 deaths. Following these outbreaks, active steps were taken by the authorities to immunize the children residing on these reserves against the disease.

The death rate for Diphtheria for 1940 is 1.5 as compared with .9 per 100,000 in 1939. It is again necessary to emphasize the fact that Diphtheria is an entirely preventable disease. There is no reason why any deaths should occur from this cause. While steps have been taken in a number of districts to protect both pre-school and school children against Diphtheria, we have still many districts in which nothing has been done in this regard.

The Department supplies Diphtheria Toxoid, which is used for immunization purposes, free of charge, and urges each local Board of Health and each school district in the Province to see that the pre-school and school children are immunized against Diphtheria.

In 1940, 2,523 children residing in 98 outlying districts were immunized against Diphtheria by a specially qualified health inspector on the staff of the Department, part of whose time is devoted to this work.

No cases of Smallpox were reported in 1940 and no deaths occurred from this cause.

It is now nine years since there has been any widespread outbreak of Smallpox in the Province. This is not due to the extent to which our people are vaccinated. Surveys which have been made



from time to time show that there are many districts in the Province in which not more than 30% of the pre-school and school children are vaccinated. This is a dangerous situation from the standpoint of public health. When Smallpox appears in unvaccinated communities it spreads with great rapidity, and when the disease is of the malignant type, the results are highly fatal to its unfortunate victims. I would point out again that children should be vaccinated in childhood, preferably during the first six months of life. Smallpox vaccine is supplied by the Department to physicians, local Boards of Health and School Boards free of charge.

In 1940, 2,711 persons residing in 98 outlying districts were vaccinated by the health inspector engaged in this work. It is worthy of note that many of these outlying districts are much better protected against Smallpox than the closely settled areas of the Province in which local medical services are readily available.

Thirty-six cases of Typhoid Fever and 5 cases of Paratyphoid Fever were reported in 1940 as compared with 44 and 2 cases respectively in 1939. Three deaths were reported as due to Typhoid in 1940 and no deaths as due to Paratyphoid. The Typhoid death rate for 1940 is .4 as compared with .8 for Typhoid and .1 for Paratyphoid for 1939.

Once more it is necessary to point out the important role played by carriers in the spread of Typhoid infection. It is essential that Typhoid carriers be carefully supervised and controlled to ensure that they do not become factors in the spread of infection. The co-operation of local health authorities with the Department is essential not only in the investigation of sources of Typhoid infection, but also in the supervision and control of the disease. Constant vigilance in the supervision of local water, milk and food supplies is necessary. Pasteurization of milk and milk products, properly carried out, is an effective means of safeguarding milk and milk products, and it is gratifying to see the increased number of pasteurizing plants being installed in the towns of the Province, ensuring protection to consumers, not only against Typhoid, but other milk borne diseases as well.

#### *Rocky Mountain Spotted Fever and Sylvatic Plague Survey.*

Mr. J. H. Brown, who had charge of the Rocky Mountain Spotted Fever and Sylvatic Plague Survey in 1938 and 1939, also had charge of this work in 1940, directing two crews each equipped with a travelling laboratory.

It was planned that crew No. 1 would confine its activities to the plague area in the Stanmore district, while crew No. 2 would carry on the Spotted Fever survey. It was not possible to follow this plan, because the finding of a large plague area in the Stanmore district during the first part of the season made it necessary to use both crews in the Stanmore district in an effort to delimit the area of plague infection.

A gopher control campaign was also carried on in the Stanmore district. The object of this campaign was to reduce the gopher population in the suspected plague infection area. In this campaign, Sodium Arsenite and Oats bait was used for the poisoning of gophers, and it is estimated that a 50 to 75% kill of gophers was obtained in two townships covered during the summer.

During the season the two crews surveyed 17 areas for Rocky Mountain Spotted Fever infected ticks, collected 730 host ticks from



515 animals, and 10,273 drag ticks, located one case of Rocky Mountain Spotted Fever in an 18-year-old male at Medicine Hat, found 1 case of Tularaemia in a 35-year-old woman at Whitla, and discovered 2 cases of suspected tick paralysis in humans.

The two crews also surveyed 15 areas for Sylvatic Plague infection, collected 3,556 fleas from 1,302 animals, took 81 tissue specimens, 6 of which were positive for plague, and marked out and placarded 9 townships in the Stanmore districts as potential plague areas. An educational campaign was also carried on, 8 meetings were addressed at which the attendance totalled 2,300 persons, and 1,000 pamphlets on Sylvatic Plague and 750 bulletins on Tick Borne Diseases of Man and Methods of Prevention were distributed.

The co-operation of the Rockefeller Foundation in providing a grant of \$3,325.50, which made this work possible, is gratefully acknowledged. Assistance of the Federal Department of Health in providing the laboratory services required is gratefully appreciated. The results obtained since this survey work was undertaken in 1938 have amply justified the expenditure made for this purpose. It is important that this survey work be continued, and that an active educational campaign be carried on throughout the areas in which infection has been found so that the people may be fully aware of the risks involved.

We have been extremely fortunate in the personnel of our survey crews. The following members of our survey crews in 1940 gave excellent service: J. H. Brown, Director, W. R. Fraser, G. C. Walkey, and G. D. Roy.

#### *Poliomyelitis.*

There were no cases of Poliomyelitis reported to the Department in 1940, but 4 deaths were registered as due to this cause as compared with 24 cases and 5 deaths reported in 1939.

Under The Poliomyelitis Sufferers Act, which went into effect on April 1, 1938, free treatment is provided for patients suffering from paralysis due to poliomyelitis and certified by the attending physician and an orthopaedic specialist as likely to benefit from treatment in hospitals with facilities required for the treatment of these patients. Under this Act authority is also given to provide vocational training and academic instruction for patients whose parents are not in a financial position to provide such training. The aim is to provide assistance such as will enable these patients to become self-supporting in so far as possible.

During the year 12 patients were admitted to the University Hospital, Edmonton, and 5 to the Junior Red Cross Hospital, Calgary, under the terms of agreements in effect between the Department and these hospitals. Assistance was extended to 7 persons to obtain vocational training and to 12 to complete academic and secretarial courses.

#### *Influenza and Pneumonia.*

Influenza was responsible for 255 deaths in 1940 as compared with 216 in 1939. The deaths registered as due to Pneumonia were 376 in 1940 as compared with 362 in 1939, an increase of 14 deaths. Influenza and Pneumonia together accounted for 631 deaths, or 16% of the deaths from all causes reported in 1940.



Early diagnosis and early treatment with the drugs now available and the early administration of typed Pneumonia serum where this is indicated, is essential if the death rate from Pneumonia is to be further reduced.

#### *Tuberculosis.*

Three hundred and twenty-one deaths were reported from Tuberculosis in 1940 as compared with 283 for the previous year. The death rate for all forms of Tuberculosis, including deaths among the Indian and Metis population, is 40 per 100,000 population in 1940 as compared with 35.9 for 1939, an increase of 11.4%. The total deaths from all forms of Tuberculosis excluding Indian and Metis population numbered 140 as compared with 121 in 1939, an increase of 19, giving a death rate of 17.6 per 100,000 population as compared with 15 per 100,000 for 1939, in which year the lowest death rate in the history of the Province was recorded.

#### *Diseases of the Heart and Circulatory System.*

One thousand and eighty-seven deaths were reported from diseases of the heart in 1940 as compared with 997 deaths from this cause in 1939. These 1,087 deaths represent 17.5% of deaths from all causes reported for the year, giving a death rate of 136.6 per 100,000 population as compared with 126.4, the rate for 1939.

Diseases of the circulatory system were responsible for 517 deaths, representing 8.3% of the deaths from all causes registered in the Province during the year as compared with 550 deaths from this cause, and a death rate of 69.5 per 100,000 population in 1939, a decrease of 6.6%.

For every 1,000 deaths registered in 1940 from all causes, diseases of the heart and circulatory system accounted for 262.

#### *Cancer.*

Seven hundred and fifty-nine deaths were registered as due to Cancer in 1940, an increase of 112 deaths as compared with the number registered the previous year, giving a Cancer death rate of 95.2 as compared with 82 in 1939, an increase of 16%.

Cancer is in second place in the list of causes of death, accounting for 12.24% of the total deaths registered from all causes in 1940. The death rate from Cancer is on the increase. The vital importance of early recognition and prompt and effective treatment of this disease in its earliest stages cannot be stressed too strongly. Authorities have pointed out that if Cancer cases were recognized early and given prompt and effective treatment in the early stages of the disease, probably one-half of the deaths now due to Cancer could be prevented.

As in former years, educational work has been carried on by the Alberta Branch of the Canadian Society for the Control of Cancer, and also by the Alberta Division of the Canadian Medical Association. The Department has co-operated as in previous years in connection with this educational work.

The Cancer Treatment and Prevention Act was assented to by the Legislature on February 16, 1940. Under the section of this report dealing with legislation an outline is given of the essential features of this Act. It is proposed early in 1941 to set up Cancer Diagnostic Clinics and to provide deep X-ray and radium treatment



for such patients as in the opinion of the staff of the Cancer Diagnostic Clinics are likely to benefit by such treatment.

#### *Deaths Due to Violence.*

Deaths due to violence numbered 415 in 1940 as compared with 364 in 1939, representing 6.7% of the total deaths registered for the year, and giving a death rate of 51.8 per 100,000 population.

In addition there were 96 suicides in 1940.

Highway accidents accounted for 86 deaths, of which 73 were due to automobile accidents, 13 less than the number reported as due to automobile accidents in 1939.

A high proportion of the deaths and injuries sustained in automobile accidents is preventable. These accidents now constitute an important cause of death, and this problem is one which requires scientific investigation with a view to the correction of conditions accounting for such accidents.

Fifty-seven deaths were registered as due to drowning in 1940 as compared with 53 such deaths in 1939. Almost all such deaths are preventable, and much more educational work is required so that the public may be made aware of the hazards connected with swimming and the use of boats, canoes and other water craft. Attendants experienced in methods of resuscitation should be on duty at all public swimming beaches and swimming pools during the season such beaches and pools are in use.

In the following tables the deaths due to violence are classified:

TABLE 1

Homicides .....	20	Accidental injuries from falling, crushing or landslides .....	217
Attack by venomous animals .....	1	Injuries inflicted by animals .....	15
Food poisoning .....	1	Hunger or thirst .....	2
Accidental absorption of toxic gases .....	13	Excessive heat .....	4
Other acute accidental poisoning (except by gas) .....	5	Excessive cold .....	4
Conflagration .....	16	Other accidents .....	17
Accidental burns (conflagration excepted) .....	18	Violent deaths (accidental, suicide or homicide), unknown .....	3
Accidental mechanical suffocation .....	12	Lightning .....	4
Accidental drowning .....	57	Capital punishment .....	1
Accidental injuries by firearms .....	10	Total .....	415
Accidental injuries by cutting instruments .....	1		

TABLE 2

#### SPECIAL CLASSES OF ACCIDENTAL DEATHS INCLUDED IN ABOVE

Accidents in mines and quarries .....	14	Automobile and motorcycle accidents .....	73
Accidents caused by machines .....	23	Other land transportation .....	13
Railway accidents .....	17	Water transportation .....	9
Street car accidents .....	1	Air transportation .....	5

#### *Infantile Mortality.*

There were 834 deaths of children under one year of age registered in 1940 as compared with 763 such deaths during the previous year, an increase of 71 deaths.

The infantile mortality rate for 1940 is 48.04 as compared with 46.3 for the previous year. The infantile death rate for 1940 is 9 less than the average rate for the five preceding years, but 1.74 more than the rate for 1939.

Once again attention is directed to the higher death rate among children residing in the towns and villages and rural districts. In 1940 the average infantile mortality rate for rural districts (including the smaller urban centres) is 56, and for the 7 cities of the



Province is 36. This means that the death rate for infants under one year of age in rural districts is 55% higher than the infant death rate in the cities.

Of the 834 deaths of children under one year of age in 1940, 434 occurred within the first month of life, of which 357 occurred within the first week and 194 on the first day of life. This means that 52% of the deaths of children under one year of age occurred during the first month of life.

We would again emphasize the urgent need of providing in all our rural districts and smaller urban centres the same type of preventive health service as is available in the larger cities of the Province and in the full-time rural health units.

#### *Maternal Mortality.*

The maternal death rate could, in the opinion of health authorities 59 in 1939, an increase of 10 deaths. The maternal mortality rate (deaths of mothers per 1,000 living births) in 1940 is 3.97 as compared with 3.5 in 1939. The average maternal mortality rate for the last five years is 4.5.

The following are the chief causes of maternal deaths registered in 1940:

Puerperal Septicaemia .....	10	Puerperal Haemorrhage .....	9
Abortion with septic condition .....	10	Puerperal Albuminaria and	
Abortion without septic condition .....	2	Eclampsia .....	6
Ectopic Gestation .....	3	Puerperal Embolism .....	2

The maternal death rate could, in the opinion of health authorities, be reduced by at least 50%, and a great deal of invalidity both preceding and following childbirth prevented if full application were made of our present knowledge in regard to maternal hygiene. The problem is a complex one, involving social, economic and public health factors. Seventy-two per cent. of the births in the Province in 1940 occurred in hospitals.

#### *Full-Time Health Units.*

The work of the health units already established, namely, Red Deer, Foothills, Lamont and Stettler, has been carried on along the same lines as in previous years.

In October, 1940, two additional health units were established, namely, Rosebud Health Unit, including the following municipal districts, towns and villages: M.D. of Beaver Dam No. 281, M.D. of Rosebud No. 280, M.D. of Mountain View No. 310, M.D. of Westerdale No. 311, M.D. of Waterloo No. 312, Towns of Didsbury and Olds, and Village of Carstairs; and the Sturgeon Health Unit, the boundaries of which are coterminus with those of the Sturgeon School Division, and in which the following municipal districts, towns and villages are included: M.D. of Sturgeon No. 548, M.D. of Ray No. 549, M.D. of Unity No. 577, M.D. of Opal No. 578, M.D. of Hazelwood No. 579, Town of Morinville, and Villages of Legal and Clyde. The total population of the Rosebud Health Unit is 17,422, and the headquarters are located in the Town of Didsbury. The total population of the Sturgeon Health Unit is 22,433, and the headquarters are located in the Village of Legal.

Inquiries have been made by a number of other districts in the Province concerning the establishment of health units. Through the organization of these health units a full-time preventive health



programme is made available to the residents of rural and urban municipalities. The results accomplished by these rural health units have been such that the Department is proceeding with a programme under which additional health units will be established as the funds are made available for this purpose, until all sections of the Province are served. Activities of these health units include health education, the prevention and control of communicable diseases, child and maternal hygiene, mental hygiene, school hygiene, supervision of water and milk supplies, food inspection, general sanitation, etc.

#### *Health Education.*

Our health educational work has been carried on as in previous years through the publication of bulletins, through articles in the press, by means of lectures, radio talks, movies, health exhibits and demonstrations. Some thirty bulletins and pamphlets dealing with various health subjects are available for distribution. Three thousand requests for health literature were received during the year. Approximately 30,000 bulletins and pamphlets were distributed by the Department. One hundred and ten lectures were given by the lecturer in charge of the health educational work, at which the total attendance was 15,045. Of this number approximately one-third were children of school age.

Each year the demand for information in regard to health increases, and no activity of the Department pays richer dividends than that of health education. We have continued as in past years to promote this service, not only through the health education division, but through all the other divisions of the Department. It is essential that each division takes full advantage of every opportunity in this field.

#### *Public Health Nursing.*

There are 36 nurses on the departmental staff. One of these is in charge of the Child Welfare Clinic serving the Edmonton district, one in charge of the Child Welfare Clinic serving the Calgary district, one in charge of the clinic serving the Medicine Hat district, and one in charge of the clinic serving the Drumheller district. One serves the Municipal District of Norma and the Town of Vegreville. Thirty-one district nurses are stationed in outlying districts remote from medical and hospital services.

During the year 1940 provision was made for the appointment of five additional district nurses. Before the end of the year five new districts were established and in operation. The new districts established in 1940 are as follows: Lomond, Grassland, Dixonville, Breynat and Whitemud Creek.

The expansion of the district nursing service during the past two years has made this service available in 17 new districts, and this has marked a distinct advance in bringing health services to the people in 17 additional outlying areas in which no medical or hospital facilities of any kind were available.

In the selection of our district nurses special consideration is given to physique, character, training and experience of the applicants with a view to securing nurses well qualified for the heavy responsibilities they are called on to assume in this work.



There were 425 Child Welfare Clinics held in Edmonton, Calgary, Medicine Hat, Redcliff, Drumheller and Vegreville, with a total attendance of 16,576 infants and pre-school children.

The following table shows the work done by our 31 district nurses:

No. of homes visited .....	7,499	No. of pre-natal visits .....	527
No. of office visits .....	19,792	No. of pre-natal consultations .....	1,738
No. of dressings .....	4,505	No. of child welfare visits .....	500
No. of medical cases .....	10,407	No. of cases sent to hospital .....	678
No. of surgical cases .....	1,913	No. of vaccinations .....	1,288
No. of obstetrical cases .....	398	No. of inoculations .....	7,459
No. of abortions .....	63	No. of communicable disease cases .....	230

A full account of the splendid service rendered by our public health and district nurses is contained in the report of the Public Health Nursing Division.

#### *Travelling Clinic.*

The Travelling Clinic visited 24 centres during the year. This clinic was in the field from May 18th to August 16th. The itinerary for 1940 included the following districts: Whitecourt, Blue Ridge, Rochfort Bridge, Gunn, Mulhurst, Battle Lake, Winfield, James River Bridge, Bergen, Flatbush, Fawcett, Dapp, Perryvale, Boyle, Grassland, Grosmont, Smith, Slave Lake, Falher, Girouxville, Dixonville, Hines Creek, Royce, Worsley.

The staff consisted of a surgeon in charge, one physician, two dentists, three nurses and two truck drivers. The clinic staff examined 3,706 children, and 604 operations for the removal of tonsils and adenoids were performed, as well as a large number of minor operations. 1,870 children were vaccinated against Smallpox, 195 children were referred to family physicians, and 43 to hospitals.

The dentists on the Travelling Clinic staff examined 3,787 children, recommended 1,740 for dental treatment, gave dental treatment to 1,130, and extracted 867 teeth.

In the short period the Travelling Clinic is in the field, it is only possible to visit a limited number of outlying districts. The Department endeavours to vary the itinerary from year to year so that the services of the Travelling Clinic may be made available in as many outlying districts as possible.

#### *Maternal Welfare Grants.*

Under the authority of The Maternal Welfare Act, which came into force on March 31, 1939, provision was made by which a grant not exceeding \$15.00 might be made to an expectant mother in need of such assistance. An application form must be completed by each applicant for this grant, and such investigations are made as are considered necessary to determine the need of the applicant.

During 1940, 1,667 grants were made, the sum of \$25,145.00 being expended for this purpose.

#### *Social Hygiene.*

Four clinics are conducted by the Division of Social Hygiene, one in each of the four larger cities and, in addition, a clinic is held in each of the Provincial Gaols.

The total number of cases of venereal diseases under treatment in all clinics in 1940 was as follows: Syphilis 519, Gonorrhoea 866, Chancroid 1, Non-venereal 1,755, making a total of 3,141.



Educational work in connection with the prevention and control of venereal diseases has been carried on along the same lines as in previous years. Fifty-seven lectures were given during the year to 8,030 persons, including 20 meetings in military camps. There is a real need for further expansion of the educational programme in this field in order to meet the increasing public demand for authoritative information and advice concerning the prevention and control of venereal diseases. Additional personnel is required in order to give the time essential for follow-up work. Splendid co-operation has been given by various local Boards of Health, R.C.M.P., and local police authorities in a number of centres.

#### *Provincial Laboratory.*

In 1940 the staff of the Provincial Laboratory made 83,127 examinations. There has been a steady increase in the examinations made by the Laboratory staff until the present staff is now taxed to the limit of its capacity in carrying on this important work.

Additional laboratory space and additional staff is urgently required to meet the demands for laboratory service which come from all sections of the Province.

The work of the Provincial Laboratory includes examinations of water, ice, sewage, milk, various examinations in connection with the control of communicable diseases, examinations of pathological material submitted by hospitals and physicians, medico-legal examinations, food examinations, and many others.

The vaccines and sera used for the prevention and treatment of various communicable diseases are distributed by the Provincial Laboratory. The staff of the Laboratory make available to the local Boards of Health, hospitals and physicians a service which is of the most vital importance to public health. The estimated value of the work done by the Laboratory in 1940, on the basis of minimum charges only, is \$225,442.85. All public health work is done free of charge.

#### *Sanitary Engineering and Sanitation.*

The plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants were examined, and where approval was given, certificates were issued for the same as required under The Public Health Act.

During the year 1,409 reports of analyses of water, ice and milk samples were received from the Director of the Provincial Laboratory, and the necessary steps taken to deal with the various conditions requiring attention.

The work of the plumbing inspector has been carried on along much the same lines as last year, and has fully demonstrated the value of this service, particularly in districts in which there is no adequate local supervision of plumbing installations and repairs.

We wish to again emphasize the responsibility resting on local municipal authorities for the safety of water supplies. Raw water drawn from streams, irrigation ditches, and other such sources, is unsafe for human consumption, and any municipal authority which permits the use of such water will, sooner or later, experience a serious outbreak of water borne disease.



The attention of municipal authorities is also directed to their responsibility in safeguarding milk supplies. Municipalities permitting the use of contaminated water supplies and the sale of unsafe milk have been found negligent by the courts. Eternal vigilance is the price of safety in this as in other fields of public health.

There were 104 complaints and requests for investigation received from various municipalities, and referred to the sanitary inspectors for attention; 77 inspections of lumber, tie, saw-mill and mining camps were made during the year. Excellent service has been given by the sanitary inspectors on the staff of our rural health units, and with the extension of health unit services we will be in a position to provide a much more satisfactory sanitary inspection service.

#### *Dental Hygiene.*

As in previous years dental service was provided for patients in all Provincial institutions. A report of the dental work carried on will be found in the reports of the various institutions. A summary of the work done by the dentists on the staff of the Travelling Clinic will be found in the report of the Travelling Clinic.

#### *Hospital Inspection.*

In 1940, 94 approved hospitals received the government grant. Under the provisions of The Private Hospitals Act, 70 private hospitals (largely nursing homes and baby shelters) were licensed.

The total number of operations reported by hospitals in 1940 is 38,811. In the report of the Hospital Inspection Division a classification of these operations is shown.

The 94 approved hospitals have a total bed capacity of 4,635, a total bed complement of 4,571, and in addition 757 bassinets.

On the basis of a population of 790,000, there was one hospital bed available (including cribs and bassinets) for every 149 of the population, or 6.7 beds per 1,000 population.

Additions were constructed to the following hospitals during the year: Red Deer Municipal Hospital and Vermilion Municipal Hospital. A new hospital, located at Turner Valley, was established to serve the Turner Valley and adjoining oil fields.

#### *Municipal Hospitals.*

There were 24 municipal hospitals in operation during the year, providing accommodation for 980 patients, including babies. In the municipal hospitals, 21,394 persons received treatment in 1940, representing 21.5% of all patients under treatment in the hospitals of the Province.

A detailed statement in regard to hospital administration and covering all hospitals in receipt of the government grant is contained in the report of the Hospital Division.

#### *Division of Tuberculosis Control.*

The number of treatment beds available for Tuberculosis was increased by 12 in 1940, raising the total available beds to 411. Patient days for all Sanatoria in 1940 totalled 140,515.



At the various diagnostic clinics 4,312 examinations were made during the year as compared with 4,886 such examinations during the previous year.

As a result of the activities carried on by the Tuberculosis Division, 591 new cases of Tuberculosis were discovered. Non-infectious cases of Tuberculosis are not admitted under the scheme by which free treatment is provided for all *bona fide* residents of the Province. As soon as funds can be made available, the additional beds required for the treatment of non-infectious types of Tuberculosis should be provided, as many of these patients require the highly specialized type of treatment available in our Sanatoria.

Various surveys of schools, Indian schools and mental hospitals were made by the staff of this Division during the year. All together, 10,222 medical examinations were made in 1940 by the medical staff of this Division. We now have 13 Tuberculosis clinic centres in the Province, and our travelling diagnostician visited 54 other centres in 1940.

At the request of the Indian Affairs Branch of the Federal Government, 1,268 children attending Indian schools were examined by our staff during the year. This service is paid for by the Federal Government.

In addition, surveys of the Normal Schools, the Provincial Institute of Technology, high schools of Medicine Hat and the high schools located in the Red Deer and High River Health Units were made during the year, 2,324 students being examined. In the survey of the mental hospitals, 2,052 examinations of patients and members of the staff were made.

In general, the activities in connection with Tuberculosis prevention and control were conducted along the same lines as in previous years. A considerable amount of interest has been aroused in regard to the problem of rehabilitation of Tuberculosis patients, and the Provincial Tuberculosis Association is endeavouring to work out a programme which will contribute to the solution of this problem.

Detailed information concerning the various activities of the Division of Tuberculosis Control will be found in the report of the Division.

#### *Mental Health Division.*

MOVEMENT OF PATIENTS—MENTAL INSTITUTIONS, 1940

	On Books, Jan. 1 1940		Admissions, 1940		Discharges, 1940		Deaths, 1940		On Books, Dec. 31, 1940	
	Psychotic	Mental Defectives	Psychotic	Mental Defectives	Psychotic	Mental Defectives	Psychotic	Mental Defectives	Psychotic	Mental Defectives
Oliver .....	691	78	56	4	24	...	37	2	686	80
Ponoka .....	1385	187	524	44	441	13	54	36	1414	182
Red Deer .....	.....	215	.....	14	.....	10	.....	3	.....	216
Claresholm .....	93	6	2	2	3	.....	.....	.....	92	8
Raymond .....	91	13	6	.....	3	.....	1	1	93	12
Totals.....	2260	499	588	64	471	23	92	42	2285	498



This table indicates that there was an increase in the patient population in the Provincial Mental Institutions of 24 during the year. On January 1, 1940, there were 2,759 patients in all institutions, and on December 31, 1940, 2,783. Since the year 1911, when the Provincial Mental Hospital, Ponoka, was opened to receive patients, there has been each year a steady increase of between 5% and 6% in the patient population in Provincial Mental Institutions. During 1940 this increase was only .86%.

The rate of hospitalized patients to general population has shown an increase from 156 per 100,000 in 1921 to 350 per 100,000 in 1940.

There were 524 psychotic patients and 44 mentally defective patients admitted to the Provincial Mental Hospital at Ponoka, 441 psychotic and 13 mentally defective patients were discharged, and 54 deaths of psychotic and 36 deaths of mentally defective patients occurred during the year.

The overcrowding of accommodation for disturbed women patients is the most serious problem facing us in so far as the Provincial Mental Hospital at Ponoka is concerned. Additional accommodation to relieve this situation is an urgent requirement. Provision was made in the capital estimates this year for the erection of a building on the grounds of the Provincial Mental Institute at Oliver, which will, when completed, provide accommodation for approximately 225 disturbed women patients. It is hoped that this accommodation will be available early in 1941. The addition to the kitchen at Ponoka, and the provision of the additional equipment required, has greatly improved the situation in respect of the food service.

The erection of a pavilion type of building similar to the farm dormitory at Ponoka, to provide accommodation for quiet, senile patients, would do much to improve the situation at Ponoka. Such male and female patients could be satisfactorily accommodated in pavilions constructed at a minimum cost, and patients accommodated in such pavilions could be cared for at much less cost than in the main institution. There are approximately 300 such patients of this type in the Ponoka and Oliver hospitals at present.

The new building at the Provincial Training School for Mental Defectives at Red Deer was completed in 1940, and it is expected that, with the installation of the equipment required, the additional accommodation will be available early in 1941. This will prove of great assistance in dealing with the problem presented by the large number of urgent cases on the waiting list at Red Deer.

The new boys' dormitory at the Gaetz farm, which provides accommodation for some 18 boys, and the acquisition of the Gaetz farm, comprising some 420 acres with good farm buildings, has proven of great advantage in connection with the instruction and training of older boys in farm work. The additional land, when put in first-class condition, will also prove a decided asset to the institution.

The Provincial Training School for Mental Defectives will, when the new pavilion is ready for full occupation, provide accommodation for 292 patients. Seventy-five per cent. of these patients are of the low grade type, requiring maximum nursing care and supervision.



During 1940, 14 patients were admitted to the Training School, 10 were discharged and 3 deaths occurred.

There were 769 patients in the Mental Institute, Oliver, at the beginning of 1940, and 766 at the end of the year. During the year, 56 psychotic and 4 mental defectives were admitted, 24 psychotic patients were discharged, and 37 deaths of psychotic patients and 2 deaths of mentally defective patients occurred.

The Auxiliary Mental Hospital at Claresholm provides accommodation for 100 women patients. There were 99 patients in this institution at the beginning of 1940 and 100 at the close of the year. There were 4 admissions, 3 discharges and no deaths during the year.

In the Auxiliary Mental Hospital at Raymond on January 1, 1940, there were 104 women patients, and at the end of the year 105 such patients. During the year, 6 psychotic patients were admitted, 3 psychotic patients were discharged, and 1 death occurred, leaving 93 psychotic patients and 12 mentally defective patients in the institution at the close of the year. The accommodation provided has proven very satisfactory.

#### *Guidance Clinics.*

Regular clinics were conducted as in previous years in Edmonton, Calgary, Lethbridge, Medicine Hat, Drumheller, High River, Red Deer and Lamont. A new clinic was established in Stettler during the year.

Patients are referred to the Guidance Clinics by local health and school authorities, local physicians, local magistrates, welfare and other organizations. Many parents visit these clinics for the purpose of obtaining information and advice in regard to mental hygiene problems in which they are interested or concerned in the home and community. This is a service which is of the most far-reaching importance for the present and future well-being of the Province, and one which the Department plans to extend as soon as the necessary provision can be made for this purpose.

There were 94 Guidance Clinics conducted in 1940, 356 new cases were presented, and 1,398 follow-up cases were dealt with. Since the inception of this service in 1929, 4,107 new cases have been dealt with by the staff.

#### *Eugenics Board.*

The work of the Eugenics Board is carried on under the authority of The Sexual Sterilization Act of 1929. Four meetings of the Board were held in 1940, all at the Provincial Mental Hospital, Ponoka. There were 114 cases presented to the Board during the year. Since the Act was proclaimed in 1929, 1,575 cases have been presented to and approved by the Board; 37 operations were performed during the year, bringing the total number of operations performed up to the end of 1940 to 727, of which 277 were operations on male patients, and 450 on female patients.



Detailed information concerning the work of the mental institutions, Guidance Clinics and the Eugenics Board will be found in the reports of these services.

#### *Board of Visitors.*

The Board of Visitors, composed of Dr. J. M. MacEachran, Chairman, Dr. E. W. Pope, Dr. E. G. Mason, Mrs. J. W. Field, and Mr. E. J. Kibblewhite, M.A., Secretary, visited the following institutions during the week beginning November 19th: Provincial Mental Institute, Oliver; Provincial Mental Hospital, Ponoka; Provincial Training School, Red Deer; Provincial Auxiliary Hospital, Claresholm; Provincial Auxiliary Hospital, Raymond; and the Central Alberta Sanatorium, Calgary.

A comprehensive report was made by the Board of each of the institutions visited. The Department is greatly indebted to the members of the Board for the splendid service which they have rendered in this regard.

#### *Child Welfare.*

Under the provisions of The Child Welfare Act, any child declared by a Judge of the Juvenile Court to be a neglected child is made a ward of the Superintendent of Child Welfare.

There were 464 children declared permanent wards in 1940 as compared with 432 in the previous year.

#### *Juvenile Delinquents.*

The Juvenile Court dealt with 914 cases in 1940 as compared with 811 cases during the previous year.

Detailed information concerning the work of the Child Welfare Branch is contained in the report of that Branch.

#### *General Administration.*

A statement of revenue and expenditure for the fiscal year ended March 31, 1941, will be found on page 10 of this report. An analysis of this statement shows that the total expenditure for all activities of the Department was \$2,017,855.66. The expenditure for the Child Welfare Branch amounted to \$69,969.18. The balance, namely, \$1,947,886.48, is the amount expended in carrying on the usual activities of the Department. Of the latter sum, \$1,713,164.25 was expended for the maintenance and operation of the various institutions which come under the administration of the Department, for grants to hospitals and homes, and for other forms of what might be classed as treatment services; \$234,722.23, representing 12% of the total budget for the Department, excluding the amounts expended for Child Welfare, was expended for all other activities, including communicable disease control, public health nursing, vital statistics, health units, clinic services, general administration, and all other preventive services. Thus, out of every dollar expended by the Department 12 cents was spent for preventive health activities. The need for the expansion of preventive health services, particularly in our rural and smaller urban centres, is great, and no expenditure will pay larger dividends in ensuring the mental and physical fitness of our people.

In bringing this summary of the activities of the Department during the year 1940 to a conclusion, I desire to express sincere appreciation of the splendid co-operation and loyal service given by the directors and the members of the staff of all divisions of the Department, including the Superintendents of all Provincial institutions, and members of all institutional staffs which come under the jurisdiction of the Department.

All of which is respectfully submitted.

MALCOLM R. BOW, B.A., M.D., C.M., D.P.H.,  
*Deputy Minister of Public Health.*



## Communicable Disease Division

(A. C. McGUGAN, M.D., D.P.H., Director)

This division of the Department of Health is concerned with the prevention and control of communicable diseases.

In unorganized territories, this Branch of the Department of Health directs, to the degree possible, the control of all communicable diseases. In the year 1940, 62 investigations of outbreaks of communicable diseases were made in Local Improvement Districts.

Consultation services were provided in cases of suspected communicable diseases.

Epidemiological surveys were conducted to discover the source of spread of certain communicable diseases, particularly Typhoid Fever. Twenty-five such surveys were conducted and forty-four special surveys made.

This branch co-operates with local boards of health and advises on matters of control of outbreaks of communicable diseases. In this branch a weekly report of all cases of communicable diseases reported throughout the Province, and all deaths from these diseases, is compiled and forwarded to the Federal Bureau of Vital Statistics. Educational work in the control of communicable diseases is carried on through the compilation and distribution of literature and by radio and platform addresses. During 1940, 93 such addresses were given by representatives of this branch.

Immunization services are provided by this Department to a few districts so remote from a doctor that otherwise this type of service would not be available. A summary of the work done follows:

Individuals vaccinated against Smallpox .....	2,711
Individuals inoculated against Diphtheria.....	2,406
Diphtheria reaction tests given .....	784

### TYPHOID FEVER

(Cases, 36, Deaths 3)

During the year 1940, 9 special investigations of Typhoid situations were made. Four carriers were discovered. These carriers have been given instructions regarding precautions necessary to prevent the spread of Typhoid Fever. In those districts where Typhoid Fever has been endemic for a period of years, it is necessary to vaccinate against Typhoid Fever. In one town in the Province over 3,000 people were vaccinated against Typhoid by the local medical health officer.

### SCARLET FEVER

(Cases 779, Deaths 9)

There has been a very material reduction in the incidence of Scarlet Fever during the year 1940. In the rural health units, immunization against Scarlet Fever has been carried out on a very large scale.



### SMALLPOX (Cases 0, Deaths 0)

Our Province is in a very precarious position in so far as Smallpox is concerned. There has not been a serious outbreak of Smallpox in a number of years, and a false sense of security has been created. A large proportion of the population is unvaccinated. It will only require the introduction of a serious type of Smallpox to create a critical situation.

### DIPHTHERIA (Cases 52, Deaths 12)

About one-half of all the cases and deaths, which occurred in this Province in 1940 from Diphtheria, occurred among Indians or those of Indian racial extraction. As a result of the serious outbreaks on two reserves, immunization against Diphtheria on a large scale has been undertaken by the Federal Department of Indian Affairs.

### PULMONARY TUBERCULOSIS (Cases 634, Deaths 232)

Of the 232 deaths from Pulmonary Tuberculosis reported in the Province of Alberta, 132 were among Indians.

### ACUTE ANTERIOR POLIOMYELITIS (Cases 0, Deaths 4)

In 1940 some confusion arose in connection with several cases which were first reported as Poliomyelitis and later reported as some other disease. In so far as this branch is concerned, there were no cases of Poliomyelitis reported during 1940.

### WHOOPIING COUGH (Cases 1,158, Deaths 56)

A study of Table 6 will show the reader how serious the Whooping Cough problem really is. An effective vaccine against Whooping Cough is now on the market. In our health units a large number of cases and contacts are vaccinated annually. Vaccination not only protects the contact, but also lessens the severity of the case if the vaccination is given in the early cases of the disease.

TABLE 1  
COMMUNICABLE DISEASES AS REPORTED FOR 1939 AND 1940

	1939	1940
Actinomycosis .....		
Acute Anterior Poliomyelitis .....	24	
Chickenpox .....	2,158	2,420
Diphtheria .....	36	52
Encephalitis Lethargica .....	1	1
Erysipelas .....	48	62
Infectious Mononucleosis .....		
Measles .....	5,382	5,041
Meningococccic Meningitis .....	3	25
Mumps .....	494	395
Paratyphoid Fever .....	2	5
Typhoid Fever .....	44	36
Pulmonary Tuberculosis .....	450	634
Rubella .....	69	291
Scarlet Fever .....	1,113	779
Smallpox .....	45	
Trachoma .....	13	1
Undulant Fever .....	2	6
Whooping Cough .....	2,080	1,158



TABLE 2  
TOTAL DEATHS DUE TO COMMUNICABLE DISEASES IN THE PROVINCE OF  
ALBERTA FOR 1939 AND 1940

	1939	1940
Pneumonia (all forms) .....	362	376
Influenza (all forms) .....	216	255
Pulmonary Tuberculosis .....	217	232
Tuberculosis (all other forms) .....	66	89
Erysipelas .....	2	6
Scarlet Fever .....	19	9
Encephalitis Lethargica .....	8	6
Whooping Cough .....	33	56
Diphtheria .....	7	12
Meningococcic Meningitis .....	7	7
Typhoid .....	6	3
Paratyphoid Fever .....	1	.....
Acute Anterior Poliomyelitis .....	5	4
Smallpox .....	.....	.....
Measles .....	6	6
Rubella .....	.....	.....
Chickenpox .....	.....	.....
Actinomycosis .....	.....	.....
Mumps .....	.....	.....

TABLE 3  
DEATHS DUE TO COMMUNICABLE DISEASES IN THE CITIES OF EDMONTON  
AND CALGARY FOR 1939 AND 1940

	Edmonton		Calgary	
	1939	1940	1939	1940
Pneumonia (all forms) .....	51	74	38	36
Influenza (all forms) .....	19	33	20	17
Pulmonary Tuberculosis .....	32	44	6	5
Tuberculosis (all other forms) .....	11	26	5	2
Diphtheria .....	1	6	1	.....
Whooping Cough .....	4	4	1	1
Acute Anterior Poliomyelitis .....	1	1	.....	.....
Meningococcic Meningitis .....	1	1	1	3
Typhoid Fever .....	2	.....	1	.....
Erysipelas .....	1	1	1	.....
Scarlet Fever .....	2	.....	2	.....
Paratyphoid Fever .....	.....	.....	.....	.....
Encephalitis Lethargica .....	2	.....	2	1
Measles .....	.....	1	1	.....
Smallpox .....	.....	.....	.....	.....
Actinomycosis .....	.....	.....	.....	.....

TABLE 4  
DEATHS DUE TO COMMUNICABLE DISEASES IN THE SMALLER CITIES, TOWNS,  
VILLAGES AND RURAL DISTRICTS FOR THE YEARS 1939 AND 1940

	1939	1940
Pneumonia (all forms) .....	273	266
Influenza (all forms) .....	177	205
Pulmonary Tuberculosis .....	179	183
Tuberculosis (all other forms) .....	50	62
Diphtheria .....	5	6
Whooping Cough .....	28	51
Acute Anterior Poliomyelitis .....	4	3
Meningococcic Meningitis .....	5	3
Erysipelas .....	.....	5
Typhoid Fever .....	4	3
Paratyphoid Fever .....	1	.....
Scarlet Fever .....	15	9
Encephalitis Lethargica .....	4	5
Measles .....	5	5
Actinomycosis .....	.....	.....
Chickenpox .....	.....	.....
Rubella .....	.....	.....
Smallpox .....	.....	.....

TABLE 5  
DEATHS DUE TO COMMUNICABLE DISEASES AMONG INDIANS IN THE  
PROVINCE FOR 1939 AND 1940

	1939	1940
Pneumonia (all forms) .....	76	85
Influenza (all forms) .....	30	32
Pulmonary Tuberculosis .....	126	132
Tuberculosis (all other forms) .....	32	49
Whooping Cough .....	6	23
Typhoid Fever .....	2	1
Measles .....	.....	1
Diphtheria .....	1	2
Erysipelas .....	.....	2
Rubella .....	.....	.....
Scarlet Fever .....	3	.....

TABLE 6  
(POPULATION, 795,000)

	Total Cases	Total Deaths	Morbidity Rate	Mortality Rate	Case Fatality Rate
Acute Anterior Poliomyelitis .....	†	4	†	†	†
Cerebro-Spinal Meningitis .....	25	7	3.1	0.9	28
Chickenpox .....	2,420	...	304	...	...
Diphtheria .....	51	12	6.4	1.5	23.5
Encephalitis Lethargica .....	*NR 1	6	...	...	...
Erysipelas .....	62	6	7.8	0.8	9.7
Influenza (all forms) .....	*NR	255	...	32.1	...
Mumps .....	395	...	49.7	...	...
Measles .....	5,041	6	634.1	0.8	0.1
Pulmonary Tuberculosis .....	634	232	79.8	29.2	36.6
Pulmonary T.B. (Indians Excepted) .....	*NR	132	...	12.6	...
Pneumonia (all forms) .....	*NR	376	...	47.2	...
Smallpox .....	...	...	...	...	...
Scarlet Fever .....	799	9	98.0	1.1	1.2
Typhoid Fever .....	36	3	4.5	0.4	8.3
Paratyphoid Fever .....	*NR 5	...	0.6	...	...
Whooping Cough .....	1,158	56	145.7	7.0	4.8
Rubella .....	291	...	36.6	...	...

†See narrative report "Acute Anterior Poliomyelitis".

\*NR: Not reported or incompletely reported.

INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES  
FOR THE 10-YEAR PERIOD, 1931-1940

DIPHTHERIA

	Population	Total Cases	Total Deaths	Morbidity Rate	Mortality Rate
1931 .....	731,605	151	26	20	3.5
1932 .....	740,000	51	10	6.89	1.35
1933 .....	757,000	32	6	4.23	.79
1934 .....	769,000	31	8	4.00	1.00
1935 .....	770,000	28	8	4.00	1.00
1936 .....	772,782	47	9	6.00	1.00
1937 .....	778,000	30	10	3.86	1.28
1938 .....	783,000	74	18	9.4	2.3
1939 .....	789,000	36	7	4.5	0.9
1940 .....	795,000	52	12	6.42	1.5

TYPHOID FEVER

	Population	Total Cases	Total Deaths	Morbidity Rate	Mortality Rate
1931 .....	731,605	42	16	5	2
1932 .....	740,000	52	9	7	1.21
1933 .....	757,000	46	6	6	.79
1934 .....	769,000	57	7	7.4	0.9
1935 .....	770,000	55	11	7	1.0
1936 .....	772,782	111	20	14.4	2.0
1937 .....	778,000	34	4	4.37	0.51
1938 .....	783,000	77	11	9.8	1.4
1939 .....	789,000	44	6	5.6	0.7
1940 .....	795,000	36	3	4.5	0.4

ACUTE ANTERIOR POLIOMYELITIS

	Population	Total Cases	Total Deaths	Morbidity Rate	Mortality Rate
1931 .....	731,605	23	8	3.2	1.1
1932 .....	740,000	39	14	5.2	1.8
1933 .....	757,000	31	7	4.1	0.9
1934 .....	769,000	12	4	1.6	0.5
1935 .....	770,000	162	15	21.0	2.0
1936 .....	772,782	18	1	2.3	0.1
1937 .....	778,000	169	13	21.72	1.67
1938 .....	783,000	105	15	13.4	1.9
1939 .....	789,000	24	5	3.0	0.6
1940 .....	795,000	...	4	...	...

WHOOPIING COUGH

	Population	Total Cases	Total Deaths	Morbidity Rate	Mortality Rate
1931 .....	731,605	451	32	61.8	4.4
1932 .....	740,000	665	34	88.6	4.5
1933 .....	757,000	1,830	55	241.7	7.2
1934 .....	769,000	1,290	52	167.5	6.7
1935 .....	770,000	763	43	99.0	6.0
1936 .....	772,782	1,793	73	232.0	9.0
1937 .....	778,000	658	49	84.57	6.3
1938 .....	783,000	310	30	39.6	3.8
1939 .....	789,000	2,080	33	263.6	4.2
1940 .....	795,000	1,158	55	145.7	7.0



## DEPARTMENT OF PUBLIC HEALTH

## SCARLET FEVER

1931	731,605	438	8	60.0	1.1
1932	740,000	202	4	26.9	0.5
1933	757,000	216	5	28.5	0.6
1934	769,000	378	5	49.1	0.6
1935	770,000	642	8	83.0	1.0
1936	772,782	2,729	23	353.0	3.0
1937	778,000	2,123	24	272.9	3.08
1938	783,000	1,452	25	185.0	3.2
1939	789,000	1,113	19	141.0	2.4
1940	795,000	779	9	98.0	1.1

## SMALLPOX

1931	731,605	27	1	3.7	0.1
1932	740,000	1	.....	0.1	.....
1933	757,000	1	.....	0.1	.....
1934	769,000	4	1	0.5	0.1
1935	770,000	4	.....	0.5	.....
1936	772,782	56	1	7.0	0.1
1937	778,000	57	1	7.3	0.1
1938	783,000	34	.....	4.3	.....
1939	789,000	45	.....	5.7	.....
1940	795,000	.....	.....	.....	.....

CLASS OF COMMUNICABLE DISEASES REPORTED IN 1940  
SCARLET FEVER

1940	Sex		MONTHS												AGES					TOTAL			
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44		45-59	60-over	Not Stated
			110	125	46	38	16	21	31	15	11	9	7	15	13	13	47	137	26		22	3	
Cities:																							
Calgary	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Drumheller	83	78	35	12	15	21	10	10	6	4	11	13	16	6	35	102	17	8	8	8	8	8	8
Edmonton	5	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lethbridge	6	8	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Medicine Hat	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Red Deer	74	60	23	11	13	5	30	4	3	5	8	19	12	2	15	63	18	20	3	3	3	3	3
Wetaskiwin	104	116	44	28	25	8	20	10	6	16	10	22	10	21	36	133	23	8	2	2	2	2	2
Towns and Villages																							
Rural Districts																							
Totals	385	394	155	91	71	60	91	43	26	29	33	62	60	55	7	140	446	90	60	8	1	1	27

CHICKENPOX

1940	Sex		MONTHS												AGES					TOTAL			
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44		45-59	60-over	Not Stated
			156	137	41	43	42	27	13	43	18	7	15	7	27	10	1 <td>24</td> <td>253</td> <td>9</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td>	24	253		9	6	
Cities:																							
Calgary	834	790	132	74	34	50	69	74	66	29	55	245	477	319	90	349	1075	89	20	20	20	20	20
Edmonton	14	14	6	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lethbridge	22	21	28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Medicine Hat	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Red Deer	6	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Wetaskiwin	80	70	41	9	11	13	3	13	1	13	12	10	24	4	19	111	9	2	1	1	1	1	1
Towns and Villages	146	119	29	27	15	24	16	20	14	5	39	22	29	25	1	51	185	14	7	7	7	7	7
Rural Districts																							
Totals	1261	1159	279	156	102	116	102	151	99	56	110	301	551	397	97	457	1689	129	34	1	1	11	

GERMAN MEASLES

1940	Sex		MONTHS												AGES					TOTAL			
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-24	25-44		45-59	60-over	Not Stated
			15	8	1	1	1	2	5	5	1	3	2	3	3	3	5	17	1		1	1	
Cities:																							
Calgary	9	11	1	1	1	1	2	4	1	1	2	3	3	5	1	4	8	6	1	1	1	1	1
Edmonton	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lethbridge	2	12	3	3	1	1	2	3	1	1	1	1	13	1	1	11	2	2	2	2	2	2	2
Red Deer	75	75	3	1	1	2	2	3	2	6	8	16	14	30	5	25	105	10	5	5	5	5	5
Wetaskiwin	37	45	1	2	2	2	3	3	2	2	2	2	2	2	2	15	49	10	4	4	4	4	
Towns and Villages																							
Rural Districts																							
Totals	139	152	5	4	2	3	9	15	4	7	14	22	45	151	8	49	181	39	12	2	2	2	





MEASLES

Cities:	526	536	1	2	26	27	170	133	50	24	5	50	148	426	2	161	829	53	24	2	1062
Calgary	1515	1479	5	4	5	38	611	1056	681	122	21	71	117	263	100	912	1822	124	34	2	2994
Edmonton	1	4	1	1	1	1	1	1	1	1	1	1	1	4	2	2	2	1	1	2	1
Drumheller	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5
Lethbridge	30	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Medicine Hat	8	7	2	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	4
Red Deer	163	144	5	2	5	1	4	123	12	2	2	19	31	78	1	36	219	32	9	2	15
Wetaskiwin	334	276	20	23	9	15	32	33	23	55	51	168	45	136	11	85	366	105	15	1	307
Towns and Villages																					8
Rural Districts																					26
Totals	2580	2461	32	32	46	80	818	1346	769	206	104	309	361	937	115	1211	3251	337	85	5	5041

MUMPS

Cities:	84	47	6	18	5	9	10	10	2	2	2	13	25	29	10	117	138	16	7	1	131
Calgary	100	99	16	14	10	18	25	9	8	5	6	21	46	23	32	138	16	7	6	1	199
Edmonton	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lethbridge	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Medicine Hat	13	6	5	2	2	1	1	1	1	1	1	4	1	3	1	9	7	2	3	1	19
Wetaskiwin	21	21	2	4	2	4	1	1	1	1	5	11	4	10	5	20	12	3	1	1	42
Towns and Villages																					
Rural Districts																					
Totals	219	176	27	35	21	29	37	19	12	13	13	49	76	66	48	286	38	15	7	1	395

WHOOPIING COUGH

Cities:	54	54	18	16	9	16	10	11	5	12	8	2	1	13	5	52	51	2	2	108
Calgary	221	262	52	49	50	74	36	32	58	29	34	37	19	13	52	213	214	2	2	483
Edmonton	6	8	1	1	1	1	1	1	1	1	1	1	1	2	3	11	11	1	1	14
Lethbridge	25	18	8	16	4	13	1	1	1	1	1	1	1	1	3	18	22	1	1	43
Medicine Hat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Red Deer	7	5	3	4	4	1	1	1	1	1	1	2	2	3	5	4	4	1	1	12
Wetaskiwin	69	80	17	12	14	11	17	18	9	10	6	14	19	2	7	61	81	1	1	149
Towns and Villages	169	179	20	36	17	16	5	22	32	19	60	80	33	8	23	100	197	22	1	348
Rural Districts																				
Totals	551	607	119	133	94	130	68	89	105	72	114	135	75	25	92	453	580	24	2	1158

ERYSIPELAS

Cities:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calgary	17	21	3	5	3	6	3	2	1	4	5	2	2	4	2	1	1	3	8	13	38
Edmonton	8	4	2	2	3	3	4	4	1	1	1	1	1	1	1	1	1	1	3	5	12
Lethbridge	7	4	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	3	5	11
Medicine Hat																					
Red Deer																					
Wetaskiwin																					
Towns and Villages																					
Rural Districts																					
Totals	32	30	3	10	3	9	4	8	3	8	5	4	5	4	4	1	1	3	14	24	62





ENCEPHALITIS

Turner Valley	1					1	1			1									1
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B. SOMME DYSENTERY

Coleman	1												1						1
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ENDOMOEBIA HISTOLYTICA

Edmonton	1					1													1
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T. B. MENINGITIS

Edmonton	2					1	1												2
Rural Districts	1	1				1													2
Totals	3	1	1	1	1	1	1		1	2									4

INFLUENZAL MENINGITIS

Edmonton	1																		1
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PULMONARY TUBERCULOSIS

Cities:																							
Calgary	59	43	8	6	33	8	4	7	4	7	7	5	6	8		1	5	14	53	20	8	1	102
Drumheller	6	7	2	1	1	21	2	2	1	1	2	2	2	4	6		2	4	6	1			13
Edmonton	39	62	9	3	33	7	5	7	8	6	8	2	9	4			8	31	34	22	5	1	101
Lethbridge	8	5			4	1		1	3	1	1		3	1				3	5	4	1		13
Medicine Hat	7	11	3		3		3	1	3				5					7	3	6			18
Red Deer	3				2	2		1											1	2			3
Wetaskiwin	3	2			2	1	1	1											3	1			5
Towns and Villages	104	109	11	8	57	10	20	20	11	5	10	21	36	4	1	2	16	34	84	38	22	16	213
Rural Districts	86	80	6	6	57	10	7	12	9	5	17	21	7	9			39	33	51	27	12	4	166
Totals	315	319	39	24	190	39	43	48	52	25	48	51	66	26	1	4	70	128	239	121	48	23	634

NON-PULMONARY TUBERCULOSIS

City:																								
Edmonton	1						1													1				1
Towns and Villages	3	4	1				1	1	1	1	1			1			2	2	2					7
Rural Districts	7	3		1		1	1	4	2								3	3	2		2			10
Totals	10	8	1	1		1	3	2	1	1	5	2	1			5	5	5		5		3		18



## Division of Public Health Education

(F. T. COOK, *Lecturer*)

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A review of the annual reports of the various divisions of the Department indicates that health education is assuming a role of major importance in many divisions.

In all six health units intensive educational work is being carried on by all members of the staffs. In addition to periodical health bulletins and lectures, a great amount of visual educational work is being done by both still and motion pictures.

A continued increase in the general work of health education is noted even outside health organizations, particularly in the schools. Each year an increase in literature distribution has to be recorded. In 1940, approximately 45,000 pieces of literature were distributed by or through the Department.

One exhibit was held during the year, and exhibit material was loaned to other organizations on several occasions.

Radio talks were given over CKUA once each week by members of the staff, the superintendents of institutions, Miss Stacey, dietitian at the University Hospital, members of the cancer committees in Edmonton and Calgary, and Dr. H. A. Gilchrist of the University Dental Clinic.

The Department lecturer gave 110 lectures to a total audience of 16,000 people. Other members of the staff also lectured, including Mr. A. M. Zalizniak, inspector of health and vital statistics, who records 50 for the year. During the course of any one year the various members of the staff, not including the health units, give approximately 400 lectures.

The small library of health films are distributed freely, and the general health films are in constant use during the fall and winter months.

# Hospital Inspection Branch and Medical Inspector's Report

(A. C. McGUGAN, M.D., D.P.H., *Inspector of Hospitals*)

This branch of the Department of Health is maintained in order that the Department may be assured that hospitals are so equipped and staffed that adequate hospital and nursing services may be available to the community. To the degree possible, contact has been maintained with the approved hospitals throughout the year. Contact is maintained either by inspection or by correspondence, or both. Some of the hospitals are so situated that an annual inspection visit to them is not economically feasible.

There were 94 approved hospitals in receipt of Government Grant in the Province during the year. These are classified as follows:

APPROVED HOSPITALS	
Hospitals operated under denominational auspices:	
Catholic .....	34
Protestant .....	7
Hospitals operating under The Municipal Hospitals Act .....	24
Hospitals supported municipally .....	15
Community organized or under special Acts .....	6
Hospitals industrially supported .....	5
Hospitals operated under non-denominational service organizations .....	2
University Hospital .....	1
Total .....	94
PRIVATE HOSPITALS	
Classification:	
Medical and Obstetrical .....	19
Chronic and Convalescent .....	13
Medical, Minor Surgical and Obstetrical .....	5
Medical, Surgical and Obstetrical .....	7
Total .....	44
Licensed Baby Shelters .....	26

## APPROVED HOSPITALS

Two hospitals employ medical superintendents on a full time basis. Eight others have medical superintendents employed on a part time basis. In 34 of the hospitals there are nursing superintendents who have had special training in hospital administration. In the rest of the approved hospitals, superintendents usually are chosen because they have evidenced ability as ward supervisors. It would appear that our larger hospitals should endeavour to make opportunities for their superintendents to take courses in hospital administration.

In the smaller hospitals, too much is expected of the nursing superintendent. It is not unusual to find a superintendent who acts as dietitian, housekeeper, purchasing agent, collecting agent, operating room supervisor, and anaesthetist. As much of the superintendent's time as possible should be devoted to the supervision of the nursing technique of the hospital.

## CASE RECORDS

Recording is regarded as an essential part of every scientific investigation, and every medical case is a problem for scientific



consideration. Complete records are also valuable in that frequently they provide a valuable reference indicating the patient's condition and the physician's findings on previous admissions. From a medico-legal point of view, it is imperative that operative reports be completed promptly. Inspections made during the present year indicate that the case records in some hospitals have improved considerably. In others, the case records are so sketchy and incomplete that they are not regarded as meeting minimal requirements for approval.

The services of this branch are available to any hospital in the Province. Advice regarding medical administration, the purchase of hospital equipment, and others matters, will be provided on request.

The following is a record of surgical work performed in hospitals of Alberta in 1940:

	Approved Hospitals Exclusive of Municipal	Municipal Hospitals	Private Hospitals		Approved Hospitals Exclusive of Municipal	Municipal Hospitals	Private Hospitals
<b>GENERAL:</b>							
Abscess	733	144	3	Hemorrhoidectomy	372	53	...
Adenectomy	23	2	...	Herniotomy	866	150	7
Adhesions	159	14	...	Hydrocele	73	12	...
Albee's Operation	1	...	2	Ileocolostomy	12	1	...
Amputation	363	61	2	Incision	304	61	...
Anus	4	...	...	Injection	381	33	...
Appendectomy	4854	1313	64	Jejunostomy	21	...	...
Arthroclasis	...	...	...	Laminectomy	15	...	...
Arthrodesis	19	...	...	Laparotomy	216	60	...
Arthroplasty	4	...	...	Ligation	325	26	...
Aspiration	274	51	1	Lithotomy	56	4	...
Bladder	25	1	...	Lobectomy	4	...	...
Bone Graft	11	...	...	Manipulation	398	54	...
Bone Plating	7	...	...	Myomectomy	3	...	...
Bowel	68	7	...	Nephrectomy	55	1	1
Bronchoscopy	47	...	...	Nephrotomy	11	1	...
Bunionectomy	32	6	1	Neurectomy	16	1	...
Burns	8	1	...	Orchidectomy	36	3	1
Cancer	282	18	...	Osteoplasty	10	...	...
Carbuncle	22	4	...	Osteotomy	66	8	1
Cauterization	34	1	...	Paralysis	2	...	...
Cecopexy	32	2	...	Peritonitis	1	...	...
Cecostomy	1	...	...	Phlebectomy	12	1	...
Cholecystectomy	477	64	1	Plaster Cast	1102	102	...
Circumcision	441	140	10	Plastic	79	6	...
Colopexy	...	...	...	Pneumothorax	3	...	...
Colostomy	67	3	...	Polypi (Cervical)	14	12	...
Craniotomy	21	...	...	Proctoscopy	37	4	...
Curetting	55	7	...	Prostatectomy	86	11	...
Cyst	435	61	...	Puncture	48	1	...
Cystectomy	6	6	...	Pyloroplasty	39	5	...
Cystoscopy	595	35	...	Removal	491	56	2
Cystotomy	86	3	...	Repair	395	114	4
Decompresia	18	1	...	Resection	366	17	1
Dilatation	45	5	...	Sequestrectomy	35	3	...
Dislocation	110	19	...	Skin Graft	51	13	...
Enterectomy	7	...	...	Splenectomy	4	...	...
Epididymotomy	7	...	...	Suturing	629	144	...
Evulsion Nail	18	10	...	Sympathectomy	2	...	...
Examination	101	7	...	Synovectomy	...	...	...
Excision	276	31	3	Tenoplasty	19	2	...
Extraction Teeth	547	110	4	Tenotomy	27	1	...
Fasciotomy	16	...	2	Thoracotomy	10	...	...
Fistula	84	4	...	Thyroidectomy	314	28	4
Foreign Body	104	15	2	Transfusion	2617	42	...
Fracture	1216	246	...	Tumor	248	30	1
Fulguration	43	2	...	T.B.	22	2	...
Gastroectomy	14	...	...	Urethrotomy	19	4	...
Gastroenterostomy	84	5	...	Varicocele	50	8	1
Gastrostomy	17	1	...	Vasectomy	34	6	3
Hammer Toe	19	3	...	Wounds	110	22	...
Hare Lip	12	1	...				
<b>OBSTETRICS:</b>							
Abortion	35	11	...	Colpotomy	4	1	...
Adhesions	14	...	...	Curetage	1064	170	5
Cervix	62	21	1	Dilatation	573	66	1
Caesarean Section	90	9	2	Examination	153	35	...
Cauterization	133	36	...	Hysterectomy	273	40	1
Colporrhaphy	87	6	1	Induction Labor	5	42	...

	Approved Hospitals Exclusive of Municipal	Municipal Hospitals	Private Hospitals		Approved Hospitals Exclusive of Municipal	Municipal Hospitals	Private Hospitals
Insertion Radium .....	128	.....	.....	Salpingo-Oophorectomy ..	47	2	1
Oophorectomy .....	173	12	.....	Sterilization .....	42	4	.....
Ovariectomy .....	11	5	.....	Suspension .....	34	1	.....
Panhysterectomy .....	4	.....	.....	Trachelorrhaphy .....	38	.....	.....
Perineorrhaphy .....	188	17	.....	Tubal Inflation .....	1	.....	.....
Plastic Genital .....	.....	.....	.....	Uterus .....	416	59	2
Salpingectomy .....	237	20	.....	Venesection .....	3	.....	.....
<b>EYE, EAR, NOSE, THROAT:</b>							
Abscess .....	8	3	.....	Mastoidectomy .....	88	10	.....
Adenoidectomy .....	41	3	1	Myringotomy .....	22	1	.....
Antrum .....	52	4	.....	Paracentesis .....	56	13	.....
Cataract .....	126	.....	.....	Plastic Eye .....	12	.....	.....
Cautery .....	19	.....	.....	Polypi .....	121	.....	.....
Cyclodialysis .....	.....	.....	.....	Phimosis .....	.....	1	.....
Dacryocystectomy .....	9	.....	.....	Ptergium .....	22	1	.....
Detachment Retina .....	2	.....	.....	Otitis Media .....	44	7	.....
Dilatation .....	2	.....	.....	Sinus .....	50	1	.....
Enucleation Eye .....	59	3	2	Sclerotomy .....	.....	.....	.....
Esophagoscopy .....	14	.....	.....	S.M.R. .....	52	.....	.....
Ethmoidectomy .....	5	.....	.....	Suturing .....	14	1	.....
Examination .....	11	.....	.....	Synectomy .....	.....	.....	.....
Excision .....	6	.....	.....	Tenotomy .....	.....	.....	.....
Foreign Body .....	50	2	.....	Tonsilectomy .....	3306	898	97
Glaucoma .....	6	.....	.....	Tracheotomy .....	6	.....	.....
Iridectomy .....	39	.....	.....	Turbineotomy .....	15	2	.....
Laryngoscopy .....	6	.....	.....	T. & A's .....	2960	480	16
<b>Total number of Operations in Hospital:</b>							
Approved (Municipal excluded) .....							33,069
Municipal .....							5,493
Private .....							249
<b>Total</b> .....							<b>38,811</b>



## Report of the Provincial Laboratory

ALLAN C. RANKIN, C.M.G., M.D., D.P.H., *Director Provincial Laboratory and Provincial Bacteriologist (On Active Service)*

(JOHN JAMES OWER, B.A., M.D., C.M., *Acting Director Provincial Laboratory*)

(ROBERT McLEOD SHAW, B.A., M.D., C.M., D.P.H., F.R.C.P., *Acting Provincial Bacteriologist*)

The number of routine public health laboratory examinations, as will be noted in the accompanying tables, is still increasing, the total being some 4,500 higher than in 1939.

As noted in previous reports, the total of strictly public health examinations has been increasing so much from year to year that it was finally found impossible to carry on the large number of animal pathological examinations requested. The establishment of a modern special veterinary pathological laboratory by the Department of Agriculture has transferred the load of this work from this laboratory. Chicken bloods, fox vaccines and other veterinary examinations have been discontinued. Routine cattle bloods continue for the present to be done in the laboratory.

In spite of this relief, the natural increase in the routine work plus the added demand for large numbers of special examinations for soldiers has now completely overtaxed the physical capacity of the space, equipment and personnel. This situation will be the subject of a special detailed report to follow.

In conclusion, may I state that the staff have shown great loyalty and diligence and a willingness to accept, without complaint, the considerable amount of unrewarded overtime necessary to complete the work day by day.

TABLE No. 1  
WORK PERFORMED IN THE PROVINCIAL LABORATORY DURING THE YEAR 1940

	Total 1939	Total 1940	Increase	Decrease
Sputum .....	829	632	.....	197
Diphtheria .....	2,045	2,140	104	.....
Typhoid Fever .....	448	471	23	.....
Milks .....	1,455	1,172	.....	283
Waters .....	1,912	2,414	502	.....
Miscellaneous Examinations .....	3,512	3,722	210	.....
Mother's Milk .....	1	.....	.....	1
Urinalysis .....	127	85	.....	42
Medico-Legal Examinations (Blood, seminal, etc.) .....	8	5	.....	3
Bloods for the Wassermann Test .....	31,444	33,140	1,696	.....
Smears for the Gonococcus .....	5,245	5,966	721	.....
Van Den Bergh Determination .....	3,173	2,295	.....	878
Pathological Histological Material .....	9,343	9,360	17	.....
Blood Smear Examinations .....	123	117	.....	6
Post-mortem Examinations .....	210	260	50	.....
Medico-Legal Examinations .....	16	16	.....	.....
Ascheim Zondek Examinations .....	231	200	.....	31
Cerebro-Spinal Fluid Examinations .....	2,047	2,031	.....	16
Bacteriological Post-mortem Examinations .....	73	99	26	.....
B. Abortus Examinations .....	430	466	36	.....
B. Tularensis Examinations .....	429	465	36	.....
Typhoid Vaccine (10 c.c. quantity) .....	899	1,059	160	.....
Autogenous Vaccine (25 c.c. quantity) .....	18	475	457	.....
Stock Vaccine (25 c.c. quantity) .....	18	500	482	.....
B.C.G. Vaccine (10 c.c. quantity) .....	76	.....	.....	76
Poliomyelitis Convalescent Serum (20 c.c.) .....	50	24	.....	26
<b>Special Veterinary Examinations:</b>				
Chicken Blood Examinations .....	15,863	.....	.....	.....
Cattle Blood Examinations .....	2,209	1,161	.....	.....
Fox Vaccine (10 c.c. quantity) .....	893	.....	.....	.....
	83,127	68,284	4,520	1,559



Table No. 2 shows the number of water and milk, special and blood containers prepared and distributed during the year 1940:

TABLE No. 2

	1939	1940
Water Containers .....	1,695	2,030
Special Containers (Diphtheria, Sputum, Typhoid) .....	2,988	3,994
Wassermann Containers .....	31,500	31,523
Total .....	36,183	37,547

Table No. 3 shows the number of cubic centimeters of auto-genous and other vaccines prepared and distributed during the year 1940:

TABLE No. 3

	1939	1940
Typhoid Vaccine .....	8,990 c.c.	10,590 c.c.
Autogenous Vaccine .....	450 c.c.	475 c.c.
Stock Vaccine .....	450 c.c.	500 c.c.
Poliomyelitis Convalescent Serum .....	1,000 c.c.	480 c.c.
Total .....	10,890 c.c.	12,045 c.c.

Increase in the preparation and distribution of Vaccines and Serums—1,155 c.c.

Table No. 4 shows the detail of some of the work done by the Laboratory in relation to the control of infectious disease:

TABLE No. 4

Diseases	No. of Specimens		No. of Post Offices	No. of Physicians	Month.	Sputum.	Diph.	Typhoid Fever.	Total.
	Posi-tives	Nega-tives							
Pulmonary Tuberculosis	31	601	.....	.....	Jan. ....	56	89	52	197
					Feb. ....	72	198	45	315
					Mar. ....	53	132	24	209
					April ....	63	81	35	179
					May ....	56	188	54	298
Diphtheria .....	73	2074	.....	.....	June ....	53	255	42	350
					July ....	47	64	44	155
Typhoid Fever..	87	384	.....	.....	Aug. ....	51	191	58	300
					Sept. ....	29	203	41	273
					Oct. ....	40	220	37	297
					Nov. ....	55	286	21	362
					Dec. ....	57	242	18	317
Total .....			211	665		632	2149	471	3252

Table No. 5 shows the number of blood examinations by the complement fixation test for the diagnosis of syphilis:

TABLE No. 5

Bloods received .....	33,282
Bloods examined .....	33,140
Bloods positive to reaction .....	2,317
Bloods negative to reaction .....	30,436
Bloods unsuitable for examination .....	387
Bloods broken in transit .....	142
Male bloods examined .....	17,488
Female bloods examined .....	11,044

Out of 33,140 of these, the following details can be given:

Male married .....	3,884
Male married positive .....	456
Male married negative .....	3,428
Male single .....	6,258
Male single positive .....	503
Male single negative .....	5,755
Female married .....	7,639
Female married positive .....	384
Female married negative .....	7,255
Female single .....	3,009
Female single positive .....	207
Female single negative .....	2,802
Bloods received from Calgary and South .....	8,031
Bloods received from North of Calgary .....	25,251
Number of blood examinations made in 1939 .....	31,444
Number of blood examinations made in 1940 .....	33,140
Increase in number of specimens examined .....	1,696
Increase in per cent. ....	5%



Table No. 6 gives the details of the bacteriological and chemical examinations of water performed throughout the year:

Waters	1939	1940
Number of samples of water examined bacteriologically and found fit for human consumption	876	1,138
Number of samples of water examined bacteriologically and found unfit for human consumption	112	294
Number of samples of water examined bacteriologically and chemically and found fit for human consumption	688	665
Number of samples of water examined bacteriologically and chemically and found unfit for human consumption	150	147
Number of samples of water examined chemically and found fit for human consumption	60	128
Number of samples of water examined chemically and found unfit for human consumption	11	15
Number of samples of ice examined bacteriologically and found fit for human consumption	15	27
Number of samples of ice examined bacteriologically and found unfit for human consumption	.....	.....
Total	1,912	2,414

Table No. 7 gives the details of the bacteriological, bacteriological and chemical, chemical examinations of milk performed throughout the year 1940:

	1939	1940
Number of samples of milk examined bacteriologically	1,169	1,026
Number of samples of milk examined bacteriologically and chemically	137	119
Number of samples of milk examined chemically	8	27
Number of rinse waters examined bacteriologically	141	.....
Total	1,455	1,172
Number of samples of milk examined showing low butter fat	9	19
Number of pasteurized milk samples examined bacteriologically with a bacterial count above 30,000	88	52
Number of non-pasteurized milk samples examined bacteriologically with a bacterial count above 300,000	105	72
Number of pasteurized milk samples examined	543	468
Number of non-pasteurized milk samples examined	771	704

#### SERA AND VACCINES DISTRIBUTED—JANUARY, 1940-DECEMBER, 1940

	Pkgs.		Pkgs.
Smallpox Vaccine:		30 persons, "D"	185
10 points	2,872	30 persons, "E"	190
2 points	268	Dick Test:	
Diphtheria Antitoxin:		10 persons	1,268
1,000 units	1,254	Tetanus Antitoxin:	
5,000 units	44	1,500 units	155
20,000 units	255	5,000 units	21
Diphtheria Toxoid:		10,000 units	9
1 person	3,705	Anti-Meningococcus Serum:	
6 persons	345	20 c.c. vial	201
12 persons	380	Pertussis:	
1 person, diluted	53	1 person	2,111
Schick Test:		Staphylococcus Toxoid:	
25 persons	783	2 c.c. vial	259
Scarlet Fever Antitoxin:		Staphylococcus Antitoxin:	
9,000 units, vial	206	10,000 units	32
9,000 units, syringe	312	20,000 units	5
3,000 units, syringe	711	Anti-Pneumococcus Serum:	
Scarlet Fever Toxin:		20,000 units	80
1 person	1,254	Gas Gangrene:	
6 persons	1,164	4,000 units	38
30 persons, "A"	42	10,000 units	121
30 persons, "B"	111	Rocky Mountain Spotted Fever	
30 persons, "C"	157	Vaccine	8 c.c.

## COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE WERE MADE, 1940

Sputum .....	632	\$ 1.00	\$ 632.00
Diphtheria .....	2,149	1.00	2,149.00
Typhoid Fever .....	471	1.00	471.00
Milks .....	1,172	3.00	3,516.00
Waters .....	2,414	10.00	24,140.00
Miscellaneous Examinations .....	3,722	3.00	11,166.00
Mothers' Milks .....		2.00	
Urinalysis .....	85	3.00	255.00
Medico-Legal Examinations .....	5	5.00	25.00
Bloods for Wassermann Test .....	33,140	3.50	115,990.00
Smears for the Gonococcus .....	5,966	1.00	5,966.00
Van Den Bergh Determination .....	2,295	1.00	2,295.00
Pathological Histological Material .....	9,360	5.00	46,800.00
Blood Smear Examinations .....	117	2.00	234.00
Ascheim Zondex Test .....	200	5.00	1,000.00
Cerebro-Spinal Fluid Examinations .....	2,031	2.00	4,062.00
Post-mortem Examinations (Bact.) .....	99	5.00	495.00
B. Abortus Examinations .....	466	1.00	466.00
B. Tularensis .....	465	1.00	465.00
Typhoid Vaccine (10 c.c. quantity) .....	1,059	.25	264.75
Autogenous Vaccine (25 c.c. quantity) .....	475	5.00	2,375.00
Stock Vaccine (25 c.c. quantity) .....	500	5.00	2,500.00
Poliomyelitis Serum (20 c.c. quantity) .....	24	2.50	60.00
Cattle Blood Examinations .....	1,161	.10	116.10
Total .....			\$225,442.85



## Public Health Nursing Branch

(KATE SHAW BRIGHTY, R.N., *Superintendent*)

During the year 1939, organization was commenced in five districts. This work was completed with the establishment of the following five districts this year: Lomond, Grassland, Dixonville, Breynat, and Whitemud Creek.

The public health centres served by the Public Health Nursing Branch are listed in the following order:

*Urban.*—Calgary, Edmonton, Medicine Hat-Redcliff, Drumheller, Vegreville.

*Rural.*—Worsley, Hines Creek, Bonanza, Blueberry Mountain, Valley View, Smith, Tangent, Grouard, Kinuso, Dixonville, Whitemud Creek, Fawcett, Fort Assiniboine, Mackay, Peers, Whitecourt, Lindale, Pendryl, Alder Flats, Grassland, Breynat, Newbrook, Maloy, Plamondon, Tulliby Lake, Youngstown, New Brigden, Vauxhall, Hilda, Lomond.

The district of Alder Flats is set aside as a teaching centre under the supervision of a senior nurse established in the Pendryl district. The Alder Flats teaching centre is utilized for the training of two nurses for a period of six months each.

There were nine resignations from the staff during the year, namely: Miss Jean McKinley, Miss E. Muriel Grant, Miss Margaret Reid, Miss Ruth Pugh, Miss Elizabeth Waddell, all to be married. Miss Elizabeth Sage and Miss Fern Primeau were transferred from this Branch to the Surgeon Full-Time Health Unit. Miss M. C. Cogswell and Miss I. Gourlay resigned. Miss Olive F. Watherston is on leave of absence overseas with the Imperial Nursing Sisters.

The following appointments were made: Miss Christine Anderson, Miss M. C. Cogswell, Miss Stella D. Hodgson, Mrs. Alice Murphy, Miss Amy V. Wilson, Miss A. G. Nordtorp, Miss Jennie Thomson, Miss Elizabeth Wallwork, Miss Mary G. White.

The following were appointed to the Travelling Clinic and summer relief staff: Miss Bernice Barrett, Miss M. K. McCaskill, Miss C. J. Winning, Miss Evelyn Eastley, Miss M. C. McKenzie, Miss L. A. Hennig.

### *Child Welfare.*

In Edmonton, the Child Welfare Clinic is supervised by Miss Blanche A. Emerson. Miss Emerson reports as follows:

Both the attendance and the interest shown in the Child Welfare Clinic has been most gratifying. Upon two occasions during the year the attendance reached 95 and 94 respectively. There were 131 children brought in from rural districts. Letters were received from 87 outside points, in 73 of which information was requested regarding feeding problems, while 14 dealt with other matters pertaining to health.

Our thanks are due to Drs. Folinsbee, Calder and Newell for their excellent services, also to Dr. A. S. Hall, who relieved Dr. Folinsbee during the months of July and August. Student nurses



from all city hospitals have been given both clinic and field experience, while medical students have been in attendance throughout the academic year.

We are grateful to the Stagette Club and other organizations for generous donations of layettes, cod liver oil, and other supplies for needy families. We appreciate greatly the hearty co-operation we have received from the City Health Department, the Council of Social Agencies, and all the Relief Officers. They have been most helpful at all times.

Special emphasis has been placed, both at the clinics and in the homes, on the need for immunization against diphtheria, and vaccination against smallpox, and we feel that good results are being obtained.

Inspections have been made of private nursing homes and children's shelters. Diabetic cases have been visited and Creche Board meetings attended. Much time has been given to soldiers' wives and their children, many of whom remained in the city where the husbands and fathers were stationed. Many of these young wives attended the clinic faithfully, and some have written for advice from other provinces.

Miss M. F. Lavell, in charge of the Child Welfare Clinic in Calgary, reports as follows:

The clinic is open to the public five afternoons each week. A pediatrician is in charge two afternoons a week. Routine work consists in the completion of cards made out from birth registration records and the follow-up through school age.

1. Invitations to attend infant clinics are sent to mothers.
2. Questionnaires are sent to family physicians concerning birth and home conditions.
3. Where home conditions are considered inadequate, families are visited by clinic nurses and advised of infant clinics.
4. All families attending clinics are visited by the clinic nurses periodically.
5. Parents are notified when children reach six months of age to have them immunized against diphtheria.
6. When children reach three years of age a special appointment is made so that each child may be given a complete physical examination. Where defects are found among children whose parents are in poor circumstances, the case is followed up by the clinic nurses.

Dr. Roach attended 103 clinics. School doctors also examined the pre-school children. Pupil nurses from the General Hospital and the Holy Cross Hospital completed two months instruction and observation, and one nurse from the University of British Columbia completed one month's observation at the clinic. A weighing station was temporarily conducted at the Ogden Community Hall. Private hospitals and baby shelters are routinely inspected. Patients receiving insulin are investigated. Provision has been made by which pre-natal instruction is given weekly by the Victorian Order of Nurses. There were 66 out-of-town cases attended by nurses, and letters were sent to a number of outside points in the Province.

Our sincere appreciation is hereby expressed for the following donations: Cod liver oil, clothes, medical supplies, layettes, glasses, hospital expenses, etc., from the Good Cheer Club; cod liver oil



from the American Women's Club; cod liver oil and infant foods from Mead, Johnson & Co.; drugs from Drs. McEachern and Merritt; infants' shirts and bed clothes from the Hounsfeld Heights Club; literature from Metropolitan Life Insurance Co.; clothes and other assistance from private individuals; Sunshine, Christmas hampers.

Miss Hagerman in charge of the work in the Medicine Hat area, reports as follows:

Two baby clinics and one V.D. clinic were held each week in Medicine Hat. A baby clinic is held every second week in Redcliff, with Dr. Lewis in attendance. Assistance is given by the nurse at the Tuberculosis Clinic, which is held every second month. Home visits and follow-up visits in connection with the different clinics are made up by the nurse.

During the summer one day baby clinics were held at the following centres in the district: Little Plume, Bow Island, Etzikom, Walsh, Manyberries; Tilley, Hilda, Schuler, Taber, Brooks. Attendance at these clinics totalled 232; babies 93, pre-school children 19. Nineteen children of school age were inspected, making a total of 251.

Assistance was given to the doctor and the school nurse in connection with immunization of the Medicine Hat public school children against scarlet fever, diphtheria, whooping cough and smallpox. The Superintendent of the Medicine Hat General Hospital arranged for the student nurses to have two weeks' instruction at this clinic. Two lectures on public health were given to the student nurses at the hospital. The average attendance at the clinic has been very good.

Miss Ethel Jones, Supervisor of a generalized public health programme in Drumheller, sends the following report:

The children in 12 school districts, 60 classrooms in all, were given health inspection, which included tests for defective vision, inspections of hearing, tonsils, nasal obstruction, glands, skin and hair, orthopaedic conditions, nervous and mental conditions, weight for height and age. Since the inspections of the previous year the children had received medical and dental attention for 279 defects.

Fifteen tuberculosis clinics were held in Drumheller, with a physician from the Central Alberta Sanatorium in attendance. Physical examinations were given to 217 persons. Interviews with the doctor and tuberculin skin tests brought the total attendance of people at these clinics to 237.

Two guidance clinics were held during the year with a physician from the Mental Hygiene Division in attendance, 22 people attending these clinics.

Forty-eight child welfare clinics were held on Friday afternoons at the clinic rooms in Drumheller, and three additional clinics were held in Wayne, Rosedale and East Coulee. There were 1,044 visits made by mothers with their babies and pre-school children to these clinics; 250 follow-up visits to the homes were made by the nurses.

Grateful appreciation is expressed for the splendid co-operation of visiting physicians, local physicians and dentists, the Board and staff of Drumheller Municipal Hospital, the personnel of local and Provincial organizations, and private individuals who have rendered valuable assistance to the nurse. Sincere appreciation is also



extended to the Canadian Institute for the Blind, the Drumheller Kinsmen Club, Drumheller Women's Institute, Drumheller Welfare Board, and the Drumheller Red Cross Society for their fine co-operation.

At Vegreville, under the supervision of Miss Mary Black, a generalized programme of Public Health Nursing is carried on in the Municipal District of Norma and the Town of Vegreville.

During the year, 44 Child Welfare Clinics were held in Vegreville, with a total attendance of 292.

## STATISTICAL REPORT

## EDMONTON

Number of clinics held .....		101
Number of babies in attendance .....	4,743	
Number of pre-school children .....	1,135	
		5,878
Average attendance .....		58
Number of weighing clinics held .....		49
Number in attendance at weighing clinics .....		796
Average attendance .....		16
New cases admitted .....		866
Transferred to pre-school clinic .....		183
Discharged .....		866
Out of town cases .....		131
Referred to family doctor .....		38
Number of babies on roll .....	1,842	
Number of pre-school children on roll .....	840	
		2,682
Total number of home visits .....	2,461	
Deaths—Babies under 1 year .....	5	
Babies under 2 years .....	1	
		6
Pre-school .....		2
Number pre-school children referred to doctor .....		33
Number new cases admitted .....		156
Number discharged .....		436

## CALGARY

Number of clinics held .....		103
Number of infants in attendance .....	5,414	
Number of pre-school children .....	1,586	
		7,000
Average attendance .....		34
Number of new cases .....		872
Number of home visits .....		3,055
Number discharged—Infants 5, pre-school 955 .....		960
Number referred to family doctor—Infants 18, pre-school 87 .....		105
Number deaths—Infants 11, pre-school 1 .....		12
Inspections of hospitals and baby shelters .....		92
Number of investigations .....		3
Letters to outside points .....		11
Out of town cases .....		66

## MEDICINE HAT

Number of clinics held .....		126
Number of babies in attendance .....	1,911	
Number of pre-school children .....	425	
		2,336
Average attendance .....		18
New cases admitted .....		236
Babies discharged .....		32
Pre-school children discharged .....		224
Out of town cases .....		133
Number referred to family doctor—Infants 67, pre-school 10 .....		77
Number deaths—Infants 2, pre-school 1 .....		3
Number home visits .....		1,178

## VEGREVILLE

Number of clinics held .....		44
Number of babies in attendance .....	286	
Number of pre-school children .....	6	
		292
Number new cases admitted—Babies 45, pre-school 1 .....		46
Number referred to family doctor .....		12

## DRUMHELLER

Number of clinics held .....		51
Number of babies in attendance .....	949	
Number of pre-school children .....	121	
		1,070
Number of home visits .....		27
Number of new cases admitted—Infants 89, pre-school 18 .....		107
Number of deaths—Infants .....		1



## DEFECTS FOUND IN EDMONTON, CALGARY, MEDICINE HAT AND REDCLIFFE, VEGREVILLE AND DRUMHELLER WELFARE CLINICS FOR THE YEAR 1940

	Pre- Babies. school		Pre- Babies. school	
<b>Eyes:</b>				
Conjunctivitis .....	16	4	Rectal fissure .....	1
Granulated eyelids .....	1	1	Prolapsed bowel .....	1
Congenital condition of eye .....	1	1	Ammoniacal urine .....	3
Strabismus .....	3	3	Undescended testicle .....	1
Eyes (general) .....	54	42	Prolapse of rectum .....	2
<b>Ears:</b>			Hydrocele .....	4
Otitis Media .....	15	10	Haemorrhoids .....	1
Earache .....	1	1	Infected penis .....	1
Ears (general) .....	49	38	<b>Skin:</b>	
<b>Throat:</b>			Eczema .....	178
Enlarged glands .....	21	148	Impetigo .....	16
Enlarged tonsils .....	15	370	Intertrigo .....	39
Enlarged adenoids .....	12	193	Seborrhoea .....	36
Tonsillitis .....	4	6	Miliaria .....	43
Pharyngitis .....	2	2	Urticaria .....	2
Throat (general) .....	13	13	Furunculosis .....	13
<b>Nose:</b>			Nevas .....	11
Foreign body in nose .....	1	1	Scabies .....	3
Epistaxis .....	1	1	Bruises .....	1
Nose (general) .....	5	17	Burns .....	3
<b>Mouth:</b>			Dermatitis .....	5
Cut lip .....	1	1	Abrasion of skin .....	2
Cleft palate .....	2	2	Infected umbilicus .....	54
Trench mouth .....	1	2	Warts .....	2
Tongue tie .....	3	3	Frost bites .....	3
Thrush .....	17	6	Insect bites .....	1
Carious teeth .....	17	760	Pityriasis .....	1
Mouth (general) .....	9	4	Infected urticaria .....	1
<b>Chest:</b>			Hives .....	1
Bronchitis .....	34	3	Cyst on scalp .....	1
Bronchial pneumonia .....	1	1	Alopecia (baldness) .....	1
Colds .....	23	23	Erythema .....	1
Cough .....	1	1	Ichthiosis .....	1
Laryngitis .....	1	1	Ringworm .....	2
Congenital depression of chest .....	1	1	Skin .....	47
Whooping cough .....	4	1	<b>Miscellaneous:</b>	
Systolic murmur .....	1	1	Infected finger .....	2
Suspect chickenpox .....	1	1	Infected knee .....	1
Cardiac disturbance .....	11	11	Injury to elbow .....	1
Congenital malformation .....	3	3	Injury to scapula .....	1
<b>Intestinal:</b>			Ganglion on knee .....	1
Intestinal indigestion .....	44	3	Club foot .....	1
Malnutrition .....	24	53	Lame .....	2
Rickets .....	24	2	Lump .....	1
Stomatitis .....	16	4	Swollen feet .....	1
Celiac disease .....	2	2	Paralysis .....	1
Hypertonic infant .....	1	1	Rheumatism .....	1
Nutritional anaemia .....	8	5	Mental defect .....	3
Convulsions .....	1	1	Nervous disorders .....	3
Worms .....	2	2	Prematurity .....	1
Anatexia .....	5	5	Hammer toes .....	1
Diarrhoea .....	70	70	Fractured clavicle .....	1
<b>Hernia:</b>			Deformity of arm (congenital) .....	1
Inguinal hernia .....	2	2	Deformity of thumb .....	1
Umbilical hernia .....	28	5	Torticollis .....	1
Hernia .....	124	10	Foecal paralysis .....	1
<b>Genito-Urinary:</b>			Epiphora .....	1
Urethral ulcer .....	8	1	Mongolian idiot .....	2
Phimosis .....	210	49	Cretin .....	1
Enuresis .....	6	6	Orthopedic defects .....	5
			Injury to head .....	1
			Tumour of brain .....	1
			Other conditions .....	40
				45



*School Inspection.*

The following is the statistical report of school work done in Vegreville, Drumheller and rural districts:

First inspection .....	2,816	Defective vision .....	481
Second inspection .....	1,616	Defective hearing .....	132
Classroom inspections .....	60	Requiring glasses .....	81
Number re-admissions .....	5	With throat symptoms .....	1,070
Number treatments .....	58	With adenoid symptoms .....	247
Number not vaccinated .....	1,590	Carious teeth .....	1,847
Number with defects .....	2,912	Symptoms malnutrition .....	396
Number without defects .....	1,534	With faulty posture .....	121
Vaccinated against smallpox .....	657	Enlarged glands .....	140
Inoculated against diphtheria .....	1,298	Orthopaedic defects .....	24
Schoolroom talks .....	37	With nervous symptoms .....	37
Number home visits .....	352	Mentality .....	17
Number interviews .....	120	Skin diseases .....	86
Number public lectures .....	3	Glasses fitted .....	55
Number mental hygiene clinics .....	1	Glasses refitted .....	26
Number T.B. clinics .....	14	Tonsils and adenoids removed .....	106
Attendance at mental hygiene clinic .....	13	Number dental treatments .....	265
Attendance at T.B. clinics .....	235	Number medical treatments .....	43
Number demonstrations .....	3	Number communicable diseases .....	123

The Emergency Hospital at the Edmonton Exhibition in July was in charge of Miss B. A. Emerson, assisted by student nurses from city hospitals. Over 100 cases were treated for minor ailments.

*Rural Public Health Nursing Service.*

The reports from our rural public health nurses in 30 rural districts served by our nurses show 398 maternity cases, including 4 sets of twins, 63 abortions, 2 maternal deaths, and 2,265 pre-natal visits. Of the maternal deaths, 1 death was of a patient under a physician's care. No pre-natal visits were made by the nurse. Circumstances prevented the physician attending the case; the nurse was called and delivered a seven months' premature babe. Death was due to haemorrhage followed by shock. The second maternal death was that of a half-breed woman; the nurse was not notified of the case until the patient was in labour. Cause of death was haemorrhage followed by shock. Maternity cases, including full term cases and abortions, for the entire service show 1.3 cases per diem.

Under instructions from Dr. H. Orr, Director of the Social Hygiene Division, venereal disease treatments and instructions were given in several of the districts.

The following is the statistical report of work done in 30 districts:

Number home visits .....	7,499	Number child welfare consulta-	
Number office consultations .....	19,792	tions .....	70
Number dressings .....	4,505	Number child welfare visits .....	500
Number medical cases .....	10,407	Number deaths (under 1 year) .....	25
Number surgical cases .....	1,913	Number deaths (over 1 year) .....	52
Number obstetrical cases .....	398	Number cases sent to hospital .....	678
Number abortions .....	63	Number visits to Indian Reserves .....	117
Number pre-natal visits .....	527	Number dental extractions .....	130
Number pre-natal consultations .....	1,738	Number communicable diseases .....	230
Number children examined .....	114	Number vaccinated .....	1,288
		Number inoculated .....	7,459

The interest of parents in our rural districts in connection with immunization against diphtheria and vaccination against smallpox is still being evidenced.

We greatly appreciate the co-operation of various school divisions in this connection during the year.

*Travelling Clinic.*

The Travelling Clinic visited 24 centres during the summer, the itinerary being conducted in the following order: Whitecourt, Blue Ridge, Rochfort Bridge, Gunn, Mulhurst, Battle Lake, Winfield, James River Bridge, Bergen, Flatbush, Fawcett, Dapp, Perryvale, Boyle, Grassland, Grosmont, Smith, Slave Lake, Falher, Girouxville, Dixonville, Hines Creek, Royce, Worsley.



The personnel of the clinic staff was as follows: Dr. B. Margolus, surgeon in charge; Dr. C. A. Cawker, anaesthetist; Dr. H. E. Gilchrist and Dr. H. Ross, dentists; three nurses and two truck drivers. The nursing staff was as follows: Miss Evelyn Waddell, senior nurse; Miss Ethelwyn Coupland. Miss Ethel Jones, survey nurse, made all the arrangements with the various local committees for the service of the Travelling Clinic. The following is the statistical report:

Number centres served .....	24	Number referred to physician .....	195
Number children examined .....	3,706	Number referred to hospital .....	43
Number recommended for T. & A. .....	936	Number prescribed for .....	118
Number recommended for circum-		Number anaesthetics (one intra-	
cision .....	73	venous) .....	892
Number recommended for stripping .....	139	Number anaesthetics (for teeth	
Number T. & A. operations .....	604	only) .....	227
Number adenoidectomies .....	2	Number thyroid cases .....	46
Number circumcisions .....	35	Number cardiac conditions .....	14
Number recommended for minor		Number asthmatic cases .....	4
operations .....	15	Number suspect T.B. cases .....	9
Number minor operations .....	13	Number lung conditions .....	18
Number vaccinated .....	1,870	Splint applied to possible fractured	
Number skin conditions .....	38	foot at Rochfort Bridge.	

#### DENTISTS' REPORT

Number of children examined .....	3,787
Number recommended for treatment .....	1,740
Number given treatment .....	1,130
Number fillings (number of teeth) .....	1,359
Number extractions (number of teeth) .....	1,867
Prophylaxis (number of children) .....	10

Routine radio talks dealing with health in the home have been given over CKUA. Addresses to women's organizations in various parts of the Province and lectures on public health to nurses in training were given in several of the training schools for nurses.

The Alberta Mother's Book and Canadian Council of Child and Family Welfare pamphlets, as well as other literature dealing with health, have been distributed by the Nursing Branch throughout the Province:

940 sets pre-natal letters.
2,869 sets post-natal letters.
2,869 supplements.
1,813 sets pre-school letters.
806 sets school age letters.
183 sets in between years.
233 sets adolescent years.

Total..... 9,713 sets.

The public health nurses met in conference in the Child Welfare Clinic rooms in Edmonton on March 27th, 28th and 29th. The conference was well attended by nurses throughout the Province.

The annual inspection of the nursing centres has been made by the Superintendent, and considerable organization work was completed.

Our appreciation is extended to the medical profession, who have given so generously of their time to the Child Welfare Clinics in various centres throughout the year, and for the interesting lectures and demonstrations which made our refresher course so interesting and instructive. We also desire to express our sincere appreciation of the continued interest of service clubs, philanthropic organizations and various women's organizations in the Province, whose splendid co-operation has been of great assistance and an inspiration to our staff. Special mention should be made of the generosity of the Students' Union of the University of Alberta. These young people have annually collected money which has been spent in packing hampers for needy families in rural districts, and the privilege has been extended to our nurses of distributing these gifts at Christmas time.



## Hospitals Division

(L. A. PATTERSON, C.A., *Secretary of Department of Public Health*)

The total number of hospitals approved under the provisions of The Hospitals Act of the Province of Alberta as at the 31st of December, 1940, was 94.

The total grant paid to hospitals and homes for the year 1940 amounted to \$490,455.20.

The approved hospitals had a total bed capacity, including cribs, of 4,635 and 760 bassinets, and a total bed complement of 4,571 and 757 bassinets. The bed complement (including cribs) is classified as follows: Medicine and Surgery, 3,109; Obstetrics, 692; Tuberculosis (including T.B. divisions), 210; Contagious diseases, 262; Incurables (Daysland, Macleod and St. Joseph's, Edmonton), 66; others, 232. These figures do not include the Central Alberta Sanatorium, which has accommodation for 210 patients.

On the basis of a population in the Province of 790,000, we had one hospital bed (including cribs and bassinets) for every 149 of the population, or 6.7 for every 1,000 population; 99,216 patients were treated during the year, 86,535 adults and children, 12,681 newborn. The total patient days of all patients admitted was 1,179,832, being 1,048,315 for adults and children, 131,517 for newborn. This means that in 1940, hospital treatment was provided for 12.5 per centum of the population, or 1 in every 8 persons.

There was an average daily admission of patients to hospital of 271.8. The average number of days spent in hospital by each patient was 11.9, or 12.1 for adults and children, 10.4 for newborn.

If the Isolation cases and the Orthopaedic, S.C.R. and Tuberculosis Division cases were eliminated, the average would be 10.8.

The average number of patients in hospital daily was 3,232.4, or 1 in every 245.9 of our population. Each bed provided accommodation for 18.6 patients during the year.

The staff summary is as follows: Executive 35, Clerical 128, Salaried doctors 30, 7 of whom are part time and 2 have contracts; Technicians 51, Internes 30; Nurses, Graduate 723, Student 749, Probationers 50, Affiliates 22; Dietitians, Graduate 18, Student 10; Orderlies, 192; all other employees, 1,042.

There were 10 Nurses' Training Schools in the Province. The number of nurses graduating during the year was 232.

During the year, 13,412 maternity cases were cared for. These cases comprised 13.5 per cent. of the total cases admitted.

Living births were: Male 6,299, female 6,121, making a total of 12,420. There were 317 stillborn.

The maternal deaths reported were 22, these giving a death rate of .164 per centum of total maternity cases admitted, and 1.771 per 1,000 living births.

The living births in Alberta for 1940 were 17,359. Of this number, 71.5 per centum took place in government approved hospitals.



The approved hospitals reported that 23,485 general and 4,941 spinal anaesthetics were administered, and 6 deaths resulted from these.

There were 637 autopsies performed. Infections developed in hospitals totalled 228, divided into: Medical 56, Surgical 113, Obstetrical—mothers 37, infants 22.

The number of communicable disease cases treated, excluding Typhoid Fever and Tuberculosis, totalled 1,877; Typhoid Fever numbered 42 and Tuberculosis, reported by general hospitals, 439.

Amongst other cases treated in hospital, there were 1,896 Cardiac, 959 Rheumatic, 504 Goitre, 278 Venereal, and 1,216 Malignant disease cases.

There were 283 deaths within ten days of surgical operations, and 988 within 48 hours after admission. Communicable diseases accounted for 83 deaths.

The approved hospitals reported 238,904 laboratory examinations and 54,755 X-rays.

The total operating expenditure of approved hospitals for the year 1940 was \$3,566,010.13, divided as follows: Administration, \$359,635.40; professional care, \$1,309,580.84; kitchen and dining room, \$839,985.42; general house and property, \$639,788.06; and maintenance, \$417,020.41.

Revenue of these hospitals amounted to \$4,024,444.10.

The average cost per patient day was \$3.01.

The average revenue per patient day was \$3.41.

The average cost was divided as follows: Administration, 10.3%; professional care, 36.5%; kitchen and dining room, 23.5% house and property, 17.9%; and maintenance, 11.8%.

The statistical and financial information given in this report has been obtained from financial and statistical returns received from the approved hospitals for the year 1940.

The following statements are submitted giving the details of each approved hospital in the Province:

No. 1—Bed capacity, number of patients, etc.

No. 2—Patient days.

No. 3—Staff.

No. 4—Nursing statistics, cases treated.

No. 5—Surgical operations, infections, deaths, and other hospital statistics.

No. 6—Expenses of administration, professional care, kitchen and dining room, general house and property, maintenance.

No. 7—Revenue.

No. 8—Costs per patient day and earnings per patient day with percentage of costs over the different divisions of expenses.

#### MUNICIPAL HOSPITALS

The statistics for Municipal Hospitals will be found with the other approved hospitals of the Province.







TABLE No. 1—Continued

Hospitals	Bed Capacity			Bed Complement				Classification (Beds, Cribs)							Patients Under Care During Year				Total				
	Number			Number				General Med. and Surgery	Obstetrics	Tuberculosis	Contagious Diseases	Incurables	Isolation	Others	Adults and Children		Newborn			Total			
	Adult	Cribs	Basinetts	Total	Adult	Cribs	Basinetts								Total	M.	F.	M.		F.	M.	F.	M.
Edmonton, Royal Alexandra	320	60	55	435	320	60	55	435	325	55						3,770	5,594	712	713	4,482	6,307	10,789	
Edmonton, Isolation:																							
(a) Contagious	82	20		102	82	20		102				65				334	260			334	260	594	
(b) T.B. Division	85	5		90	75	5		80	50		25					35	35	1		35	35	70	
Edmonton, St. Joseph's																144	78			145	78	223	
Edmonton University:																							
(a) Civilian	328	16	31	375	328	16	31	375	214	28	22					1,971	2,269	313	290	2,284	2,559	4,843	
(b) S.C.R.																702	4			702	4	706	
(c) Orthopaedic																28	28			28	28	56	
(d) Polio																23	34			23	34	57	
(e) T. B. Division																22				22		22	
Edson, St. John's	30	3	5	38	29	3	5	37	26	5		1				367	287	43	54	410	341	751	
Elk Point, Municipal	26	1	10	37	32	1	10	43	23	10						483	756	70	57	553	813	1,366	
Empress, Cottage	20		5	25	20		5	25	13	2		5				204	259	29	28	233	287	520	
Fairview, Community	21	3	6	30	13	1	5	19	13			1				105	182	28	32	133	214	347	
Fort McMurray, St. Gabriel's	17	4	2	23	14	4	2	20	15	2		1				139	102	9	4	148	106	254	
Fort Smith, General				No Report															No Report				
Fort Vermilion, St. Theresa	9	2	2	13	9	2	2	13	9	2						46	57	5	10	51	67	118	
Galahad, St. Joseph's	20	4	4	28	19	3	4	26	17	5						194	290	30	31	224	321	545	
Grande Prairie, Municipal	50	5	16	71	50	5	16	71	44	7	2					498	711	124	115	622	826	1,448	
Grimshaw, Battle River	6			6	7	1	3	11	7	1						41	103	35	20	76	123	199	
Hanna, Municipal	50		10	60	45		10	55	34	7						325	413	62	56	387	469	856	
Hardisty, St. Anne's	16	1	6	23	16	1	6	23	12	5						150	290	18	53	168	343	511	
High Prairie, Providence	30	5	4	39	30	5	4	39	32	3						412	455	42	30	454	485	939	
High River, Municipal	38	4	7	49	38	4	7	49	31	11						410	651	78	76	488	727	1,215	
Innisfail, Municipal	36	3	8	47	36	3	8	47	30	9						283	427	82	72	365	499	864	
Islay, Municipal	17	2	4	23	17	2	4	23	15	4						117	160	26	20	143	180	323	
Jasper, Seton	14		4	18	14		4	18	14							120	86	9	9	129	95	224	
Killam, General	15	1	5	21	13	1	3	17	10	4						89	171	26	35	115	206	321	
Lacombe and District Community	33	3	7	43	33	3	7	43	30	4						462	481	86	90	548	571	1,119	
Lac La Biche, St. Catherine's	40	5	8	53	32	4	8	44	26	8						118	230	34	35	152	265	417	
Lamont Public	64	8	8	80	64	8	8	80	51	8	5					727	1,111	108	105	835	1,216	2,051	
Lethbridge, Galt	88	8	17	113	88	8	17	113	86	10						1,247	1,768	216	197	1,463	1,965	3,428	
Lethbridge, Isolation	14			14	14			14								8	9			8	9	17	
Lethbridge, St. Michael's	102	15	21	138	102	15	21	138	87	26						1,291	1,829	189	162	1,480	1,991	3,471	

Lloydminster, Municipal	41	5	14	60	52	14	43	11	4	32	540	890	89	102	629	992	1,621	
Macleod, General	49	2	6	57	49	6	12	7	.....	.....	174	244	34	35	208	279	487	
Macleod, General (Incurables)	.....	.....	.....	.....	.....	.....	.....	.....	.....	(32)	16	11	.....	16	11	27	27	
Mannville, Municipal	18	3	6	27	16	6	12	7	.....	.....	197	210	25	22	222	232	454	
Marwayne, Nursing Home	.....	.....	Not Included	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not Included	.....	.....	.....	.....	
Medicine Hat, General	110	10	22	142	110	22	93	23	4	.....	961	1,361	178	191	1,139	1,552	2,691	
Medicine Hat, Isolation	12	2	4	14	12	4	14	6	14	.....	2	5	36	37	239	331	570	
Mundare, General	22	2	4	28	22	4	14	6	2	.....	203	294	36	37	239	331	570	
McLennan, Sacred Heart	29	3	5	37	28	5	18	12	1	.....	232	295	40	39	272	334	606	
Myram, Municipal	20	2	5	27	17	5	14	19	.....	.....	180	308	49	36	229	344	573	
Nordegg, General	12	1	1	14	12	1	11	2	.....	.....	96	63	4	7	100	70	170	
Oil Field, General	.....	.....	Not Included	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not Included	.....	.....	.....	.....	
Olds, General	10	4	14	14	10	4	14	6	.....	.....	69	265	60	54	129	319	448	
Peace River, Municipal	27	3	4	34	19	4	16	4	.....	.....	183	247	30	30	213	277	490	
Pincher Creek, St. Vincent's	24	2	5	31	24	5	21	5	.....	.....	168	235	32	30	200	265	465	
Provost, Municipal	24	2	8	34	24	8	21	5	.....	.....	202	269	48	39	250	308	558	
Radway, St. Joseph's	20	7	6	33	20	7	22	4	1	.....	363	586	51	56	414	642	1,056	
Red Deer, Municipal	50	2	15	67	49	15	33	12	.....	.....	381	566	87	66	468	632	1,100	
Rimbey, St. Paul's	21	2	6	29	21	6	17	6	.....	.....	225	234	38	42	263	276	539	
Rocky Mountain House	20	2	4	26	20	4	17	4	1	.....	215	227	35	34	250	261	511	
Smoky Lake, George McDougall	15	3	6	24	15	6	13	5	.....	.....	98	180	30	19	128	199	327	
Spirit River, Community	.....	.....	No Report	.....	.....	.....	.....	.....	.....	.....	.....	.....	No Report	.....	.....	.....	.....	
St. Paul, St. Theresa	39	6	6	51	40	6	26	6	2	.....	331	537	81	86	412	623	1,035	
Stettler, Municipal	33	2	10	45	33	10	30	5	6	.....	412	612	80	71	492	683	1,175	
Trochu, St. Mary's	20	2	4	26	20	4	16	6	.....	.....	130	209	32	34	162	243	405	
Vegreville, General	68	10	12	90	68	10	63	12	3	.....	876	1,366	125	104	1,001	1,470	2,471	
Vermilion, Municipal	26	2	8	36	28	8	23	8	.....	.....	269	504	59	82	328	586	914	
Viking, Municipal	22	2	6	30	22	6	17	6	1	.....	188	292	32	56	220	348	568	
Vilna, Our Lady's	15	3	4	22	15	4	14	4	.....	.....	122	196	39	41	161	237	398	
Vulcan, Municipal	21	2	6	29	21	6	17	6	.....	.....	177	291	35	38	212	329	541	
Wainwright, Municipal	21	2	4	27	21	4	19	4	.....	.....	232	331	46	44	278	375	653	
Wayne, General	23	2	3	28	21	3	20	3	.....	.....	284	254	29	23	313	277	590	
Westlock, Immaculata	30	2	6	38	27	6	24	5	.....	.....	436	269	48	47	484	316	800	
Wetaskiwin, Community	35	5	9	49	35	9	30	7	1	.....	470	675	106	117	576	792	1,368	
Willingdon, General	25	6	6	37	23	6	25	4	.....	.....	236	396	33	38	269	434	703	
Total	4,159	476	760	5,395	4,102	469	757	692	210	262	232	36,721	49,814	6,424	6,257	43,145	56,071	99,216



TABLE No. 2

Hospitals	PATIENT DAYS										Aver. No. Patients in Hospital Daily
	Total of All Patients Admitted			Total Patients Discharged and Died			Average Stay of Patients Discharged and Died			Total	
	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total		
Athabasca, Municipal	5,065	1,243	6,308	5,034	1,222	6,256	9.2	10.7	9.5	17.2	
Banff, Mineral Springs	9,906	221	10,127	8,165	209	8,374	22.2	11.0	21.6	27.7	
Barrhead, Barrhead	4,877	692	No Report	5,278	690	5,968	14.3	No Report	13.6	15.3	
Bassano, Municipal	2,235	558	2,793	2,235	557	2,792	6.6	9.1	6.6	7.6	
Bentley, Community	2,717	359	3,076	2,628	348	2,976	7.2	7.7	7.3	8.4	
Berwyn, R.A.P.	2,118	524	2,642	2,118	524	2,642	9.2	11.6	9.6	7.2	
Bonnyville, K. H. Prittie	5,014	959	5,973	5,003	959	5,962	9.9	9.9	9.9	16.4	
Bonnyville, St. Louis	66,036	7,429	73,465	61,119	7,342	68,461	12.5	11.6	12.4	201.3	
Calgary, General	7,402	7,402	7,402	7,210	7,402	7,210	25.1	11.2	25.1	203.3	
Calgary, Isolation	83,744	9,662	93,406	80,958	9,463	90,421	11.2	10.7	11.1	255.9	
Calgary, Holy Cross	13,416	13,416	13,416	6,028	6,028	6,028	94.2	11.3	94.2	36.7	
Calgary, Junior Red Cross	4,283	3,947	8,230	4,191	3,901	8,092	11.9	11.3	11.5	22.5	
Calgary, Salvation Army Grace	9,482	2,242	11,724	9,270	2,220	11,490	7.6	9.8	7.9	32.1	
Camrose, St. Mary's	2,759	92	2,851	2,698	92	2,790	8.5	7.1	8.4	7.8	
Canmore, Canmore	8,150	1,720	9,870	7,730	708	8,438	6.2	9.3	7.6	27.0	
Cardston, Municipal	3,487	443	3,930	3,487	443	3,930	9.5	8.4	9.3	10.8	
Carmanagay, Little Bow Municipal	2,586	684	3,270	2,535	684	3,219	7.0	9.4	7.4	9.0	
Castor, Our Lady of the Rosary	1,790	411	2,201	1,717	411	2,128	8.5	9.6	8.6	6.0	
Cereal, Esler	6,091	1,017	7,108	5,356	994	6,350	9.4	11.7	9.6	19.5	
Clareholm, Municipal	3,603	786	4,389	3,547	782	4,329	10.8	12.6	11.1	12.0	
Cold Lake, John Nell	2,970	2,970	2,970	2,847	2,847	2,847	9.0	9.0	9.0	8.1	
Coleman, Miners' Union	4,166	671	4,837	3,962	655	4,617	10.8	11.1	10.8	13.3	
Consort, Municipal	2,289	506	2,795	2,201	505	2,706	7.7	10.1	8.2	7.3	
Coronation, General	1,349	396	1,745	1,343	393	1,736	8.5	8.4	8.6	4.8	
Daysland, Providence	3,572	3,572	3,572	815	815	815	271.6	271.6	271.6	9.8	
Daysland (Incurables)	1,792	80	1,872	1,792	80	1,872	11.7	10.0	12.2	5.1	
Desmarais, St. Martin's	2,158	727	2,885	2,120	727	2,847	7.3	8.3	7.6	7.9	
Drumheller, Municipal	25,093	2,562	27,655	25,114	2,541	27,655	10.4	10.5	10.4	75.8	
Eckville, Medicine Valley Community	1,506	495	2,001	1,501	494	1,995	5.5	8.7	6.1	5.5	
Edmonton, Beulah Rescue Home	3,453	2,329	5,782	3,346	2,235	5,581	.....	.....	.....	15.8	
Edmonton, General Hospital	26,519	1,540	28,059	23,455	1,422	24,877	9.3	10.2	9.4	77.0	
Edmonton, General, T.B. Division	45,352	8,804	54,156	41,040	7,659	48,699	289.0	9.1	289.0	125.0	
Edmonton, Misericordia	45,976	16,945	62,921	43,780	16,752	60,532	13.1	12.2	12.5	150.0	
Edmonton, Royal Alexandra	112,709	11,611	124,320	104,337	10,293	114,630	11.5	18.4	11.6	355.2	
Edmonton, Isolation	11,611	11,611	11,611	10,293	10,293	10,293	18.4	18.4	18.4	31.8	
Edmonton, Isolation (T.B. Division)	12,698	12,698	12,698	4,071	4,071	4,071	119.7	119.7	119.7	34.8	







TABLE No. 2—Continued

Hospitals	PATIENT DAYS										Aver. No. Patients in Hospital Daily
	Total of All Patients Admitted		Total Patients Discharged and Died		Average Stay of Patients Discharged and Died		Total Patients Discharged and Died		Average Stay of Patients Discharged and Died		
	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
Rocky Mountain House	4,307	648	4,955	4,160	623	4,783	9.5	9.4	9.5	9.4	13.6
Smoky Lake, George McDougall	2,467	488	2,955	2,048	488	2,536	7.6	9.9	8.0	8.0	8.1
Spirit River, Community			No Report					No Report			
St. Paul, St. Theresa	6,568	1,600	8,168	6,405	1,467	7,872	7.6	8.9	7.8	8.9	22.4
Stettler, Municipal	10,190	1,666	11,856	10,738	1,680	12,418	10.5	11.1	10.6	11.1	32.5
Trochu, St. Mary's	2,886	620	3,506	2,819	621	3,440	8.6	9.4	8.7	9.4	9.6
Vegreville, General	17,448	1,832	19,280	17,907	1,837	19,744	8.2	8.2	8.2	8.2	52.8
Vermilion, Municipal	9,353	1,557	10,910	9,142	1,551	10,693	12.1	11.1	11.7	11.1	29.9
Viking, Municipal	5,174	880	6,054	5,085	865	5,950	10.9	10.3	10.7	10.3	16.6
Vilna, Our Lady's	2,008	591	2,599	1,656	494	2,150	5.5	6.2	5.5	6.2	7.1
Vulcan, Municipal	3,920	756	4,676	4,121	756	4,877	8.9	10.5	9.1	10.5	12.8
Wainwright, Municipal	5,670	902	6,572	5,529	890	6,419	10.1	9.9	10.1	9.9	18.0
Wayne, General	5,284	510	5,774	5,264	510	5,774	10.0	9.8	9.9	9.8	15.8
Westlock, Immaculata	6,628	962	7,590	6,171	962	7,133	8.7	10.1	9.4	10.1	20.8
Wetaskiwin, Community	8,319	1,879	10,198	8,295	1,856	10,151	7.4	8.5	7.5	8.5	27.9
Willington, General	5,772	702	6,474	5,634	690	6,324	9.0	9.4	9.1	9.4	17.7
<b>Total</b>	<b>1,048,315</b>	<b>131,517</b>	<b>1,179,832</b>	<b>979,471</b>	<b>127,599</b>	<b>1,107,070</b>	<b>11.3</b>	<b>10.0</b>	<b>11.1</b>	<b>10.0</b>	<b>3,232.4</b>

TABLE No. 3

Hospital	STAFF																Medical Staff	No. of Doctors	Training School	Affiliation with other Institutions	Graduated during the year		
	Administrative		Professional			Nurses				Dietitians			Others			Total							
	Executive	Clerical	Salaries	Internes	Technicians	Graduate	Student	Probationers	Affiliates	Graduate	Student	Orderlies and Ward Helpers	All other Employees										
Athabasca, Municipal	1				5	7										10	18	No					
*Banff, Mineral Springs					No Report	8										10	25	Yes					
Barrhead, Barrhead	1					6										3	10	No					
Bassano, Municipal	1					3										2	5	No					
Bentley, Community	1					3										2	7	No					
Berwyn, R.A.P.						3										5	9	No					
Bonnyville, K. H. Prittie						4										4	13	No					
Bonnyville, St. Louis	2	12	*3		7	21	87	24	4	2	8	8				66	236	Yes		Yes			38
Calgary, General						3										4	7	Yes		Yes			
Calgary, Isolation						32	142		2	1	2	14				70	289	Yes		Yes			38
Calgary, Holy Cross	2	14	*2		4	8										10	20	Yes		Yes			
*Calgary, Junior Red Cross						5										4	11	Yes		Yes			
Calgary, Salvation Army Grace						16										11	31	Yes		Yes			
Camrose, St. Mary's	1	1				2										1	5	No		No			
Canmore, Canmore						2										1	5	No		No			
Cardston, Municipal	1					9										3	7	No		No			
Carmangay, Little Bow Municipal	1	1				3										3	7	Yes		Yes			
Castor, Our Lady of the Rosary	1	1				5										3	5	No		No			
Cereai, Esler						2										3	5	Yes		Yes			
Clareholm, Municipal	1	1				7										3	12	No		No			
Cold Lake, John Neil						4										3	9	No		No			
Coleman, Miner's Union						3										3	6	No		No			
Consort, Municipal	1					3										3	8	No		No			
Coronation, General						3										6	12	No		No			
Daysland, Providence						3										7	12	No		No			
Daysland (Incurables)						1										1	4	No		No			
Desmarais, St. Martin's						3										4	4	No		No			
Didsbury, General						1										1	53	Yes		Yes			
Drumheller, Municipal	2	1				25										21	53	Yes		Yes			
Eckville, Medicine Valley Community						2										3	4	No		No			
Edmonton, Beulah Rescue Home	1	1				2										2	4	No		No			
Edmonton, General						38										6	11	No		No			
Edmonton, General, T.B. Division						2	90									4	233	Yes		Yes			24
						2	6									1	92	Yes		Yes			



## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 3—Continued

Hospital	STAFF													Medical Staff	No. of Doctors	Training School	Affiliation with other Institutions	Graduated during the year	
	Administrat'n		Professional			Nurses				Dietitians		Others							Total
	Executive	Clerical	Salari'd Doctors	Interns	Technicians	Graduate	Student	Probationers	Affiliates	Graduate	Student	Orderlies and Ward Helpers	All other Employees						
Edmonton, Misericordia	2	4	2	5	5	16	99	6	1	1	12	74	225	Yes	82	Yes	Yes	23	
Edmonton, Royal Alexandra	2	23	5	5	6	91	122	3	3	3	11	140	411	Yes	122	Yes	No	42	
Edmonton, Isolation						18	13	3	3		3	9	46						
Edmonton, Isolation, T.B. Division						6					11	6	27						
Edmonton, St. Joseph's		2	*1		1	6													
Edmonton, University:						48	82	4	3	7	21	92	321	Yes	73	Yes	Yes	23	
(a) Civilian	3	20	5	9	13														
(b) S.C.R.																			
(c) Orthopaedic																			
(d) Polio																			
(e) T.B. Division																			
Edson, St. John's						5						8	13	No					
Elk Point, Municipal		1				5					5	7	18	No					
Empress, Cottage		1				4						3	8	No					
Fairview, Community		1				3						3	7	No					
Fort McMurray, St. Gabriel's		1				3						6	9	No					
Fort Smith, General				No Report											No Report				
Fort Vermilion, St. Theresa						2					1	2	5	No					
Galahad, St. Joseph's						5					1	5	12	No					
Grande Prairie, Municipal	1	2				11						5	19	Yes	6				
Grimshaw (Notkiwin), Battle River						3						3	6	No					
Hanna, Municipal		1				9					5	7	22	No					
Hardisty, St. Anne's	1	1				4					3	4	13	Yes	4				
High Prairie, Providence	1	1				6					5	7	20	No					
High River, Municipal		1				10						6	17	No					
Innisfail, Municipal		1				7					4	8	20	No					
Islay, Municipal		1				3					2	3	6	No					
Jasper, Seton		1				4					2	2	8	No					
Killam, General	1					7					1	3	8	No					
Lacombe and District Community		1				3					1	5	13	No					
Lac La Biche, St. Catherine's		1	1			7					1	9	14	No					
Lamont, Public	2	5	1	1		4	24				9	19	57	Yes	4	Yes	No	8	
Lethbridge, Galt	2	3			2	21	28				9	22	88	Yes	30	Yes	Yes	10	













TABLE No. 4—Continued

Hospitals	Medical		Surgical				Non-Operative		Obstetrics Admitted		Percentage of Maternity Total Admissions		Living Births		Tuberculosis		Communicable Diseases except Typhoid & T. B.	Typhoid cases	Cardiac Disease cases	Rheumatic cases	Malignant Disease Cases	Goitre cases	Venereal Disease cases	Alcoholics		
	Male	Female	Major		Minor		Male	Female	Total	Maternity	Male	Female	Pulmonary	Other Forms												
			Male	Female	Male	Female																				
Rocky Mountain House	121	84	16	32	40	24	4	79	15.46	35	33	..	..	..	..	..	..	29	4	4	..	..	..	1		
Smoky Lake, George McDougall	96	132	7	5	22	13	2	50	15.29	30	19	1	1	..	..	..	..	4	1	..	..	..	..	..		
Spirit River, Community	237	281	No Report	26	70	54	..	163	15.75	80	83	4	1	..	..	..	..	No Report	..	..	..	..	..	..	1	
St. Paul, St. Theresa	153	150	75	82	202	201	31	173	14.72	79	70	..	..	..	..	..	..	23	1	7	..	..	..	..	1	
Stettler, Municipal	102	92	22	38	42	46	1	68	16.79	32	33	..	..	..	..	..	..	11	3	2	..	..	..	..	1	
Trochu, St. Mary's	575	706	106	198	320	289	5	224	9.06	119	101	4	4	..	..	..	..	2	10	28	8	30	..	..	2	
Vegreville, General	156	180	42	51	47	89	7	147	16.08	58	81	1	1	..	..	..	..	15	40	8	3	..	..	..	1	
Vermilion, Municipal	134	145	18	25	19	33	3	90	15.84	32	56	..	..	..	..	..	..	3	4	1	..	..	..	..	1	
Viking, Municipal	65	86	9	5	28	22	7	79	19.85	38	41	2	..	..	..	..	..	10	6	1	1	..	..	..	2	
Vilna, Our Lady's	121	130	17	29	32	53	7	76	14.05	35	37	..	..	..	..	..	..	10	6	1	1	..	..	..	..	
Vulcan, Municipal	125	140	20	25	42	45	50	91	13.93	43	41	..	..	..	..	..	..	4	6	3	4	..	..	..	1	
Wainwright, Municipal	156	96	38	42	74	58	..	51	8.64	29	22	1	1	..	..	..	..	6	3	3	..	..	..	..	..	
Wayne, General	243	147	45	34	70	30	15	96	12.00	47	46	..	2	..	..	..	..	1	15	3	..	..	..	..	..	
Westlock, Immaculata	223	243	62	84	130	120	20	240	17.54	106	117	3	3	..	..	..	..	14	6	8	10	..	..	..	5	
Wetaskiwin, Community	186	278	18	12	65	76	..	68	9.67	30	37	..	..	..	..	..	..	13	6	3	..	..	..	..	..	
Willingdon, General	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	19298	20954	5181	6417	10755	11059	2050	1336	13412	13.83	6299	6121	279	160	1877	42	1896	959	1216	504	278	367	..	..	..	..

TABLE No. 5

Hospitals	Surgical Operations										Infections Developed in Hospital				Deaths					
	Abdominal	Gynaecological not including Curetages	Curetages	Amputations	Fractures		General	Total Operations	Medical	Surgical	Obstetrical		Mothers	Newborn	Stillborn	Premature	From Cancer	From Anaesthetics	From Communicable Diseases	Within 48 Hours of Admission
					Open	Closed					Mothers	Infants								
Athabasca, Municipal	24	2		2		27	79	132												4
Banff, Mineral Springs	24	2		6		14	22	70												4
Barrhead, Barrhead																				
Bassano, Municipal	57		No Report	3			69	139		No Report										4
Bentley, Community	51	6	8	1		21	70	157												4
Berwyn, R.A.P.	13		1			19	11	44		1										2
Bonnyville, K. H. Prittie	41		1			4	28	46		1										2
Bonnyville, St. Louis	527	142	139	31	2	179	1392	2422		2										10
Calgary, General																				218
Calgary, Isolation																				
Calgary, Holy Cross	747	292	160	52	20	192	2891	4354		15	14	7	10	40	9	60				88
Calgary, Junior Red Cross																				
Calgary, Salvation Army Grace																				
Camrose, St. Mary's	218	25	16	3	2	45	121	430												3
Canmore, Canmore	28	2	3	3	3	20	112	171												15
Cardston, Municipal	178	9	16	3	1	9	156	372												2
Carmanagay, Little Bow Municipal	43		4	1		12	42	102		5										1
Castor, Our Lady of the Rosary	26	3	5	5		7	87	128												2
Cereal, Esler	21	1	2	1	1	14	37	77		2										2
Clareholm, Municipal	45		7	2		30	83	167												2
Cold Lake, John Nell	9				1	4	47	61												2
Coleman, Miners' Union	63	4	3			12	73	155												2
Consort, Municipal	3	1				2	104	110												1
Coronation, General	32		4	2	1	12	57	108												2
Daysland, Providence	31		5			4	7	47												1
Daysland (Incurables)																				
Desmarais, St. Martin's																				
Didsbury, General	32		4				51	87												1
Drumheller, Municipal	237	45	30	8	3	54	440	817		5	2	2	6	8	2	5				3
Eckville, Medicine Valley Community	34					3	45	92												4
Edmonton, Beulah Rescue Home																				4
Edmonton, General	290	72	40	7	10	38	507	964												2
Edmonton, General T.B. Division																				21
Edmonton, Misericordia	518	136	48	19	7	165	1188	2081		2	2		13	13	3	9				44





Macleod, General	47	6	1	1	1	1	62	4	2	1	10	2	
Macleod, General (Incurables)	14		Not Included			97	3	1	1				
Mannville, Municipal	305	67	41	18	8	1237	7	4	4	12	10	29	
Marwayne, Nursing Home	24		2	2		118	3					3	
Medicine Hat, General	35		4	2	1	154	2					1	
Medicine Hat, Isolation	40		4	4		115	3	1				1	
Mundare, General	17	2	1	1	1	61	1			Not Included			
McLennan, Sacred Heart	13	8	2		5	72	4					2	
Olds, General	21	1	1	1	2	31	3					9	
Peace River, Municipal	63	4	8		15	159	1					4	
Pincher Creek, St. Vincent's	22				9	60	4					2	
Provost, Municipal	156	12	1	3	2	351	2					12	
Radway, St. Joseph's	96	2	12	6	1	290	1					3	
Red Deer, Municipal	8	1	5	2	1	92	1					2	
Rimbey, St. Paul's	43		5	2	1	124	4				1	12	
Rocky Mountain House	10		2		1	47	1					5	
Smoky Lake, George McDougall	46	1	7	3	2	170	1					8	
Spirit River Community	143	8	9	6	1	560	3					9	
St. Paul, St. Theresa	58	2	2	2	10	148	5					8	
Stettler, Municipal	251	61	32	14	9	913	2					8	
Trochu, St. Mary's	66	2	10	1	1	229	1					3	
Vegreville, General	43	4	1	1	1	116	4					9	
Vermilion, Municipal	14		5	3	8	77	3					6	
Viking, Municipal	46		15	1	13	141	2					4	
Vihna, Our Lady's	45	2	5	5	1	131	2					2	
Vulcan, Municipal	80	2	5	5	36	248	1					12	
Wainwright, Municipal	79	1	3	5	1	197	3					15	
Wayne, General	146	1	32	11	2	473	1					15	
Westlock, Immaculata	17				2	171	2						
Wetaskiwin, Community					2	141	3						
Willington, General					2	141	3						
Total	8544	1838	1093	398	219	2328	56	113	37	22	182	83	988



## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 5a

Hospitals	DEATHS				General Anaesthetics Given	Spinal Anaesthetics Given	Autopsies Held	Laboratory Examinations	X-Ray Examinations	Blood taken for Wasserman Test	Bacteriological Examination of Sterilized Dressings	Pasteurized Milk Supply	Water Supply Tested Bacteriologically
	Within 10 days from Surgical Operation		Total excluding Stillbirths										
	Number	Percentage to Total Operations	Male	Female									
Athabasca, Municipal	1	.75	4	13	81	2	34	30	3	3	5	No	Yes
Banff, Mineral Springs	1	1.43	5	5	46	..	1050	410	8	8	Not Included	No	Yes
Barrhead, Barrhead	..	..	Not Included	Not Included	..	..	..	..	..	..	1	No	Yes
Bassano, Municipal	1	.63	13	13	40	2	100	110	5	5	4	No	No
Bentley, Community	2	4.54	6	2	90	3	195	59	2	2	4	No	No
Berwyn, R.A.P.	..	..	8	8	38	..	190	14	3	3	4	No	No
Bonnyville, K. H. Prittie	2	2.04	5	4	33	..	414	36	2	2	4	No	Yes
Bonnyville, St. Louis	18	.74	15	4	92	66	20585	2690	284	284	34	Yes	Yes
Calgary, General	..	..	138	81	2268	..	..	..	..	..	..	Yes	Yes
Calgary, Isolation	39	.89	165	129	2162	144	25974	4620	617	617	310	Yes	Yes
Calgary, Holy Cross	..	..	2	2	19	1	373	70	29	29	20	Yes	Yes
Calgary, Junior Red Cross	..	..	4	4	..	..	..	..	52	52	4	Yes	Yes
Calgary, Salvation Army Grace	4	.93	17	21	200	..	2139	813	2	2	..	Yes	Yes
Camrose, St. Mary's	..	..	2	2	51	..	946	125	46	46	..	No	No
Canmore, Canmore	..	..	12	9	185	1	..	31	6	6	..	No	No
Cardston, Municipal	..	..	5	2	53	..	..	120	10	10	..	No	Yes
Carmanagay, Little Bow Municipal	..	..	10	5	127	..	373	80	2	2	1	No	No
Castor, Our Lady of the Rosary	2	1.19	3	4	49	2	97	56	15	15	2	No	Yes
Cereal, Esler	1	1.64	7	5	120	1	56	40	9	9	8	No	Yes
Clareholm, Municipal	1	.64	5	5	96	1	400	324	..	..	4	Yes	No
Cold Lake, John Neil	1	2.12	10	8	42	2	195	55	7	7	4	No	No
Coleman, Miners' Union	..	..	9	4	54	..	78	8	..	..	..	No	No
Consort, Municipal	1	1.15	3	..	32	..	..	..	..	..	..	..	..
Coronation, General	..	..	4	2	..	..	..	..	..	..	..	..	..
Daysland, Providence	..	..	..	..	..	..	..	..	..	..	..	..	..
Daysland (Incurables)	..	..	..	..	..	..	..	..	..	..	..	..	..
Desmarais, St. Martin's	1	1.10	8	8	51	29	..	..	12	12	..	No	Yes
Didsbury, General	9	1.10	31	20	428	237	3205	1012	..	..	..	Yes	Yes
Drumheller, Municipal	..	..	..	..	..	6	..	..	..	..	..	..	..
Eckville, Medicine Valley Community	..	..	5	..	68	7	..	..	2	2	1	No	Yes
Edmonton, Beulah Rescue Home	..	..	3	2	..	..	..	..	135	135	..	Yes	Yes
Edmonton, General	4	.41	38	30	585	236	7235	16182	488	488	96	Yes	Yes
Edmonton, General, T.B. Division	..	..	14	24	..	..	..	..	..	..	..	Yes	Yes
Edmonton, Misericordia	19	.91	56	60	1318	180	21976	2288	396	396	12	Yes	Yes

	45	.87	190	158	4452	295	156	64373	4041	6643	149	Yes
Edmonton, Royal Alexandra	45	.87	190	158	4452	295	156	64373	4041	6643	149	Yes
Edmonton, Isolation			13	11								Yes
Edmonton, Isolation, T.B. Division			35	11	4			222	4	30		Yes
Edmonton, St. Joseph's												Yes
Edmonton, University:												Yes
(a) Civilian	53	1.59	125	59	1201	616	160	27691	11037	3054	56	Yes
(b) S.C.R.			29	1								Yes
(c) Orthopaedic												Yes
(d) Polio												Yes
(e) T.B. Division			1									Yes
Edson, St. John's			11	8	153	17		458	303	15	1	No
Elk Point, Municipal			17	8	489		2	206	54	10	3	No
Empress, Cottage	1	.73	6	5	25	35		80	97	10	3	No
Fairview, Community	3	2.88	14	4	103	4		42	10	10	12	Yes
Fort McMurray, St. Gabriel's			9	4	54		2	54	32	33		Yes
Fort Smith, General			No Report				No Report				No Report	No
Fort Vermilion, St. Theresa			4	4	6			600	101		4	No
Galahad St. Joseph's			4	8	120	1		1865	377			No
Grande Prairie, Municipal	6	1.18	23	20	330	31						Yes
Grimshaw (Notkiwin), Battle River												No
Hanna, Municipal	3	1.13	15	10	37		1	62	122			No
Hardisty, St. Anne's			6	3	170	51	5	1997	274	10	5	Yes
High Prairie, Providence	2	.47	8	8	205	21		816	344	150		Yes
High River, Municipal			22	11	211	35						Yes
Innisfail, Municipal	6	2.25	18	15	197	13		19	309	3	12	Yes
Islay, Municipal	1	1.56	6	4	18	10			30		6	No
Jasper, Seton	1	2.38	4	2	28	1			104	10	2	Yes
Killam, General			4	2	52	3		460	19	2	2	Yes
Lacombe and District Community			7	2	200	79		30	141	2	4	No
Lac La Biche, St. Catherine's			11	11	56			400	112	12	1	No
Lamont, Public	1	.23	15	15	300	126	2	9130	984	130		Yes
Lethbridge, Galt	4	.26	53	33	917	227		13916	2095	1551		Yes
Lethbridge, Isolation			1									Yes
Lethbridge, St. Michael's	12	.67	51	40	929	179	8	15544	1088	908	9	Yes
Lloydminster, Municipal			41	19	270	37		2211	661	50	1	Yes
Macleod, General	2	3.22	10	3	51			150	100	10		No
Macleod, General (Incurables)												No
Manville, Municipal			4	3	28			25	73	2		No
Marwayne, Nursing Home			Not Included				Not Included				Not Included	No
Medicine Hat, General	4	.32	60	33	719	70		374			1	Yes
Medicine Hat, Isolation												Yes
Mundare, General			4	7	87	19		102	124		3	No
Myrnam, Sacred Heart			5	1	116		2	563	191	12	3	No
Myrnam, Municipal			6	3	102	2		40	43			No
Nordegg, General			Not Included		44	5		75	110	10		Yes
Oil Fields, General			2	4	58							Yes
Olds, General	1	3.22	12	8	75			358	49			Yes
Peace River, Municipal	4	2.51	11	4	57			405	160		2	Yes
Pincher Creek, St. Vincent's						43						Yes



TABLE No. 5a—Continued

Hospitals	DEATHS				General Anaes- thetics Given	Spinal Anaes- thetics Given	Autopsies Held	Laboratory Examinations	X-Ray Examinations	Blood taken for Wasserman Test	Sterilized Dressings Bacteriological Examination of	Pasteurized Milk Supply	Water Supply Tested Bacteriologically
	Within 10 days from Surgical Operation		Total excluding Stillbirths										
	Number	Percentage to Total Operations	Male	Female									
Provost, Municipal	2	.57	9	6	28	23	...	34	31	...	4	No	Yes
Radway, St. Joseph's	4	1.38	21	10	320	5	...	1585	243	10	12	No	Yes
Red Deer, Municipal	1	.80	7	2	268	6	...	343	223	8	...	Yes	Yes
Rimbey, St. Paul's	...	...	16	8	40	2	...	475	84	50	...	No	No
Rocky Mountain House	...	...	5	7	107	5	...	...	105	...	...	No	No
Smoky Lake, George McDougall	1	...	No Report	7	24	1	1	156	13	6	2	No	Yes
Spirit River, Community	1	.59	10	8	134	36	1	728	132	15	No Report	No	No
St. Paul, St. Theresa	2	.36	26	15	212	172	...	1836	101	...	24	No	No
Stettler, Municipal	2	1.35	13	8	81	41	...	291	81	...	7	No	Yes
Trochu, St. Mary's	5	.55	32	17	534	223	...	3253	404	60	6	Yes	Yes
Vegreville, General	3	1.31	11	14	174	14	...	471	60	25	3	Yes	Yes
Vermillion, Municipal	1	.86	9	14	57	38	...	490	310	5	...	No	No
Viking, Municipal	...	...	11	7	113	14	...	55	43	...	2	No	No
Vilna, Our Lady's	2	1.42	7	8	61	43	...	46	68	...	1	No	Yes
Vulcan, Municipal	...	...	8	5	102	2	...	...	88	1	3	No	Yes
Wainwright, Municipal	3	1.21	6	2	160	27	...	...	262	4	...	No	Yes
Wayne, General	1	.51	14	9	191	6	...	432	105	6	2	Yes	Yes
Westlock, Immaculata	2	.42	18	22	348	8	2	500	64	6	...	Yes	Yes
Wetaskiwin, Community	...	...	5	4	146	15	...	325	...	70	...	No	Yes
Willingdon, General	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	283	.77	1,724	1,204	23,485	4,941	637	238,904	54,755	15,068	867	...	...

TABLE No. 6

Hospitals	Salaries and Audit	Board Meetings	Office Expenses	Stationery, Printing, Postage	Telegraph and Telephones	Insurance	Sundry	Total Administration
Athabasca, Municipal	\$ 1,184.48	\$ 354.60	\$ 44.70	\$ 389.17	\$ 137.20	\$ 532.63	\$ 678.62	\$ 3,321.40
Banff, Mineral Springs	123.00	Not Included	49.35	295.11	120.16	867.34	322.93	1,777.89
Barrhead, St. Joseph's	1,166.60	426.60		275.46	139.74	279.87	255.61	2,543.88
Bassano, Municipal	120.00			91.45	88.18	50.00	222.42	572.05
Bentley, Community	300.00	262.40		143.69	70.88	71.47	48.05	896.49
Berwyn, R.A.P.				119.22	92.25		7.45	218.92
Bonnyville, K.H.P.	360.00			60.00	59.00	111.04		590.04
Bonnyville, St. Louis	14,011.07			3,692.67	1,738.97	2,007.31	1,046.73	22,496.75
Calgary, General	11,680.75	4,180.00	611.55	2,930.49	1,749.25	4,300.37	3,843.51	29,295.92
Calgary, Holy Cross	4,670.31			200.00	132.00	450.95		5,453.26
Calgary, Junior Red Cross	385.00				157.74	110.72	557.43	1,210.89
Calgary, Salvation Army Grace		793.39			437.70			1,231.09
Canrose, St. Mary's	600.00			337.20	122.23	165.00	1,892.22	3,116.65
Canmore, Canmore				223.00	333.67	201.20		757.87
Cardston, Municipal	580.00	414.50		265.74	177.99	264.40	151.50	1,854.13
Carmanagay, Little Bow Municipal	335.00	213.50	21.80	128.55	115.20	85.10	54.77	953.92
Castor, Our Lady of the Rosary	559.16			120.49	110.10	271.02		1,123.50
Cereal, Esler				103.50	113.81		66.66	283.97
Clareholm, Municipal	871.50	183.00		372.18	105.80	107.86	25.56	1,665.90
Cold Lake, John Neil	180.00			102.76	75.68		108.92	287.36
Coleman, Miners' Union	440.00	110.74		66.24	61.19	266.86	25.00	599.29
Consort, Municipal	491.66	32.50	100.30	64.93	74.90	109.89	16.74	817.20
Coronation, General	600.00			105.71	75.53	19.62	10.50	835.82
Daysland, Providence				93.82	93.56	472.60		1,259.98
Desmarais, St. Martin's			148.71	19.00				19.00
Didsbury, General	240.00			132.61	64.00	35.20		620.52
Drumheller, Municipal	4,054.02	812.95		1,573.80	193.32	1,050.38	1,922.37	9,608.84
Eckville, Medicine Valley Community	150.00			50.50	37.74	13.50	5.00	256.74
Edmonton, Beulah Rescue Home	1,092.50		5.06	356.39	69.24	162.71	1,011.23	2,697.13
Edmonton, General	11,034.51		646.19	1,474.62	780.65	2,546.62	5,612.09	22,994.68
Edmonton, Misericordia	8,440.00			1,521.16	611.68	2,693.72	5,204.98	18,471.54
Edmonton, Royal Alexandra	29,719.35			4,459.62	1,300.22	5,211.35	8,523.52	49,214.06
Edmonton, Isolation	7,430.00			874.07	325.00	1,303.00	2,131.00	12,063.07
Edmonton, St. Joseph's	972.00		131.63	190.80	105.23	66.47		1,466.13
Edmonton, University of Alberta	20,842.64	2,816.24	370.10	3,594.87	3,418.05	2,556.32	5,611.49	39,209.71
Edson, St. John's	960.00		40.54	111.45	155.44	187.64		1,708.91
Elk Point, Municipal	830.00	378.80		258.53	76.23	259.65	567.39	2,411.14
Empress, Cottage	420.00	2.00		125.11	66.45	65.15	62.85	760.86
Fairview, Community	335.00	61.40	17.60	84.35	44.40	134.00		676.75
Fort McMurray, St. Gabriel's	500.00			45.80	48.21		31.40	625.41





Stettler, Municipal .....	1,043.20	650.43	17.96	561.77	165.96	720.52	289.69	3,449.47
Trochu, St. Mary's .....	2,200.00	.....	56.52	131.23	159.08	83.33	.....	630.16
Vegreville, General .....	2,200.00	74.00	590.00	390.00	270.00	555.00	211.00	4,227.00
Vermilion, Municipal .....	675.00	474.64	67.23	330.14	130.11	207.65	132.21	2,036.98
Viking, Municipal .....	600.00	391.60	.....	454.21	108.32	240.50	300.92	2,095.55
Vilna, Our Lady's .....	600.00	.....	15.00	80.00	65.00	.....	1,000.00	1,760.00
Vulcan, Municipal .....	555.00	437.40	2.75	355.97	75.87	102.17	539.13	2,068.29
Wainwright, Municipal .....	420.00	348.20	406.71	328.82	137.90	386.88	80.77	2,109.28
Wayne, General .....	720.00	.....	90.76	181.56	133.49	186.54	91.33	1,403.68
Westlock, Immaculata .....	.....	.....	89.60	150.65	132.44	576.00	40.46	989.15
Wetaskiwin, Community .....	1,069.50	121.40	44.71	241.20	115.12	276.74	47.22	1,915.89
Willingdon, General .....	360.00	.....	57.47	63.34	84.08	52.15	3.75	620.79
<b>Total .....</b>	<b>\$ 175,815.85</b>	<b>\$ 17,856.68</b>	<b>\$ 9,384.28</b>	<b>\$ 38,657.56</b>	<b>\$ 20,724.06</b>	<b>\$ 39,244.70</b>	<b>\$ 57,952.27</b>	<b>\$ 359,635.40</b>



TABLE No. 6a

Hospitals	Professional Care of Patients			Kitchen and Dining Room		
	Salaries	Supplies	Total	Wages	Food Supply	Total
Athabasca, Municipal	\$ 5,761.70	1,326.69	7,088.39	\$ 729.26	2,830.23	\$ 3,559.49
Banff, Mineral Springs	13,071.50	2,279.28	15,350.78	2,908.10	7,744.29	10,652.39
Barrhead, St. Joseph's		No Report			No Report	
Bassano, Municipal	5,524.18	1,034.65	6,558.83	791.75	2,970.06	3,761.81
Bentley, Community	2,488.55	832.87	3,321.42	402.50	1,389.98	1,792.48
Berwyn, R.A.P.	2,442.20	1,282.17	3,724.37	683.02	1,692.63	2,375.65
Bonnyville, K.H.P.	2,967.76	434.43	3,402.19	544.00	1,627.00	2,171.00
Bonnyville, St. Louis	4,090.00	787.98	4,877.98	1,720.00	2,193.30	3,913.30
Calgary, General	63,993.42	29,033.51	93,026.93	15,924.12	39,647.67	55,571.79
Calgary, Holy Cross	34,527.67	62,530.36	97,058.03	13,066.50	57,843.74	70,910.24
Calgary, Isolation	7,703.74	460.62	8,164.36	1,975.21	4,982.81	6,958.02
Calgary, Junior Red Cross	7,373.20	3,134.00	10,507.20	3,548.04	4,201.79	7,749.83
Calgary, Salvation Army Grace	3,119.90	642.39	3,762.29	541.50	3,926.50	4,468.00
Camrose, St. Mary's	8,836.22	4,437.75	13,273.97	817.00	7,067.93	7,884.93
Camrose, Canmore	1,435.00	3,913.81	5,348.81	360.00	2,394.42	2,754.42
Cardston, Municipal	6,017.00	2,891.02	8,908.02	1,375.97	5,110.73	6,486.70
Cardston, Little Bow Municipal	2,052.88	4,109.21	6,162.09	522.00	1,804.91	2,326.91
Castor, Our Lady of the Rosary	3,345.00	1,081.41	4,426.41	563.00	2,118.62	2,681.62
Cereal, Esler	1,621.46	1,328.46	2,949.92	664.50	906.32	1,570.82
Claresholm, Municipal	5,900.70	2,056.11	7,956.81	708.60	3,567.43	4,276.03
Cold Lake, John Nell	3,302.21	462.33	3,764.54	582.55	1,498.81	2,081.36
Coleman, Miners' Union	3,686.20	936.91	4,623.11	649.00	2,207.67	2,856.67
Consort, Municipal	3,863.45	981.08	4,844.53	678.25	2,143.44	2,821.69
Coronation, General	2,573.10	1,158.49	3,731.59	594.00	1,793.58	2,387.58
Daysland, Providence	2,664.65	430.43	3,095.08	1,344.80	2,333.93	3,678.73
Desmarais, St. Martin's	1,820.00	124.10	1,944.10			820.50
Didsbury, General	3,071.90	809.91	3,881.81	391.05	1,201.40	1,592.45
Drumheller, Municipal	23,135.15	5,532.51	28,667.66	3,567.09	13,822.25	17,389.34
Eckville, Medicine Valley Community	1,273.45	621.01	1,894.46	425.00	801.98	1,226.98
Edmonton, Beulah Rescue Home	2,185.65	389.75	2,575.40	300.00	2,680.44	2,980.44
Edmonton, General	36,733.85	10,898.24	47,632.09	10,048.77	45,589.90	55,638.67
Edmonton, Misericordia	27,750.80	32,743.57	60,494.37	7,300.00	37,708.57	45,008.57
Edmonton, Royal Alexandra	134,510.40	54,715.81	189,226.21	17,023.54	76,403.44	93,426.98
Edmonton, Isolation	21,675.38	4,161.07	25,836.45	3,825.00	15,563.29	19,388.29
Edmonton, St. Joseph's	7,620.00	560.11	8,180.11	3,016.15	8,619.76	11,635.91
Edmonton, University of Alberta	138,263.34	69,812.34	208,075.68	27,286.14	63,651.62	90,937.76
Edson, St. John's	4,266.67	824.33	5,091.00	946.25	3,076.66	4,022.91
Elk Point, Municipal	5,105.37	2,220.81	7,326.18	689.35	4,192.41	4,881.76
Empress, Cottage	2,487.27	1,720.94	4,208.21	857.50	1,379.21	2,236.71
Fairview, Community	2,317.10	868.95	3,186.05	555.50	1,504.84	2,060.34
Fort McMurray, St. Gabriel's	2,685.05	419.52	3,104.57	710.10	1,620.64	2,330.74
Fort Smith, General		No Report			No Report	
Fort Vermilion, St. Theresa	1,520.00	371.73	1,891.73	300.00	727.50	1,027.50
Galahad, St. Joseph's	4,633.70	656.83	5,290.53	879.95	2,052.70	2,932.65
Grande Prairie, Municipal	10,710.58	3,184.46	13,895.04	1,979.70	6,559.68	8,539.38



Grimshaw (Notkiwin), Battle River	302.29	2,969.29	240.00	939.43	1,179.43
Hanna, Municipal	1,457.70	8,147.57	975.45	5,045.42	6,020.87
Hardisty, St. Anne's	1,466.22	3,516.76	800.00	2,898.46	3,698.46
High Prairie, Providence	2,731.14	6,181.14	840.00	4,924.53	5,764.53
High River, Municipal	3,790.63	11,593.73	995.00	6,749.73	7,744.73
Innisfail, Municipal	1,920.63	9,483.13	1,082.00	4,529.21	5,611.21
Islay, Municipal	594.43	2,789.43	405.76	1,655.54	2,061.30
Jasper, Seton	170.86	3,161.41	600.00	1,526.04	2,126.04
Killam, General	746.50	3,742.50	479.00	1,234.66	1,713.66
Lacombe and District, Community	2,155.96	7,457.66	818.65	3,268.71	4,087.36
Lac La Biche, St. Catherine's	5,301.70	10,458.59	2,000.00	2,578.70	2,778.70
Lamont, Public	1,048.59	4,048.59	200.00	2,578.70	2,778.70
Lethbridge, Galt	7,596.20	18,378.02	1,431.75	13,235.99	14,667.74
Lethbridge, Isolation	9,796.49	33,142.60	5,591.30	22,728.97	28,320.27
Lethbridge, St. Michael's	33,142.60	33,142.60	344.00	286.59	630.59
Lloydminster, Municipal	1,272.00	1,315.89	9,155.81	21,799.04	30,954.85
Macleod, General	43.89	30,796.48	2,277.30	8,934.25	11,211.55
Mannville, Municipal	3,993.57	17,166.77	1,243.50	5,009.90	6,253.40
Marwayne, Nursing Home	2,296.93	6,938.38	614.95	2,132.23	2,747.18
Medicine Hat, General	734.13	3,865.03		No Report	
Mundare, General	6,577.62	24,742.58	2,604.02	15,151.57	17,755.59
Medicine Hat, Isolation	987.24	9,388.48	153.45	2,855.98	3,009.43
McLennan, Sacred Heart	9.00	751.20	1,080.00	377.05	377.05
Myrnam, Municipal	1,279.73	4,233.73	235.00	4,326.67	5,406.67
Nordeg, General	1,054.96	3,098.71	443.50	1,429.91	1,664.91
Oil Fields, General	632.36	2,309.40		1,385.57	1,829.07
Olds, General	Not Included			Not Included	
Peace River, Municipal	3,509.72	4,417.10	880.32	2,000.71	2,881.03
Pincher Creek, St. Vincent's	4,594.54	5,433.70	576.85	2,780.42	3,357.27
Provost, Municipal	1,193.41	4,755.41	540.00	1,341.17	1,881.17
Radway, St. Joseph's	945.34	4,906.69	801.55	3,170.39	3,971.94
Red Deer, Municipal	1,497.13	5,717.13	763.05	3,546.99	4,310.04
Rimbey, St. Paul's	3,740.76	11,756.26	818.90	4,760.63	5,519.53
Rocky Mountain House	706.99	3,726.99	914.00	2,487.52	3,401.52
Smoky Lake, George McDougall	3,020.00	2,468.28	845.32	2,171.13	3,016.45
Spirit River, Community	1,200.72	6,379.38	353.30	1,371.21	1,724.51
St. Paul, St. Theresa	952.77	6,451.10	2,020.00	3,013.38	5,033.38
Stettler, Municipal	1,458.35	10,126.87	832.08	3,981.26	4,813.34
Trochu, St. Mary's	2,244.04	4,115.46	540.00	2,557.70	3,097.70
Vegreville, General	835.46	17,360.00	2,060.00	10,194.50	12,254.50
Vermilion, Municipal	5,240.00	17,360.00	750.02	4,243.33	4,993.35
Viking, Municipal	3,110.76	8,330.41	1,199.46	2,581.49	3,780.95
Vilna, Our Lady's	1,691.82	6,038.17	144.00	938.16	1,082.16
Vulcan, Municipal	840.00	4,500.00	616.70	2,851.66	3,468.36
Wainwright, Municipal	1,469.85	5,471.36	1,297.03	3,267.37	4,564.40
Wayne, General	2,181.87	7,248.99	540.00	3,008.29	3,548.29
Westlock, Immaculata	915.08	4,760.08	360.00	2,797.23	3,157.23
Westkiwin, Community	3,521.96	10,516.31	1,023.00	4,744.71	5,767.71
Willingdon, General	3,168.61	3,935.29	626.60	2,350.06	2,976.66
	1,415.29				
	No Report				
	414,540.13	\$1,309,580.84	\$ 182,907.38	\$ 657,078.04	\$ 839,985.42
Total	\$ 895,040.71	\$ 414,540.13	\$ 182,907.38	\$ 657,078.04	\$ 839,985.42



TABLE No. 6b

Hospitals	Housekeeping		Laundry		Engineer & Janitor		Fuel	Light and Power	Ice and Water	Sundry	Total
	Wages	Supplies	Wages	Supplies	Wages	Supplies					
	\$	\$	\$	\$	\$	\$					
Athabasca, Municipal	316.96	68.65	734.03	99.33	680.17	16.52	1,152.43	857.51	276.71		4,202.31
Banff, Mineral Springs	1,713.80	619.74	1,703.90	339.03	2,897.70	515.06	1,992.91	883.80	169.48		10,835.42
Barrhead, St. Joseph's		No Report				No Report					
Bassano, Municipal	400.50	148.87		1,038.04	785.80	120.82	785.78	706.46	306.00		4,292.27
Bentley, Community	337.50							188.33			958.16
Berwyn, R.A.P.		88.17		28.95	375.00		664.80	929.90	9.85		2,096.67
Bonnyville, K.H.P.				310.39	900.00		414.61	233.33	12.50		1,871.03
Bonnyville, St. Louis	300.00	170.75	470.00	209.00	600.00	97.30	385.75	428.90	52.20		2,713.90
Bonnyville, General	6,157.84	8,408.45	9,008.89	1,066.51	Not shown		7,872.30	2,731.08	2,065.78		37,310.85
Calgary, Holy Cross	2,135.44	7,833.07	3,041.91	2,105.31	11,183.15	4,112.23	10,729.06	5,396.56	4,116.51	1,118.04	51,791.28
Calgary, Isolation		315.80	382.50	24.00	Not shown		830.00	289.61	235.17		2,077.08
Calgary, Junior Red Cross			492.97				577.72	344.19	171.23		1,586.11
Calgary, Salvation Army Grace	60.65	956.54	285.00	177.18	617.50		521.35	384.00	220.36		3,222.58
Calgary, St. Mary's	965.02	783.23		182.28	540.00		1,013.45	830.98	1,167.82		5,482.78
Canmore, Canmore			108.00		360.00		280.50	314.65	30.00		1,093.15
Cardston, Municipal	408.00		1,742.30	48.99	987.50	157.21	492.70	720.82	96.30		4,653.82
Carmanagay, Little Bow Municipal		40.67		101.83	191.15	30.75	374.45	311.53	122.45		1,172.83
Castor, Our Lady of the Rosary	180.00		420.00	169.40	544.00		673.09	533.13	312.39		2,832.01
Cereal, Esier				33.50	81.25		179.25	180.65	7.50		482.15
Clareholm, Municipal		144.82	585.00	169.23	341.50		585.59	661.21	197.74	13.00	2,698.09
Cold Lake, John Neil	65.51	301.00	292.50		926.40	140.11	33.00	218.59	89.60		2,066.71
Coleman, Miners' Union	314.50	246.03	600.00		499.20	171.98	305.05	108.00	250.84		2,484.26
Consort, Municipal		43.64	925.95		260.00		494.25	231.37	240.00		2,162.41
Coronation, General	164.22	127.47		51.15			387.74	330.01			1,216.76
Daysland, Providence	300.00		211.00	155.60	432.85		873.27	709.93			2,299.12
Desmarais, St. Martin's			900.00	106.00	144.00		296.00	92.00	96.00		1,426.00
Didsbury, General	1,812.15	654.09	1,973.63	588.33	4,346.93	611.34	1,087.19	3,377.40	1,334.09		15,785.15
Drumheller, Municipal							200.17	93.77			293.94
Elkville, Medicine Valley Community		164.22	168.00		665.00		630.01	279.97	56.50		2,132.60
Edmonton, Beulah Rescue Home	9,073.39	2,098.25	3,833.82	1,218.78	8,239.39	2,638.72	6,685.10	2,150.99	2,770.18		38,708.62
Edmonton, General	12,761.19	3,145.41	2,520.00	1,239.58	4,800.00	3,401.91	5,520.76	2,740.40	1,886.67		38,015.92
Edmonton, Misericordia	31,999.10	4,474.63	15,864.69	1,733.33	26,646.17	5,640.33	8,017.71	5,098.31	3,652.85		103,127.12
Edmonton, Royal Alexandra		754.32	2,932.00	339.00	6,170.00	1,402.80	1,276.00	2,672.00	679.00		20,981.85
Edmonton, Isolation		4,756.73	1,425.00	301.20	195.00		1,395.63	868.67			10,467.28
Edmonton, St. Joseph's	1,562.27	4,719.51	1,425.00	983.67	6,480.20	715.70	11,071.37	3,810.15	3,198.00		45,913.45
Edmonton, University of Alberta	6,714.40	2,205.49	10,734.47	141.07	1,268.78	62.28	749.59	653.89	239.80		4,307.96
Edson, St. John's	480.00	382.83	329.72	175.04	182.00	4.25	1,244.67	1,200.00	74.00	739.60	5,172.79
Elk Point, Municipal	501.25	274.98	467.40	96.93	260.91		238.94	475.90	54.40		1,595.22
Empress, Cottage		140.05	547.05	43.45	260.91	4.45	449.46	774.85	308.00	85.68	2,093.35
Fort McMurray, St. Gabriel's	389.70	88.96	300.00	39.07	900.00	288.53	792.50	182.27	43.09		3,024.12
Fort Smith, General		No Report				No Report					
Fort Vermilion, St. Theresa	1,560.00	50.10	104.00	25.00	480.00	120.00	200.00	11.25	17.00		957.25
Galahad, St. Joseph's	80.00	29.44	220.00	28.25	229.73	40.00	420.00	440.00			2,988.08
Grande Prairie, Municipal			520.65	175.95	1,235.25	15.96	1,898.27	1,401.42	8.10		5,365.04



Grimshaw (Notikwiwin), Battle River	258.65	79.74	484.50	180.00	32.29	1,017.22	270.71	217.50	9.00	1,006.60	
Hanna, Municipal	715.50	447.47	200.00	716.70	29.77	502.36	1,603.68	133.06		5,646.83	
Hardisty, St. Anne's		98.50	360.00	390.00		742.35	253.58			1,579.21	
High Prairie, Providence	788.47		632.45	573.54		908.85	1,174.84	120.00		3,671.10	
High River, Municipal	339.50	369.13	1,083.65	887.75		1,156.04	999.86	178.80		4,972.02	
Innisfail, Municipal		165.82	343.26	1,004.35	181.29	371.40	728.00			4,626.98	
Islay, Municipal		12.85	180.00	468.75		449.93	471.75	266.08		2,101.06	
Jasper, Seton	660.00	72.30	558.05	360.00	30.00	209.40	253.09			2,442.86	
Killam, General	660.00	625.19	1,679.15	1,258.50	157.32	1,034.01	569.90	392.01		1,430.96	
Lacombe and District, Community	5.95	836.80	250.00	694.00	50.00	400.00	272.61	128.00		4,746.70	
Lac La Biche, St. Catherine's	1,314.55	734.24	1,679.15	3,697.00	669.60	2,601.82	708.44	94.24		3,016.41	
Lamont, Public	893.16	1,607.09	2,589.00	4,042.00	567.59	2,747.48	2,088.95	1,547.89		11,843.50	
Lethbridge, Galt						169.76	83.11			17,082.65	
Lethbridge, Isolation										252.87	
Lethbridge, St. Michael's			2,959.58	2,996.58	631.77	1,543.34	1,783.45	833.55		11,655.70	
Lloydminster, Municipal		701.28	1,595.50	1,297.90	20.80	966.05	1,589.75	120.00		7,331.91	
Macleod, General			599.60	623.35	36.18	485.12	644.84			2,591.42	
Mannville, Municipal		No Report	612.03		No Report					2,401.52	
Marwayne, Nursing Home		658.11	4,603.07	2,426.62	644.86	369.46	2,570.15	232.00		15,328.19	
Medicine Hat, General	2,916.38	42.88		358.36	119.05	516.11	500.15	100.00		1,757.20	
Mundare, General										128.80	
Medicine Hat, Isolation	660.00		85.00	1,320.00	40.00	651.00	740.39	217.50		3,832.69	
McLennan, Sacred Heart	180.00	38.34	41.85	295.00	98.28	380.45	212.12	6.03		1,339.27	
Myram, Municipal		74.01				272.15	156.38	18.00		673.19	
Nordegg, General		No Report									
Oil Fields, General		No Report									
Olds, General	541.55	81.00	287.20	138.50	71.83	569.37	321.96	289.00		1,301.46	
Peace River, Municipal		270.77	358.00	950.95	27.60	157.91	833.15	66.50	33.50	3,639.68	
Pincher Creek, St. Vincent's			480.00	480.00			315.31	80.23		1,985.11	
Provost, Municipal			518.90	398.09	72.91	1,234.95	581.26			2,837.51	
Radway, St. Joseph's	720.00	208.23	390.00	701.00	130.67	854.07	480.56			3,630.14	
Red Deer, Municipal	321.75	543.33	706.05	900.90	5.34	998.40	1,467.36	78.30		5,235.94	
Rimbey, St. Paul's	451.50	165.21	787.00	344.50	51.02	638.47	392.69			2,971.77	
Rocky Mountain House			345.00	855.00	532.89	490.35	694.49			3,001.34	
Smoky Lake, George McDougall		17.28	200.00	868.75	31.52	659.72	372.29	59.58		2,233.84	
Spirit River, Community		No Report									
St. Paul, St. Theresa	504.00	371.47	730.00	860.00	26.70	488.03	572.76			3,655.39	
Stettler, Municipal	599.71	118.18	656.91	776.30	92.06	757.05	1,099.73	120.00	13.35	4,308.82	
Trochu, St. Mary's	200.00	290.10	400.00	600.00	60.25	523.15	390.23	127.06		2,701.71	
Vegreville, General	1,240.00	690.00	1,200.00	1,050.00	350.00	2,100.00	1,255.00	650.00		9,140.00	
Vermilion, Municipal	511.00	308.80	359.10	746.65	11.95	1,172.05	1,267.86		56.00	4,627.71	
Viking, Municipal			399.73	527.85	313.58	692.67	557.62			2,593.49	
Vilna, Our Lady's		195.12	144.00	420.00	73.85	530.00	136.70			1,379.55	
Vulcan, Municipal	239.00	111.07	345.00	586.50	6.80	728.29	869.87	127.50		3,158.34	
Wainwright, Municipal		293.15	469.71	147.50	110.72	777.66	727.39	218.92		2,729.70	
Wayne, General	420.00	390.00	390.00	155.65	60.00	356.22	647.85			2,470.37	
Westlock, Immaculata	200.00	148.75	360.00	360.00	127.50	737.69	737.69			2,707.06	
Wetaskiwin, Community	813.00	345.66	360.00	832.99		75.65	802.79	228.36		3,717.64	
Willingdon, General	360.00	166.96	340.00	300.00	166.02	499.16	290.27			2,365.74	
Total	\$102,023.79	\$ 50,388.01	\$ 92,594.17	\$23,764.89	\$121,866.83	\$ 26,169.16	\$109,163.37	\$79,476.36	\$ 31,678.13	\$ 2,663.35	\$639,788.06



TABLE No. 6c MAINTENANCE

Hospitals	Buildings and Grounds	Furniture and Equipment	Dry Goods	Sundries and Rents	Total Maintenance	Total Running Cost
Athabasca, Municipal	\$ 211.55	269.06	529.21	2.01	\$ 1,011.83	\$ 19,183.42
Banff, Mineral Springs	1,351.78	446.63	545.79	449.97	2,794.17	41,410.65
Barrhead, St. Joseph's		No Report			No Report	
Bassano, Municipal	613.41	332.01	253.09	142.08	1,198.51	18,355.30
Bentley, Community	132.90	85.00	140.80		500.78	7,144.89
Berwyn, R.A.P.	122.15	146.74	142.61	545.67	411.50	9,504.68
Bonnyville, K.H.P.	429.45	435.94			1,411.06	9,074.20
Bonnyville, St. Louis	660.75	169.40	400.25		1,230.40	13,325.62
Calgary, General	2,054.14	15,893.76		23,454.78	41,402.68	249,809.00
Calgary, Holy Cross	5,843.26	2,661.27	8,741.44	14,652.68	31,898.35	280,953.82
Calgary, Isolation	7.52	156.23		2,843.64	3,007.39	25,660.11
Calgary, Junior Red Cross		1,205.87		535.07	1,740.94	22,794.97
Calgary, Salvation Army Grace	1,293.60	1,032.79	608.10	480.00	3,414.49	16,098.45
Camrose, St. Mary's		486.90	832.39	839.74	2,159.03	31,917.36
Canmore, Canmore	100.00		354.00	698.80	1,152.80	11,107.05
Cardston, Municipal	623.63	565.46	642.85	972.55	2,804.49	24,707.16
Carmanagay, Little Bow Municipal	162.18	509.54	300.15	185.76	1,157.63	9,720.50
Castor, Our Lady of the Rosary	1,347.48	1,318.00	614.71	20.34	3,300.53	14,364.07
Cereal, Esler	116.80	134.37	157.30		408.47	5,695.33
Claresholm, Municipal		397.32	500.97	500.97	898.29	17,495.12
Cold Lake, John Neil	2.50	113.00	11.70	176.93	304.13	8,504.10
Coleman, Miners' Union	365.11	66.76	45.50	45.45	522.82	11,086.15
Consort, Municipal	211.53	303.88	230.96		746.37	11,392.20
Coronation, General	570.03	23.00			735.07	8,906.82
Daysland, Providence	237.25	128.52		142.04	722.29	11,055.20
Desmarais, St. Martin's	99.75	96.25	100.00	220.79	296.00	4,505.60
Didsbury, General	178.02	133.65	149.93		461.60	8,475.00
Drumheller, Municipal	2,983.55	3,756.05	1,163.78		8,550.38	80,001.37
Eckville, Medicine Valley Community	156.88			647.00	800.88	3,944.00
Edmonton, Beulah Rescue Home	340.26	228.65	242.24	132.71	943.86	11,389.43
Edmonton, General	6,972.45	52,803.27	6,017.30	8,607.94	74,400.96	238,475.02
Edmonton, Misericordia	36,867.07	17,284.23	9,424.62	6,011.77	69,587.69	231,578.09
Edmonton, Royal Alexandra			7,603.82	6,500.00	14,103.82	449,098.19
Edmonton, Isolation			830.70		830.70	79,100.36
Edmonton, St. Joseph's	1,114.52	848.10		89.97	2,429.15	34,178.58
Edson, St. John's	12,907.03	11,425.12	376.56		31,322.63	415,459.23
Elk Point, Municipal	439.84	338.40	683.48	27.98	806.22	15,937.00
Empress, Cottage	731.54	537.78	209.14	53.00	2,005.80	21,797.67
Fairview, Community	34.95	152.86	147.06	33.93	430.88	9,240.88
Fort McMurray, St. Gabriel's	292.92	13.75	387.39		453.73	8,470.22
Fort Smith, General	631.94	85.15			1,104.48	10,189.32
Fort Vermilion, St. Theresa	25.00	No Report	43.80		No Report	4,084.68
Galahad, St. Joseph's	377.05	107.00	147.75	240.00	1,166.52	12,843.37
Grande Prairie, Municipal	1,745.94	401.72	176.71	3.50	3,077.79	35,589.68



Grimshaw (Notkiwin), Battle River	461.70	531.83	55.82	517.52	5,734.67
Hanna, Municipal	63.37	569.07	569.07	3,297.34	26,695.32
Hardisty, St. Anne's	1,944.00	299.78	185.34	3,228.97	12,863.74
High Prairie, Providence	2,240.82	857.78	3,392.63	6,745.01	23,413.68
High River, Municipal	778.85	389.96	2,032.41	2,812.37	29,504.30
Innisfail, Municipal	54.23	242.71	5.15	1,041.36	23,285.48
Islay, Municipal	127.75	203.49	40.57	529.02	8,928.15
Jasper, Seton	701.24	252.41	126.26	904.73	10,062.76
Killam, General	552.60	252.41	137.68	1,117.24	8,869.60
Lacombe and District, Community	1,235.19	1,413.27	1,376.88	1,372.87	19,393.88
Lac La Biche, St. Catherine's	2,000.45	1,413.27	4,425.72	4,425.72	14,744.22
Lamont, Public	4,342.51	2,100.32	186.50	5,073.34	59,528.68
Lethbridge, Galt	1,631.88	2,100.32	812.88	5,646.90	95,500.96
Lethbridge, Isolation	9.35	30.84	44.80	44.80	2,366.29
Lethbridge, St. Michael's	2,645.37	1,298.83	576.63	4,520.83	89,271.29
Lloydminster, Municipal	1,119.44	743.80	46.27	2,707.42	41,892.23
Macleod, General	279.21	324.10	72.29	2,434.82	19,809.64
Mannville, Municipal	743.86	217.82	6.45	1,025.07	11,066.03
Marwayne, Nursing Home	No Report	No Report	No Report	No Report	No Report
Medicine Hat, General	1,522.11	2,988.68	338.32	6,339.94	78,108.33
Mundare, General	57.50	442.27	38.00	554.67	15,168.31
Medicine Hat, Isolation	96.93	557.57	96.93	96.93	1,373.51
McLennan, Sacred Heart	350.10	84.30	46.00	1,111.67	15,932.34
Myrnam, Municipal	20.00	154.43	11.10	448.64	7,718.33
Nordegg, General	No Report	154.43	600.00	754.43	5,673.35
Oil Fields, General	Not Included	Not Included	Not Included	Not Included	Not Included
Olds, General	173.64	197.14	575.11	1,098.33	10,388.29
Peace River, Municipal	519.85	147.57	5.00	877.81	15,523.45
Pincher Creek, St. Vincent's	7,655.43	132.75	9,214.31	9,214.31	18,234.65
Provost, Municipal	434.26	291.58	1,233.40	1,233.40	14,967.91
Radway, St. Joseph's	735.44	1,029.63	120.62	2,647.39	17,894.62
Red Deer, Municipal	2,175.85	707.23	3,201.48	3,201.48	28,161.85
Rimbeey, St. Paul's	1,048.62	406.04	203.00	2,167.74	13,099.66
Rocky Mountain House	520.30	No Report	520.30	520.30	9,546.26
Smoky Lake, George McDougall	565.42	No Report	565.42	565.42	11,484.00
Spirit River, Community	No Report	No Report	No Report	No Report	No Report
St. Paul, St. Theresa	421.64	660.49	35.85	1,583.24	19,019.14
Stettler, Municipal	1,689.93	383.25	2,642.33	2,642.33	25,340.83
Trochu, St. Mary's	1,048.58	305.66	3,153.45	3,153.45	13,698.48
Vegreville, General	940.00	890.00	2,480.00	45,461.50	45,461.50
Vermillion, Municipal	216.49	702.73	1,379.76	1,379.76	21,368.21
Viking, Municipal	291.30	324.77	746.34	746.34	15,254.50
Vilna, Our Lady's	360.00	95.00	41.36	871.36	9,593.07
Vulcan, Municipal	534.51	255.11	89.92	1,067.04	15,233.39
Wainwright, Municipal	1,210.71	259.71	3,052.82	3,052.82	19,705.19
Wayne, General	1,089.97	232.30	438.30	2,565.83	14,748.25
Westlock, Immaculata	206.50	340.55	45.00	872.65	13,388.05
Wetaskiwin, Community	429.29	458.01	29.60	955.90	22,873.45
Willingdon, General	96.50	404.05	76.90	597.95	10,496.43
<b>Total</b>	<b>\$ 126,189.52</b>	<b>\$ 141,380.08</b>	<b>\$ 78,314.69</b>	<b>\$ 417,020.41</b>	<b>\$3,566,010.13</b>



TABLE No. 7 EARNINGS OR REVENUE

Hospitals	Grants		Patients' Fees	Donations, Cash and Service	Tax Requisitions	Sundry Earnings	Total
	Alberta	Others					
Athabasca, Municipal	\$ 2,826.00		\$ 7,997.05	\$ 6,480.00	\$ 9,298.84	\$ 1,583.60	\$ 21,705.49
Banff, Mineral Springs	4,565.25		36,058.79			8,946.50	56,050.54
Barrhead, Barrhead			No Report			No Report	
Bassano, Municipal	2,506.05		8,247.00	4.00	8,336.90	1,640.47	20,734.42
Bentley, Community	1,254.15		8,111.52	5.00		137.98	9,508.65
Berwyn, R.A.P.	1,381.05		7,401.59		2,925.00		11,712.64
Bonnyville, K.H.P.	1,193.90		3,647.10			41.61	4,882.61
Bonnyville, St. Louis	2,688.75	\$ 320.00	11,957.50	4,106.50			19,072.75
Calgary, General	30,186.45		184,855.84	5,000.00			222,248.35
Calgary, Isolation	3,237.75		924.00			.60	4,162.35
Calgary, Holy Cross	42,032.70	3,200.00	298,080.86	5,150.38			348,463.94
Calgary, Junior Red Cross	13,295.65	750.00	8,111.36	7,196.30			25,627.28
Calgary, Salvation Army Grace	3,737.25	1,250.00	33,159.75	46.50			15,365.06
Canmore, St. Mary's	5,275.80		3,159.75	3,650.00			42,085.55
Canmore, Canmore	1,282.95		1,933.45				3,216.40
Cardston, Municipal	4,385.95		10,252.74		15,044.71		29,683.40
Carmangay, Little Bow Municipal	1,764.00		6,453.00	63.00	4,103.45		12,383.45
Castor, Our Lady of the Rosary	1,470.50		8,149.02	3,060.00		300.00	12,979.52
Cereal, Esler	990.00	782.00	3,441.99				7,315.02
Clareholm, Municipal	3,198.60		7,038.50		13,878.27		24,231.08
Cold Lake, John Neil	1,641.60	1,836.00	5,457.50	204.05		115.71	9,506.39
Coleman, Miners' Union	1,335.60		10,974.68			367.24	12,889.79
Consort, Municipal	2,177.55	1,892.00	6,585.15	1.00		579.51	16,400.57
Coronation, General	1,461.15		7,755.13			45.87	9,262.15
Daysland, Providence	785.25		3,157.90	3,300.00		2,135.00	9,378.15
Desmarais, St. Martin's	622.00	2,647.40	6,783.19				3,269.40
Didsbury, General	1,298.25	1,500.00	44,638.48		37,746.95	5,685.67	100,276.35
Drumheller, Municipal	11,405.25		4,280.34	800.00		308.00	9,581.44
Eckville, Medicine Valley Community	916.00	200.00	4,355.00	31.62			5,735.96
Edmonton, Beulah Rescue Home	3,374.55	900.00	192,490.29	2,598.22		1,195.46	12,423.23
Edmonton, General	12,620.25	6,000.00	150,958.40	26,600.00			211,110.54
Edmonton, Misericordia	5,691.60		390,090.99				183,250.00
Edmonton, Royal Alexandra	58,107.90	31,732.50	25,205.54				448,198.89
Edmonton, Isolation	5,809.70	125.00	34,632.10	9,300.00			62,747.74
Edmonton, St. Joseph's	2,775.13		18,431.95			746.80	46,832.23
Edmonton, University	67,986.20	42,233.52	375,969.04	5,040.00			486,935.56
Edson, St. John's	3,333.15		11,802.98				26,805.10
Elk Point, Municipal	4,474.35		11,486.16	176.95			28,362.10
Empress, Cottage	1,722.05	2,450.00	7,214.91	2,219.76			13,550.45
Fairview, Community	1,204.65	2,522.00	No Report	4,570.05			13,133.80
Fort McMurray, St. Gabriel's	600.30		No Report			No Report	10,887.35
Fort Smith			1,075.55				3,994.85
Fort Vermilion, St. Theresa	555.30	2,364.00	12,264.98	4,449.94			27,188.22
Galahad, St. Joseph's	3,199.10	7,274.20	18,248.90	177.95			55,758.94
Grande Prairie, Municipal	7,024.95				30,206.00	101.14	



Grimshaw, Battle River	1,015.20	3,155.00	3,273.50	48.00	23,377.88	334.00	7,825.70
Hanna, Municipal	4,061.70	.....	12,088.72	.....	.....	793.48	40,321.78
Hardisty, St. Anne's	2,121.75	.....	10,601.51	3,056.36	.....	2,748.00	18,527.62
High Prairie, Providence	3,407.85	.....	25,348.51	4,639.50	.....	.....	33,415.86
High River, Municipal	4,991.85	.....	16,515.25	.....	.....	856.61	43,268.71
Innisfail, Municipal	4,194.00	.....	11,215.60	.....	20,905.00	.....	30,451.60
Islay, Municipal	1,626.30	.....	2,515.59	.....	15,042.00	1,486.63	12,927.91
Jasper, Seton	876.15	2,500.00	7,325.00	3,463.94	7,299.39	.....	14,165.09
Killam, General	1,641.15	.....	6,965.00	1,069.63	.....	.....	9,675.78
Lacombe and District, Community	3,359.25	.....	18,765.00	.....	.....	.....	22,124.25
Lac La Biche, St. Catherine's	3,142.80	1,000.00	6,669.12	3,076.00	.....	936.00	14,823.92
Lamont, Public	8,115.30	4,038.50	60,027.78	79.98	.....	11,068.64	83,331.20
Lethbridge, Galt	15,649.99	4,000.00	88,725.49	25.00	.....	1,727.65	110,128.13
Lethbridge, Isolation	113.40	.....	365.00	.....	.....	.....	478.40
Lethbridge, St. Michael's	13,356.45	.....	93,375.14	6,003.69	.....	27,332.74	140,068.02
Lloydminster, Municipal	5,290.65	.....	35,879.65	.....	.....	203.39	45,458.19
Macleod, General	1,938.15	4,084.50	9,903.77	.....	.....	9,310.00	21,151.92
Mannville, Municipal	1,611.45	.....	4,472.42	.....	6,787.43	11.00	12,882.30
Marwayne, Nursing Home	.....	.....	Not Included	.....	.....	Not Included	.....
Medicine Hat, General	11,824.20	9,000.00	71,903.27	30.03	.....	681.50	93,439.00
Medicine Hat, Isolation	36.90	.....	72.85	.....	.....	.....	109.75
Mundare, General	2,272.05	.....	10,031.13	3,194.22	.....	180.50	15,677.90
McLennan, Sacred Heart	2,591.55	606.00	20,780.60	3,394.00	.....	.....	27,372.15
Myrnam, Municipal	1,484.55	.....	4,798.32	1,003.00	4,683.45	.....	11,969.32
Nordegg, General	773.55	.....	330.50	.....	.....	.....	1,104.05
Oil Fields, General	.....	.....	Not Included	.....	.....	Not Included	.....
Olds, General	1,726.20	.....	8,601.51	.....	.....	16.76	10,244.47
Peace River, Municipal	2,112.30	.....	8,111.57	.....	11,645.54	340.91	22,210.32
Pincher Creek, St. Vincent's	1,867.95	.....	10,814.04	.....	.....	5,067.10	17,749.09
Provost, Municipal	2,785.64	.....	6,890.88	4,060.00	11,038.00	.....	20,714.52
Radway, St. Joseph's	2,819.70	.....	15,481.89	.....	.....	700.00	23,061.59
Red Deer, Municipal	4,776.41	.....	23,950.75	1,134.35	4,519.81	475.41	33,722.38
Rimby, St. Paul's	2,658.15	.....	9,947.59	185.53	.....	103.88	13,902.11
Rocky Mountain House	2,632.50	5.00	7,440.00	.....	.....	432.80	10,366.91
Smoky Lake, George McDougall	1,329.75	6,444.28	4,186.09	.....	.....	.....	12,392.92
Spirit River, Community	.....	.....	No Report	.....	.....	No Report	.....
St. Paul, St. Theresa	3,169.80	3,525.20	13,581.98	5,700.00	.....	482.40	26,459.38
Stettler, Municipal	4,804.30	.....	14,369.59	.....	11,507.87	334.85	31,016.61
Trochu, St. Mary's	1,577.70	.....	8,122.00	4,371.75	.....	.....	14,071.45
Vegreville, General	8,676.00	145.00	65,616.00	8,387.30	.....	.....	82,824.30
Vermillion, Municipal	4,907.25	.....	11,710.43	.....	11,201.00	788.17	28,606.85
Viking, Municipal	2,471.85	.....	6,139.93	.....	9,122.00	203.97	17,937.75
Vilna, Our Lady's	1,705.05	669.00	5,462.19	4,860.00	.....	.....	12,696.24
Vulcan, Municipal	4,324.59	.....	4,882.18	78.75	.....	.....	24,845.58
Wainwright, Municipal	2,956.50	.....	10,833.23	.....	15,560.06	.....	23,378.73
Wayne, General	2,598.30	.....	12,984.05	.....	9,589.00	73.98	15,656.33
Westlock, Immaculata	3,415.50	1,300.00	17,745.00	2,500.00	.....	185.52	24,960.50
Westkiwin, Community	4,451.85	1,445.75	25,370.61	4,374.26	.....	321.83	30,007.98
Willington, General	2,912.40	.....	8,858.60	.....	.....	.....	17,912.84
Total	\$ 493,570.46	\$ 151,896.85	\$2,815,924.05	\$ 158,991.51	\$ 300,874.92	\$ 103,186.31	\$4,024,444.10



TABLE No. 8

Hospitals	Operating Cost Per Patient Per Day Exclusive of Capital and Reserve	Percentage of Cost					Revenue per Patient per Day
		Adminis- tration %	Professional Care %	Kitchen and Dining Room %	House and Property %	Mainten- ance %	
Athabasca, Municipal	\$ 3.04	17.3	36.9	18.6	21.9	5.3	3.44
Banff, Mineral Springs	4.09	4.3	37.1	25.7	26.2	6.7	5.53
Barrhead, Barrhead							
Bassano, Municipal	3.30	13.9	35.7	20.5	23.4	6.5	3.73
Bentley, Community	2.56	8.0	46.5	25.1	13.4	7.0	3.40
Berwyn, R.A.P.	3.09	9.4	39.2	25.0	22.1	4.3	3.81
Bonnyville, K.H.P.	3.43	2.4	37.5	23.9	20.6	15.5	1.85
Bonnyville, St. Louis	2.23	4.4	36.6	29.4	20.4	9.2	3.19
Calgary, General	3.40	9.0	37.2	22.2	14.9	16.6	3.03
Calgary, Isolation	3.47	21.3	31.8	27.1	8.1	11.7	5.6
Calgary, Holy Cross	3.01	10.4	34.5	25.2	18.4	11.4	3.73
Calgary, Junior Red Cross	1.70	5.3	46.1	34.0	7.0	7.6	1.91
Calgary, Salvation Army Grace	1.96	7.6	23.3	27.8	20.0	21.2	1.87
Camrose, St. Mary's	2.72	9.7	41.6	24.7	17.2	6.8	3.59
Canmore, Canmore	3.90	6.8	48.2	24.8	9.8	10.4	1.13
Cardston, Municipal	2.50	7.5	36.1	26.3	18.8	11.3	3.00
Carmanagay, Little Bow Municipal	2.47	9.8	42.3	23.9	12.1	11.9	3.15
Castor, Our Lady of the Rosary	4.39	7.8	30.8	18.7	19.7	23.0	3.97
Cereal, Esler	2.59	5.0	51.8	27.6	7.1	7.1	3.32
Clareholm, Municipal	2.46	9.5	45.4	24.4	15.4	5.1	3.41
Cold Lake, John Neil	1.94	3.4	44.2	24.5	24.3	3.6	2.16
Coleman, Miners' Union	3.73	5.4	41.7	25.8	22.4	4.7	4.34
Consort, Municipal	2.36	7.1	42.5	24.8	19.0	6.6	3.39
Coronation, General	3.19	9.3	41.9	26.8	13.7	8.3	3.31
Daysland, Providence	2.08	11.4	28.0	33.3	20.8	6.5	1.76
Desmarais, St. Martin's	2.41	4	43.1	18.2	31.6	6.6	1.75
Didsbury, General	2.94	7.3	45.8	18.8	22.6	5.4	3.32
Drumbeller, Municipal	2.89	12.0	35.8	21.7	19.7	10.7	3.62
Eckville, Medicine Valley Community	1.97	6.5	48.0	31.1	7.5	6.9	2.86
Edmonton, Beulah Rescue Home	3.24	9.3	22.6	26.2	19.3	8.3	2.15
Edmonton, General	4.23	8.0	20.0	23.3	16.2	31.2	2.87
Edmonton, Misericordia	3.46	10.9	26.1	19.4	16.4	30.1	3.34
Edmonton, Royal Alexandra	3.25	15.3	42.1	20.8	23.0	3.1	3.45
Edmonton, Isolation	1.38	4.3	32.7	24.5	26.5	1.1	2.58
Edmonton, St. Joseph's	3.73	9.4	23.9	34.1	30.6	7.1	1.89
Edmonton, University	2.15	10.7	31.9	21.9	11.1	7.5	4.37
Edson, St. John's	2.14	11.1	25.2	27.0	27.0	5.1	3.62
Elk Point, Municipal	2.35	8.3	33.6	22.4	23.7	9.2	2.79
Empress, Cottage	3.13	8.0	45.6	24.2	17.3	4.7	3.45
Fairview, Community	4.26	6.1	37.6	24.3	24.7	5.4	4.84
Fort McMurray, St. Gabriel's			30.5	22.9	29.7	10.8	4.55
Fort Vermillion, St. Theresa	1.98	.8	46.3	25.2	23.4	4.3	1.94

Galahad, St. Joseph's	2.76	3.6	41.2	22.8	23.3	9.1	5.85
Grande Prairie, Municipal	2.36	13.2	39.0	24.0	15.1	8.6	3.70
Grimshaw, Battle River	3.05	1.1	51.8	20.6	17.5	9.0	4.16
Hanna, Municipal	2.96	13.4	30.5	22.6	21.1	12.4	4.46
Hardisty, St. Anne's	2.73	6.5	27.3	28.8	12.3	25.1	3.93
High Prairie, Providence	2.54	4.5	26.4	24.6	15.6	28.8	3.63
High River, Municipal	2.66	10.7	39.3	26.2	16.9	6.9	3.90
Innisfail, Municipal	2.50	10.8	40.7	24.1	19.9	4.5	3.27
Islay, Municipal	2.90	16.2	31.2	23.1	23.5	5.9	4.19
Jasper, Seton	5.17	14.2	31.4	21.1	24.3	9.0	7.28
Killam, General	3.65	9.8	42.2	19.3	16.1	12.6	3.98
Lacombe and District Community	2.63	8.9	38.5	21.1	24.4	7.1	3.00
Lac La Biche, St. Catherine's	2.43	3.2	27.5	18.8	20.5	30.0	2.45
Lamont, Public	3.30	16.1	30.9	24.6	19.9	8.5	4.62
Lethbridge, Galt	2.76	11.8	34.7	29.7	17.9	5.9	3.19
Lethbridge, Isolation	9.38	5.2	55.6	26.7	10.7	1.9	1.90
Lethbridge, St. Michael's	2.99	12.7	34.5	34.7	13.1	5.1	4.70
Lloydminster, Municipal	2.10	8.3	41.0	26.7	17.5	6.5	2.28
Macleod, General	1.70	8.0	35.0	31.6	13.1	12.3	1.81
Mannville, Municipal	3.09	9.3	34.9	24.8	21.7	9.3	3.59
Medicine Hat, General	2.89	17.6	31.7	22.7	19.6	8.4	3.47
Medicine Hat, Isolation	9.54	1.4	54.7	27.4	7.1	9.4	.76
Mundare, General	3.01	3.0	61.9	19.8	11.6	3.7	3.11
McLennan, Sacred Heart	2.49	8.5	26.6	33.9	24.1	6.9	4.28
Myrnam, Municipal	2.34	15.1	40.2	21.6	17.4	5.8	3.63
Nordegg, General	3.36	1.9	40.7	32.2	11.9	13.3	6.53
Oil Fields, General							
Olds, General	2.71	6.6	42.5	27.7	12.5	10.6	2.70
Peace River, Municipal	3.31	14.3	35.0	21.6	23.4	5.7	4.73
Pincher Creek, St. Vincent's	44.6	2.2	26.1	10.3	10.9	50.2	4.34
Provost, Municipal	2.54	13.5	32.8	26.5	18.9	8.2	3.52
Radway, St. Joseph's	2.85	8.8	31.9	24.1	20.3	14.8	3.68
Red Deer, Municipal	2.73	8.7	41.7	19.5	18.6	11.4	3.26
Rimbey, St. Paul's	2.61	6.4	28.5	25.9	22.7	16.5	2.77
Rocky Mountain House	1.93	5.7	25.8	31.6	31.4	5.5	2.09
Smoky Lake, George McDougall	3.88	5.1	35.5	15.0	19.5	4.9	4.19
St. Paul, St. Theresa	2.33	12.1	33.9	26.5	19.3	8.3	3.24
Stettler, Municipal	2.14	13.6	39.9	18.9	17.0	10.4	2.61
Trochu, St. Mary's	3.91	4.6	30.0	22.6	19.7	23.0	4.01
Vegreville, General	1.96	9.3	38.2	26.9	20.1	5.5	4.29
Vermillion, Municipal	1.96	9.5	38.9	23.4	21.7	6.5	2.62
Viking, Municipal	2.52	13.7	39.5	24.8	17.0	4.9	2.96
Vilna, Our Lady's	3.69	18.4	46.9	11.3	14.4	9.1	4.88
Vulcan, Municipal	3.26	13.5	35.9	22.7	20.7	7.0	5.31
Wainwright, Municipal	3.00	10.7	36.8	23.1	13.8	15.5	3.56
Wayne, General	2.55	9.55	32.3	24.1	16.7	17.4	2.71
Westlock, Immaculata	1.76	7.4	42.3	23.6	20.2	6.5	1.96
Wetaskiwin, Community	2.24	8.4	45.9	25.2	16.2	4.2	2.94
Willingdon, General	1.62	5.9	37.4	28.3	22.5	5.7	2.76
Average	3.01	10.3	36.5	23.5	17.9	11.8	3.41

Not Included

Not Included



## Division of Social Hygiene

(HAROLD ORR, O.B.E., M.D., D.P.H., F.R.C.P. (C.), *Director*)

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The educational programme has been continued on a somewhat increased scale. About 70 lectures were delivered in various parts of the Province, including the following places: Mundare, Ponoka, Consort, Big Valley, Trochu, Two Hills, St. Paul, Vilna, Spedden, Waskatenau, Stony Plain, Westlock, Morinville, Beaverlodge, Grande Prairie, Medicine Hat, Redcliffe, Camrose, Red Deer, Edmonton and Calgary.

The policy of distributing drugs free for the treatment of syphilitics is being continued. Over 20,000 doses of drugs for injection were distributed to some 150 physicians.

During the past twenty-one years all prisoners admitted to our gaols have been examined for venereal disease. The examination includes the blood Wassermann test and a urinalysis; in the case of women, smear preparations from the urethra and cervix are examined for gonococci. The percentage of syphilis in the gaol population for the year was 2.98%; this is to be compared with 16% in 1920, when the division was organized. It is believed that this reduction in the incidence of syphilis in our gaols is paralleled in the general population in the Province.

At the Provincial Conference under the Chairmanship of the Hon. Dr. W. W. Cross held in Edmonton on October 2nd, 1939, it was agreed that we should do everything in our power to assist in the control of venereal disease in our military forces. The search for sources of infection is fundamental, and I must again point out that our staff is inadequate to meet the present situation. I strongly urge the appointment of two epidemiologists, one for each half of the Province.

In the last annual report it was pointed out that the City of Lethbridge had the highest syphilis rate in the Province, and the suggestion was made that the existence of several recognized "houses of prostitution" in the centre of that city was the direct cause of the excessive syphilis rate there. With large numbers of soldiers being trained in the City of Lethbridge, the matter of suppressing open prostitution has become urgent. On October 21st, 1940, your Director had a round table discussion with the Lethbridge City Council, at which were present also the police commission, the chief constable and Mr. A. B. Hogg, representing the Attorney-General's Department. As a result of the discussion both the police commission and the council decided that the "houses of prostitution" must be closed. These houses were all closed for a short time, but were soon re-opened. The chief of police seems to find difficulty in working up a case against these people, but it is hoped that he will be successful in developing a technique which will be adequate to suppress this vice.

Every venereally infected soldier is always a temporary and sometimes a permanent, war casualty, just as surely as if struck by an enemy bullet. Every municipality and every police detachment in the Province is urged to do its utmost to suppress prostitution.



To succeed would constitute a very important contribution to our war effort.

During the year the five-day intensive treatment for syphilis was introduced in our Edmonton clinic, and several patients have already been treated by the method, which is one of the most important advances in therapy during recent years.

I take this opportunity to express my appreciation of the splendid co-operation we have had from the officers and personnel of the Royal Canadian Mounted Police. They have been the important factor in rounding up alleged sources of infection, especially in rural areas. In the cities, this work has been done in a very fine way by the staffs of the health departments, and in some cases the assistance of the police has been necessary, and they have been most co-operative.

The following figures indicate the work done in the various clinics during the year:

PROVINCIAL CLINIC, Provincial Building, 10048 101A Avenue, Edmonton  
CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

	Males			Females			Totals
	0-12 yrs.	12-20 yrs.	Over 20 yrs.	0-12 yrs.	12-20 yrs.	Over 20 yrs.	
Carried forward from 1939:							
Syphilis .....	2	1	76	....	2	32	113
Gonorrhoea .....	....	....	36	....	4	35	75
							188
New cases admitted in 1940:							
Syphilis .....	....	1	52	....	2	11	66
Gonorrhoea .....	....	10	273	....	5	82	390
Non-Venereal .....	....	1	9	....	39	139	296
Total number of cases treated .....	3	21	545	5	67	299	940

Males—569

Females—371

Number and results of Wassermann tests: 1,662 tests, of which 384 were positive.

Number and results of Cerebrospinal Fluid Tests: 62 tests, of which 16 were positive.

PROVINCIAL CLINIC, 713 3rd Street East, Calgary  
CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

	Males			Females			Totals
	0-12 yrs.	12-20 yrs.	Over 20 yrs.	0-12 yrs.	12-20 yrs.	Over 20 yrs.	
Carried forward from 1939:							
Syphilis .....	....	....	84	1	1	40	126
Gonorrhoea .....	....	....	38	....	2	14	54
							180
New cases admitted in 1940:							
Syphilis .....	....	....	41	2	2	17	62
Gonorrhoea .....	....	7	165	....	15	41	228
Non-Venereal .....	....	1	7	....	42	112	337
Total number of cases treated .....	1	14	499	7	62	224	807

Males—514

Females—293

Number and results of Wassermann tests: 1,516 tests, of which 221 were positive.

Number of results of Cerebrospinal Fluid Tests: 50 tests, of which 12 were positive.

PROVINCIAL CLINIC, c/o Galt Hospital, Lethbridge  
CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

	Males			Females			Totals
	0-12 yrs.	12-20 yrs.	Over 20 yrs.	0-12 yrs.	12-20 yrs.	Over 20 yrs.	
Carried forward from 1939:							
Syphilis .....	....	....	27	....	....	6	33
Gonorrhoea .....	....	....	3	....	....	1	4
							37
New cases admitted in 1940:							
Syphilis .....	....	....	14	....	1	11	26
Gonorrhoea .....	....	....	16	....	1	2	19
Non-Venereal .....	....	....	16	....	....	5	21
Total number of cases treated .....	....	....	76	1	1	25	103

Males—76

Females—27

Number and results of Wassermann tests: 198 tests, of which 32 were positive.

Number and results of Cerebrospinal Fluid Tests: 4 tests, of which none were positive.



PROVINCIAL CLINIC, c/o General Hospital, Medicine Hat  
CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

	Males			Females			Totals
	0-12 yrs.	12-20 yrs.	Over 20 yrs.	0-12 yrs.	12-20 yrs.	Over 20 yrs.	
Carried forward from 1939:							
Syphilis .....			3	1		2	6
Gonorrhoea .....			2				2
							8
New cases admitted in 1940:							
Syphilis .....			5	1		5	11
Gonorrhoea .....			10			1	11
Chancroid .....			1				1
Non-Venereal .....			1			1	2
Total number of cases treated.....			22	2		9	33
			Males—22			Females—11	

Number and results of Wassermann tests: 120 tests, of which 67 were positive.  
Number and results of Cerebrospinal Fluid Tests: Nil.

PROVINCIAL GAOL, Fort Saskatchewan

CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

	Males			Females			Totals
	0-12 yrs.	12-20 yrs.	Over 20 yrs.	0-12 yrs.	12-20 yrs.	Over 20 yrs.	
Carried forward from 1939:							
Syphilis .....			5			4	9
Gonorrhoea .....			1			2	3
							12
New cases admitted in 1940:							
Syphilis .....			25			28	53
Gonorrhoea .....			2		9	21	57
Non-Venereal .....			56		9	118	1099
Total number of cases treated.....			58		18	173	1221
Total number of admissions examined: Females .....							185
Males .....							1024
Total.....							1209

Number and results of Wassermann tests: 1,328 tests, of which 111 were positive.  
Number and results of Cerebrospinal Fluid Tests: Nil.

PROVINCIAL GAOL, Lethbridge

CLASSIFICATION OF DISEASES WITH NUMBERS, SEX AND AGE OF PATIENT

All patients are Males over 20 years of age:	Syphilis.	Gonorrhoea.	Totals.
Carried forward from 1939 .....	3	4	7
New cases in 1940 .....	11	19	30
Total number of cases treated.....	14	23	37

Number and results of Wassermann tests: 448 tests, of which 51 were positive.  
Number and results of Cerebrospinal Fluid Tests: 2 tests, of which none were positive.

RECAPITULATION

OF PATIENTS TREATED BY THE STAFF OF THE DIVISION OF SOCIAL  
HYGIENE IN 1940

Sex:	Syphilis.	Gonorrhoea.	Chancroid.	Non-Venereal.	Totals
Males .....	350	611	1	1286	2248
Females .....	169	255		469	893
Totals .....	519	866	1	1755	3141

Total number of cases of venereal disease—1,386.

Total number of cases reported by doctors in the Province: Syphilis 321, Gonorrhoea 83; total, 404.



## Sanitary Engineering Division

(D. B. MENZIES, M.Sc., C.E., *Provincial Sanitary Engineer*)

In so far as the construction of waterworks and sewerage projects within the Province is concerned, it is very noticeable that the war is having a very definite effect in reducing such construction within cities and towns. A great deal of waterworks and sewerage construction, however, took place within the Province in connection with military projects.

The establishment of R.C.A.F. and military camps at a number of points throughout the Province has had the effect of making local dairymen provide themselves with pasteurizing equipment, as the military authorities will accept none other than pasteurized milk. Thus, in an indirect way, the milk supplies of a number of towns have been improved in a very marked degree.

### *Municipal Waterworks.*

The largest and most interesting project constructed in this field during the year 1940 was the installation, by the City of Edmonton, of a water-softening scheme, along with an additional new clear water basin, the total estimated cost for the project being \$141,500.00. The Edmonton water-softening plant marks the first of its kind in the Province, and the results obtained seem to have been very satisfactory. The total estimated expenditure on waterworks throughout the Province for the year 1940 totalled \$153,108.48, made up as follows:

1. City of Calgary, Certificate No. 429-40. Installation of Water Services. Estimated cost, \$2,321.48.
2. Town of Bassano, Certificate No. 430-40. Reconstruction of Waterworks Intake. Estimated cost, \$2,733.00.
3. City of Edmonton, Certificate No. 431-40. Installation of Water-softening equipment and construction of new covered clear water basin. Estimated cost, \$141,500.00.
4. Town of Brooks, Certificate No. 434-40. Construction of new water mains. Estimated cost, \$6,554.00.

There are still a number of municipal waterworks system in the Province which furnish untreated surface waters to their customers. This practice is potentially dangerous and every effort has been made by the Division to impress upon offending municipalities the desirability and necessity of providing safe waters. Unfortunately, a number of municipalities still try to evade the issue by serving their customers with notices advising the boiling of the water prior to consumption.

There are several other municipalities which are equipped with modern filtration plants, but only filter their water at such times as the surface waters from which their supplies are drawn are highly turbid. While such supplies are chlorinated throughout the year, better waters would no doubt be supplied if filtration were practiced continuously throughout the year. Furthermore, a number of municipalities are providing safe waters from a bacterio-



logical standpoint, but which, from a chemical and taste and odour standpoint, leave much to be desired. It is to be hoped that in the future some of these objectionable features will be corrected.

During the year, waters were obtained from different public or municipal waterworks systems for bacteriological analysis, with the following results:

Municipality and Source of Supply	Chlorinated	No. of Tests	Positive	Negative
Athabasca—Athabasca River	Yes	2	.....	2
Bassano—Bow River	Yes	5	2	3
Bellevue—Connelly Creek	No	3	1	2
Blairmore—York Creek and Oldman River	No	9	2	7
Brooks—Irrigation Water	No	7	2	5
Calgary—Elbow River	Yes	4	.....	4
Camrose—Stoney Creek and wells	Yes	16	.....	16
Cardston—Lees Creek	No	6	1	5
Carmangay—Infiltration Gallery	No	1	.....	1
Claresholm—Willow Creek	No	7	3	4
Coleman—Nez Perce Creek & Oldman River	No	16	11	5
Coronation—Wells	No	2	.....	2
Drumheller—Wells	No	4	.....	4
Edson—Wells	No	1	1	.....
Exshaw—Creek	No	1	.....	1
Frank—Gold Creek	No	3	2	1
Gleichen—Wells	No	4	.....	4
Grande Prairie—Wells	No	8	3	5
Hanna—Wells	No	1	.....	1
Lacombe—Wells	No	8	.....	8
Macleod—Oldman River	Yes	13	5	8
Magrath—Wells	No	5	.....	5
Medicine Hat—South Saskatchewan River	Yes	17	1	16
Pincher Creek—Pincher Creek	No	2	2	.....
Raymond—Surface Reservoir	Yes	2	.....	2
Redcliffe—South Saskatchewan River	No	6	3	3
Stettler—Wells	No	1	.....	1
Taber—Oldman River	Yes	7	4	3
Turner Valley—Highwood River	Yes	13	.....	13
Turner Valley—Sheep Creek	Yes	13	.....	13
Vegreville—Wells	No	2	.....	2
Wetaskiwin—Wells	No	19	.....	19

#### *Municipal Sewerage and Sewage Disposal.*

The following are the sewerage and sewage disposal projects approved during the year:

1. City of Calgary, Certificate No. 429-40. Sewer Services. Estimated cost, \$2,000.00.
2. City of Lethbridge, Certificate No. 433-40. Storm Sewer Construction. Estimated cost, \$16,000.00.
3. Town of Brooks, Certificate No. 435-40. Sewerage Extension. Estimated cost, \$4,547.00.

During the year the reports of 1,293 water analyses, 100 milk analyses, and 16 ice analyses reached the Division. In the case of contaminated waters, the persons concerned were advised as to the procedure to follow in order to restore the quality of the water to a safe condition.

The sanitary inspector of the Division during the year investigated 104 complaints, over and above a number of routine inspections carried out throughout the Province. During the year 77 lumber and industrial camp inspections were made.

During the year the following plumbing fixtures were installed throughout the Province under the inspection of either the local or Provincial boards of health: Water closets, 2,936; lavatory basins, 3,762; laundry tubs, 70; baths and showers, 1,839; sinks, 1,823; special fixtures, 638. As a result of the above plumbing installations, 308 outside toilets were eliminated.

The staff of the Division during the year consisted of four members: the director, one sanitary inspector, one plumbing inspector, and one stenographer.

## Dental Hygiene Division

(HERBERT ROSS, D.D.S.)

A full-time dental service is provided by the Provincial Mental Hospital at Ponoka, which includes the auxiliary hospitals at Claresholm and Raymond. A full report of this service for the year will be found in the report of the Mental Hospital.

The Provincial Dentist provides service for the following institutions: Provincial Mental Institute, Provincial Training School, and the Sanatoria at Edmonton and Calgary. The work done is fully reported in the annual report of these institutions.

As in previous years, the Provincial Dentist was a member of the Travelling Clinic staff. The report for the year is as follows:

Number of children examined .....	2,698
Number recommended for treatment .....	1,181
Number given treatment .....	661
Number fillings (number of teeth) .....	759
Number extractions (number of teeth) .....	1,136

Radio talks on dental hygiene were given over CKUA by Dr. H. A. Gilchrist, of the University of Alberta.



## Mental Health Division

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Separate reports are submitted for each branch of this Division:

Eugenics Board,  
Mental Hygiene (Guidance) Clinics,  
Provincial Mental Hospital, including Provincial Auxiliary  
Hospitals at Claresholm and Raymond,  
Provincial Mental Institute,  
Provincial Training School.

The institutional population again shows an increase over the previous year, though not so great as in other years. On January 1st, there were 2,759 patients—1,772 males and 987 females—at all institutions, and at the close of the year there were 2,783—1,766 males and 1,017 females—being an increase of 24 patients—a decrease of 6 males and an increase of 30 females.

From the time the first mental hospital was opened in 1911 there was a steady annual increase in population of from 4% to 8% until 1939, when for the first time it fell below 4%, while in 1940 the increase was less than 1%.

During the same period the ratio of hospitalized mental patients to population has shown a steady increase from 156 per 100,000 in 1921 to 350 in 1940. It may again be pointed out that while this is serious, it need not cause undue alarm, as Alberta still stands one of the lowest of the provinces in this respect. A continued increase may, therefore, be expected.

Admission rates as well as resident rates have risen in recent years. This rise is due in part to the greater number of early, mild and temporary cases seeking such assistance as the mental hospitals are able to provide, as shown by the rising proportion of voluntary admissions; and in part to the greater number of mental defectives who are being forced into the institutions for one reason or another. Largely on account of this last group, the acceleration in discharges is not keeping pace with acceleration in admissions.

At the Provincial Mental Hospital at Ponoka there were 568 admissions, 454 discharges, and 90 deaths, being an increase in population of 24 patients.

Notwithstanding new accommodation for 375 patients in 1938 and 1939, there is still serious congestion at both the Mental Hospital and the Provincial Training School. The additions to be added to the Provincial Training School in 1941 and the new building at the Mental Institute in 1942, will offer some relief, but it is not expected that these will be enough.

The facilities provided by the psychopathic ward at the University Hospital, which was closed in 1933, continues to be greatly missed, both as a suitable centre for the observation and treatment of mild borderline and doubtful cases and as a teaching centre.

Reports will be found, under their respective headings, of Mental Hygiene Clinics and Eugenics Board.

Radio talks over CKUA were given during the year by various members of the institutional staff on subjects relating to mental health.

Attention is again directed to the splendid work that is being done by the superintendents of the institutions and the members of their respective staffs.

## TABULATED SUMMARY

## A.—INSTITUTIONS—MOVEMENT OF PATIENTS

	On Books Jan. 1, 1940			Admissions 1940			Discharges 1940			Deaths 1940			On Books Dec. 31/40		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
	Oliver .....	769	.....	769	60	.....	60	24	.....	24	39	.....	39	766	.....
Ponoka .....	891	681	1572	309	259	568	261	193	454	52	38	90	887	709	1596
Red Deer .....	112	103	215	7	7	14	3	7	10	3	.....	3	113	103	216
Claresholm .....	.....	99	99	.....	4	4	.....	3	3	.....	.....	.....	.....	100	100
Raymond .....	.....	104	104	.....	6	6	.....	3	3	.....	2	2	.....	105	105
Totals .....	1772	987	2759	376	276	652	288	206	494	94	40	134	1766	1017	2783

## ADMISSIONS—BROAD DIAGNOSIS

	Psychotic			Non-Psychotic			Mental Defectives			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
	Oliver .....	44	.....	44	12	.....	12	4	.....	4	60	.....
Ponoka .....	244	225	469	49	16	65	16	18	34	309	259	568
Red Deer .....	.....	.....	.....	.....	.....	.....	7	7	14	7	7	14
Claresholm .....	.....	4	4	.....	.....	.....	.....	.....	.....	.....	4	4
Raymond .....	.....	6	6	.....	.....	.....	.....	.....	.....	.....	6	6
Totals .....	288	235	523	61	16	77	27	25	52	376	276	652

## B—CLINIC SUMMARY

	1939			1940			Total New cases since 1929
	Clinics	New Cases	Follow-ups	Clinics	New cases	Follow-ups	
Edmonton .....	42	85	332	42	79	717	1128
Calgary .....	20	78	800	21	98	604	1098
Lethbridge .....	10	43	57	9	40	32	592
Medicine Hat .....	4	81	27	4	47	15	492
Drumheller .....	4	17	31	2	5	15	112
High River .....	5	25	13	4	17	8	81
Lamont .....	4	34	1	3	32	3	76
Red Deer .....	4	31	6	4	25	2	56
Other Clinics .....	2	9	8	5	13	2	472
Totals .....	95	403	1275	94	356	1398	4107



## The Eugenics Board for the Province of Alberta

(J. M. MACEachran, M.A., Ph.D., *Chairman*)

During the year 1940 the Eugenics Board met at four regular meetings, at the Provincial Mental Institute, Ponoka; on March 14th, May 9th, August 8th, and November 19th and 20th.

There were presented to and passed by the Eugenics Board in 1940, 53 male and 61 female cases, or a total of 114 cases. Of these, 16 cases were presented through the Guidance Clinics, 6 of these cases being male and 10 female. The total cases presented and passed to date is 1,575, of whom 801 cases are male and 774 female. Thirty-seven operations were performed under the direction of the Board during 1940, 14 being male cases and 23 female. Of these operations, 2 were orchidectomies and 2 oophorectomies. All operations were performed by Dr. L. C. Conn, Dr. Robt. O'Callaghan, and Dr. J. W. Richardson. Dr. Robt. O'Callaghan resigned as consultant surgeon in June, 1940, because he was leaving the Province. His resignation was received with regret by the Eugenics Board. Following Dr. O'Callaghan's resignation, Dr. J. W. Richardson was appointed by the Department to fill the vacancy, after consulting with the Board. The medical, nursing and attendant staffs at the Provincial Mental Hospital assisted at all operations in the usual efficient manner, which the Board commends.

Although the social workers associated with the Guidance Clinics have been able to do some follow-up and investigational work regarding Eugenics Board cases, this has necessarily been limited. It would be advantageous to the work of the Board to have an appropriation made for travelling expenses and salary for the services of a full time social worker for Eugenics Board work only.

The Board wishes to express its appreciation to all who have prepared and handled the cases which have been presented, and for the competent way in which this has been done.

In addition to their regular duties the Eugenics Board acted as a Visiting Board in November, 1940, at the request of the Minister of Health. The Provincial Mental Institute, Edmonton, was inspected on November 19th, the Provincial Mental Hospital, Ponoka, on November 19th and 20th, the Provincial Training School, Red Deer, on November 20th, the Central Alberta Sanatorium, Keith, on November 21st, the Provincial Mental Auxiliary Hospital, Claresholm, on November 21st, and the Provincial Mental Auxiliary Hospital, Raymond, on November 22nd. A detailed report of the findings of these visits has been submitted to the Minister of Health.

Miss E. Mary Frost, associated with the Edmonton Guidance Clinic, acted as secretary for the Visiting Board.

There is appended a summary of the Eugenics Board work to the end of 1940, in table form.

## CASES PRESENTED AND PASSED TO DECEMBER 31st, 1940

	Yearly Totals			Cumulative Totals		
	Male	Female	Totals	Male	Female	Totals
1929 .....	1	3	4	1	3	4
1930 .....	6	36	42	7	39	46
1931 .....	25	63	88	32	102	134
1932 .....	20	43	63	52	145	197
1933 .....	35	56	91	87	201	288
1934 .....	132	82	214	219	283	502
1935 .....	123	97	220	342	380	722
1936 .....	103	88	191	445	468	913
1937 .....	115	87	202	560	555	1115
1938 .....	84	84	168	644	639	1283
1939 .....	104	74	178	748	713	1461
1940 .....	53	61	114	801	774	1575

## OPERATIONS ONLY TO DECEMBER 31st, 1940

	Yearly Totals			Cumulative Totals		
	Male	Female	Totals	Male	Female	Totals
1929 .....	1	2	3	1	2	3
1930 .....	6	30	36	7	32	39
1931 .....	13	51	64	20	83	103
1932 .....	15	34	49	35	117	152
1933 .....	13	41	54	48	158	206
1934 .....	46	59	105	94	217	311
1935 .....	33	54	87	127	271	398
1936 .....	35	42	77	162	313	475
1937 .....	57	48	105	219	361	580
1938 .....	26	37	63	245	398	643
1939 .....	18	29	47	263	427	690
1940 .....	14	23	37	277	450	727



## Guidance Clinics

(R. R. MACLEAN, M.D., *Director*)

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The work of the Guidance Clinics in the Mental Hygiene Division was carried forward during 1940. One new clinic centre was established at Stettler in connection with the Full-time Health Unit there. The clinics already established were maintained during the year. During the summer of 1940 certain changes in clinic schedules had to be made because of the shortage of staff and the pressure of other work. These changes cut down somewhat on the number of clinics held, and have been reflected in a drop in the number of new cases seen at some of the clinic centres. There are now nine regular clinics in the Province, and cases are seen by appointment at the Provincial Mental Hospital. In 1940, as in 1939, it was not found possible to hold a series of clinics in the Peace River-Grande Prairie area. This is much to be regretted, and it is planned to re-establish this service as soon as conditions make it possible to do so.

Mention should be made of the increase in Guidance Clinic work at Edmonton and Calgary where resident social workers are stationed. The psychiatric social workers at these points, Miss E. M. Frost and Miss I. A. Munroe respectively, have given excellent service, and have added very materially to the effectiveness of the clinic work. It is to be hoped that further additions to the clinic personnel will be made as the work expands. During the last five months of the year Mr. E. J. Kibblewhite, Chief Psychiatric Social Worker, was away on leave of absence. This threw additional work on Miss Munroe and Miss Frost, and necessitated some curtailment of the amount of work which they were able to do at their respective clinic centres.

Dr. R. R. MacLean, Director of Clinics and Superintendent of the Provincial Mental Hospital, and Dr. T. C. Michie, Assistant Superintendent of the Provincial Mental Hospital, attended most of the clinics in the southern part of the Province. Dr. W. L. Valens, Assistant Superintendent of the Provincial Mental Institute, attended the clinics at Edmonton and Lamont. Occasionally clinics were taken by other members of the Provincial Mental Hospital staff. Dr. D. L. McCullough, Superintendent of the Provincial Training School, assisted with the clinics at Red Deer. The clinic work in the Province could well be under the direct charge of a specially appointed physician, who would be able to give all, or the major part, of his time to the furtherance of the service. With a somewhat depleted medical staff at the Provincial Mental Hospital, the physicians who go on clinic trips add materially to their load of work by doing so.

It has been found advantageous to have a personnel of three attend each of the clinics held. This includes the psychiatrist in charge and two psychiatric social workers. This enables one of the social workers to give full time to psychometric examinations and other psychological problems, and the other to assist with the routine procedures. It also allows more thorough study of each



case and prevents interruptions during psychometrics and personal interviews, which are otherwise unavoidable.

The total number of clinics held in 1940 was 94, as against 95 in 1939. The total number of new cases examined was 356 as compared with 403 in 1939. The number of follow-ups and interviews in 1940 was 1,938 as compared with 1,275 in 1939. The total case load in 1940 was 1,754 as compared with 1,678 in 1939. It may be noted that at the established clinic centres the number of new cases seen each year may tend to remain stationary, or to drop somewhat, and the number of return visits to increase. At some of the clinic centres additional clinic time may have to be arranged for, in order to take care of the demands for the clinic services. Since the first clinics in Alberta were started in the fall of 1929, up to the end of 1940, 4,107 new cases have been seen and examined.

A poster exhibit was displayed in 1940 at the Edmonton Exhibition for the first time. This seemed to be a worth-while medium for the extension of mental health education as it contacted both parents and teachers in an informal way. It is hoped to make further use of such exhibits in the future.

Comments on the work at the various clinic centres follow below. Tables showing the distribution of the clinic work are also included. The tables are generally self-explanatory, although brief notes have been appended where this seemed necessary.

#### *Edmonton.*

Forty-two half-day clinics were held in 1940, which is the same number as were held in 1939. There were 79 new cases as compared with 85 in 1939. However, 717 follow-ups and interviews were made as compared with 332 in 1939. This brings the case load for 1940 to 796 as compared with 417 for the previous year.

In February the clinic quarters were moved from the Baby Clinic rooms on 100th Street to the University Outdoor Clinic quarters in the Provincial Building on 101A Avenue. The quarters in the Provincial Building have proved very satisfactory. We appreciate very much the kindness and co-operation of the University Outdoor Clinic staff and the consideration that Dr. R. T. Washburn has shown us. Although the new quarters for the Edmonton Clinic have many advantages, the clinic staff felt genuine regret at breaking their pleasant associations with Miss Emerson and Miss Christensen, who are in charge of the Baby Clinic.

Dr. W. L. Valens, Assistant Superintendent of the Provincial Mental Institute, has been in charge of the clinics held, with Dr. McAlister relieving him during his holidays.

Miss E. M. Frost, Social Worker, has given excellent service, and the clinic is showing the results of her efforts. This tends to emphasize again the advantage of having resident psychiatric social workers at the major clinic centres. During the last six months of the year, it was necessary for Miss Frost to be away from Edmonton on several occasions to assist with work outside that centre, because of the absence of Mr. E. J. Kibblewhite.

#### *Calgary.*

The Guidance Clinic had another successful year during 1940 at this centre. Twenty-one full-day clinics were held as compared with 20 in 1939. Ninety-eight new cases were examined as compared with 78 in 1939. The follow-up work showed some decrease,



there being some 604 follow-ups and interviews in 1940 as compared with 800 in 1939. The total case load for 1940 was 702, while in 1939 it was 878. This drop in total case load is accounted for partly by the increase in new case work and partly by the fact that during the last half of the year Miss Munroe, the resident Social Worker, had to be out of the city on several occasions to do other work because of the absence of Mr. E. J. Kibblewhite.

The clinic quarters are the same as have been used for several years, and are in the City Hall. We wish to express our sincere thanks to the City of Calgary health officials for their many kindnesses, and for the quarters which have been provided for our use. Miss Lavell, Public Health Nurse, and Miss Craig and Miss Smith of the Baby Clinic Service, have been of considerable assistance to use in former years.

Dr. R. R. MacLean attended 8 of the clinics held, Dr. T. C. Michie 9, and Dr. R. C. Hamilton 4.

#### *Lethbridge.*

There were nine clinics held in Lethbridge in 1940, and 40 new cases were seen. There were 43 new cases seen in 1939. There were 32 follow-ups and interviews in 1940 as compared with 100 in the previous year. The drop in the case load for the Lethbridge Clinic is due in part to the drop in the number of clinics held, and in part to the fact that it has not been possible for the social worker to spend any time there other than at the actual clinic. During the latter half of the year it was found necessary to lengthen the time between clinics from once every four weeks to once every eight weeks. It is hoped to return to the old schedule as soon as circumstances permit.

The clinics continue to be held in the Nursing Mission. Miss A. M. Tilley, who is in charge of the Mission, has assisted very materially in maintaining the clinic contacts and work.

Dr. R. R. MacLean attended 4 of the clinics in Lethbridge, Dr. T. C. Michie 3, and Dr. R. C. Hamilton 2.

#### *Medicine Hat.*

During 1940, 4 clinics were held in Medicine Hat; 2 of these were two-day clinics and 2 one-day clinics. The change in the length of time spent in Medicine Hat on each trip was made necessary when the clinic schedules had to be revised during the midsummer of 1940. During the year 47 new cases were seen as against 81 in 1939. There were 15 follow-ups and interviews as compared with 27 in the previous year. The clinic case load was 62 as compared with 108 in 1939. Up to midsummer 1940, one day of each of the clinics was spent in the schools and one day spent in examining cases referred by the doctors at the General Hospital. Under the new arrangement, half a day is spent at the General Hospital and half a day at the schools. It has been found, however, that the psychiatrist has difficulty in completing the hospital work in one half-day, and this tends to cut down on the amount of work which can be done in the schools. It is hoped that the new arrangement will not result in a further drop in the clinic case load.

Miss M. E. Hagerman, Public Health Nurse, gave very valuable assistance to our clinics during the year. Miss Hagerman looks after the appointment list for cases to be seen at the hospital and assists with the clinic itself. The clinic, too, appreciates the kind-



ness of the hospital authorities for providing quarters at the hospital for the examining of patients. The clinic staff appreciates very much the co-operation of the resident physicians in Medicine Hat, and also of Mr. P. L. F. Riches, Superintendent of Schools.

Dr. T. C. Michie attended 2 of the clinics, Dr. R. R. MacLean 1, and D. R. C. Hamilton 1.

#### *Drumheller.*

There were only two clinics held in Drumheller in 1940 as compared with four in 1939. The clinic case load shows a corresponding drop: the case load in 1940 was 20 as compared with 48 in 1939. Drumheller was affected by the change in clinic schedules necessitated in the last half of the year, as well as by the weather and road conditions, materially affecting the number of patients seen on the first clinic held during the year.

The clinic is held in the offices provided for Miss Ethel Jones, Public Health Nurse. Miss Jones has given valuable assistance in arranging appointments and has assisted with the clinics themselves. It would be practically impossible to hold satisfactory clinics at such points as Drumheller without the assistance of the Public Health Nurses who may be stationed there.

Dr. T. C. Michie attended both of the clinics held during the year.

#### *High River.*

Four clinics were held at High River during 1940 as compared with 5 in 1939. Seventeen new cases were seen as compared with 25 in 1939, and the total case load was 25 as compared with 38 in 1939. High River was also affected by the change in clinic schedules made during the summer of 1940, which has resulted in one fewer clinics and a lessening in the clinic load.

The clinics continued to be held in the quarters of the Full-time Health Unit. The Health Unit staff, under Dr. A. Somerville, have been of great assistance to the clinic work, and have arranged the major number of appointments.

Of the four clinics held, Dr. R. R. MacLean attended 2, Dr. T. C. Michie 1, and Dr. R. C. Hamilton 1.

#### *Lamont.*

Three clinics were held in Lamont as compared with 4 in 1939. Thirty-two new cases were seen as compared with 34 in the previous year. The clinic case load of 35 is the same as that for 1939. Lamont has been an active clinic during the year, although the last scheduled clinic for the year had to be cancelled because of the road conditions.

Dr. W. L. Valens, Assistant Superintendent of the Provincial Mental Institute, attended all of the clinics held at this centre.

The clinics have been held again this year in the quarters of the Full-time Health Unit. Dr. H. Siemens and Dr. M. B. Donaldson, who have been in charge of the Health Unit, along with their staff, have been of great assistance to the work of the clinics, and have arranged the appointments for the major number of cases seen.

#### *Red Deer.*

Four clinics were held in the Health Unit offices in Red Deer during 1940. This is the same number as were held in 1939.



Twenty-five new cases were seen as compared with 31 in 1939. The case load for 1940 was 27 as compared with 37 for the previous year. Despite the apparent drop in case load, it is felt that there has been no actual drop in the amount of work done.

Dr. C. L. Pearson and Dr. L. A. MacLean and the other members of the Health Unit staff have given very generously of their time in arranging for clinic appointments. The assistance of Dr. D. L. McCullough, Superintendent of the Provincial Training School, Red Deer, at each of the clinics has been very much appreciated.

Dr. T. C. Michie attended 2 of the Red Deer clinics, Dr. R. R. MacLean 1, and Dr. R. C. Hamilton 1.

#### Stettler.

Two clinics were held in Stettler during 1940. These were held in the Health Unit quarters as in the other districts where Health Units have been established.

The clinic wishes to express their appreciation to Dr. M. G. McCallum and his staff for assisting in establishing the clinic work at this centre. Eight new cases were seen at the two clinics held.

Dr. R. R. MacLean attended one of the clinics held at Stettler and Dr. R. C. Hamilton the other one. The clinic work in connection with the Health Unit at Stettler should expand considerably during 1941.

One scheduled clinic had to be cancelled because of road conditions.

In addition to the regular clinics outlined above, four cases were examined by the Provincial Mental Hospital, Ponoka, by special appointments.

TABLE 1  
SUMMARY OF NEW CASES AND FOLLOW-UP WORK

Place	1939				1940			Total Case Load	Total New Cases Since 1929
	No. of Clinics	New Cases	Follow-ups Interviews	Case Load Total	No. of Clinics	New Cases	Follow-ups Interviews		
Edmonton .....	42	85	332	417	42	79	717	796	1128
Calgary .....	20	78	800	878	21	98	604	702	1098
Lethbridge .....	10	43	57	100	9	40	32	72	592
Medicine Hat .....	4	81	27	108	*4	47	15	62	492
Drumheller .....	4	17	31	48	2	5	15	20	112
High River .....	5	25	13	38	4	17	8	25	81
Lamont .....	4	34	1	35	3	32	3	35	76
Red Deer .....	4	31	6	37	4	25	2	27	56
Other Clinics .....	2	9	8	17	5	13	2	15	472
Total .....	95	403	1275	1678	94	356	1398	1754	4107

\*This includes two 2-day clinics and two 1-day clinics.

TABLE 2  
AGE AND SEX CLASSIFICATION OF NEW CLINIC CASES, 1940

Age Group	Edmonton			Calgary			Lethbridge			Medicine Hat			Other Clinics			Totals			Percentages		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0-4	4	6	10	6	4	10	1	1	2	1	1	2	6	1	7	18	12	30	8.9	7.8	8.4
5-9	9	5	14	22	8	30	1	3	4	10	6	16	14	13	27	56	35	91	27.7	22.7	25.6
10-14	15	6	21	12	13	25	2	3	5	5	5	10	18	14	32	52	41	93	25.7	26.6	26.1
15-19	4	4	8	8	8	16	2	2	4	2	2	4	5	2	7	21	16	37	10.4	10.4	10.4
20-24	1	5	6	3	2	5	2	1	3	4	2	6	2	2	4	8	10	18	4.0	6.5	5.1
25-29	1	1	2	1	1	2	2	2	4	4	2	6	1	1	2	9	7	16	4.5	4.5	4.5
30-34	1	1	2	1	1	2	2	3	5	1	1	2	2	2	4	7	5	12	3.5	3.2	3.4
35-39	2	3	5	1	1	2	1	5	6	3	1	4	1	1	2	8	11	19	4.0	7.1	5.3
40-44	2	1	3	2	4	6	2	2	4	2	2	4	1	2	3	5	7	12	2.5	4.5	3.4
45-49	3	3	6	1	1	2	1	1	2	2	2	4	2	2	4	4	3	7	2.0	1.9	2.0
40	4	4	8	2	2	4	2	2	4	2	2	4	3	3	6	11	6	17	5.4	3.9	4.8
Unknown	1	1	2	1	1	2	1	1	2	2	2	4	3	3	6	3	1	4	1.5	0.6	1.1
Totals	43	36	79	57	41	98	19	21	40	30	17	47	53	39	92	202	154	356	100%		

TABLE 3  
CLASSIFICATION OF NEW CLINIC CASES ACCORDING TO INTELLIGENCE QUOTIENTS  
INTELLIGENCE QUOTIENTS OF 75 AND LESS

I.Q. Range	Edmonton			Calgary			Lethbridge			Medicine Hat			Other Clinics			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0-25	1	2	3	1	1	2	1	1	2	1	1	2	2	1	3	3	4	7
26-50	7	3	10	3	2	5	2	2	4	1	1	2	8	6	14	10	14	34
51-75	8	4	12	13	6	19	2	2	4	3	2	5	13	5	18	39	19	58
Unknown	2	7	9	3	2	5	3	2	5	4	3	7	4	6	10	16	15	31
Totals	18	16	34	19	10	29	7	5	12	7	3	10	27	18	45	78	52	130



TABLE 4a  
CLASSIFICATION OF NEW CLINIC CASES—PRE-SCHOOL GROUP  
(0-6 YEARS 11 MONTHS)

Nature of Case	Edmonton	Calgary	Lethbridge	Medicine Hat	Other Clinics	Totals
Examination and Report .....	2	5	.....	5	4	16
Mental Deficiency:						
General Retardation .....	7	7	1	.....	4	19
Epilepsy .....	.....	.....	.....	.....	.....	.....
Diplegia (Spastic and Cerebral) .....	2	.....	.....	.....	2	4
Hydrocephalus .....	.....	1	1	.....	.....	2
Epilepsy .....	.....	.....	.....	.....	.....	.....
Other Conditions .....	6	6	.....	1	2	15
Totals .....	17	19	2	6	12	56

TABLE 4b  
CLASSIFICATION OF NEW CLINIC CASES—SCHOOL AGE GROUP  
(7 YEARS-18 YEARS 11 MONTHS)

Nature of Case	Edmonton	Calgary	Lethbridge	Medicine Hat	Other Clinics	Totals
Examination and Report .....	.....	18	.....	11	7	36
Mental Deficiency:						
General Retardation .....	13	13	7	5	24	62
Behavior Problem, including theft .....	3	2	.....	.....	2	7
Sex Delinquency .....	1	1	.....	.....	.....	2
Epilepsy .....	3	.....	.....	.....	1	4
Physical Defect, including Endocrine Dis-						
turbance .....	.....	1	.....	1	5	7
Backward in School .....	3	12	.....	6	11	32
Behavior Problem, including theft .....	9	6	1	.....	4	20
Sex Delinquency .....	.....	2	.....	.....	.....	2
Epilepsy .....	1	1	2	.....	.....	4
Psychosis and Psychopathic Personality .....	1	3	2	.....	2	8
Other Conditions .....	1	2	.....	1	5	9
Totals .....	35	61	12	24	61	193

TABLE 4c  
CLASSIFICATION OF NEW CLINIC CASES—ADULT GROUP  
(OVER 19 YEARS)

Nature of Case	Edmonton	Calgary	Lethbridge	Medicine Hat	Other Clinics	Totals
Examination and Report .....	5	.....	2	2	2	11
Mental Deficiency:						
General Retardation .....	3	2	3	2	5	15
Behavior Problem, including theft .....	1	1	.....	.....	.....	2
Sex Delinquency .....	1	1	.....	.....	.....	2
Epilepsy .....	.....	.....	.....	.....	.....	.....
Physical Defects .....	.....	.....	.....	.....	2	2
Psychoneurosis .....	.....	.....	.....	2	.....	2
Sex Delinquency .....	1	2	.....	1	.....	4
Epilepsy .....	.....	1	1	1	.....	3
Psychosis and Psychopathic Personality:						
Psychosis other than G.P.I. ....	7	6	12	6	5	36
Psychoneurosis and Psychopathic .....	8	3	3	2	1	17
Arterio- and Disseminated Sclerosis .....	.....	.....	2	.....	1	3
Other Conditions .....	1	2	3	1	3	10
Totals .....	27	18	26	17	19	107
Table 4a .....	17	19	2	6	12	56
Table 4b .....	35	61	12	24	61	193
Grand Totals .....	79	98	40	47	92	356

TABLE 5  
AGENCIES REFERRING NEW CLINIC CASES, 1940

Agency	Edmonton	Calgary	Lethbridge	Medicine Hat	Other Clinics	Totals
School Officials and Teachers .....	9	26	3	26	11	75
Doctors, Medical Health Officers and Clinics .....	16	14	20	19	6	75
Provincial Child Welfare, Childrens' Aid, Juvenile Court .....	25	27	.....	.....	1	53
Police, Provincial Gaols, Courts .....	3	.....	10	1	2	16
Homes (Mountview, Beulah, Kiwanis, Y.W.C.A., and Salvation Army) .....	2	6	.....	.....	.....	8
Parents, Relatives, Friends .....	12	20	1	.....	5	38
Relief Department .....	.....	1	.....	.....	1	2
Provincial Health Department other than Child Welfare and Relief .....	3	1	3	.....	8	15
Full-Time Health Units .....	1	.....	.....	.....	57	58
Self .....	2	2	2	.....	.....	6
Other Agencies .....	6	1	1	1	1	10
Totals .....	79	98	40	47	92	356

TABLE 6  
MAJOR RECOMMENDATIONS MADE IN REGARD TO NEW CLINIC CASES, 1940

Major Recommendations	Edmonton	Calgary	Lethbridge	Medicine Hat	Other Clinics	Total
Admission to Provincial Mental Hospital or Provincial Mental Institute .....	5	2	7	3	3	20
Admission to Provincial Training School or other similar institutions .....	17	10	4	1	13	45
Treatment by own doctor or other clinics .....	6	7	8	9	11	41
Treatment given, including direct treatment for epilepsy .....	3	1	1	.....	1	6
Continue home, institutional or school life .....	11	16	6	18	11	62
Change in home routine, care, discipline .....	10	9	5	5	8	37
Modified School programme, special class or vocational training .....	3	12	1	4	19	39
More social contacts, wider interests, re-establishment of self-confidence .....	7	5	2	3	7	24
Sterilization and supervision .....	5	1	.....	.....	2	8
Return to clinic, further examination .....	7	18	1	2	10	38
Placement under careful supervision .....	4	5	.....	.....	1	10
Other recommendations .....	1	12	5	2	6	26
Totals .....	79	98	40	47	92	356



# Provincial Mental Hospital, Ponoka, Alberta

(R. R. MACLEAN, *Medical Superintendent*)

The movement of patients is set forth in Table 1.

## PATIENT-POPULATION CHANGES

There were 1,557 patients—880 male, 677 female—in residence on January 1st, 1940. On December 31st, 1940, there were 1,578 patients—871 male, 707 female—in residence, representing a gain of 21 patients during the year. The comparatively small gain in patient population was again due, to a great extent, to the transfer of patients to other institutions during the year. Twenty-nine patients were transferred to the Provincial Mental Institute, Oliver, and 17 female patients were transferred to the auxiliary hospitals in the south of the Province. Although there was no great increase in patient population during the year, the overcrowding is still very excessive, particularly on the female wards. There is great urgency for the immediate opening of the new refractory ward which is being constructed at Oliver. There is overcrowding on the male wards, but no relief is forthcoming in the near future. The accumulation of so many refractory female cases in the institution with such limited facilities for caring for them is very discouraging to members of the staff who endeavor to care for them.

More than ever during the year it has been necessary to restrict the admissions to the most urgent cases. There is a great demand for the admission of senile individuals who are showing mental changes associated with old age. The most urgent of such cases only are admitted. It would seem highly advisable and more economical to place such individuals in buildings of cheaper construction, and staff such institutions with persons who are less highly trained, and consequently not as eligible for high salaries as trained nurses and other personnel.

The Mental Hygiene Clinics held at various points throughout the Province were again largely responsible for limiting the admission rate further.

It is still considered highly advisable that psychopathic wards, or at least one psychopathic ward, be opened either in Calgary or Edmonton, preferably the latter city, where a great many cases might be observed for a circumscribed period to determine the advisability or not of their admission to the general mental hospitals. Such a ward is also essential to the proper instruction of medical students in psychiatry.

## ADMISSION OF PATIENTS

The total number of admissions for the year was 568—309 male, 259 female. The number admitted was 21 more than the previous year. First admissions totalled 410 (73.9%); re-admissions totalled 146 (25.7%); and transfers totalled 12 (2.1%). Some 84 (14.8%) patients were admitted on a voluntary basis, the balance, 484 (85.2%), being admitted by other methods, chiefly by warrant of the Attorney-General. As in previous years many patients, psychotic



and not psychotic, were admitted suffering from various forms of neuro-syphilis, and were treated for this disorder.

Practically no cases of alcoholic or drug addiction were admitted, as treatment of such cases in the past has proven of negligible value.

Nationalities were as follows: Canadian born, 267 (47%); natives of Great Britain and British possessions, 98 (17.2%); natives of United States, 72 (12.6%); all other countries, 131 (23.2%).

#### SEPARATIONS OF PATIENTS

Separations for the year amounted to 544—313 male, 231 female. The discharge rate, exclusive of transfers, deaths and elopements, was approximately 70% of the total admission rate. The death rate based on the total number under treatment and observation is approximately 4.2%.

Broncho-pneumonia, tuberculosis, and various forms of cardiovascular diseases were again the commonest causes of death during the year.

#### ACCIDENTS

There were 8 fractures among the male patients, 1 of which proved fatal, and 5 among the female. There were several other major accidents among both male and female patients, and 3 deaths followed as a result. There continues to be an innumerable number of minor accidents, again more especially on the female side, which is due to the overcrowding and the accumulation of so many uncertain and impulsive patients. There were several attempts at suicide.

#### ELOPEMENTS

Eleven patients succeeded in effecting their escape—10 males and 1 female. All but 2 of these patients were safely returned to the institution.

#### GENERAL HEALTH

The general health of the patients during the year was very satisfactory. There were no epidemics. The results of Dr. Baker's tuberculosis survey made during the latter part of 1939 and the early part of 1940 indicated that there were some 30 or 40 patients each on the male and female sides of the hospital. There were comparatively few acute cases. Arrangements were made to isolate all the active cases on each side. Facilities for caring for the latter patients were not entirely satisfactory, but during the year improvement in their care took place with the obtaining of more equipment. Dr. Baker reported that the incidence of tuberculosis in this institution was low, compared with similar institutions throughout the Dominion. Concerted efforts were made to get all patients outside for part of each day, either for walks, on the verandahs or in the airing courts, with a view to compensating to some extent for the congestion on the wards and the vitiation of the atmosphere on them through such overcrowding.

The general health of the staff was comparatively good, although in the latter part of the year a number suffered from influenzal attacks of a mild character. The Tuberculosis Survey revealed very few suffering from active tuberculosis. The latter finding was somewhat revealing, as the general impression was that there was an inordinate amount of tuberculosis in our staff before the survey was made. During the winter months, cod liver oil capsules were provided for the staff.



### CLINICAL WORK

The admission rate was about the same as in recent years, so that it was necessary for all members of the staff to continue to work diligently to keep up the records. Metrazol treatments were given to between 5 and 10 patients weekly by Dr. J. M. Byers, Staff Physician, with favorable temporary results, at least in some cases. The general impression of the staff is that shock therapy has very definite limitations, and can by no means be considered in the nature of a cure for mental diseases. This form of treatment is likely to bring about a radical change in a patient's mental reactions, but these changes are not always toward recovery. Mute patients may become communicative. Destructive patients may become more settled. Patients who do not eat and have to be tube-fed may resume their eating habits. The treatment is chiefly symptomatic in character. An insufficient number of depressed cases were treated to warrant general agreement with those who maintain that it is most efficacious in such cases. A small number of patients were given sub-shock doses of insulin with what were considered moderately satisfactory results.

Staff conferences were held from two to four times weekly. All new admissions and patients awaiting discharge were considered at such conferences. Strenuous efforts were continued to keep the discharge rate as high as possible. Discussion of psychiatric and medical problems of interest was carried on in connection with staff conferences. Articles of particular interest appearing in the medical journals were discussed.

### MENTAL HYGIENE CLINICS

Mental Hygiene Clinics were held periodically in Edmonton, Calgary, Lethbridge, Medicine Hat, Drumheller, High River, Red Deer, Stettler, and Lamont. Owing to the fact that Mr. Kibblewhite, our Chief Social Worker, was on leave of absence, having been loaned to the Dominion authorities to assist in certain psychological research projects in connection with the Air Force, and also due to shortage of medical staff, the number of clinics in the various centres was reduced, and in some instances certain clinics had to be cancelled. Notwithstanding this, the clinics, when held, were well patronized, and public interest continues to grow in them. It is obvious that the clinics are of great service generally to the Department of Health and to the community at large. The work of the clinics is under the direction of the Medical Superintendent of this institution, but many of the clinics are conducted by the Assistant Medical Superintendent and other members of the medical staff. The Peace River Clinic had to be cancelled because of shortage of staff.

### RAYMOND AND CLARESHOLM AUXILIARY MENTAL HOSPITALS

These institutions are under the supervision of the Superintendent of this hospital, who visits them from time to time, and endeavors to direct the activities in them. Due to general shortage of physicians, it has been necessary to make use of the services of physicians in the towns of Raymond and Claresholm in cases of emergency. Separate Annual Reports of these institutions are submitted.

### DENTAL CLINICS

The work of the Dental Department was carried on by Dr. Sneddon, who had been granted a year's extension to his term of



service. The work of the Dental Department was carried on quietly, but most efficiently. All new patients received early dental attention, and the patients on the continued treatment wards visited the dentist in rotation except in cases of emergency.

The following is a summary of the work done by this Department:

Full upper and lower dentures ..	18	Fillings .....	309
Full upper dentures .....	3	Extractions .....	939
Partial upper dentures .....	10	Abscessed Teeth .....	37
Partial lower dentures .....	1	Examinations and treatments .....	1009
Complete extractions .....	16	X-Rays .....	56
Repairing dentures .....	28	Gold Inlays .....	4
Treatments (Prophylactic) .....	42	Gold Crowns .....	4

#### X-RAY DEPARTMENT

The work of the X-Ray Department during this year was carried out by a certificated attendant who had taken special work in X-Ray technique. This technician also assisted in the hospital laboratory in his spare time. In view of the Tuberculosis Survey, hundreds of chest plates were taken which, in addition to the many other X-ray examinations necessary, kept the technician extremely busy.

There was general satisfaction with the work done in this department. The services of this X-ray Department are available to physicians in the nearby town of Ponoka, who make use of it and express appreciation of it.

The following is an account of the plates which were taken:

Chests .....	433	Ankles .....	28
Spine .....	182	Feet .....	11
Skull .....	103	Aesophagus .....	9
Ribs .....	7	Stomach .....	1
Shoulders .....	34	Heart .....	1
Arms .....	24	Dentals .....	182
Hands .....	18	Toes .....	3
Fingers .....	15	G.B. Series .....	18
Elbows .....	9	B.A. Series .....	12
Pelvis .....	30	Fleuroscope .....	10
Hips .....	2	Heels .....	4
Wrists .....	19	Kidneys .....	2
Legs .....	35	Breasts .....	2
Knees .....	19	Foetus .....	5
Chest Survey .....	428		

#### HYDROTHERAPY

This department on the male side was placed under the supervision of Mr. Dick, who replaced Mr. Gill in view of the latter's enlistment. The Department authorized the appointment of a hydrotherapist on the female side of the hospital, which has proved a decided advantage in the care of the female patients. An innumerable number of prolonged baths, wet packs, electric cabinets, and other procedures were administered during the year. Hydrotherapy continues to constitute one of the most valuable items in treatment in this hospital.

Facilities for the administration of some form of "Artificial Sunlight Treatment" would be of great value to the institution.

#### OCCUPATIONAL THERAPY

Miss Crysler, with her assistant, Miss Bier, directed the activities of this department. The number of patients attending the classes has been increasing annually. During the year a new branch of this department was opened. A studio was arranged for the express purpose of dealing with patients on the male continued treatment wards, who are not otherwise engaged in some occupation. The patients are sent in groups of 12 to 15 in rotation from the wards in question. Although such a procedure is obviously contrary to the chief principles of occupational therapy, in that patients concerned



have little or no continuity in their work or attendance at the studio, yet many patients are given an opportunity of attending a class periodically under supervision. On the whole, the results of the experiment have been very gratifying, and many patients have been salvaged for departments in the hospital requiring more assistance. An attempt is being made to open a similar class for female patients on the continued treatment wards.

Students and graduate nurses have been given instruction by the occupational therapists. This branch of the service is being developed.

Exhibits were displayed in Edmonton, but space was not available at the Calgary Exhibition, unfortunately. There was a considerable amount of general interest in the articles displayed on the work of our hospital.

The annual bazaar was held in the Fall in conjunction with a sale of home cooking and a tea. The hospital is indebted to the relatives of members of the staff living on or near the grounds for their valuable assistance at the tea and sale. Such a function always improves the general relationship between the institution and members of the staff and their relatives. The proceeds from the tea and the profits from the sale of articles made in the studios were again used for the purchase of books for the library, radios, and other forms of entertainment for the patients.

There were 75 books added to the patients' library. The circulation of books is improving. Magazines were donated for the use of the patients by friends of the hospital and from local stores in the town of Ponoka.

Members of the staff and patients have made great use of the Hospital Canteen. The profits from the sales were used exclusively for the patients' comforts. Among other things, this department purchased a typewriter to be used in connection with the therapeutic work of this department.

The Printing Shop and Bookbinder were kept busy doing work not only for the hospital, but for other departments of the Government. A number of patients are assigned to assist the occupational printer, and the work done is of very high calibre.

The Occupational Department contributed much to the recreation of the patients. Card parties, teas, and picnics were held on several occasions for the patients themselves. The Occupational Department also arranged for their patients to play group games such as baseball, softball, badminton, tennis, shuffleboard, and many others.

#### RECREATION AND ENTERTAINMENT

Patients' dances were held fortnightly during the winter months. The pianist was provided at the expense of the hospital and various members of the staff assisted with other instruments. Their assistance is much appreciated by both patients and staff alike. During the course of the year, an up-to-date 16 millimeter talking-picture machine, complete with record player, microphone and radio hook-up facilities was installed. This was the highlight of the year in so far as the patients were concerned, as they had been without moving pictures for years. The machine has been operated by reliable attendants. The pictures are chosen by the Chief Occupational Therapist. Many of the best pictures of the day are now available for 16 millimeter machines. Pictures are chosen for their enter-



taining, educational and sometimes purely therapeutic value. The pictures are obtained from several film houses, so that the hospital is not committed to a contract with any one firm. After the pictures are shown in this hospital, they are forwarded to the Provincial Mental Institute at Oliver. This effects a saving and eliminates the necessity for the two institutions to choose pictures separately.

The annual Sports' Day was held late in the season in 1940, as the weather had been so frequently inclement in previous years. On the whole, the patients seemed to have had a more enjoyable time than in former years. Besides being given prizes for the races, they were served with hot-dogs, soft drinks, ice cream, and peanuts. The assistance given the staff by citizens from the town of Ponoka was greatly appreciated.

The hospital rink was very well patronized during the winter. A number of pairs of skates were purchased or otherwise provided for the use of the patients, making it possible to have more of them use the rink facilities.

Staff dances were held regularly each month, and the "At Home" and the Civil Service Card Party were held as in recent years. All of these functions were well patronized, and very much enjoyed. The arrangement for defraying the expense of the entertainments was somewhat different. Each member of the staff was called upon to contribute at least \$1.00. A sum of \$350.00 was realized in this manner. This sum was divided into seven equal amounts, and seven functions were put on during the winter season and the early part of 1941. The amount allotted to the orchestra was kept at a minimum. The amount spent for decorations was practically nil, as the decorations were provided through the medium of the Occupational Department and the patients working therein. The refreshments were definitely limited, so that no function cost more than approximately \$35.00, and the difference between the cost of the function and the \$50.00 allotted was donated on each occasion to one of the war services. In this manner the staff were able to pay for their entertainments, feeling at the same time that a certain amount of money was to be donated for the use of those who were in the fighting services. It was not thought advisable to discontinue the entertainments. The decorations drew high praise, and the Occupational Department is to be complimented for their splendid work.

Members of the staff and some patients continued to take advantage of the tennis grounds, golf grounds, and facilities in the recreation hall for badminton and basketball.

#### RELIGIOUS SERVICES

Religious services of all major denominations continue to be held from time to time. No patient who is physically and mentally able, and who wishes to attend religious services, is denied that privilege. A special effort is put forward to make it possible for the various clergymen to contact members of their particular faith.

#### SOCIAL SERVICE

This department was deprived for several months of the services of Mr. Kibblewhite, but during the major part of the year he directed the activities of his department with the assistance of Miss Isobel Munroe in Calgary and Miss Mary Frost in Edmonton. The latter social workers were appointed with the approval of the



Department. Mr. Kibblewhite did the major part of the social work in connection with the hospital and its patients. He and the other two social workers assisted at all times with Mental Hygiene Clinics held throughout the Province. The Department of Health is fortunate to have such an alert group of workers in the Social Service Department. Mr. Kibblewhite also acts as Secretary to the Eugenics Board, and the work done in connection with the cases for presentation to the Board is carried out by members of the Social Service Department.

#### SURGICAL SERVICE

The work of this service was done for the most part by Dr. Conn of Edmonton and Dr. Richardson of Calgary, the latter having replaced Dr. O'Callaghan, who moved to the coast. Dr. Carnat, of the hospital staff, acted as surgical assistant, and assumed the responsibility for the preparation of the operative slates and the post-operative care of the patients. Dr. J. M. Byers, of the hospital staff, acted as anaesthetist for the latter part of the year, while Dr. Evelyn Aiello acted earlier in the season. The surgical service functioned very smoothly, and no difficulties arose in connection with it.

A summary of the work done is given herewith:

Operations	Male	Female	Total
Salpingectomy .....		20	20
Salpingectomy and Appendectomy .....		1	1
Vasectomy .....	12		12
Orchidectomy .....	2		2
Tonsillectomy .....		2	2
Gastrastomy .....	1	1	2
Herniotomy .....	4	2	6
Oophorectomy .....		2	2
Hysterectomy .....		1	1
Perineal Repair .....		1	1
Nephrectomy (Right) .....		1	1
Exploratory Laparotomy .....	1		1
Totals .....	20	31	50

#### NURSES' TRAINING SCHOOL

The eighth annual graduation exercises of the nurses and attendants were held on May 22nd. The fifth class in the combined course of general and mental nursing was graduated. Four nurses completed their course successfully, and the affiliated training schools reported favorably on our students. Eight attendants received their certificates, having completed three years of training. It was again all too evident that the nurses taking the combined course preferred for the most part to pursue work in some field of general nursing rather than psychiatric nursing. Notwithstanding this, it is still felt that the combined course has much to commend it, and even though this hospital does not benefit as much as it would like to by receiving more of its graduates, a great service is being done to the community at large.

The post-graduate course was given as previously. The shortening of the course to eight months seemed to have had the desired effect of sustaining the interest of the graduates to a greater degree. Twenty-four nurses received certificates.

The lectures were given by members of the medical and nursing staffs, and by certain other members of the staff in special departments; for instance, the dispenser gave lectures on Drugs and Solutions. Sixteen nurses were granted two years' leave of absence to affiliate with training schools in Edmonton or Calgary.



The following constitutes the allotment of our nurses-in-training to the various affiliated schools:

Holy Cross .....	2
Calgary General .....	7
University of Alberta Hospital .....	3
Royal Alexandra .....	3
Edmonton General .....	1

Towards the end of the year, Miss Jackson, the Superintendent of Nurses, resigned, and her position was ably filled by Miss Edith Kemp, who had been Miss Jackson's assistant, and who assumed the position of Acting Superintendent of Nurses. The work of the training school was ably and efficiently carried out by both Miss Jackson and Miss Kemp, and efforts were made to keep the school up-to-date by introducing new ideas and developing new trends in nursing education.

Miss Margaret McLean was appointed Instructor of Nurses in the latter part of the year. The work of her branch of the training school was very efficiently carried out. The Committee for Inspection of Schools of Nurses reported favorably on the work of our training school. Their recommendations of previous years had been carried out for the most part.

#### TEACHING OF MEDICAL STUDENTS

Lectures in psychiatry to the medical students were given by the Medical Superintendent. Clinics on psychiatric cases were given by the other members of the medical staff to the final year students. The medical students continued to express a desire to resume the former practice of coming in groups of three to five to live in the hospital for some two weeks.

#### MEDICAL LIBRARY

Subscriptions to leading medical journals were renewed, and new volumes of recent publications were added.

#### VISITORS TO THE HOSPITAL

Dr. Cross, the Minister of Health, visited the hospital on several occasions, making rounds of the wards and other parts of the institution, and displaying an active interest in the welfare of all concerned in the hospital. The staff were very appreciative of Dr. Cross's visits, and as a result of his first-hand knowledge of our problems, it was possible to have structural defects of the institution remedied, and to have conditions for the staff improved. His efforts in having conditions in the hospital kitchen improved were particularly appreciated.

Dr. Bow, the Deputy Minister of Health, visited the institution on numerous occasions, making rounds on each occasion. During his visits, consultations and discussions were held with him, and his opinions and advice were most helpful. His many visits make it possible for him to retain a detailed knowledge of the functioning of the institution.

Mr. Fallow, Minister of Public Works, together with Mr. Monkman, his Deputy, also visited the institution and made rounds. Their visit was much appreciated and obviously bore fruit, as it was possible to obtain certain additions and repairs to the buildings which might not have been forthcoming otherwise. More visits by such high ranking Government officials would be most welcome.

Great numbers of relatives and friends of the patients and staff visited the institution during the year. All expressed general satis-



faction almost without exception, and seemed to appreciate what is being done for the patients.

The Eugenics Board made regular visits to the hospital every two months to examine cases recommended for sterilization. The Board also acted as a visiting committee at the request of the Minister of Health. A report was submitted to the Department of Health with comments and recommendations as a result of the committee's visits.

Meetings of local organizations of Registered Nurses were again held during the year. Matters of interest to the nursing profession were discussed at this meeting.

#### ACCOMMODATION AND ALTERATIONS

No new accommodation was provided during the year for the relief of our overcrowding. Some alterations were made in this institution to permit of the handling of tuberculous patients.

Work was begun on a very badly needed extension to the hospital kitchen. Although the plans finally approved were not those originally submitted, the addition will be greatly appreciated.

Emergency repairs were made to the buildings regularly, but it is again necessary to make reference to the fact that the roofs of the buildings are in a deplorable condition, which is growing steadily worse. A considerable amount of money would have to be appropriated to enable the maintenance branch to repair the roofs satisfactorily.

#### DEPARTMENTAL ACTIVITIES

*Business Office.*—Mr. J. D. J. McDonald, Business Superintendent, directed the work of this department. He has under his supervision the work of other departments whose activities are outlined in the part of this report which follows. With the growth of the institution, the work of the Business Office has increased materially. There is still urgent need for increase in personnel, business machines, and office accommodation.

*Laundry.*—The work required of this department is so extensive that it is necessary to arrange for shifts during the evenings and on Sundays. The facilities are not sufficient to permit of the work being handled during regular hours. The staff of this department are to be complimented for discharging their duties so commendably under such difficult circumstances.

*Tailor Shop.*—The work of this department is under the supervision of the tailor, with an assistant who is more particularly concerned with the repair of shoes, the construction of mattresses, and the manufacture of strong sheets and other items. Clothing for the male patients and uniforms for the attendants and the repair of these is also done in this department.

*Occupational Carpenter Shop.*—This department repairs the furniture of the institution and keeps the farm equipment in shape. The work is under the direction of an occupational carpenter, who is assisted by some 10 to 20 patients.

*Sewing Room.*—This department, which is under the supervision of a seamstress, who has an assistant and several patients working with her, is responsible for the making of dresses for the female patients, repairing the same, and the making of nurses' uniforms, as well as a great many other items for hospital use. This department has done a great deal recently in repairing dresses, thereby effecting a saving to the institution.



*Stores.*—Mr. Walter Mason, with an assistant, continues to supervise the work of this department. The work is done very quietly and efficiently, the staff being assisted by a number of reliable patients.

*Kitchen and Dietary Department.*—The work of this department was hampered by lack of accommodation, but an addition to the kitchen is under construction. The dietitian is responsible for the work of the kitchen, and the serving of all meals throughout the hospital. She has an able chef with assistants, and a reliable contingent of maids. Approximately 5,000 meals were served daily. Special diets were also prepared for patients and members of the staff requiring them. The catering for the staff and patients' dances and other functions was under the direction of this staff.

During the year an effort was made to improve the diet throughout the hospital, chiefly with a view to having it contain at least the minimum requirements of all food principles.

From time to time trained cooks left to enlist, causing some inconvenience temporarily.

The dietitian gives lectures to the students in training as well as arranging the work for student dietitians who come from the University.

*Gardens and Grounds.*—The Garden Department had unusual success in the raising of greens, vegetables, hot-house plants and honey. An unusual amount of garden stuff was supplied to the Cannery for canning purposes.

The grounds were kept attractive throughout the summer season. As many patients as possible are allowed out to take advantage of the beauty of the flowers and the lawns.

*The Farm.*—The Farm Department, which is responsible for the raising of root crops, dairying activities, the raising of sheep and hogs, met with its usual success throughout the year. Arrangements were made for the procuring of more arable land for crops and pasturage.

*Chicken Ranch.*—A large number of chickens and turkeys were raised for hospital use, and fresh eggs were supplied daily for the use of the staff and patients. Additional accommodation for more birds would prove advantageous.

*Cannery.*—As in previous years, the work of the cannery was personally supervised by Mr. McDonald. Vast quantities of vegetables, fruits and greens were canned, especially in view of the fact that there was an almost unlimited quantity of these provided by the garden and farm departments. Such items as raspberries, strawberries, peaches, cherries, apricots, plums, rhubarb, pickles, carrots, and beans and peas were put up for winter consumption. About 12,000 tins were processed, which represented approximately 25 tons of produce. The proven value of this enterprise would warrant steps being taken to appoint a man to the staff who could assume the responsibility for its supervision.

#### STAFF CHANGES

There were no changes in the medical staff during the year. There was a shortage of medical staff, but it was impossible to obtain the services of satisfactory physicians interested in pursuing psychiatry. Although there was an acute shortage, the hospital physicians willingly assumed the added responsibilities, and the work of the hospital did not seem to suffer greatly.



In the Fall, Miss C. N. Jackson, Superintendent of Nurses, resigned to accept a position in the field of general nursing. Her resignation was accepted with keen regret, as she had been a member of the staff off and on for many years, and was extremely well acquainted with not only all the details of the training school office, but also the details of many other departments. The hospital generally owed a great deal to Miss Jackson for her part in keeping the training school up-to-date, and keeping the nursing staff usually up to strength. Miss Jackson had participated in all the social functions of the hospital, and had contributed a great deal to the comfort of patients.

#### CONCLUSION

In conclusion, it is necessary, as in recent years, to place overcrowding, especially on the female side, as the major problem in the administration of the hospital. The prospective opening of a new wing for refractory female cases at Oliver is anticipated with very keen interest. Despite efforts to keep the population of this hospital somewhat stationary, there is an annual increase.

The major staff change of the year affected the training school office by virtue of Miss Jackson's resignation. Her duties, however, were most commendably undertaken and discharged by Miss Edith Kemp, who had been her assistant, and who had proven her ability on many previous occasions.

Throughout the year the whole-hearted co-operation from all departmental heads and employees generally, and in particular the Business Superintendent, the Superintendent of Nurses, and the Assistant Medical Superintendent, was very noticeable and fully appreciated. Such co-operation was doubtlessly responsible for what was considered a most successful year.

The Medical Superintendent, on his own behalf and on behalf of the staff of the hospital, takes advantage of this opportunity to thank the Minister of Health, the Deputy Minister of Health, and the members of the Department of Public Works and other departments of the Government for their sympathetic attitude and splendid co-operation and assistance in the administration of hospital affairs.

Attached hereto are the annual reports of the Auxiliary Hospitals at Claresholm and Raymond.



TABLE No. 1  
MOVEMENT OF PATIENT POPULATION DURING 1940

	Male	Female	Total	Male	Female	Total
In residence Dec. 31, 1939 .....	880	677	1557			
On leave or otherwise absent .....	11	4	15			
	<u>891</u>	<u>681</u>	<u>1572</u>			
Admissions:						
First Admissions:						
(a) Voluntary .....	54	30	84			
(b) Certificates .....	40	50	90			
(c) Warrant .....	134	97	231			
(d) M.D. Act .....	3	2	5			
Re-admissions:						
(a) Voluntary .....	15	14	29			
(b) Certificates .....	11	17	28			
(c) Warrant .....	49	36	85			
(d) M.D. Act .....	1	3	4			
Transfers .....	2	10	12			
	<u>309</u>	<u>259</u>	<u>568</u>			
Separations:	1200	940	2140			
Discharges:						
(a) As recovered .....	82	54	136			
(b) As improved .....	70	85	155			
(c) As unimproved .....	21	10	31			
(d) As without psychosis .....	59	27	86			
Transfers .....	29	17	46			
Deaths .....	52	38	90			
	<u>313</u>	<u>231</u>	<u>544</u>			
On leave or otherwise absent .....	877	709	1586			
	<u>16</u>	<u>2</u>	<u>18</u>			
In residence December 31st, 1940 .....	871	707	1578			

TABLE No. 2  
SHOWING PSYCHOSES IN THOSE ADMITTED DURING 1940

	Male	Female	Total
01. Psychoses with syphilitic meningoencephalitis (general paresis) .....	9	6	15
02. Psychoses with other forms of syphilis of the central nervous system:			
021 Meningo-vascular type .....	2	...	2
022 With intracranial gumma .....	...	...	...
023 With tabes dorsalis .....	1	...	1
024 With tabo-paresis .....	1	1	2
03. Psychoses with epidemic encephalitis .....	...	...	...
04. Psychoses with other infectious diseases .....	...	...	...
05. Alcoholic psychoses:			
051 Pathological intoxication .....	...	1	1
052 Delirium tremens .....	2	...	2
053 Korsakow's psychosis .....	...	...	...
054 Acute hallucinosis .....	4	1	5
055 Chronic alcoholism .....	...	...	...
06. Psychoses due to drugs or other exogenous poisons .....	1	2	3
07. Traumatic psychoses:			
073 Traumatic delirium .....	1	...	1
08. Psychoses with cerebral arteriosclerosis .....	13	11	24
09. Psychoses with other disturbances of circulation:			
091 With cerebral embolism .....	...	...	...
092 With cardio-renal disease .....	2	2	4
10. Psychoses with convulsive disorders:			
101 Epileptic deterioration .....	2	...	2
102 Epileptic clouded states .....	9	2	11
103 Traumatic epilepsy .....	2	...	2
104 Paranoid type .....	1	...	1
11. Senile psychoses:			
111 Simple deterioration .....	9	11	20
112 Presbyophrenic type .....	1	...	1
113 Delirious and confused .....	1	...	1
114 Depressed and agitated .....	1	2	3
115 Paranoid types .....	10	2	12
116 Undefined .....	1	...	1
12. Involutional Melancholia:			
121 Melancholia .....	3	5	8
13. Psychoses due to other metabolic, etc., diseases:			
131 Pernicious anaemia .....	2	1	3
132 Cancer of stomach .....	1	...	1
133 Cancer of uterus .....	...	1	1
134 Chronic nephritis .....	...	1	1
14. Psychoses due to new growth:			
141 Intracranial neoplasm .....	1	1	2
15. Psychoses associated with organic changes of the nervous system:			
151 Huntington's Chorea .....	1	...	1
152 Disseminated sclerosis .....	1	...	1
153 Vascular accident .....	1	...	1
154 Subarachnoid haemorrhage .....	1	...	1
155 Undetermined .....	1	...	1



TABLE No. 2—Continued  
Psychoses

	Male	Female	Total
16. Psychoneuroses:			
161 Hysteria		1	1
162 Psychasthenic		1	1
163 Neurasthenic	5	5	10
164 Hypochondriasis			
165 Reactive depression	1	3	4
166 Anxiety state	1		1
167 Paranoid trend	1		1
17. Manic-depressive psychoses:			
171 Manic type	19	27	46
172 Depressive type	9	32	41
173 Mixed types		1	1
174 Hypomanic	8	9	17
175 Perplexed type		1	1
18. Dementia Praecox (Schizophrenia):			
181 Simple type		3	3
182 Hebephrenic type	1	1	2
183 Catatonic type	72	52	124
184 Paranoid type	24	11	35
185 Undefined	1	2	3
19. Paranoia and paranoid conditions:			
191 Paranoia			
192 Paranoid conditions	8	2	10
20. Psychoses with psychopathic personality		1	1
21. Psychoses with mental deficiency	6	11	17
22. Undiagnosed psychoses	3	2	5
23. Without psychoses	1	1	2
231 Epilepsy	2	4	6
232 Alcoholism	2	1	3
233 Drug addiction	2		2
234 Mental deficiency	16	28	44
235 Disorder of personality	3		3
236 Psychopathic personality	1	1	2
237 Epidemic encephalitis	2		2
238 Paranoid trend	1		1
239 Pernicious anaemia	1		1
240 Somatic syphilis	1		1
241 Tabes dorsalis	8		8
242 Neuro-syphilis	25	4	29
243 Cerebral arteriosclerosis		1	1
244 Disseminated sclerosis		2	2
24. Primary behaviour disorders:			
241. Simple maladjustments		2	2
Total	309	259	568









TABLE No. 4  
AGES OF PATIENTS ADMITTED DURING 1940

Ages	First admissions			Re-admissions			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 15 years	3	3	6				3	3	6
15 to 19 years	13	14	27	1	2	3	14	16	30
20 to 24 "	26	20	46	7	11	18	33	31	64
25 to 29 "	26	20	46	16	3	19	42	23	65
30 to 34 "	21	16	37	14	13	27	35	29	64
35 to 39 "	23	23	46	15	8	23	38	31	69
40 to 44 "	24	19	43	4	5	9	28	24	52
45 to 49 "	18	15	33	5	7	12	23	22	45
50 to 54 "	21	15	36	6	8	14	27	23	50
55 to 59 "	16	9	25	3	3	6	19	12	31
60 to 64 "	7	10	17		8	8	7	18	25
65 to 69 "	11	4	15	2	1	3	13	5	18
70 and over	22	11	33	3	1	4	25	12	37
Total	231	179	419	76	70	146	307	249	556

TABLE No. 5  
NATIVITIES OF PATIENTS ADMITTED DURING 1940

Nativities	Male Female Total			Nativities	Male Female Total		
	Male	Female	Total		Male	Female	Total
Canada	140	127	267	Holland		1	1
Newfoundland	1		1	Hungary	2	1	3
England	27	35	62	Iceland	1		1
Scotland	13	8	21	Italy	4	2	6
Ireland	4	6	10	Jugo-Slavia	4		4
Wales		1	1	Lithuania	3	1	4
Other British Possessions	2	1	3	Norway	4	2	6
U.S.A.	37	35	72	Poland	13	7	20
Austria	13	2	15	Rumania	2	3	5
Belgium	2	1	3	Russia	7	5	12
China	3		3	Sweden	5		5
Czecho-Slovakia	5	1	6	Switzerland	2		2
Denmark	1	2	3	Ukraine	1	1	2
Finland		1	1	Total	307	249	556
France	1	2	3				
Germany	10	4	14				

TABLE No. 6  
PLACE OF RESIDENCE OF PATIENTS ADMITTED DURING 1940

Place of Residence	Male Female Total			Place of Residence	Male Female Total		
	Male	Female	Total		Male	Female	Total
Edmonton	47	49	96	Castor	1		1
Calgary	57	36	93	Champion		1	1
Acme	1		1	Chauvin	1		1
Airdrie	1		1	Chisholm		1	1
Alcomdale	1		1	Claresholm	2		2
Alder Flats	1		1	Clive	1		1
Alliance	1	1	2	Clyde	1		1
Altario		1	1	Coburn		1	1
Armistice	1		1	Cochrane	1		1
Ardrossan		1	1	Cold Lake		1	1
Athabasca		2	2	Coleman		1	1
Atikameg	1		1	Condor	1		1
Balzac	1		1	Coutts		2	2
Banff		4	4	Critchley	1		1
Barrhead	1	1	2	Crossfield		1	1
Bashaw	2		2	Czar	2		2
Bawlf		1	1	Dapp	2		2
Beauvallon	1	1	2	Daysland	1		1
Beaverlodge		1	1	Deer Lodge	1		1
Bellevue	1	2	3	Delph		1	1
Benalta		1	1	Diamond City	1		1
Bentley		1	1	Didsbury		3	3
Beverley		2	2	Donalda	1	2	3
Bezanson	1		1	Downing	1	1	2
Big Valley	1		1	Drumheller	4	4	8
Black Diamond		1	1	Duchess	1		1
Blackfalds	3		3	Dunstable		1	1
Blairmore	2		2	Dunvegan		1	1
Bloomsbury	1		1	East Coulee	1		1
Blueridge		1	1	Eastgate	1		1
Bluffton		1	1	Eckville	1	1	2
Bonnyville		1	1	Edberg	1		1
Bowden	1		1	Egremont		2	2
Breton	1	2	3	Eik Point	1		1
Bruderheim		1	1	Elmsworth		1	1
Buffalo	1		1	Embarrass	1		1
Calvert	1		1	Entwistle	1		1
Camp Creek		1	1	Erskine		1	1
Campsie	1		1	Evansburg	1		1
Camrose	2		2	Fairview	2		2
Carbondale		1	1	Flat Lake	1		1
Cardston	3		3	Fort Assiniboine	2		2
Carmangay		1	1	Fort Saskatchewan		1	1
Caroline		3	3	Galloway	1		1

TABLE No. 6—Continued

Place of Residence	Male	Female	Total	Place of Residence	Male	Female	Total
Genesee	1	1	2	Niton	1		1
Gerrington	1		1	Nobleford		2	2
Ghost Pine Creek	1	1	2	Nordegg	1	1	2
Girouxville		1	1	Northville	1		1
Gleichen	1		1	Olds	2		2
Glendon	1		1	Oliver		1	1
Goodfare	1		1	Onion Lake	1		1
Goodridge		1	1	Opal	1		1
Grande Prairie		1	1	Peace River	1	1	2
Grantham		1	1	Penhold	2		2
Grimshaw		1	1	Peno	1		1
Gwynne		1	1	Picture Butte		1	1
Hackett	1		1	Pincher Creek	4		4
Haight		1	1	Pincher Station	2		2
Hardisty	1	2	3	Ponoka	1	1	2
Haynes	1		1	Queenstown		1	1
Halfway Lake	1		1	Red Deer	3	4	7
Hazelmere		1	1	Reno	1		1
Heath		1	1	Rimbey	1	2	3
High Prairie	1		1	Robb	1		1
High River	2	1	3	Rosedale	1		1
Hillcrest		1	1	Rosalind		2	2
Hillsdown	1		1	Round Hill		1	1
Holden	1		1	Round Valley	1		1
Hotchkiss	2	1	3	Sandy Rapids	1		1
Hughenden	1		1	Seebe	1		1
Huxley	1		1	Scollard	1		1
Iola		1	1	Shoal Lake	1		1
Irma		1	1	Smoky Lake	2		2
Irvine	1		1	Spondin		1	1
Jarvie	1		1	Standard	1		1
Joussard	1		1	Stavely		1	1
Jumping Pond		1	1	Sterco	1		1
Kananaskis	1		1	Stettler		2	2
Kitscoty		1	1	Stony Plain		2	2
Lacombe	3		3	Stry	1	1	2
La Corey	1		1	Styal		1	1
Lavoy		1	1	Sugden		1	1
Leduc	1	1	2	Sundre	2		2
Leedale	1		1	Sunnynook	2		2
Leslieville		1	1	Sunyslope	1		1
Lethbridge	8	3	11	Sylvan Lake	1		1
Linaria		1	1	Taber	1		1
Lloydminster	2		2	Tepee Creek	1		1
Lomond	1		1	Thorhild		1	1
Lindbergh	1		1	Thorsby	1		1
Lundbreck	1	1	2	Toffield	1		1
Lymburn		1	1	Tomahawk	1	1	2
Macleod	2	1	3	Trochu	2		2
Magrath		1	1	Uncas		1	1
Manyberries	2	1	3	Van Soucy		1	1
Marlboro		1	1	Vega		1	1
Meanook		1	1	Vegreville	1		1
Mecheche		1	1	Vermilion	1	2	3
Medicine Hat	5	9	14	Viking	1		1
Midlandvale	1		1	Vilna		1	1
Midnapore	1	1	2	Vimy		1	1
Milk River	1		1	Vulcan		2	2
Millet	2	1	3	Wainwright		2	2
Minburn	2		2	Warner	1	1	2
Mirror		2	2	Wasel		1	1
Mirror Landing	1		1	Water Valley	1		1
Moon Lake		2	2	Watino	1		1
Morecambe		1	1	Waugh	1		1
Morningside	2		2	Wayne	1		1
Mundare	1	1	2	Westlock	1		1
Musidora	1		1	Wetaskiwin	5	2	7
Nampa	2		2	Wildwood	3		3
Nanton		2	2	Willingdon		2	2
Newbrook	2	2	4	Willisden Green	1		1
Newcastle	2	2	4				
New Serepta		1	1				
Nisbet		1	1				
				Total	307	249	556



TABLE No. 7  
DISCHARGES, CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES AND CONDITION ON DISCHARGE  
FOR THE YEAR 1940

	Recovered			Improved			Unimproved			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Psychoses												
01. Psychoses with syphilitic meningo-encephalitis (general paresis).....				3	3	6				3	3	6
02. Psychoses with other forms of syphilis of the central nervous system.....	1		1	1	1	2				2	1	3
03. Psychoses with chronic encephalitis.....				1		1				1		1
04. Psychoses with other infectious diseases.....	4		4	1	1	2				5	1	6
05. Alcoholic psychoses.....												
06. Psychoses due to drugs and other exogenous poisons.....	1	2	3							1	2	3
07. Traumatic psychoses.....				1		1				1		1
08. Psychoses with cerebral arteriosclerosis.....	4	2	6	4	3	7		1	1	8	6	14
09. Psychoses with other disturbances of circulation.....	1	2	3							1	2	3
10. Psychoses with convulsive disorders.....	7		7	4	2	6		1	1	12	2	14
11. Senile psychoses.....	1		1	3	2	5		2	3	6	3	9
12. Involutional psychoses.....		1	1		5	5		1	1	1	6	7
13. Psychoses due to other metabolic diseases.....	1		1	1		1				2		2
14. Psychoses due to new growth.....												
15. Psychoses associated with organic changes of the nervous system.....												
16. Psychoneuroses.....	2	1	3	3	6	9		1	1	1	5	8
17. Manic-depressive psychoses.....	30	27	57	12	29	41		1	1	43	56	99
18. Dementia praecox (Schizophrenia).....	24	12	36	31	28	59		7	20	68	47	115
19. Paranoid and paranoid conditions.....		1	1	1	1	2				1	2	3
20. Psychoses with psychopathic personality.....		1	1	1	1	2				1	2	3
21. Psychoses with mental deficiency.....	4	5	9	2	1	3		1	1	7	6	13
22. Undiagnosed psychoses.....	2		2	1	2	3		1	1	4	2	6
23. Without psychoses.....										59	27	86
Total.....	82	54	136	70	85	155	21	10	31	232	176	408





TABLE No. 9  
RECORD OF DEATHS DURING 1940

Register No.	Sex.	Age.	Time in Hospital.			Cause of Death
			Years.	Months.	Days.	
9680	F	37	....	8	10	Asphyxiation due to strangulation; suicide.
10063	M	66	....	....	12	Broncho-pneumonia.
9206	F	71	1	7	10	Broncho-pneumonia.
3663	F	34	13	1	12	Acute pulmonary oedema.
10073	F	27	....	....	27	Broncho-pneumonia.
16089	M	74	....	....	18	Broncho-pneumonia.
10041	M	81	....	1	19	Broncho-pneumonia.
10121	F	57	....	....	6	Uraemia and diabetes.
9809	F	57	....	7	6	Broncho-pneumonia.
932	M	55	23	11	6	Rupture of the coronary artery.
2242	F	50	17	8	22	Intestinal obstruction.
9810	M	72	....	7	16	Chronic myocarditis and myocardial degeneration.
9626	M	75	....	11	7	Prostatic hypertrophy with urinary obstruction and infection.
10120	F	61	....	....	22	Broncho-pneumonia.
8912	M	76	2	2	8	Broncho-pneumonia.
9684	M	70	....	11	9	Broncho-pneumonia.
10164	M	29	....	....	7	Lobar pneumonia.
10005	M	63	....	3	18	Cerebral haemorrhage.
10059	M	76	....	2	14	Chronic myocarditis with myocardial degeneration.
9909	M	41	....	6	5	Chronic rheumatic endocarditis.
6737	M	78	5	7	22	Coronary sclerosis.
1327	F	54	22	....	27	Chronic myocarditis and myocardial degeneration.
5072	M	31	9	4	4	Broncho-pneumonia.
9763	F	39	....	9	12	Chronic rheumatic endocarditis.
9025	F	31	2	1	3	Idiopathic epilepsy.
8749	M	65	2	6	25	Cerebral arteriosclerosis.
9748	M	56	....	....	6	Chronic myocarditis and chronic nephritis.
10191	M	84	....	....	26	Chronic myocarditis; Acute failure.
9936	M	62	....	6	26	Haemorrhage from artery in left axilla.
8099	F	25	3	7	9	Pulmonary tuberculosis.
9904	F	66	....	8	13	Chronic myocarditis and myocardial degeneration.
10144	M	63	....	2	22	Chronic myocarditis and myocardial degeneration.
10175	M	53	....	1	4	Meningo-vascular syphilis; Multiple carbuncles.
10224	M	60	....	2	2	General paresis.
10237	F	59	....	....	12	Exhaustion due to agitation; Broncho-pneumonia.
10249	F	27	....	....	8	Chronic myocarditis; Exhaustion due to over-activity.
3272	M	52	14	9	....	Chronic myocarditis and myocardial degeneration.
9465	F	76	1	5	....	Chronic myocarditis and myocardial degeneration.
9535	F	69	1	3	26	Chronic myocarditis and myocardial degeneration.
9519	M	69	1	4	11	Chronic myocarditis and myocardial degeneration.
10285	M	73	....	....	6	Chronic glomerulo nephritis.
10254	F	48	....	1	....	Exhaustion due to Manic-depressive psychosis.
10275	M	65	....	....	16	Haemorrhage into left temporal lobe.
10207	F	73	....	2	7	Coronary artery disease.
6883	F	31	5	7	1	Septicaemia due to erysipelas.
10009	F	42	....	6	12	Pulmonary tuberculosis.
5111	M	84	4	4	16	Chronic myocarditis and myocardial degeneration.
9287	M	42	1	10	20	Haemorrhage into the lungs.
10334	M	32	....	....	1	Acute exhaustion.
10236	M	46	....	2	9	Chronic nephritis.
9808	F	84	....	11	22	Broncho-pneumonia.
4358	F	60	11	6	16	Broncho-pneumonia.
10336	M	44	....	....	10	Carcinoma of stomach.
10339	M	50	....	....	8	Acute enteritis and exhaustion.
10078	M	70	2	3	11	Senile exhaustion.
10078	M	33	....	6	1	Cerebral syphilis.
9674	F	66	1	3	3	Senility with senile dementia.
10246	F	79	....	2	29	Chronic myocarditis and myocardial degeneration.
3840	M	67	11	10	27	Cerebral arteriosclerosis.
7180	F	59	3	9	27	Pulmonary tuberculosis.
10371	M	47	....	....	2½	Cerebral haemorrhage.
10347	M	28	....	1	....	Exhaustion and inanition due to chronic encephalitis.
8508	M	46	3	3	21	Pulmonary tuberculosis.
4346	M	55	11	8	5	Disease of the coronary arteries.
10037	M	35	....	8	1	Acute pulmonary oedema.
10297	M	65	....	2	10	Cerebral arteriosclerosis.
1716	F	67	21	....	2	Carcinoma of the lungs.
10401	F	55	....	....	17	Exhaustion and inanition due to manic-depressive psychosis.



TABLE No. 9—Continued

Register No.	Sex.	Age.	Time in Hospital.			Cause of Death		
			Years.	Months.	Days.			
10422	F	52	.....	.....	9	Exhaustion due to manic excitement.		
4208	F	52	12	1	23	Toxaemia due to erysipelas.		
8598	M	53	3	.....	19	Pulmonary tuberculosis.		
10247	M	36	.....	.....	5	Influenzal pneumonia.		
6199	M	42	7	2	22	Exhaustion and inanition.		
10461	M	77	.....	.....	12	Terminal broncho-pneumonia.		
5780	F	41	8	2	13	Pulmonary tuberculosis.		
3747	F	52	13	6	25	Pulmonary tuberculosis.		
10438	M	57	.....	.....	1	General paresis.		
10158	F	63	.....	.....	7	Cerebral haemorrhage or thrombosis.		
10149	M	73	.....	.....	8	1	Coronary sclerosis and arteriosclerosis.	
10481	M	40	.....	.....	1	2	Acute myocarditis; cirrhosis of liver.	
9901	F	53	1	2	9	Intestinal obstruction; volvulus of small bowel.		
4781	F	47	8	10	19	Influenzal pneumonia.		
9943	M	37	1	1	19	Pulmonary tuberculosis.		
10503	M	55	.....	.....	1	.....	Chronic byocarditis and myocardial degeneration.	
5555	M	33	8	10	.....	Pulmonary tuberculosis.		
10296	F	51	.....	.....	6	4	Cancer of the uterus.	
10484	M	76	.....	.....	1	25	Influenzal pneumonia.	
9812	M	75	.....	.....	1	5	2	Influenzal pneumonia.
6687	F	27	6	5	24	Broncho-pneumonia.		
686	F	51	26	.....	15	Pulmonary tuberculosis.		

### PROVINCIAL AUXILIARY HOSPITAL, CLARESHOLM

*Movement of Patients.*—In residence on January 1st, 1940, there were 99 patients. In residence on December 31st, 1940, there were 100 patients. Four patients were transferred to this hospital from the Provincial Mental Hospital, Ponoka. Three patients were transferred to the Provincial Mental Hospital from here.

There were no deaths during the year.

*Accidents and Elopements.*—There were no elopements, though almost half the patients are allowed the freedom of the grounds, with a minimum amount of supervision. One patient suffered a fracture of the right leg when she fell while walking on the grounds. There were no other accidents of a serious nature.

*General Health.*—The health of the patients and staff has been very satisfactory. All patients and staff were given X-Ray examinations by the Travelling Clinic from the Central Alberta Sanatorium.

*Dentistry.*—Dr. S. M. Sneddon visited this hospital in June and examined all the patients' teeth, and gave the necessary dental care. Any further dental work required was attended to by local dentists.

*Occupational Therapy.*—The Occupational Therapy Department continued to do very good work. The patients treated to this form of therapy continued to display definite results.

A bazaar and exhibition of work done in this department was held during the Fall, with very gratifying results.

*Library.*—More volumes were obtained for the Patients' Library. The patients who are able to read use the library extensively, and derive much enjoyment from it.

*Buildings.*—Improvements and repairs to all the buildings were carried out during the year by the Public Works Staff. Their kind co-operation and interest in the welfare of the institution is very much appreciated.

*Gardens and Grounds.*—The lawns and gardens were improved during the year.



The garden produced an abundance of vegetables, and was sufficient for the needs of the hospital. It was also possible to send a large quantity to the Central Alberta Sanatorium.

The flowers and grounds were lovely, and were the object of many favorable comments.

*Religious Services.*—These were conducted each Sunday afternoon. Local clergymen were very kind in co-operating to conduct the services.

The Catholic services were conducted once a month.

*Recreation and Entertainment.*—The patients continued to attend the regular matinees at the local theatre twice a month. More than half the patients attended regularly and enjoyed the shows very much.

The kindness and co-operation of the theatre management is very much appreciated.

Many and varied forms of entertainment were arranged for the patients. These included parties, picnic suppers and the annual Sports Day. The United Church choir visited the hospital at Easter and Christmas, and several groups of entertainers from the town and district visited the hospital and presented very enjoyable programmes. The patients derived a great deal of pleasure from these entertainments, and co-operated very well.

Mr. E. Charlton very kindly continued to donate his services at the piano during the entertainments. This was very much appreciated.

*Dietetic Department.*—Miss Helen J. Drew resigned in November to take another position, and was replaced by Miss Muriel C. Harvey. The high standard of this department has been maintained. The meals have been varied and of very good quality.

*Staff.*—During 1940, there was no resident physician at this hospital. However, Dr. Carnat continued as medical officer, and visited the hospital at intervals. Dr. Wm. McCallum replaced Dr. Carnat as medical officer at the end of the year. In cases of emergency, the local physicians were called in the absence of the medical officer.

*Staff Changes.*—There was only one staff change during the year, that being in the sewing room.

*Visitors.*—Periodic visits to the hospital were made by the Medical Superintendent of the Provincial Mental Hospital, whose interest and advice was keenly appreciated.

The members of the Eugenics Board, acting as a Board of Visitors, visited and inspected the hospital during the Fall.

Many relatives and friends of patients visited the hospital at frequent intervals. Members of the surrounding community continued to visit and take an interest in the institution. Their kindness and co-operation is appreciated.



TABLE No. 1  
MOVEMENT OF PATIENT POPULATION DURING 1940

	Male	Female	Total	Male	Female	Total
In Residence Jan. 1, 1940 .....				99		99
Admissions:						
(a) Voluntary .....						
(b) Certificate .....						
(c) Warrant .....						
(d) Order .....						
(e) Transfers .....		4	4			
Re-admissions:						
(a) Voluntary .....						
(b) Certificate .....						
(c) Warrant .....						
(d) Order .....						
(e) Transfers .....				4		4
				103		103
Discharged during the year:						
(a) As recovered .....						
(b) As improved .....						
(c) As unimproved .....						
(d) As without psychosis .....						
(e) Transferred to other hospitals .....		3	3			
(f) Eloped .....						
(g) Deported to other countries .....						
(h) Deaths .....				3		3
				100		100

TABLE No. 2  
SHOWING THE DIAGNOSIS OF THOSE IN RESIDENCE, DECEMBER 31, 1940

	Male	Female	Total
01. Psychoses with syphilitic meningo-encephalitis (general paresis) .....			
02. Psychoses with other forms of syphilis of the central nervous system:			
021 Meningo-vascular type (cerebral syphilis) .....			
022 With intracranial gumma .....			
023 Other types (to be specified) .....			
03. Psychoses with epidemic encephalitis .....	1		1
04. Psychoses with other infectious diseases:			
041 With tuberculous meningitis .....			
042 With meningitis (unspecified) .....			
043 With acute chorea (Sydenham's) .....			
044 With other infectious diseases .....	1		1
045 Post-infectious psychoses .....			
05. Alcoholic psychoses:			
051 Pathological intoxication .....			
052 Delirium tremens .....			
053 Korsakow's psychosis .....			
054 Acute hallucinosis .....			
055 Other types (to be specified) .....			
06. Psychoses due to drugs or other exogenous poisons:			
061 Due to metals (to be specified) .....			
062 Due to gases (to be specified) .....			
063 Due to opium and derivatives .....			
064 Due to other drugs (to be specified) .....			
07. Traumatic psychoses:			
071 Traumatic delirium .....			
072 Post-traumatic personality disorders .....			
073 Post-traumatic mental deterioration .....			
074 Other types (to be specified) .....			
08. Psychoses with cerebral arteriosclerosis .....	3		3
09. Psychoses with other disturbances of circulation:			
091 With cerebral embolism .....			
092 With cardio-renal disease .....			
093 Other types (to be specified) .....			
10. Psychoses with convulsive disorders (epilepsy):			
101 Epileptic deterioration .....			
102 Epileptic clouded states .....			
103 Other epileptic types .....			
11. Senile psychoses:			
111 Simple deterioration .....			
112 Presbyphrenic type .....	1		1
113 Delirious and confused types .....			
114 Depressed and agitated types .....			
115 Paranoid types .....	1		1
12. Involutional psychoses:			
121 Melancholia .....			
122 Paranoid types .....	4		4
123 Other types (to be specified) .....			
13. Psychoses due to other metabolic, etc., diseases:			
131 With diseases of the endocrine glands .....			
132 Exhaustion delirium .....			
133 Alzheimer's disease .....			
134 With pellagra .....			



TABLE No. 2—Continued

	Male	Female	Total
135 With other somatic diseases .....	....	....	....
14. Psychoses due to new growth:			
141 With intracranial neoplasms .....	....	....	....
142 With other neoplasms .....	....	....	....
15. Psychoses associated with organic changes of the nervous system:			
151 With multiple sclerosis .....	....	....	....
152 With paralysis agitans .....	....	....	....
153 With Huntington's chorea .....	....	1	1
154 With other brain or nervous diseases .....	....	1	1
16. Psychoneuroses:			
161 Hysteria (anxiety hysteria, conversion hysteria, and subgroups) .....	....	....	....
162 Psychasthenia or compulsive states .....	....	....	....
163 Neurasthenia .....	....	....	....
164 Hypochondriasis .....	....	....	....
165 Anxiety state .....	....	....	....
166 Mixed psychoneurosis .....	....	....	....
17. Manic-depressive psychoses:			
171 Manic type .....	....	....	....
172 Depressive type .....	....	4	4
173 Circular type .....	....	....	....
174 Mixed type .....	....	....	....
175 Perplexed type .....	....	....	....
176 Stuperous type .....	....	....	....
177 Other types .....	....	....	....
18. Dementia praecox (schizophrenia):			
181 Simple type .....	....	2	2
182 Hebephrenic type .....	....	6	6
183 Catatonic type .....	....	19	19
184 Paranoid type .....	....	27	27
185 Other types .....	....	....	....
19. Paranoia and paranoid conditions:			
191 Paranoia .....	....	1	1
192 Paranoid conditions .....	....	9	9
20. Psychoses with psychopathic personality .....	....	....	....
21. Psychoses with mental deficiency .....	....	10	10
22. Undiagnosed psychoses .....	....	....	....
23. Without psychoses:			
231 Epilepsy .....	....	....	....
232 Alcoholism .....	....	....	....
233 Drug addiction .....	....	....	....
234 Mental deficiency .....	....	8	8
235 Disorders of personality due to epidemic encephalitis .....	....	....	....
236 Psychopathic personality:			
2361 With pathological sexuality .....	....	....	....
2362 With pathological emotionality .....	....	....	....
2363 With asocial or amoral trends .....	....	....	....
Mixed types .....	....	....	....
24. Primary behaviour disorders:			
241 Simple adult maladjustment .....	....	....	....
242 Primary behaviour disorders in children .....	....	....	....
2421 Habit disturbance .....	....	....	....
2422 Conduct disturbance .....	....	....	....
2423 Neurotic traits .....	....	....	....
Total.....	....	100	100

### PROVINCIAL AUXILIARY HOSPITAL, RAYMOND

*Movement of Patients.*—There were 104 patients in residence on January 1st, 1940, and 105 patients in residence on December 31st, 1940. Three patients were transferred to this hospital from the Provincial Mental Hospital, Ponoka. One patient was transferred to the Provincial Mental Hospital from here.

There were 4 deaths during the year.

*General Health.*—The patients on the whole are happy and in good health. A spacious portion of the lawn has been fenced off so that the elderly ladies may be out in the fresh air as much as possible.

*Dentistry.*—Dr. S. M. Sneddon visited this hospital, examined all the patients' teeth and gave the necessary dental care.

*Occupational Therapy.*—The Occupational Department is under the capable supervision of Miss E. Pritchard. This department has proven very valuable in the mental adjustment of many patients.



*Library.*—The hospital has a small library of novels, which is greatly appreciated by the patients.

*Gardens and Grounds.*—The garden, under the supervision of Mr. C. Gill, is improving each year. The hospital is practically self-supporting as to vegetables, and there is also an orchard of crab-apples, apples and plums. Many of the patients work in the garden. The flower beds add much to the appearance of the grounds.

*Religious Services.*—A Catholic priest gives Communion once a month, and United Church services are held every Sunday.

*Recreation and Entertainment.*—The patients enjoy a picture show every other week, a sports' day once a year with races and prizes, a costume party at Hallowe'en, a harvest weiner roast in the Fall, and a Christmas tree and party at Christmas and New Year's. Small parties on the lawns are frequent. There are two radios on the wards for music and world news.

*Livestock.*—An abundant supply of milk is available from a herd of some nine cows. The milk is bacteriologically and chemically analyzed each month at the Provincial Laboratory. Food for the herd in the winter time is grown on the hospital property. The present housing facilities for the herd are entirely unsatisfactory, and there is no milk house. A strong recommendation has been submitted for the construction of a modern barn with a proper milk house. Building for housing poultry would also be an asset to the institution. Much of the garden work such as ploughing, cultivating and so on is now being done by a pair of mules which have been purchased.

*Staff.*—The ultimate administration of the hospital is under the direction of the Superintendent of the Provincial Mental Hospital, Ponoka, but Miss Birt, the Matron, who is well trained and very efficient, directs the general activities of the hospital. Dr. J. S. Madill, of Raymond, visits the institution when immediate medical advice is required. Dr. Madill's services have been most satisfactory, and he is well liked by patients and staff alike.

Besides the Matron, there are 6 nurses, 2 being graduates. There is also 1 medical graduate and 3 nurse-attendants. The patients appear to be very well cared for, and hold the staff in high regard.

Miss Pritchard directs the activities of the Occupational Department, which is very successful. Other departments are the sewing room, laundry and kitchen. Each is under the direction of a capable individual, and the work done in them is highly satisfactory.

The diet for the patients, which is arranged by a dietitian appointed to this institution and Claresholm, is complete and well supervised. No complaints have been received relative to the food.

A great number of patients assist in all the various departments of the hospital.



TABLE No. 1  
MOVEMENT OF PATIENT POPULATION DURING 1940

	Male	Female	Total	Male	Female	Total
In Residence Jan. 1st, 1940 .....				104		104
Admissions:						
(a) Voluntary .....						
(b) Certificatet .....						
(c) Warrant .....						
(d) Order .....						
(e) Transfers .....		4	4			
Re-admissions:						
(a) Voluntary .....		2	2			
(b) Certificate .....						
(c) Warrant .....						
(d) Order .....						
(e) Transfers .....					6	6
				110		110
Discharges during the year:						
(a) As recovered .....						
(b) As improved .....		2	2			
(c) As unimproved .....						
(d) As without psychosis .....						
(e) Transferred to other hospitals .....		1	1			
(f) Eloped .....						
(g) Deported to other countries .....		2	2			
(h) Deaths .....					5	5
				105		105

TABLE No. 2  
SHOWING THE DIAGNOSIS OF THOSE IN RESIDENCE, DECEMBER 31, 1940

	Male	Female	Total
01. Psychoses with syphilitic meningo-encephalitis (general paresis) .....		1	1
02. Psychoses with other forms of syphilis of the central nervous system:			
021 Meningo-vascular type (cerebral syphilis) .....		1	1
022 With intracranial gumma .....			
023 Other types (to be specified) .....			
03. Psychoses with epidemic encephalitis .....			
04. Psychoses with other infectious diseases:			
041 With tuberculosis meningitis .....			
042 With meningitis (unspecified) .....			
043. With acute chorea (Sydenham's) .....			
044 With other infectious diseases .....			
045 Post-infectious psychoses .....			
05. Alcoholic psychoses:			
051 Pathological intoxication .....			
052 Delirium tremens .....			
053 Korsakow's psychoses .....			
054 Acute hallucinosis .....			
055 Other types (to be specified) .....			
06. Psychoses due to drugs or other exogenous poisons:			
061 Due to metals (to be specified) .....			
062 Due to gases (to be specified) .....			
063 Due to opium and derivatives .....			
064 Due to other drugs (to be specified) .....			
07. Traumatic psychoses:			
071 Traumatic delirium .....			
072 Post-traumatic personality disorders .....			
073 Post-traumatic mental deterioration .....			
074 Other types (to be specified) .....			
08. Psychoses with cerebral arteriosclerosis .....			
09. Psychoses with other disturbances of circulation:			
091 With cerebral embolism .....			
092 With cardio-renal disease .....			
093 Other types (to be specified) .....			
10. Psychoses with convulsive disorders (epilepsy):			
101 Epileptic deterioration .....			
102 Epileptic clouded states .....			
103 Other epileptic types (with mental deficiency) .....		2	2
11. Senile psychoses:			
111 Simple deterioration .....		2	2
112 Presbyophrenic type .....			
113 Delirious and confused types .....			
114 Depressed and agitated types .....			
115 Paranoid types .....		3	3
12. Involuntional psychoses:			
121 Melancholia .....			
122. Paranoid types .....			
123. Other types (to be specified) .....			
13. Psychoses due to other metabolic, etc., diseases:			
131 With diseases of endocrine glands .....			
132 Exhaustion delirium .....			
133 Alzheimer's disease .....			
134 With pellagra .....			
135 With other somatic diseases .....			

TABLE No. 2—Continued

	Male	Female	Total
14. Psychoses due to new growth:			
141 With intracranial neoplasms .....	.....	.....	.....
142 With other neoplasms .....	.....	.....	.....
15. Psychoses associated with organic changes of the nervous system:			
151 With multiple sclerosis .....	.....	.....	.....
152 With paralysis agitans .....	.....	.....	.....
153 With Huntington's chorea .....	.....	.....	.....
154 With other brain and nervous diseases .....	.....	.....	.....
16. Psychoneurosis:			
161 Hysteria (anxiety hysteria, conversion hysteria, and subgroups) .....	.....	.....	.....
162 Psychasthenia or compulsive states .....	.....	.....	.....
163 Neurasthenia .....	.....	.....	.....
164 Hypochondriasis .....	.....	.....	.....
165 Anxiety state .....	.....	.....	.....
166 Mixed psychoneuroses .....	.....	.....	.....
17. Manic-depressive psychoses:			
171 Manic type .....	.....	1	1
172 Depressive type .....	.....	3	3
173 Circular type .....	.....	1	1
174 Mixed type .....	.....	.....	.....
175 Perplexed type .....	.....	.....	.....
176 Stuperous type .....	.....	.....	.....
177 Other types (Hypomania) .....	.....	1	1
18. Dementia praecox (Schizophrenia):			
181 Simple type .....	.....	.....	.....
182 Hebephrenic type .....	.....	6	6
183 Catatonic type .....	.....	22	22
184 Paranoid type .....	.....	26	26
185 Other types .....	.....	.....	.....
19. Paranoid and paranoid conditions:			
191 Paranoid .....	.....	.....	.....
192 Paranoid conditions .....	.....	8	8
20. Psychoses with psychopathic personality .....	.....	.....	.....
21. Psychoses with mental deficiency .....	.....	10	10
22. Undiagnosed psychoses .....	.....	3	3
23. Without psychoses:			
231 Epilepsy .....	.....	.....	.....
232 Alcoholism .....	.....	.....	.....
233 Drug addiction .....	.....	.....	.....
234 Mental deficiency .....	.....	12	12
235 Disorders of personality due to epidemic encephalitis .....	.....	1	1
236 Psychopathic personality:			
2361 With pathological sexuality .....	.....	.....	.....
2362 With pathological emotionality .....	.....	.....	.....
2363 With asocial or amoral trends .....	.....	.....	.....
2364 Mixed types .....	.....	.....	.....
24. Primary behaviour disorders:			
241 Simple adult maladjustment .....	.....	.....	.....
242 Primary behaviour disorders in children:			
2421 Habit disturbance .....	.....	.....	.....
2422 Conduct disturbance .....	.....	.....	.....
2423 Neurotic traits .....	.....	.....	.....
Total .....	.....	105	105

TABLE No. 3

## RECORD OF DEATHS DURING 1940

Register No.	Sex.	Age.	Time in Mental Hospital.			Cause of Death.
			Years.	Months.	Days.	
5754	F	58	7	3	8	Coronary infarction due to coronary arterio sclerosis.
7751	F	70	4	.....	6	Hypostatic pneumonia following cerebral apoplexy.



## Provincial Mental Institute, Edmonton, Alberta

(W. J. McALISTER, M.D., *Medical Superintendent*)

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### GENERAL REMARKS

We had 766 patients registered on our books at the close of the year. Of this number, 29 were first admissions, 2 re-admissions, and 29 transfers from Ponoka. Our total discharges were 63, 39 of whom died. As in 1939, the majority of deaths was in the higher age brackets, 17 being 70 years of age or older. These were diagnosed as senile or arteriosclerosis dementia. Table No. 13 shows that of the 60 patients admitted, 13 were of the senile type and 18 diagnosed as schizophrenia. In addition, we admitted 4 diagnosed as mentally defective. As all of these are of the essentially chronic type with a hopeless prognosis, they will likely continue in the institution for the rest of their lives.

The movement of population (apart from the deaths) was not large, although we did discharge 22, 19 of whom were considered improved and 3 unimproved. Considering the chronic nature of the psychoses from which our patients suffer and the prolonged period of hospitalization, this is quite a creditable showing. One of the greatest obstacles to the discharge of patients from a hospital of this nature is the fact that having been so long in residence, many of the homes from which our patients came have been broken up, and those who were once interested have, as a result of prolonged absence, death or other reasons, ceased to continue that interest. As a result, one hesitates to probate many otherwise eligible cases knowing that without any sympathetic assistance and encouragement the attempt at re-adjustment is almost sure to fail.

Another point which I think is worthy of mention. We have in residence at the present time no less than 126 patients diagnosed as mental defective or mental deficiency with psychosis, that is, about 1 in 6 of our population is of this type. As the non-psychotic mental defective here is for the most part of good personality, one wonders if there could not be some steps taken whereby they could be colonized at a decidedly much less cost than what must maintain when housed in an institution built and staffed for the care of the insane. By removing the senile group, which by the way constitutes the majority of our direct admissions, those suffering from a psychosis due to cerebral arteriosclerosis and the mental defective from our population, provision could be made for an equal number of chronically insane, thus relieving in a material way the congestion which is now more or less chronic in the Provincial Mental Hospital, Ponoka.

You will note that elopements from our hospital were more frequent than in 1939, 18 in all having escaped or broken parole. Fortunately, all but 2 were returned again without incident. Of those returned, 13 were absent less than a week. All but 4 were parole patients, harmless, who for the most part eloped during a period of temporary mental upset.



## INSTITUTIONAL ACTIVITIES

There is little to add to what was reported last year. We still lack some important therapeutic requisites such as X-Ray, laboratory, morgue, etc. I have asked for these repeatedly, especially a portable X-Ray outfit, but have not succeeded in securing this very necessary facility for the hospital.

We have, however, continued to carry out routine therapy and such specific therapy for selected cases of schizophrenia. Our results with respect to shock treatment were much as that experienced in 1939. It is generally considered that to be successful, treatment should be instituted very early in the condition, and as we do not admit many cases directly, the patients which we submit to therapy are usually more confirmed in their psychosis, hence are less likely to be affected by treatment.

There is one situation which causes considerable concern, and that is the continued spread of pulmonary tuberculosis within the institution. Without adequate hospital accommodation to segregate this type of case, we are placed at a decided disadvantage. I have pressed for this extension on previous occasions, but so far without results. It may be that with the opening of the Nurses' Home and the removal of the female staff from No. 2 Building, we could utilize the space vacated for active and suspected pulmonary T.B. cases. This arrangement, if it could be made effective, should be only temporary. Our present need is a pavilion for the infective case, whether the case be tuberculosis or some other condition.

Activities have also been somewhat hampered by the frequent turnover in staff, particularly the result of enlistments of our trained men and the dearth of suitable applicants to replace them. We discourage the appointment of young single men whom we consider eligible for military service. This leaves the choice for replacement to those who have been rejected for military service and those who for various reasons, mainly educational, cannot hope to measure up to our hospital standards. We, of course, are hoping that this is but a temporary condition.

## RELIGIOUS SERVICES

These have been discharged in a faithful and conscientious way by the clergymen appointed. Protestant services continue weekly; the Roman Catholic services taking the first Monday of each month. I wish to record my appreciation of the continued devotion to this important duty on the part of the clergymen interested.

## HEALTH

The general health of our patients has, on the whole, been good. One or two cases of typhoid developed, but as a result of prompt inoculation any possibility of an epidemic was forestalled. As the majority of our patients are in the middle and higher age brackets, we frequently have cases of acute illness usually transient in character admitted to our hospital ward. Fortunately, there have been no epidemics, and there were no cases of suicide or homicide during the year.

Our hospital facilities, although limited, would be on the whole satisfactory provided it were possible to segregate our active and suspected cases of tuberculosis. This situation constitutes a continual hazard, and is a reflection on hospital administration.



## INSTITUTIONAL PROGRESS

There is nothing worthy of report, with the exception of the start being made on the new dormitory building to house chronic refractory female patients. This work was not continued to completion during the year because of lack of funds.

Extra-institutional activities were continued, the Superintendent devoting more and more of his time to the work of the Police Court and the Attorney General's Department. His assistant supervised the work of the Mental Hygiene Clinic during the year. These are important activities, the work entailed is considerable and is demanding more and more attention from our staff from year to year. The Superintendent examined and gave evidence in no less than 51 cases of suspected insanity at the Edmonton Police Court, mute evidence of the growing importance of this extramural activity.

## THE FARM

There have been many changes in the staff during the year, some enlisting and some resigning to better their positions.

Financial statement shows a net profit of \$4,958.45; \$2,700.00 of this is due to increase in inventory. Included in the statement, however, is revenue from vegetables sold to the institute. As the production of vegetables is carried on by and is the responsibility of the institute proper, it hardly seems equitable that this revenue should be considered as farm revenue. Taken out, the report of farm profits does not look so favourable.

## INSTITUTIONAL FINANCES

There is nothing of note here to report other than the moderately appreciable increase in per capita cost per day. This increase amounted to 1½c over last year and is due, according to the Bursar, to increase in the purchase price of food and clothing.

## CONCLUDING REMARKS

I have received excellent co-operation on the part of the staff, and I wish to acknowledge my appreciation of the loyalty and devotion to duty shown by all.

I also wish to record my thanks for the consideration given by the Department of Public Works to all demands made by me on that Department. Mr. Muir, the engineer, and Mr. Cameron, of the Maintenance Department, are especially to be commended in this respect.

Many new problems have arisen as a result of the war, and no doubt there will be many more with the completion of the new building. We will require an unduly large staff because of the refractory type of patient to be transferred from Ponoka. It is unfortunate that we cannot offer them the conveniences of a nurses' home at this time, but I trust this need will be constantly kept in mind and steps taken to meet it when the next estimates are brought down. We will also have to consider transportation for female staff to and from the city, and there will be other demands which will have to be met as they arise.

I wish to thank your Department for the sympathetic hearing which you have given to all requests made by the Superintendent. I realize that many of them, while in my opinion constructive, were difficult or impossible to grant under existing circumstances.



In closing, I would again point out the need for additional housing accommodation for married staff. The only house available is now occupied by the Junior Medical Officer. There is no existing accommodation for Dr. Schrag, who takes over the duties of Assistant Medical Superintendent beginning the first of June, 1941. For the time being he will be living in Edmonton. This, I hope, is only temporary, as it is very apparent if we are to secure and retain an efficient staff, adequate provision must be made for their accommodation at the institution. With our small staff it certainly is not in the interests of the hospital to have any of them living at such a distance as Edmonton.

TABLE No. 1  
MOVEMENT OF POPULATION

	Males	Females	Total
(a) In Hospital .....	749	.....	749
(b) On Probation .....	5	.....	5
(c) Elopements .....	9	.....	9
(d) In University Hospital .....	2	.....	2
(e) On Special Parole .....	4	.....	4
<b>Total</b> .....	<b>769</b>	<b>.....</b>	<b>769</b>
<b>Admissions during year:</b>			
(a) First Admissions .....	29	.....	29
(b) Re-admissions .....	2	.....	2
(c) Transfers .....	29	.....	29
<b>Total</b> .....	<b>60</b>	<b>.....</b>	<b>60</b>
<b>Total received during year:</b>			
(a) Transfers .....	29	.....	29
(b) Re-admissions .....	2	.....	2
(c) By Warrant .....	12	.....	12
(d) Voluntary .....	3	.....	3
(e) By Certificate .....	10	.....	10
(f) By Mental Defectives Act .....	4	.....	4
<b>Total</b> .....	<b>60</b>	<b>.....</b>	<b>60</b>
<b>Total on books during year</b> .....	<b>829</b>	<b>.....</b>	<b>829</b>
<b>Discharged during year:</b>			
(a) As Recovered .....	.....	.....	.....
(b) Improved .....	19	.....	19
(c) Unimproved .....	3	.....	3
(d) Without Psychosis .....	.....	.....	.....
(e) Transfers .....	2	.....	2
(f) Died during year .....	39	.....	39
<b>Total</b> .....	<b>63</b>	<b>.....</b>	<b>63</b>
<b>Patients on books end of year:</b>			
(a) In Hospital .....	756	.....	756
(b) On Probation .....	5	.....	5
(c) Elopements .....	1	.....	1
(d) In University Hospital .....	.....	.....	.....
(e) On Special Parole .....	4	.....	4
<b>Total</b> .....	<b>766</b>	<b>.....</b>	<b>766</b>
<b>Total Admitted since Opening</b> .....	<b>1229</b>	<b>.....</b>	<b>1229</b>
<b>Total discharged since Opening</b> .....	<b>320</b>	<b>.....</b>	<b>320</b>
<b>Total Died since Opening</b> .....	<b>223</b>	<b>.....</b>	<b>223</b>

TABLE No. 2  
NUMBER OF OFFICERS AND EMPLOYEES

	Males	Females	Total
Medical Superintendent .....	1	.....	1
Assistant Medical Superintendent .....	1	.....	1
Medical Officer .....	1	.....	1
Dentist (part time) .....	1	.....	1
Administrative Assistant .....	1	.....	1
Bursar .....	1	.....	1
Storekeeper .....	1	.....	1
Stenographers and Clerks .....	1	2	3
Night Supervisor .....	1	.....	1
Graduate Nurses .....	.....	2	2
Other Female Nurses .....	.....	.....	.....
Male Attendants .....	67	.....	67



TABLE No. 2—Continued

	Males	Females	Total
Social Workers, Tailor .....	1	.....	1
Teachers .....	1	.....	1
Occupational Therapist .....	4	.....	4
Kitchen and Bakery .....	2	1	3
Laundry .....	3	.....	3
Gardeners and Assistants .....	12	.....	12
Engineers and Mechanics .....	9	.....	9
Other Employees (Male) .....	.....	.....	.....
Other Employees (Female) .....	.....	.....	.....
<b>Total</b> .....	<b>108</b>	<b>5</b>	<b>113</b>

TABLE No. 3

## PSYCHIATRIC AND INDUSTRIAL CLASSIFICATION OF PATIENTS

	Males	Females	Total
<b>Psychiatric:</b>			
Patients Insane .....	679	.....	679
Epileptic (not Insane) .....	6	.....	6
Mental Deficiency (not Insane) .....	75	.....	75
Alcoholic (not Insane) .....	.....	.....	.....
Drug Addicts .....	.....	.....	.....
Neurosyphilitics (not Insane) .....	.....	.....	.....
All Other Types (not Insane) .....	5	.....	5
Undiagnosed .....	1	.....	1
<b>Total Population</b> .....	<b>766</b>	<b>.....</b>	<b>766</b>
<b>Industrial:</b>			
Industrial Workers .....	42	.....	42
Garden Workers .....	61	.....	61
Internal Workers .....	392	.....	392
External Workers .....	28	.....	28
Doing no work .....	233	.....	233
On Probation, Parole, etc. ....	10	.....	10
<b>Total Population</b> .....	<b>766</b>	<b>.....</b>	<b>766</b>

TABLE No. 4

## NATIVITY OF PATIENTS IN RESIDENCE

	Males	Females	Total		Males	Females	Total
Canada .....	207	.....	207	Japan .....	2	.....	2
Australia .....	1	.....	1	Norway .....	22	.....	22
Austria .....	58	.....	58	Poland .....	34	.....	34
Belgium .....	3	.....	3	Roumania .....	8	.....	8
China .....	4	.....	4	Russia .....	42	.....	42
Denmark .....	6	.....	6	Scotland .....	26	.....	26
England .....	89	.....	89	Sweden .....	18	.....	18
Finland .....	5	.....	5	Switzerland .....	6	.....	6
France .....	8	.....	8	United States .....	111	.....	111
Germany .....	31	.....	31	Wales .....	7	.....	7
Holland .....	2	.....	2	Other Countries .....	23	.....	23
Hungary .....	6	.....	6	Unascertained .....	17	.....	17
Ireland .....	19	.....	19	<b>Total</b> .....	<b>766</b>	<b>.....</b>	<b>766</b>
Italy .....	11	.....	11				

TABLE No. 5

## CITIZENSHIP OF PATIENTS IN RESIDENCE

	Males	Females	Total
Citizen by Birth .....	241	.....	241
Citizen by Naturalization .....	51	.....	51
Aliens .....	309	.....	309
Unascertained .....	34	.....	34
British Birth out of Canada .....	131	.....	131
<b>Total</b> .....	<b>766</b>	<b>.....</b>	<b>766</b>

TABLE No. 6

## DENTAL REPORT

	Males	Females	Total
Patients Examined .....	760	.....	760
Patients Treated .....	340	.....	340
Prophylactic Treatment .....	191	.....	191
Fillings .....	139	.....	139
Extractions .....	174	.....	174
New Dentures .....	3	.....	3
Dentures Repaired .....	10	.....	10
General Anaesthetic .....	5	.....	5
Denture Adjustments .....	14	.....	14

TABLE No. 7  
AGE AT ADMISSION AND PRINCIPAL PSYCHOSES

Psychoses	Total		Under 15 years		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	23	23												
2. Senile	17	17					1	1	1	1	6	6	4	4
3. Cerebral Arteriosclerosis	33	33												
4. General Paralysis	1	1												
5. With Cerebral Syphillis	1	1												
6. Huntington's Chorea	1	1												
7. With Brain Tumour	8	8							2	2	1	1	1	1
8. With Other Brain Diseases	4	4												
9. Alcoholic														
10. Due to Drugs														
11. With Pellagra	1	1												
12. Other Somatic Diseases	31	31									4	4	3	3
13. Manic Depressive	2	2												
14. Involutional Melancholia	423	423			14	14	59	59	90	90	90	90	74	74
15. Schizophrenia	66	66			1	1	5	5	3	3	7	7	5	5
16. Paranoia and Paranoid Conditions	18	18			1	1	5	5	3	3	2	2	3	3
17. Epileptic Psychoses	1	1												
18. Psychoneuroses and Neuroses	50	50	1	1	3	3	5	5	11	11	1	1	9	9
19. Psychopathic Personality														
20. With Mental Deficiency														
21. Undiagnosed	6	6	5	5	2	2	21	21	2	2	1	1	5	5
22. Without Psychoses:			1	1			1	1	1	1	8	8	1	1
A														
E														
F														
D														
<b>Total</b>	<b>766</b>	<b>766</b>	<b>7</b>	<b>7</b>	<b>37</b>	<b>37</b>	<b>92</b>	<b>92</b>	<b>122</b>	<b>122</b>	<b>129</b>	<b>129</b>	<b>106</b>	<b>106</b>



TABLE No. 7—Continued  
AGE AT ADMISSION AND PRINCIPAL PSYCHOSES

Psychoses	40 to 44		45 to 49		50 to 54		55 to 59		60 to 64		65 to 69		70 and over		Unascertained M. F. T.
	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	
1. Traumatic	8	1	6	1	1	1	2	2	3	3	7	7	8	8	1
2. Senile	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3. Cerebral Arteriosclerosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4. Cerebral Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5. General Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6. With Cerebral Syphilis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7. Huntington's Chorea	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8. With Brain Tumour	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9. With Other Brain Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10. Alcoholic	2	2	1	1	3	3	3	3	3	3	3	3	3	3	3
11. Due to Drugs	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
12. With Pellagra	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
13. Other Somatic Diseases	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7
14. Manic Depressive	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7
15. Involuntional Melancholia	36	36	28	28	16	16	16	16	16	16	16	16	16	16	16
16. Schizophrenia	14	14	8	8	19	19	19	19	19	19	19	19	19	19	19
17. Paranoia and Paranoid Conditions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18. Epileptic Psychoses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19. Psychoneuroses and Neuroses	7	7	2	2	2	2	2	2	2	2	2	2	2	2	2
20. Psychopathic Personality	7	7	2	2	2	2	2	2	2	2	2	2	2	2	2
21. With Mental Deficiency	7	7	2	2	2	2	2	2	2	2	2	2	2	2	2
22. Undiagnosed	7	7	2	2	2	2	2	2	2	2	2	2	2	2	2
Without Psychoses:															
A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
E	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3
F															
D															
Total	78	78	55	55	54	54	30	30	24	24	12	12	13	13	7



TABLE No. 8  
DEGREE OF EDUCATION OF FIRST ADMISSIONS, BY PRINCIPAL PSYCHOSES

Psychoses	Total		Illiterate		Read and Writes		Common School		High School		University		Unascertained	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	23	17	2	4	8	8	10	10	3	3				
2. Senile	17	33	4	2	4	4	9	9						
3. Cerebral Arteriosclerosis	33	1	2	1	9	1	20	20	2	2				
4. General Paralysis	1	1			1	1	1	1						
5. With Cerebral Syphilis	1	1												
6. With Huntington's Chorea	1	1												
7. With Brain Tumour	8	4	1	1			5	5	2	2				
8. With Other Brain Diseases	4	1			1	1	1	1	1	1	1	1		
9. Alcoholic														
10. Due to Drugs														
11. With Pellagra														
12. With Other Somatic Diseases	1	31					1	1						
13. Manic Depressive	31	2			5	5	23	23	2	2			1	1
14. Involutional Melancholia	2	423					1	1	1	1				
15. Schizophrenia	423	66	24	4	144	144	199	199	26	26	6	6	24	24
16. Paranoia and Paranoid Conditions	66	18	4	4	21	21	30	30	6	6	1	1	4	4
17. Epileptic Psychoses	18	1	4	1	8	8	6	6						
18. Psychoneuroses and Neuroses	1	50												
19. Psychopathic Personality	1	8			1	1								
20. With Mental Deficiency	50	8	8	8	17	17	21	21	2	2			2	2
21. Undiagnosed Psychoses														
22. Without Psychoses:														
A	6	6	3	3	2	2	1	1						
E	76	76	34	34	28	28	12	12	1	1			1	1
F	3	3			1	1	2	2						
D	2	2					1	1	1	1				
Total	766	766	86	86	250	250	343	343	47	47	8	8	32	32





TABLE No. 10  
ECONOMIC CONDITION OF FIRST ADMISSIONS, BY PRINCIPAL PSYCHOSES

Psychoses	Total		Dependent		Living on Daily Earnings		Comfortable (ample for 4 months)		Unascertained	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	23	23	9	9	8	8	4	4	2	2
2. Senile	17	17	5	5	8	8	4	4	1	1
3. Cerebral Arteriosclerosis	33	33	10	10	14	14	8	8	1	1
4. General Paralysis	1	1	1	1	1	1	1	1	1	1
5. With Cerebral Syphilis	1	1	1	1	1	1	1	1	1	1
6. With Huntington's Chorea	1	1	1	1	1	1	1	1	1	1
7. With Brain Tumour	8	8	5	5	3	3	1	1	1	1
8. With Other Brain Diseases	4	4	2	2	1	1	1	1	1	1
9. Alcoholic	4	4	2	2	1	1	1	1	1	1
10. Due to Drugs	1	1	1	1	1	1	1	1	1	1
11. With Pellagra	1	1	1	1	1	1	1	1	1	1
12. With Other Somatic Diseases	31	31	11	11	14	14	6	6	1	1
13. Manic Depressive	2	2	1	1	1	1	1	1	1	1
14. Involitional Melancholia	423	423	128	128	241	241	35	35	19	19
15. Schizophrenia	66	66	19	19	40	40	7	7	1	1
16. Paranoia and Paranoid Conditions	18	18	13	13	5	5	1	1	1	1
17. Epileptic Psychoses	1	1	1	1	1	1	1	1	1	1
18. Psychoneuroses and Neuroses	50	50	23	23	23	23	3	3	1	1
19. Psychopathic Personality	1	1	1	1	1	1	1	1	1	1
20. With Mental Deficiency	6	6	3	3	2	2	1	1	1	1
21. Undiagnosed	76	76	66	66	7	7	2	2	1	1
22. Without Psychoses:	3	3	1	1	2	2	1	1	1	1
A	3	3	1	1	2	2	1	1	1	1
E	2	2	2	2	1	1	1	1	1	1
F	2	2	2	2	1	1	1	1	1	1
D	2	2	2	2	1	1	1	1	1	1
Total	766	766	301	301	369	369	72	72	24	24

TABLE No. 11  
USE OF ALCOHOL BY FIRST ADMISSIONS, BY PRINCIPAL PSYCHOSES

Psychoses	Total		Abstinent		Temperate		Intemperate		Unascertained	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	T.	T.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	23	10	10	10	10	10	2	2	1	1
2. Senile	17	3	3	12	12	1	1	1	1	1
3. Cerebral Arteriosclerosis	33	8	8	20	20	4	4	1	1	1
4. General Paralysis	1	1	1	1	1	1	1	1	1	1
5. Cerebral Syphilis	1	1	1	1	1	1	1	1	1	1
6. Huntington's Chorea	1	1	1	1	1	1	1	1	1	1
7. With Brain Tumour	8	8	1	6	6	6	4	4	1	1
8. With Other Brain Diseases	4	4	4	4	4	4	4	4	1	1
9. Alcoholic	1	1	1	1	1	1	1	1	1	1
10. Due to Drugs	1	1	1	1	1	1	1	1	1	1
11. With Pellagra	31	7	7	20	20	3	3	1	1	1
12. With Other Somatic Diseases	2	2	2	1	1	1	1	1	1	1
13. Manic Depressive	423	69	69	273	273	32	32	49	49	49
14. Involutional Melancholia	66	8	8	39	39	11	11	8	8	8
15. Schizophrenia	18	8	8	6	6	1	1	3	3	3
16. Paranoia and Paranoid Conditions	1	1	1	1	1	1	1	1	1	1
17. Epileptic Psychoses	50	15	15	29	29	4	4	2	2	2
18. Psychoneuroses and Neuroses	1	1	1	1	1	1	1	1	1	1
19. Psychopathic Personality	6	6	3	3	3	3	3	3	5	5
20. With Mental Deficiency	76	52	52	19	19	2	2	5	5	5
21. Undiagnosed	3	3	1	1	1	1	1	1	1	1
22. Without Psychoses:	2	2	1	1	1	1	1	1	1	1
A	6	6	3	3	3	3	3	3	5	5
E	76	76	52	19	19	2	2	5	5	5
F	3	3	1	1	1	1	1	1	1	1
D	2	2	1	1	1	1	1	1	1	1
<b>Total</b>	<b>766</b>	<b>766</b>	<b>190</b>	<b>439</b>	<b>439</b>	<b>65</b>	<b>65</b>	<b>72</b>	<b>72</b>	<b>72</b>



TABLE No. 12  
MARITAL CONDITION OF FIRST ADMISSIONS, BY PRINCIPAL PSYCHOSES

Psychoses	Total		Single		Married		Widowed		Separated		Divorced		Unascertained	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	23	17	8	8	8	8	6	6	1	1	1	1	1	1
2. Senile	17	33	8	8	5	5	3	3	1	1	1	1	1	1
3. Cerebral Arteriosclerosis	33	1	12	12	19	19	1	1	1	1	1	1	1	1
4. General Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5. Cerebral Syphilis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6. Huntington's Chorea	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7. With Brain Tumour	8	4	4	4	3	3	1	1	1	1	1	1	1	1
8. With Other Brain Diseases	4	4	2	2	1	1	1	1	1	1	1	1	1	1
9. Alcoholic	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10. Due to Drugs	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11. With Pellagra	31	2	10	10	15	15	3	3	1	1	3	3	1	1
12. With Somatic Diseases	2	2	1	1	1	1	1	1	1	1	1	1	1	1
13. Manic Depressive	423	66	335	335	63	63	7	7	3	3	6	6	9	9
14. Involuntional Melancholia	18	18	13	13	4	4	1	1	2	2	2	2	2	2
15. Schizophrenia	66	18	36	36	26	26	1	1	1	1	1	1	1	1
16. Paranoia and Paranoid Conditions	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17. Epileptic Psychoses	50	50	46	46	3	3	1	1	1	1	1	1	1	1
18. Psychoneuroses and Neuroses	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19. Psychopathic Personality	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20. Mental Deficiency	50	50	46	46	3	3	1	1	1	1	1	1	1	1
21. Undiagnosed	6	6	5	5	1	1	1	1	1	1	1	1	1	1
22. Without Psychoses:	76	76	74	74	2	2	2	2	1	1	1	1	1	1
A	3	3	2	2	1	1	1	1	1	1	1	1	1	1
E	2	2	1	1	1	1	1	1	1	1	1	1	1	1
F	2	2	1	1	1	1	1	1	1	1	1	1	1	1
D	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Total	766	766	558	558	155	155	24	24	8	8	12	12	9	9

TABLE No. 13  
INCREASE OF PATIENTS DURING THE YEAR, BY PRINCIPAL PSYCHOSES

Psychoses	Total		First Admission		Re-admission		Transfer	
	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	.....	.....	.....	.....	.....	.....	.....	.....
2. Senile	.....	.....	.....	.....	.....	.....	.....	.....
3. Cerebral Arteriosclerosis	.....	.....	.....	.....	.....	.....	.....	.....
4. General Paralysis	.....	.....	.....	.....	.....	.....	.....	.....
5. Cerebral Syphilis	.....	.....	.....	.....	.....	.....	.....	.....
6. Huntington's Chorea	.....	.....	.....	.....	.....	.....	.....	.....
7. With Brain Tumour	.....	.....	.....	.....	.....	.....	.....	.....
8. With other Brain Diseases	.....	.....	.....	.....	.....	.....	.....	.....
9. Alcoholic	.....	.....	.....	.....	.....	.....	.....	.....
10. Due to Drugs	.....	.....	.....	.....	.....	.....	.....	.....
11. With Pellagra	.....	.....	.....	.....	.....	.....	.....	.....
12. With other Somatic Diseases	.....	.....	.....	.....	.....	.....	.....	.....
13. Manic-Depressive	.....	.....	.....	.....	.....	.....	.....	.....
14. Involutional Melancholia	.....	.....	.....	.....	.....	.....	.....	.....
15. Schizophrenia	.....	.....	.....	.....	.....	.....	.....	.....
16. Paranoia and Paranoid Conditions	.....	.....	.....	.....	.....	.....	.....	.....
17. Epileptic Psychoses	.....	.....	.....	.....	.....	.....	.....	.....
18. Psychoneuroses and Neuroses	.....	.....	.....	.....	.....	.....	.....	.....
19. Psychopathic Personality	.....	.....	.....	.....	.....	.....	.....	.....
20. Mental Deficiency	.....	.....	.....	.....	.....	.....	.....	.....
21. Undiagnosed	.....	.....	.....	.....	.....	.....	.....	.....
22. Without Psychoses:	.....	.....	.....	.....	.....	.....	.....	.....
A	.....	.....	.....	.....	.....	.....	.....	.....
E	.....	.....	.....	.....	.....	.....	.....	.....
F	.....	.....	.....	.....	.....	.....	.....	.....
D	.....	.....	.....	.....	.....	.....	.....	.....
<b>Total</b>	<b>60</b>	<b>60</b>	<b>40</b>	<b>40</b>	<b>5</b>	<b>5</b>	<b>15</b>	<b>15</b>



TABLE No. 14  
DECREASE OF PATIENTS DURING THE YEAR, BY PRINCIPAL PSYCHOSES

Psychoses	Total		Discharged				Unimproved		Transfer		Death	
	M. F. T.		Recovered		Improved		M. F. T.		M. F. T.		M. F. T.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Traumatic	15	15			2	2	1	1			12	12
2. Senile	5	5					1	1			4	4
3. Cerebral Arteriosclerosis	4	4							1	1	3	3
4. General Paralysis	1	1									1	1
5. Cerebral Syphilis												
6. Huntington's Chorea	1	1									1	1
7. With Brain Tumour												
8. With other Brain Diseases	1	1			1	1						
9. Alcoholic												
10. Due to Drugs												
11. With Pellagra												
12. With other Somatic Diseases	1	1										
13. Manic-Depressive	11	11			4	4	4	4	1	1	6	6
14. Involutional Melancholia	5	5			2	2					3	3
15. Schizophrenia	3	3			1	1					3	3
16. Paranoia and Paranoid Conditions	2	2									2	2
17. Epileptic Psychoses	1	1									1	1
18. Psychoneuroses and Neuroses												
19. Psychopathic Personality	2	2									2	2
20. Mental Deficiency	1	1									1	1
21. Undiagnosed												
22. Without Psychoses:												
A	12	12			2	8	1	1			3	3
E	1	1			1	1						
F												
D												
Total	63	63			19	19	3	3	2	2	39	39

TABLE No. 15  
CAUSE OF DEATH, BY PRINCIPAL PSYCHOSES, WITH AGE AT DEATH AND DURATION OF HOSPITAL LIFE

Psychoses	M.	F.	Total	T.	Cause of Death	Age			Hospital Life	
						Years	Months	Days	Years	Months
2. Senile	12	.....	12	12	Bronchopneumonia (following fracture)	70	2	6	8	8
					Prostatic hypertrophy	85	11	3	8	8
					Pronchopneumonia	89	1	11	.....	.....
					Bronchopneumonia (following fracture)	79	4	.....	.....	.....
					Gangrene, right foot	86	.....	5	5	5
					Cerebral Haemorrhage (apoplexy)	76	1	3	23	23
					Gangrene, left foot	79	.....	4	.....	.....
					Tuberculosis of the lungs, Senile Dementia	70	19	2	14	14
					Arteriosclerosis	84	3	9	6	6
					lobar Pneumonia	71	.....	3	8	8
					Endocarditis with Senile Dementia	89	.....	1	8	8
					Pneumonia	66	.....	6	14	14
					Cerebral Haemorrhage	73	3	9	.....	.....
					Cerebral Haemorrhage	70	4	6	.....	.....
					Generalized Arteriosclerosis and Senile Dementia	93	11	11	18	18
					Arteriosclerosis	73	10	6	11	11
					G.P.I.—fracture; hypostatic congestion	64	17	8	.....	.....
					General Paresis of the Insane	58	15	9	8	8
					Lobar Pneumonia, G.P. of the Insane	78	9	9	.....	.....
					Huntington's Chorea	63	9	7	.....	.....
					Bronchopneumonia bilateral	57	21	.....	.....	.....
					Chronic Nephritis, right sided Cardiac Decomp.	47	26	1	22	22
					Tuberculosis (Pyonephrosis) right kidney	38	19	6	.....	.....
					Myocardial Flerosis, Aortic insufficiency	59	26	7	.....	.....
					Tuberculosis of the lungs	39	6	6	17	17
					Cerebral Apoplexy	58	26	2	12	12
					Peritonitis	38	9	2	.....	.....
					Gangrene of right foot, Senile and Neurotrophria	74	18	9	.....	.....
					Pulmonary Tuberculosis	54	11	4	15	15
					Suicide by hanging	29	3	4	5	5
					Bronchopneumonia	60	23	2	.....	.....
					Lobar Pneumonia	68	4	5	17	17
					Epilepsy	57	24	.....	.....	.....
					Carcinoma of the Colon	54	18	.....	.....	.....
					Tuberculosis of the lungs	26	5	5	8	8
					Obstruction of the third part of the Duodenum	38	.....	.....	.....	.....
					Progressive Muscular Dystrophy	36	.....	3	5	5
					Tuberculosis of the lungs	34	17	2	18	18
					Acute Bronchitis	49	23	7	15	15
					Total	39	.....	39	.....	39



TABLE No. 16  
RELIGION OF PATIENTS IN RESIDENCE

	Males	Females	Total
Baptists .....	26	.....	26
Episcopalians .....	71	.....	71
Jews .....	9	.....	9
Presbyterians .....	75	.....	75
Roman Catholics .....	176	.....	176
United Church .....	71	.....	71
Other Denominations .....	282	.....	282
Unascertained .....	56	.....	56
Total .....	766	.....	766

TABLE No. 17  
OCCUPATION OF PATIENTS IN RESIDENCE

	Males	Females	Total
Professional .....	3	.....	3
Commercial .....	23	.....	23
Agricultural .....	247	.....	247
Mechanics, Outdoor .....	15	.....	15
Mechanics, Sedentary .....	41	.....	41
Domestic Service .....	4	.....	4
Education .....	4	.....	4
Miners, Engineers, Carpenters, Painters .....	49	.....	49
Laborers .....	279	.....	279
No Occupation .....	77	.....	77
Unascertained .....	24	.....	24
Total .....	766	.....	766

## Provincial Training School, Red Deer, Alberta

(D. L. McCULLOUGH, B.A. (Sen. Mod.), M.B., D.P.H., D.P.M.,  
*Medical Superintendent*)

### CHANGES IN POPULATION

On January 1st, 1940, there were 215 patients (112 male, 103 female) in residence, and on December 31st, 1940, there were 216 (113 male, 103 female). Table X shows 40% of these to be totally helpless, either physically or mentally. Twenty per cent. are epileptic, many of these in the first group. And Mongols form 7% of our total population.

#### *Additions.*

Admissions during the year totalled 14 (7 male, 7 female). Twelve of these were first admissions, 9 coming directly from their own homes and 3 from Ponoka following sexual sterilization.

One of the two re-admissions was a high grade girl who was adjusting very well, but had to return on account of a tubercular kidney, which was later removed. The other was a very low grade imbecile who could no longer be looked after at home. All the admissions and re-admissions were voluntary, with 1 exception. Seven were morons, 5 imbeciles and 2 idiots, both infirm cases.

#### *Separations.*

Outgoing patients totalled 13 (6 male, 7 female). Of these, 10 (3 male, 7 female) were discharged and 3 (all males) died. Of the boys discharged, 1 was removed by his parents a week after admission, 1 returned home after a month's residence as agreed upon before admission, and 1 went out to farm work. This latter boy is adjusting well, and promises to become permanently re-established outside. Of the girls discharged, 1 returned to her home greatly improved and 6 went out to work. One of these returned later on account of her health (kidney condition already mentioned), 1 is likely to be returned for enuresis as on two previous occasions, but the other 4 give promise of making good and being permanently paroled.

There were no transfers to other institutions.

All 3 patients who died were very debilitated, infirm idiots. One had been 18 years in the Training School.

#### *Applications for Admission, etc.*

During the year, 33 (22 male, 11 female) applications for admission were received, bringing the number on the active waiting list (Table XI) at the end of the year, after deletions because of death, admission to other institutions and outdating, to 241 names (133 male, 108 female).

In addition, 37 (22 male, 15 female) mentally defective suspects were reported, bringing the number of known suspects (Table XII) to 332 (176 male, 147 female).



There were also 193 mental defectives (120 male, 73 female) not insane in Ponoka and Oliver at the end of the year.

This brings the total of definitely known defectives in the Province to 982 (542 male, 431 female), or roughly one-sixth of the estimated total.

These figures summarized in tabular form are:

216 (113M, 103F) in Provincial Training School,
241 (133M, 108F) on waiting lists,
332 (176M, 147F) on the "suspect" list, and
193 (120M, 73F) in other Institutions.
<hr/>
982 (542M, 431F)

### Ex-Patients.

Contact was maintained throughout the year with a number of discharged patients. The following tabulation may be of interest:

	Male		Female
Army .....	4	Married .....	13
Self-supporting .....	7	Self-supporting .....	18
At Home:		At Home:	
Helpful .....	4	Helpful .....	6
At school .....	1	At school .....	2
Cared for .....	2	Cared for .....	2
Delinquent .....	2	Delinquent .....	2
In other Provincial Institutions .....	15	In other Provincial Institutions .....	10
In Penitentiary or Gaol .....	2		
School for Deaf .....	1		
	<hr/>		<hr/>
	36		51

Adding those married to the two self-supporting groups, 38, or about 44% out of the total of 87 patients, are acquitting themselves creditably. A majority of those listed as in other Provincial institutions were only moved there to make room for younger children, not because they were troublesome or psychotic, as some of this group were. All of the above patients who were old enough had been sterilized before discharge.

### HEALTH OF PATIENTS AND STAFF

In addition to the usual minor ailments and accidents occurring throughout the year, 1 patient through carelessness got her hand and wrist very severely cut and bruised in a washing machine in the laundry, another broke both bones in her leg tobogganing, and 1 had a kidney removed for tuberculosis. Two widespread and quite severe epidemics of diarrhoea occurred—one in July and one in October—causing 1 death in a debilitated, infirm, cripple. On the 26th of November, in the course of a few hours, 19 boys on the third floor were prostrated with very high temperatures and other symptoms of influenza. Eight days later the peak of the epidemic was reached, with 78 patients (35% of the patient population) and 6 of the staff in bed. For several weeks the whole routine of the institution was disrupted—the schoolrooms had to be closed, the low grade groups left on the wards, occupational classes and evening recreational groups abandoned, lectures and practical nursing demonstrations suspended, teachers and sewing room staff put to help on the wards, and a number of additional staff engaged. The response of both patients and staff to this very trying situation was deserving of the highest praise.

Dr. Ross attended in January, May and September, and carried out 94 prophylactic treatments, 77 fillings, and 37 extractions.

There were no operations for tonsils and adenoids, as it was not possible to secure Dr. Wannop's services.



## EUGENICS

There were no cases presented during 1940, but 4 cases presented in 1939 were sent to the Provincial Mental Hospital, Ponoka, for operation. Table XIII shows that 23% of all patients in residence have been sterilized.

## PATIENT ACTIVITIES

Most of the routine activities, healthful, recreational, educational, socializing and character-forming were maintained throughout the year with but slight variation from previous years in the numbers of the various groups. The special events were the New Year party, Patrick's Day dance, Red Deer Fair, Sports Day and weiner roast, Summer camp (117 boys and girls in eight groups for a week each), Hallowe'en Masquerade dance, Christmas concert and Christmas trees. The routine activities, in addition to the work on the wards, in the various departments, round the grounds and on the farm, were sense training and grade school classes, occupational therapy groups, physical training classes, scouts and guides, 16 m.m. picture shows, Church and Sunday school. For various reasons, it was not possible to hold the usual carpentry classes and cooking classes. Displays of occupational work were sent, as usual, to the Edmonton Exhibition and Red Deer Fair, and two sales of work were held at the Training School. One of these was attended by nine members of the Mirror Women's Institute, who also saw through the buildings. The physical training classes were run by Miss M. Hansen, instructress under the Dominion Youth Training Scheme. Three of the girls travelled to Olds and took part in the district display. Walks, hikes, ball games, skating, tobogganning, hockey practices and a few matches were engaged in according to season. Visits by Kenneth Spencer, noted singer, and a Negro Quartet, all of whom volunteered their services without charge, greatly delighted both patients and staff.

Sixty-six patients were allowed home for holidays varying from a few days to a month. A few were allowed out on working holidays, as a change from institutional routine and an introduction to outside life. Four boys worked steadily on a threshing crew, and were well thought of by their employer and fellow workers. Portion of their earnings were credited to the municipal districts paying for their maintenance.

For the first time, a number of the farm boys were taken to the Spring horse sale and to the stock displays at the Red Deer Fair by Mr. Farrow, the farmer. The building and opening of the Army Training Centre in close proximity to and in full view of the Training School excited much interest, particularly amongst the boys.

## STAFF CHANGES AND ACTIVITIES

Changes in the permanent staff—7 resignations, a transfer and a dismissal—were not so numerous as in the previous year. Mr. Elgood, Bursar for 20 years, finally resigned owing to ill-health. His loyal service and wide experience will be a great loss to the Training School. Mr. Moyse, senior attendant, resigned after 10 years of service to rejoin the army. Miss Hug, head cook, resigned to get married after 9½ years of service. Other resignations included the assistant matron, a charge nurse and a student nurse. One laundry maid was dismissed. One nurse, a psychiatric graduate,



transferred to the staff at Ponoka, preferring that type of work. One attendant left to go back to college.

In May, 5 nurses passed their senior year examinations and will graduate when they have completed their three years on the nursing staff. Three nurses and one attendant passed their intermediate year examinations. Five nurses and three attendants passed their junior year examinations.

In connection with the war effort, 4 of the female staff took the motor mechanics course of the W.A.S.C., 11 completed the St. John Ambulance first aid course, and 6 the home nursing course.

The local branch of the C.S.A. of A. was active throughout the year attending to the interests and promoting the social activities of the Training School staff and its outside members.

And again I am able to record with gratitude the sincere interest of the rank and file of the staff in promoting the happiness of the patients in their off duty time, and entirely voluntarily.

#### INSTITUTIONAL PROGRESS

##### *Construction and Maintenance.*

The upper floor of the new infirmary building, the inside of which had been left a mere shell the previous fall, was fully completed during the summer. Furnishings and equipment continue to arrive, but there is still much to get and to be done before this unit can be opened.

Poles were erected and a 2,300 volt line run from the power house to the Gaetz place to provide lighting and power for the water pump and feed grinder. The outside and inside of the house were painted, the roof stained, the barns and outhouses painted, a new and larger septic tank installed and various inside alterations completed.

The lighting of the main skating rink used by the staff and the larger boys was greatly improved by the erection of poles and wires and the installation of a number of lights, an improvement greatly appreciated by all.

The schoolroom ceilings were replastered, as the paster had fallen off in large sections.

Much plastering was also necessary in the main building and elsewhere. This becomes a bigger item every year.

Small diet kitchens were installed on the fourth floor and in the cottage for the convenience of the staff.

Much time was spent by the maintenance staff unpacking new furniture and equipment, sorting out, matching and putting up beds, making cupboards and other utility articles, fixing and fitting locks, fitting storm sash, making and putting in doors, etc., etc.

##### *Grounds.*

No noteworthy changes were made during the year, but the general appearance of the grounds was well maintained, and the flower beds gained much praise and attention from the public.

##### *Vegetable Garden.*

A very favourable season gave uniformly good results with yields well above average, in some cases more than double the previous years, as a glance at Table XVII will show—e.g., 60 tons of potatoes as against 16 (1939 was not a good year for comparison;



our average is about 45 to 50 tons); 14 tons of carrots as against  $6\frac{1}{2}$ ;  $5\frac{1}{2}$  tons of parsnips as against  $2\frac{1}{2}$ ;  $3\frac{1}{2}$  tons of beets as against  $2\frac{1}{2}$ . Eight acres were sown to potatoes and 4 to small vegetables, giving an average yield for the whole crop of potatoes and vegetables of  $8\frac{3}{4}$  tons per acre. Two tons of parsnips and 2 tons of carrots were donated to the Bureau of Relief in the Fall. We had difficulty in storing the balance, and the constant picking over of potatoes, etc., in the roothouse certainly will keep the boys of that group busy all winter and spring.

#### *Farm.*

In April, when the leases arranged by Mrs. J. J. Gaetz ended we began operating the Gaetz farm. This gave us 110 acres of cleared land in addition to our own 80 acres. Forty acres of this total was summer fallowed. The yields from the remaining 150 acres are given in Table XVII. These yields will undoubtedly improve when the land has been rested and cleaned and a regular rotation of crops laid down. Wheat yields throughout the district were quite disappointing. Like many others, we had a nice stand and good straw, but the heads had not filled out.

In the spring, anaemia carried off about 75% of the young pigs—three whole litters and part of a fourth. In spite of this, we had a successful year, raising 5,103 lbs. of dressed pork for our own use, selling 35 pigs (19 selects) for \$558.85, and we still had 40 on hand at the end of this year. Our boar, though pedigreed, not being satisfactory, was disposed of and a new one bought.

During the year, 13 cows were bought (3 Ayrshires, 2 Holsteins and 7 Jerseys) and a registered Jersey bull, bringing out herd at the end of the year to 31 head of cattle, 20 of them milking. Milk production for the year was 5,202.7 lbs., a substantial increase over the previous year (Table XVII). This is still far short of what it should be. The herd was vaccinated against blackleg, tuberculin tested and found tubercle-free, but unfortunately several reactors to the Bang test were found in November. All milk from the herd, however, is pasteurized, and the infected animals are isolated for the present.

Work horses were increased to 13 by the purchase of three in the Spring. All were vaccinated against equine encephalitis by the local veterinary.

In the Spring 300 day-old, sexed, White Leghorn chicks were purchased. Egg production for the year was 1,440 as against 1,670 dozen the previous year. Fifty birds were killed for table use at the end of the year.

We were rather unfortunate with our turkeys.

On the whole, we have had a very successful year of farming, especially from the standpoint of training boys for discharge. The boys did practically all the farm work (under supervision, of course)—the spring seeding, the summer fallowing, the fall cutting and stooking, and helped with the threshing and getting in the crops. They also did the usual chores—the milking, feeding of hogs, looking after the stables and barns, etc., repaired one mile of fencing and cleared four acres of land, from which they cut 30 loads of poles. Four of the boys, when our own work was done, were hired on a threshing crew and gave much satisfaction whilst gaining experience. Part of their earnings were applied against their maintenance at the Training School.



The opening of the Gaetz building early in the coming year should be a further stimulus to the boys and greatly facilitate their training.

#### *Laundry and Sewing Room.*

More space and machinery are needed in the laundry, especially driers, and should be provided before the new units are opened and our beds increased from 217 to 285. Even without this increase, the Chief Engineer reports the softened water heater is not satisfactory, and the problem urgent, "due chiefly to increased load, which is almost 46% greater than two years ago." As already pointed out, the need for better ventilation, especially during the warm summer weather, is also urgent.

#### *Kitchen, Pantry and Dining Room.*

Both sections were active and did faithful work all year without any noteworthy changes.

#### *Extra-Institutional Activities.*

These also remained much as in recent years. The services of the Medical Superintendent were made use of by local practitioners, the police magistrate, and the local Chief of Police in connection with a number of psychiatric cases.

A number of cases of mental deficiency were referred to the Red Deer Guidance Clinics and seen there along with the regular clinic staff.

Addresses on psychiatric and health subjects were given to several local clubs and to an interested group of women in Calgary during the Alberta Council for Family and Child Welfare week, held there in June.

Twenty-five of the Ponoka post-graduate nurses were shown through the Training School, and illustrative cases of the various types of mental deficiency were shown them.

Dr. Smith's class in psychology, a very large group, came down from the University and were similarly entertained.

In October, Dr. Griffin of the Canadian National Committee for Mental Hygiene, called in, showed some very interesting films of the Manitoba Training School for Defectives and of Dr. Kelcher's work in the States, and brought much helpful encouragement.

In November, the official Board of Visitors made their annual inspection of the Training School, and thoroughly investigated all departments.

Many visitors have passed through—singly, in pairs and in large groups—and are always welcomed.

A number of official visits were also paid by Dr. Bow, Mr. Stacey, Mr. Patterson, Mr. Blaine, Mrs. Pardee, Provincial Commissioner in connection with the Guide work, and Miss Sanderson in connection with the physical training classes.

### RECOMMENDATIONS

Our requirements are many, and each month adds urgency to most of them, but additional laundry space and equipment easily come first. Following that, a combined roothouse, carpenter shop and paint shop, as previously outlined, to relieve congestion both there and in the boiler room and to accommodate badly needed carpentry classes for the boys. Water should be piped over to the



Gaetz house to give an adequate supply and proper fire protection for both house and barns. Other needs are a Nurses' Home, in fairness to the staff, who should be further away from the patients, and to accommodate the increased numbers that will be necessary for the new buildings; a low-grade patients' pavilion with recreation room; a milk house and pasteurizer; more storeroom and refrigerator space; an addition to the greenhouse; another tubular fire escape for the main building; a small mortuary; a cottage or house for the farmer beside the Gaetz building; an elevator in the main building; and last, but not least, an automatic fire alarm signalling system. Detailed reasons for most of these have been given in previous annual reports and elsewhere.

### THANKS

Once again I would like to express warm appreciation of the loyal work of the staff during a very trying year; of the contribution made to the Training School by the doctors of Red Deer, who have, without exception, given freely of their time and effort in lecturing to the nurses; to the staff of the Red Deer Guidance Clinic and the Red Deer Health Unit for their ever ready assistance and co-operation; to the Red Deer Fair Board for their generosity to the patients; the Red Deer Rotary Club; the M.D. of Bigstone No. 450 and several individuals for gifts for the Christmas trees; to Mr. Stacey, Mr. Patterson, Mr. Kibblewhite, and more especially to Dr. M. R. Bow for their frequent visits and helpful co-operation at all times.

TABLE No. 1  
MOVEMENT OF FEEBLE-MINDED POPULATION

	Male	Female	Total
Defective on books of Institution at January 1st, 1940: In the Provincial Training School, Red Deer, Alberta .....	112	103	215
<b>ADMISSIONS:</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
1. First Admissions:			
Voluntary .....	6	2	8
Court commitment .....	1	1	2
2. Re-admissions .....	1	1	2
3. Transfers .....	—	3	3
Total number of admissions .....	7	7	14
Total number of defectives on the books during 1940...	119	110	229
<b>OUTGOING:</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
1. Paroles .....	3	7	10
2. Transfers—P.M.H., Ponoka .....	—	—	—
3. Deaths .....	3	—	3
Total number of outgoing .....	6	7	13
Defectives on books of the institution at Dec. 31, 1940...	113	103	216

TABLE No. 2  
RESPONSIBILITY FOR MAINTENANCE OF PATIENTS IN RESIDENCE  
AS AT DECEMBER 31, 1940

	In Residence	Percentage
Wards of the Province of Alberta .....	30	13.9
Wards of the Municipal Districts of Alberta .....	148	68.5
Wards of the Department of Municipal Affairs of Alberta .....	31	14.4
Private Cases in residence .....	3	1.4
Wards of Department of Pensions and Health, Ottawa .....	2	.9
Wards of the Dominion Government .....	2	.9
Total .....	216	



TABLE No. 3  
MENTAL STATUS OF ADMISSIONS, RE-ADMISSIONS AND TRANSFERS

Mental Status	First Admissions			Re-admissions			Transfers			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Idiot .....	2		2							2		2
Imbecile .....	2	2	4	1		1				3	2	5
Moron .....	2	1	3		1	1		3	3	2	5	7
Borderline .....												
Dull .....												
Totals .....	6	3	9	1	1	2		3	3	7	7	14

TABLE No. 4  
NATIVITY OF ADMISSIONS AND OF PARENTS OF ADMISSIONS

Nativity	Patients			Male Patients			Female Patients		
	Male	Female	Total	Fathers	Mothers	Total	Fathers	Mothers	Total
Alberta .....	6	6	12					1	1
Other Provinces .....	1		1	2	1	3			
England .....				1	2	3	2	2	4
United States .....		1	1	3	3	6	1	2	3
Italy .....							1	1	2
Poland .....				1	1	2			
Finland .....							1		1
Unascertained .....							2	1	3
Totals .....	7	7	14	7	7	14	7	7	14

TABLE No. 5  
AGE OF ADMISSIONS CLASSIFIED WITH REFERENCE TO MENTAL STATUS

Age Group	Idiot			Imbecile			Moron			Borderline			Dull			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0-4 .....	1		1													1		1
5-9 .....				1		1										1		1
10-14 .....	1		1				2	2								3		3
15-19 .....				1	2	3	4	4								1	6	7
20-24 .....				1		1	1	1								1	1	2
Totals .....	2		2	3	2	5	2	5	7							7	7	14

TABLE No. 6  
ENVIRONMENT OF ADMISSIONS

Environment	Idiot			Imbecile			Moron			Borderline			Dull		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Rural .....	1		1				1	3	4						
Urban .....	1		1	3	2	5	1	2	3						
Totals .....	2		2	3	2	5	2	5	7						

TABLE No. 7  
RELIGION OF ADMISSIONS

Denominations	Idiot			Imbecile			Moron			Borderline			Dull		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
United Church .....	1		1					1	1						
Church of England .....				2	1	3		2	2						
Roman Catholic .....				1	1	2	1		1						
Greek Catholic .....															
Presbyterian .....								1	1						
Lutheran .....								1	1						
Pentecostal .....															
Baptist .....								1	1						
Unascertained .....	1		1												

TABLE No. 8  
ECONOMIC CONDITION OF FAMILIES OF ADMISSIONS CLASSIFIED WITH REFERENCE TO MENTAL STATUS

Economic Condition	Idiot			Imbecile			Moron			Borderline			Dull		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Comfortable .....															
Marginal .....	1		1	2	1	3	1	3	4						
Dependent .....	1		1	1	1	2	1	2	3						
Totals .....	2		2	3	2	5	2	5	7						

TABLE No. 9

OUTGOING PATIENTS CLASSIFIED WITH REFERENCE TO MENTAL STATUS  
AND CHRONOLOGICAL AGE

Age Group	Idiot			Imbecile			Moron			Borderline			Backward			Years in Residence
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
10-14						1			1							0/0/7
15-19				1	1											0/7
									1							3/2
									1							2/5
									1	3						2/9
20-24									1	1						3/9
				1	1											0/1
									1	1						3/11
25-29													1	1		9/6
																10/3-36/5

Causes of Deaths		Idiot			Imbecile			Moron			Borderline			Backward			Years in Residence
		M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Acute epidemic diarrhoea	1		1														18/5
Status Epilepticus	1		1														1/7
Pneumonia	1		1														0/4-20/4
Totals	3		3		1	1	2	1	5	6	1		1		1	1	56/9-56/9

TABLE No. 10

## SOME OF THE TYPES IN RESIDENCE

Classification	Idiot			Imbecile			Moron			Total			Percentage
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Infirmary Type:													
(a) Physically Helpless	13	7	20	4	3	7				17	10	27	12.00
(b) Mentally Helpless	42	5	47	9	5	14				51	10	61	28.36
M.D. and Epileptic	13	10	23	5	4	9	3	7	10	20	22	42	19.33
M.D. and Psychopathic				2	2	4				2	4	6	2.77
M.D. and Psychotic		2	2		1	1		1	1		4	4	1.8
Mongols and Mongoloid	2	1	3	8	4	12	1		1	11	5	16	7.4
Totals	69	26	95	28	19	47	4	10	14	101	55	156	71.66

TABLE No. 11

## APPLICATIONS AWAITING ADMISSION

Applications dated:	Male Female Total			Applications dated:	Male Female Total		
	Male	Female	Total		Male	Female	Total
1926 to 1930	5	8	13	1937	20	9	29
1931	3	2	5	1938	18	13	31
1932	1	2	3	1939	23	24	47
1933	1	2	3	1940	22	11	33
1934	8	10	18				
1935	16	10	26				
1936	16	17	33				
					133	108	241

TABLE No. 12

## KNOWN DEFECTIVES

Reported, 1929 to 1930	Male Female Total			Reported during:	Male Female Total		
	Male	Female	Total		Male	Female	Total
1931	16	6	24	1937	19	15	34
1932	5	6	11	1938	19	16	36
1933	7	11	18	1939	19	18	37
1934	4	11	19	1940	22	15	37
1935	10	7	18				
1936	17	7	24		176	147	332



## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 13  
EUGENICS SUMMARY

	Male	Female	Total
A.—Training School Cases:			
Presented and approved—P.T.S.	50	61	111
Presented and approved—Out-patients	1	1	2
Totals	51	62	113
Operations	39	59	98
Paroled, Transferred, etc.	26	37	63
In Residence	13	22	35
B.—Sterilized before Admission	2	33	35
Paroled, Transferred, etc.	1	19	20
In Residence	1	14	15
C.—Total in Residence	14	36	50
Percentage of Population—23.15.			

TABLE No. 14  
STAFF—DECEMBER 31, 1941

	Male	Female	Total
Medical Superintendents	1	...	1
Social Workers—Voluntary	1	...	1
Dentists—Part time	1	...	1
Teachers, Grade	...	1	1
Teachers, Special Subjects (both P.T.S. Grads.)	...	2	2
Bursars	1	...	1
Stenographers	...	2	2
Clerks	1	...	1
Kitchen Staff	...	3	3
Dining Room Staff	...	2	2
Laundry Staff	...	3	3
Sewing Room Staff	...	2	2
Gardeners	1	...	1
Farmers	1	...	1
Matrons	...	1	1
Assistant Matrons and Surgery Nurses	...	1	1
Night Supervisors	...	1	1
Other Registered Nurses	...	5	5
P.T.S. Graduate Nurses	...	11	17
Student Nurses	6	...	6
Ward Maids	...	2	2
Boiler Room Staff—D.P.W.	6	...	6
Maintenance Staff—D.P.W.	3	...	3
Totals	22	36	58

TABLE No. 15  
SEWING ROOM—SUMMARY OF ARTICLES MADE AND REPAIRED IN 1940

Articles	Quantity	Articles	Quantity
Aprons: Gingham, White, Burlap	203	Press Covers	24
Bags: Laundry, Sand	49	Pants	1
Bath Mats	14	Rompers	17
Bed Pan Covers	33	Slips	43
Bedjacket	146	Sheets	359
Bibs	59	Sheets, ironing	5
Blouse	17	Sleeves	41
Bloomers	355	Scarves, dresser	41
Brassieres	57	Serviettes	24
Chemises	153	Shorts	34
Coats: Barn, Barber, Butcher	5	Shawl, barber	1
Coverall	37	Towels: Dish 439, Huck 339	778
Curtains	65	Tray Cloths	8
Cloths: Table, Wash, Dish, Mangie	249	Table Centres	20
Covers: Dressing, Hot Water Bottle, Cushion, table end	34	Uniforms:	
Drapes	20	Guide	1
Dresses	265	Dining Room 3, Bloomers 3	7
Handkerchiefs	84	Dining Room Aprons 5, C. & C. 13, Caps	29
Garters	15	Nurses'	143
Garter Waists	7	Nurses' Caps	17
Kneelers	78	Miscellaneous	34
Mattress Covers	30		
Night Gowns	227	Total number of articles manufactured	4,794
Napkins	500	Total number of articles repaired	57,531
Pillow Covers	15		
Pillow Cases	451		

	1935	1936	1937	1938	1939
Manufactured	2,958	2,771	3,725	4,006	3,764
Repaired	43,272	52,597	56,491	57,569	53,399

TABLE No. 16

## LAUNDRY

	1936	1937	1938	1939	1940
Articles Laundered .....	339,790	360,881	362,222	351,923	335,244

TABLE No. 17

## FARM AND GARDEN PRODUCE FOR HOME CONSUMPTION

Product	1938	1939	1940
Beans .....	lbs. 720	655	1,775
Beets .....	lbs. 4,500	5,373	7,000
Barley .....	bus. 455	729	755
Cabbage .....	lbs. 5,500	6,674	4,000
Carrots .....	lbs. 11,000	12,456	28,000
Cauliflower .....	lbs. 1,024	.....	1,620
Celery .....	lbs. 810	895	800
Corn .....	lbs. ....	.....	800
Cucumbers .....	lbs. 341	483	180
Eggs .....	doz. 937	1,670	1,440
Greenfeed .....	bundles 4,500	16,000	12,000
Hay, Timothy .....	tons 19	9	10
Lettuce .....	lbs. 2,255	1,705	1,765
Milk .....	lbs. 27,752	46,673	75,202
Oats .....	bus. 795	360	2,310
Onions .....	lbs. 760	935	1,600
Parsnips .....	lbs. 5,130	4,891	11,000
Peas, green .....	lbs. 2,326	1,123	2,029
Pork, dressed .....	lbs. 3,924	5,233	5,103
Potatoes .....	lbs. 106,170	32,840	120,000
Poultry, dressed .....	lbs. 106	200	197
Radish .....	lbs. 555	337	600
Rhubarb .....	lbs. 3,143	1,868	2,415
Spinach .....	lbs. 1,430	1,330	1,275
Swiss Chard .....	lbs. 2,045	1,110	2,225
Sugar Beets .....	lbs. 10,800	.....	.....
Tomatoes .....	lbs. 316	.....	350
Turnips .....	lbs. 21,665	20,300	23,000
Veal .....	lbs. ....	260	405
Vegetable Marrow .....	lbs. 959	.....	500
Wheat .....	bus. 195	1,026	262

## ACREAGES

Barley .....	31	Summer fallow .....	40
Greenfeed .....	34	Potatoes .....	8
Hay .....	20	Vegetables .....	4
Oats .....	46	Wheat .....	10
Wild Land .....	310	Camp and Barns .....	14
Pasture, wild .....	10	Gardens and Lawn .....	10
Pasture, tame .....	70		

TABLE No. 18

## HOME CANNING

Varieties	Quantity
Vegetables:	
Beans .....	46 qts.
Carrots .....	9 qts.
Pickles .....	117 qts.
Fruits:	
Crab Apples .....	28 qts.
Currants .....	14 qts.
Raspberries .....	35 qts.
Rhubarb .....	134 qts.
Saskatoons .....	11 qts.
Jams .....	60 qts.
	<hr/> 454 qts.



## Division of Tuberculosis Control

(A. H. BAKER, B.A., M.B., *Medical Superintendent and Director of Division of Tuberculosis Control*)

The work of this Division has progress throughout another year. The splendid system of X-raying all recruits has brought to light a considerable number of young men who have tuberculosis, and who but for their effort to enlist would not have been diagnosed. The majority of these have only a small amount of disease which, fortunately for them, has been discovered early. Undoubtedly the need for sanatorium accommodation will increase as the war goes on, and the demand for anti-tuberculosis measures are even more urgent than previously.

The deaths throughout the Province showed an increase as compared with 1939. Three hundred and twenty-one were reported, an increase of 38 over last year. An increase was present both among the Indians and the non-Indians. However, while deaths increased, the actual number of new cases of tuberculosis diagnosed, outside of mental hospitals, was 408. Last year's figures were 441.

	White Deaths	Indian and Metis Deaths
1931 .....	218	152
1932 .....	241	163
1933 .....	203	171
1934 .....	180	140
1935 .....	177	136
1936 .....	194	189
1937 .....	174	160
1938 .....	143	133
1939 .....	121	162
1940 .....	145	176

It may be pointed out that the decrease in deaths among the white population is not apparent among those of Indian blood. It is once more apparent that there is urgent need for a more definite and aggressive campaign among the Indians. The predominating influence of the Indians in keeping up a high death rate is a matter of concern to both Federal and Provincial authorities.

Three out every 4 new cases of pulmonary tuberculosis were admitted to sanatorium for treatment by the end of 1940. Some of the others have since been admitted. Of those admitted, 60% had a positive sputum on admission. It is of utmost importance in a tuberculosis programme that infectious patients should be given institutional care, which is the only effective way of preventing spread of infection to the healthy.

### *Medical Treatment.*

All recognized methods of successfully treating this disease are in practice. The day has long since passed when tuberculosis treatment was limited to the so-called rest dietetic regime. At present a large proportion of patients have their chances of recovery increased and their periods of disablement shortened by various minor and major surgical procedures. Sanatorium care now means tuberculosis hospital care, combining both medicine and surgery.



*Institutional Treatment.*

Institutional care was given to 718 patients. The surgical service at the Central Alberta Sanatorium was successfully carried on. Limitations of staff and accommodation are still experienced, and will have to be removed if the work demanding attention is to be carried out.

The average daily patient strength of the Division was 384. The total patient days numbered 140,515, which is an increase of 606 days over those of last year. The average length of treatment of discharged patients was 337.3 days.

*Out-Patient Treatment Department.*

One hundred former patients received 1,660 pneumothorax treatments at 8 centres.

*Stationary and Travelling Clinics.*

Stationary clinics were held at 13 points: Central Alberta Sanatorium, Calgary City Health Department, Lethbridge, Drumheller, Red Deer, Camrose, Vegreville, Bonnyville, Medicine Hat, Hanna, Stettler, Edmonton, St. Paul de Metis.

The stationary clinics held 257 sessions. New examinations numbered 1,799 and review examinations 1,570, making a total of 3,369. Number diagnosed as having pulmonary tuberculosis, 220; non-pulmonary tuberculosis, 22.

The travelling clinic visited 54 points. New examinations numbered 594 and reviews 349, a total of 943. Of these, 38 were diagnosed as having pulmonary tuberculosis, and 11 as having non-pulmonary.

Approximately 10% of those examined for the first time were found to be tuberculous. Of the new examinations, 40% gave a history of contact with other cases of tuberculosis.

*School Surveys (Non-Indian).*

Normal, Technical and High School students numbering 2,324 were tuberculin tested. Reactors formed 17.5%. These were X-rayed and examined. Six new cases of tuberculosis were found.

High School surveys were carried out in Medicine Hat, also in Red Deer and High River Health Units. In these efforts much of the work was carried out by local committees.

*Indian Residential School Survey.*

As in former years, this work has been carried out for the Department of Indian Affairs in an effort to keep the schools free from infectious cases of tuberculosis. Those found requiring treatment were admitted to sanatorium under arrangement with the Department of Indian Affairs. The number of children X-rayed was 1,268, and 22 new cases of tuberculosis diagnosed.

*Cadomin Tuberculosis and Silicosis Survey.*

This work was undertaken in co-operation with the Workmen's Compensation Board. The men presented themselves voluntarily, and in all instances appeared to be quite well. All told, 95 were examined and X-rayed. Two new cases of pulmonary tuberculosis were found, and 4 men showed evidence of silicosis. The examiner considered that 56 out of the 95 had no clinical abnormality of significance.



*Survey of Mental Hospitals.*

The patients and staffs of the Mental Hospitals at Ponoka, Claresholm and Raymond were tested with tuberculin and all X-rayed. Those showing abnormal findings were examined. Patients surveyed were 1,738, and staff 314. Classification of Mental Hospital patients is as follows:

	Ponoka	Claresholm	Raymond
Pulmonary tuberculosis, active .....	69	7	13
Pulmonary tuberculosis, inactive .....	77	3	5
Non-tuberculous disease .....	105	5	...
No disease .....	1,316	71	67
	<u>1,567</u>	<u>86</u>	<u>85</u>

## CLASSIFICATION OF STAFF

	Ponoka	Claresholm	Raymond
Pulmonary tuberculosis, active .....	...	...	...
Pulmonary tuberculosis, inactive .....	9	...	...
Non-tuberculous disease .....	22	...	...
No disease .....	262	7	14
	<u>293</u>	<u>7</u>	<u>14</u>

This study showed that 10% of the patients in these hospitals were considered to have definite tuberculosis of the lungs. In about one-half the disease was considered active, and the remainder probably inactive. Many of these patients require isolation if the spread of the disease is to be controlled, and steps have been taken in the hospitals to remedy the situation, but lack of adequate accommodation minimizes the effectiveness of the preventive measures.

If a city of 80,000 population had a corresponding amount of tuberculosis, we would have 8,000 patients, 4,000 of these cases needing treatment.

The discovery of so many tuberculous mental patients is nothing new, since surveys elsewhere have revealed an incidence of tuberculous disease far in excess of that found outside mental hospitals. However, the fight against tuberculosis must be waged wherever the disease is present, if the sources of disease are to be wiped out. Proper accommodation is required for the treatment of tuberculous mental cases, and such routine medical examinations as will discover new cases before they have grossly infected their associates.

## SOURCES OF DISCOVERY OF NEW CASES OF TUBERCULOSIS

	1939	%	1940	%
Clinics .....	276	62.6	291	49.2
Referred to Sanatorium by Physicians .....	107	24.3	82	13.9
Provincial Laboratory .....	29	6.6	14	2.3
Provincial Board of Health .....	13	2.9	8	1.4
School Surveys .....	9	2.0	6	1.0
Mental Hospital Surveys .....	...	...	183	31.0
Cadomin Survey .....	...	...	7	1.2
Others .....	7	1.6	...	...
	<u>441</u>		<u>591</u>	

These 591 cases were classified as follows:

Active pulmonary tuberculosis .....	343
Inactive pulmonary tuberculosis .....	204
Non-pulmonary tuberculosis .....	44

Of the 343 cases of active pulmonary tuberculosis, 69 are in the Provincial Mental Hospital. Of the remainder, 74.77% were admitted to the sanatorium in 1940.

## CLASSIFICATION OF 547 NEW CASES OF ACTIVE AND INACTIVE PULMONARY TUBERCULOSIS

Minimal .....	211	28.6%
Moderately advanced .....	175	31.9%
Far advanced .....	97	18.0%
Childhood Tuberculosis .....	35	6.3%
Tuberculous pleurisy with effusion .....	11	2.0%
Tuberculous pleurisy without effusion .....	3	.5%
Unclassified .....	15	2.7%
	<u>547</u>	



The total clinic and survey examinations numbered 10,222, an increase of over 45% over last year. This additional work was accounted for by the Mental Hospital Survey and the School Surveys in Medicine Hat and Red Deer.

The net cost to the Province for its tuberculosis work for the fiscal year ending March 31st, 1941, was \$368,333.38. The net cost was \$352,778.51. This sum does not include the cost of much valuable work performed by local agencies through the Christmas Seal Sale. The per diem treatment cost per patient in the Central Alberta Sanatorium was \$2.44. The corresponding cost in Edmonton was \$2.62. Diagnostic clinics and surveys cost \$5,876.72. This figure does not include salaries of sanatorium physicians doing the work.

At the present time tuberculosis involving parts of the body other than the respiratory system is not accepted for treatment, unless the disease has progressed to such an extent that the patient is a source of gross danger to others. In other words, a patient with tuberculosis of a joint is not accepted until such time, if ever, that his disease has progressed to the stage when cure is unlikely. This situation is unsatisfactory in an attempt at effective control of the disease. It is, therefore, felt that provision should be made to treat tuberculosis in all its forms and at the earliest possible moment.

Once more the need of a Nurses' Home at Central Alberta Sanatorium is brought forward. The present quarters have been utterly inadequate for years.

Plans should be made for the construction of a limited number of houses on sanatorium property for the accommodation of staff. At the present time only one physician has a house. The house occupied by the Chief Engineer has served its purpose for almost 60 years, and should now be retired.

#### *Laundry.*

The laundry facilities at the Sanatorium require improvement. Only a portion of the hot water is softened and none of the cold, so that laundry supplies are greater than they would be if all water were softened, and unnecessary damage results to fabrics. Increased equipment for softening and storing water is needed. An additional extractor is required. A bottleneck now exists, the washing capacity being 300 lbs. per hour, while only 150 lbs. can be put through the one extractor.

#### *Administration and Medical Staff Personnel.*

Col. E. R. Knight was given leave in January to enlist for active military service. Col. Knight has been Bursar since the Sanatorium opened in October, 1920, and has made a great contribution to this institution and its patients throughout the years. Mr. G. M. Moodie, accountant, was promoted to Acting Bursar.

Dr. J. C. McPherson, of the Edmonton General Hospital, resigned October 12th to take charge of the Health Unit at Didsbury.

Dr. J. M. Waddell joined the Edmonton staff on June 1st, 1940.

Dr. C. H. Hemmings was a member of the staff in Calgary from January 3rd, 1940, to September 30th, when he joined the R.C.A.F. Dr. R. G. Martin replaced Dr. Hemmings.

In the presentation of this report, grateful acknowledgment is made of the advice and assistance rendered by Hon. the Minister, Dr. W. W. Cross, and by Dr. M. R. Bow, Deputy Minister of Health. The volume of work undertaken and its degree of success were made



possible by the loyal co-operation and skilled assistance of everyone connected with the Division of Tuberculosis. For the splendid hospital care of patients in Edmonton we are indebted to the Sister Superior of the Edmonton General Hospital, to Dr. R. T. Washburn of the University Hospital, and to Dr. A. F. Anderson of the Royal Alexandra Hospital, together with their respective staffs.

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### CENTRAL ALBERTA SANATORIUM

The Sanatorium has experienced difficulties, in common with other institutions, owing to war conditions. One nurse and 11 men have left our staff to go on active service. Supplies have been more difficult to procure and costs have increased.

#### *Medical Service.*

The medical and surgical work has gone ahead in ever increasing volume, and this has made an additional demand on members of the staff.

#### *Administration.*

Total patient days numbered 74,340, a decrease of 1,084 over last year. The gross per diem operating cost was \$2.44 in comparison with \$2.41 in 1939.

#### *Dietary Department.*

Meals served were 324,852. Food cost per meal was \$0.132.

#### *Canadian Nurses' Association.*

Miss E. K. Connor, Matron, was chairman of the General Committee in charge of all arrangements for the National Convention of Canadian Nurses, held in Calgary in June. Widespread tribute was paid to the efficiency with which the convention plans were carried out and to the splendid work of the committee.

On June 28th the Canadian Nurses in session in Calgary visited the Sanatorium, and were entertained at tea. Some 650 were present. It was a real pleasure to have the opportunity of meeting representatives of all Provinces, and showing them a little of what the Province of Alberta is doing in the tuberculosis field.

#### *The School.*

This very successful activity has been supervised by Mr. Stuart Evans. Pupils were engaged in Public, High School and University work. A very important phase is concerned with the adult students who pursue studies in various subjects, some taking advantage of the opportunity to learn to read and write English.

Through the courtesy and kindness of Mr. F. G. Garbutt, of the Garbutt Business College, a number of patients were able to study bookkeeping by correspondence, and to satisfactorily pass their examinations. Typewriting and stenography received considerable attention, especially from the young women, and a number have qualified for positions on leaving the Sanatorium. This work is of great importance not only to the individual patient, but to the Sanatorium, as an agency in getting ex-patients back into remunerative employment.

A need exists in this field for the services of a teacher of general occupational therapy.



*Recreation.*

This is essential in the long standing treatment of tuberculosis, to keep up the patients' morale. The library, movies, the radio, concerts, parties, tournaments and auto drives, all help to relieve the monotony of protracted institutional life.

*Divine Services.*

The religious services conducted by representatives of various churches are much appreciated by patients, as well as the bedside visiting of members of the clergy. We are particularly indebted to the following gentlemen, who have regularly served in these capacities: Rev. Dr. Aldridge, Rev. Father MacDonald, Rev. Father Clancy, Very Rev. H. Ragg, Rev. J. M. Roe, Rev. P. Unterschults, and Rev. J. C. Harris.

*Acknowledgment.*

To the many friends of the Sanatorium who have contributed in various ways to the life of our patients, our gratitude is expressed.

In concluding this brief report, may I express my personal appreciation to the Chief Engineer, E. L. Appleby, and his staff for their cheerful and helpful co-operation at all times, and also to every member of the staff for a year of splendid service.

## DONATIONS AND ENTERTAINMENTS

CONCERTS, Etc.—Civic Employees Concert Club; North Hill Players; Mississippi Quartet; Pro-Cathedral Concert Party; Pro-Cathedral Folk Dancers; Calgary Table Tennis Club; St. Andrew's Church Choir; Elk's Band; Salvation Army Band; Calgary Regiment (Tank) Band; Red Cross Society, Christmas Concert.

PARTIES, Etc.—Valentine Party; Garden Party; Hallowe'en Party; Military Chapter I.O.D.E., Whist Drive; Recreation Committee, Whist Drive, Bridge Parties.

STAFF ENTERTAINMENTS—Farewell Dance for Col. E. R. Knight; Farewell Dance for Miss M. McLeod; Supper Party for X-ray Technicians; Garden Party for National Convention Registered Nurses (music by Calgary Boys' Band); Staff Corn Roast; Calgary Medical Society Meeting; Christmas Party and Dance.

TOURNAMENTS—Cribbage Tournament; Billiard Tournament; Croquet Tournament.

DRIVES—Rotary Club.

PICTURE SHOWS—Moving Picture Shows given twice a month; Royal Visit, World's Fair and Travel Pictures shown by Mr. A. S. Chalk and Mr. Williams.

CHRISTMAS, 1940—Junior Samaritan Club, Cheque; Canadian Red Cross Society, Gifts for all patients; Sisters of Ste. Famillie, Gifts; Catholic Women's League, Gifts; Junior Catholic Women's League, Gifts; Military Chapter I.O.D.E., Gifts; Children's Hospital Aid, Gifts; CJCJ, Gifts; Rotary Club, Magazines; Ontario Laundry Company, Cigarettes and Candy; Union Milk Company, Ice Cream.

MISCELLANEOUS—Mrs. D. Sara, Flowers; Herald Library, Books; Magazines, Books, etc.

## EDMONTON SANATORIA

(DR. G. R. DAVIDSON)

The Edmonton Branch of the Tuberculosis Division has operated on the same lines as in previous years. The many phases of sanatorium operation were greatly facilitated on June 1st, 1940, by the addition to the full time medical staff of Dr. James Waddell. On November 1st, however, Dr. J. C. McPherson resigned from our staff



to take charge of the Rosebud Health Unit. His loss was keenly felt by all concerned.

The various Sanatorium sections of the city hospitals have been operated as satisfactorily as the facilities of general hospitals will permit. I wish to thank the Sisters of Charity of Montreal, who operate the General Hospital; Dr. A. F. Anderson, Superintendent of the Royal Alexandra Hospital; Dr. R. T. Washburn, Superintendent of the University Hospital, for their co-operation in the organization and maintenance of their respective sections. I wish also to thank the Edmonton Kinsmen Club and their nurse for their assistance with the clinics and for the social service work done throughout this city. In December, the Kinsmen Club very kindly supplied the General Hospital patients with an occupational therapy teacher. These classes are greatly appreciated. They are both educational and recreational. I wish to thank the various organizations for donations they have made and for entertainments they have given throughout the year.

#### DONATIONS AND ENTERTAINMENTS

##### GENERAL HOSPITAL:

Donations—The Sun Specialty Co.; Gaults Alberta, Limited; J. H. Samuels & Co., Limited; Dower Bros., Ltd.; Western Grocers, Ltd.; H. H. Cooper, Ltd.; Northern Hardware, Ltd.; J. H. Ashdown Co., Ltd.; Mid-West Paper Sales, Ltd.; Willson Stationery Co., Ltd.; Calgary Brewing & Malt-ing Co., Ltd.; Orange Crush Bottling Co.; Sisters of the Precious Blood Monastery; Sister Superior, General Hospital; Mr. J. Gallant; Edmonton Journal Sunshine Fund.

Entertainments—Four-in-One Club, with Dr. Bulyea; Scona Ramblers, with Mr. Wright; Joyeux Noel Club, with Madame Bow; Spankie School of Dancing; Mr. Gould and family; General Hospital Staff.

Parties—Hallowe'en; Valentine; Carnival; Bingo; Whist; Quiz Contest.

UNIVERSITY HOSPITAL—Hospital Auxiliary, donations of Clothing, Books and Magazines; Valentine Party; Hallowe'en Party; Christmas Party; Six Picnics; Monthly Movies.

ROYAL ALEXANDRA HOSPITAL—Hospital Auxiliary, donation of 25 Bed Tables; Wimodausis Society, donations of Flowers; The Kinsmen Club, donation of Books; Anonymous Donor, two boxes of Apples; Mr. Brown, Movies; Dr. F. S. McPherson, donation of Books; Mrs. Everud, donation of 10 quarts of Pickles; Student Christian Fellowship, Music; Hallowe'en Party; Christmas Party; Guest Supper; Occupational Therapy taught by Mrs. Kitchen.

#### STATISTICAL SECTION

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
Patients under treatment Jan. 1, 1940.....	203	121	35	19	378
Patients admitted 1940 .....	162	144	31	3	340
Patients treated 1940 .....					718
Patients discharged 1940 .....	168	125	32	9	334
Remaining in Hospital .....	200	126	36	22	384
Patient days .....	74,492	45,535	12,698	7,790	

NOTE.—21 patients were transferred from one institution to another.

## CLASSIFICATION OF 340 PATIENTS ADMITTED TO SANATORIA IN 1940

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
No disease .....	3	2	5
Undiagnosed .....	2	2	2
Non-Tuberculous .....	16	10	26
Tuberculosis, Inactive .....	4	1	5
Non-Pulmonary Tuberculosis .....	2	7	9
Tuberculous Pleurisy .....	7	3	10
Tuberculosis, Childhood Type .....	3	3	6
Pulmonary Tuberculosis:			
Minimal .....	25	18	43
Moderately Advanced .....	41	75	116
Far Advanced .....	61	57	118
	162	178	340
Re-admissions (included above) .....	31	31	62—18%
Sputum Positive on admission .....	85	99	184—54.2%
Becoming Positive later .....	5		5—1.4%
Sputum persistently Negative .....	72	79	151—44.4%

## LABORATORY REPORTS

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
Sputum:					
Number of positive examinations .....	1,051	981	190	145	2,367
Number of negative examinations .....	2,183	838	257	97	3,375
Urinalysis:					
Number of examinations .....	2,139	2,363	971	171	5,644
Blood Counts .....	483	172	46	10	711
Sedimentations .....	667	529	62	43	1,301
Blood Sugars .....	22	36	6		64
Wassermans:					
Positive .....	5	6			11
Negative .....	195	127	29	3	354
Guinea Pig Inoculations .....	125	18	1		144
Pleural Fluids .....	45	28			73
Gastric Analyses .....	9	17	4	3	33
Other examinations .....	58	46	19	3	126

## HELIO THERAPY REPORT

Number of Patients Treated .....	50	78	3	4	135
Number of Treatments .....	4,956	891	66	32	5,945

## DENTAL REPORT

Number of Patients Examined .....	410	271	78	36	795
Number of Patients Treated .....	253	143	37	17	450
Number of Prophylactic Treatments .....	68	81	24	14	187
Number of Fillings .....	147	247	79	11	484
Number of Extractions .....	100	64	17	3	184
Number of New Dentures made .....		4			4
Number of Dentures Repaired .....	2	1			3
Number of Denture Adjustments .....	5	3		3	11
Number of Bridges .....		1			1

## X-RAY REPORT

Radiographs Made:					
Thorax .....	1,570	526	171	59	2,326
Spine .....	43	14	1	1	59
G. I. Tract. ....	14	16	1		31
Kidney .....	8	1	1		10
Pyelogram .....	8				8
Hip .....	7	2		1	10
Sinuses .....	6				6
Gall Bladder .....	5		3		8
Pelvis .....	4	6	1		11
Barium enema .....	4				4
Abdomen .....	3				3
Shoulder .....	4	5			9
Foot and ankle .....	3	1			4
Bronchograph .....	3				3
Knee .....	2			4	6
Hand and fingers .....	2	1			3
Teeth .....	2	1	1		4
Skull .....	1				1
Sternum .....				1	1
Parotid gland .....			1		1
Leg .....	2				2
	1,691	573	180	66	2,510



	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
<b>Fluoroscopic Examinations:</b>					
Chests .....	3,640	2,350	507	75	6,572
G.I. Tract .....	18	16	1	.....	35
Chest (Lipiodol) .....	3	.....	.....	.....	3
Chest (Ariodol) .....	.....	1	.....	.....	1
					<u>6,611</u>
Treatments given .....	15	.....	4	19	38
<b>Clinic Films Made and Interpreted:</b>					
Stationary Clinics .....	1,664	1,171	.....	.....	2,835
Travelling Clinics .....	188	281	.....	.....	469
<b>School Surveys:</b>					
High River .....	138	.....	.....	.....	138
Medicine Hat .....	33	.....	.....	.....	33
Red Deer .....	66	.....	.....	.....	66
Technical Institute .....	80	.....	.....	.....	80
Calgary Normal School .....	22	.....	.....	.....	22
Edmonton Normal School .....	.....	59	.....	.....	59
<b>Indian Schools:</b>					
Blood Reserve .....	279	.....	.....	.....	279
Blackfoot Reserve .....	184	.....	.....	.....	184
Hobbema Reserve .....	140	.....	.....	.....	140
Peigan Reserve .....	109	.....	.....	.....	109
Morley Reserve .....	102	.....	.....	.....	102
Sarcee Reserve .....	28	.....	.....	.....	28
Blue Quill Reserve .....	.....	137	.....	.....	137
Joussard Reserve .....	.....	46	.....	.....	46
Edmonton Reserve .....	.....	95	.....	.....	95
Youville .....	.....	175	.....	.....	175
<b>Hospital Surveys:</b>					
Ponoka Mental Hospital .....	1,860	.....	.....	.....	1,860
Claresholm Mental Hospital .....	93	.....	.....	.....	93
Raymond Mental Hospital .....	99	.....	.....	.....	99
Films referred for interpretation .....	408	431	.....	.....	839
					<u>7,888</u>

## OPERATING ROOM REPORTS

<b>Summary of Pneumothorax Cases:</b>					
Under Treatment Jan. 1, 1940 .....	99	50	21	6	176
Cases begun during 1940 .....	47	38	4	1	90
Cases under treatment admitted and carried on .....	3	1	2	.....	6
Number Treated .....	149	89	27	7	272
Number discontinued .....	48	25	12	5	90
Under treatment Dec. 31, 1940 .....	101	64	15	2	182
Number unsuccessfully attempted .....	21	13	9	1	44
Refills given during year .....	3,671	2,314	400	65	6,450
Pneumolysis (closed) .....	9	.....	.....	.....	9
<b>Intravenous Injections:</b>					
Calcium Chloride .....	492	195	.....	.....	687
Saline and Glucose .....	105	16	3	29	153
Sanocrysin .....	106	.....	.....	.....	106
Neo Salvarsan .....	.....	3	.....	.....	3
Typhoid Vaccine .....	.....	.....	1	.....	1
<b>Intramuscular Injections:</b>					
Calcium Gluconate .....	76	.....	339	.....	415
Liver Extract .....	20	.....	.....	.....	20
<b>Surgical Cases:</b>					
Cholecystectomy .....	2	.....	.....	.....	2
Appendectomy .....	2	.....	.....	1	3
Abdominal Paracentesis .....	.....	1	.....	.....	1
Orchidectomy .....	.....	1	.....	1	1
Tonsilectomy .....	.....	1	.....	.....	1
Nephrectomy .....	.....	1	.....	1	2
Spinal Fusion .....	1	.....	.....	.....	1
1st Stage Thoracoplasty .....	12	.....	.....	.....	12
2nd Stage Thoracoplasty .....	10	.....	.....	.....	10
3rd Stage Thoracoplasty .....	8	.....	.....	.....	8
4th Stage Thoracoplasty .....	2	.....	.....	.....	2
5th Stage Thoracoplasty .....	2	.....	.....	.....	2
Phrenicopraxis (9 repeats) .....	31	.....	.....	.....	31
Rib Resection and Drainage .....	1	.....	.....	.....	1
Biopsy of Cervix .....	1	.....	.....	.....	1
Confinement .....	2	1	.....	.....	3

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
Other Treatments:					
Aspiration from pleural space	480	50	23	2	555
Other aspirations	26	11	.....	2	37
Gomenol refills	26	.....	.....	.....	26
Blood transfusions	5	.....	.....	.....	5
Basal metabolism	8	3	1	.....	12
Lumbar puncture	12	8	1	.....	21
Cauterization of uretral orifice	5	.....	.....	.....	5
Injection of intercostal nerves	4	.....	.....	.....	4
Bronchoscopic examination	1	.....	3	.....	4
Cystoscopic examination	4	1	.....	1	6
Pelvic examination	4	.....	.....	.....	4
Plaster shells and splints	4	6	.....	.....	10
Incision of facial cyst	.....	.....	2	.....	2
Removal of nodule	.....	1	.....	.....	1
Electrocardiogram	.....	.....	1	.....	1
Inductotherm	.....	.....	.....	6	6
Eye refractions	.....	.....	.....	6	6
Aridol in pelvic sinus	.....	1	.....	.....	1
Staphylococci toxoid	.....	.....	6	.....	6

## CLINIC REPORT

Place	No. of Clinics	New Cases of T.B.				New Exams.	Review Exams.	Total
		Pulmon-ary		Non-Pul-monary				
		Active	Inactive	Active	Inactive			
<b>STATIONARY CLINICS:</b>								
Bonnyville	2	1	1	.....	.....	37	21	58
Calgary	47	10	14	2	1	214	127	341
Camrose	6	5	.....	.....	1	67	46	113
Central Alberta Sanatorium	51	27	27	3	.....	314	325	639
Drumheller	12	7	7	7	.....	108	110	218
Edmonton	103	49	34	4	3	673	494	1167
Hanna	4	.....	.....	.....	.....	11	15	26
Lethbridge	6	5	7	2	.....	121	119	240
Medicine Hat	6	3	10	.....	1	82	115	197
Red Deer	6	2	4	.....	.....	56	101	157
Stettler	6	1	3	1	2	55	60	115
St. Paul	2	2	.....	1	.....	18	12	30
Vegreville	6	1	.....	.....	.....	43	25	68
	257	113	107	14	8	1799	1570	3369
<b>TRAVELLING CLINICS:</b>								
Athabasca	1	2	.....	.....	.....	9	2	11
Bellevue	1	.....	.....	.....	.....	2	5	7
Berwyn	1	1	.....	.....	.....	20	2	22
Blairmore	1	2	1	.....	.....	3	16	19
Cadomin	1	.....	.....	.....	1	5	1	6
Cardston	1	.....	.....	.....	.....	1	1	2
Claresholm	1	.....	1	.....	.....	14	10	24
Coleman	1	.....	.....	.....	.....	7	13	20
Coronation	1	.....	.....	.....	.....	20	2	22
Eckville	1	.....	.....	.....	.....	15	13	28
Edgerton	1	.....	.....	.....	.....	8	.....	8
Edson	1	.....	1	.....	.....	16	4	20
Elk Point	1	.....	2	.....	.....	7	3	10
Fairview	1	1	.....	.....	.....	24	4	28
Faust	1	.....	.....	1	.....	21	2	23
Galahad	1	.....	.....	1	.....	4	2	6
Gleichen	1	.....	.....	.....	.....	4	13	17
Grande Prairie	1	1	3	.....	2	36	21	57
Hardisty	1	.....	.....	.....	.....	13	3	16
High Prairie	1	5	.....	1	1	33	11	44
High River	1	1	1	.....	.....	7	18	25
Innisfree	1	.....	.....	.....	.....	9	10	19
Irma	1	.....	.....	.....	.....	17	1	18
Islay	1	.....	.....	.....	.....	.....	8	8
Jasper	1	.....	.....	.....	.....	3	1	4
Killam	1	.....	.....	.....	.....	1	.....	1
Kinuso	1	.....	.....	.....	.....	8	2	10
Lac La Biche	2	1	2	.....	.....	36	8	44
Lamont	1	1	1	.....	.....	12	3	15
Lloydminster	1	.....	.....	.....	.....	3	.....	3
Mannville	1	.....	.....	.....	.....	16	.....	16
Marwayne	1	.....	.....	.....	.....	5	4	9
Mundare	1	.....	.....	.....	.....	20	17	37



Place	No. of Clinics	New Cases of T.B.				New Exams.	Review Exams.	Total
		Pulmon-ary		Non-Pul-monary				
		Active	Inactive	Active	Inactive			
Myrnam	1					9	3	12
McLennan	1					16	11	27
Macleod	1					10	13	23
Notikewin	1	1				4	3	7
Peace River	1	2	1			31	11	42
Pincher Creek	2					3	19	22
Provost	1		1			8	4	12
Radway	1					7		7
Rocky Mountain House	1					12	3	15
Sexsmith	1				1	1	5	6
Slave Lake	1	1				4	5	9
Smoky Lake	1		1			9	8	17
Spirit River	1	1				18	4	22
Strome	1					2	2	4
Trochu	1					19	14	33
Vermillion	1					1	1	2
Viking	1					6	3	9
Vilna	1	1		2		10	11	21
Vulcan	1		1			1	11	12
Wainwright	1	1				10	7	17
Willingdon	1			1		14	11	25
	56	22	16	6	5	594	349	943

## SCHOOL SURVEYS:

	No. Tested	New Cases Found
Edmonton Normal School	329	1
Calgary Normal School	169	
Technical Institute	354	
Medicine Hat High School	394	1
High River Health District High Schools	569	
Red Deer Health District High Schools	509	4
	2324	6

Positive Reactors—17.5%.

## INDIAN SCHOOL SURVEYS:

Stoney Indian School, Morley	102	
Ermineskin Indian School, Hobbema	140	2
Edmonton Residential School, Edmonton	95	
Youville Indian School, St. Albert	175	3
Blue Quill Indian School, St. Paul	137	3
Peigan Indian Schools (2), Brocket	109	
Blood Indian Schools (2), Cardston	279	5
Blackfoot Indian Schools (2), Gleichen	184	1
Sarcee Indian School, Calgary	28	3
Joussard Indian School, Joussard	19	5
	1268	22

## CADOMIN TUBERCULOSIS AND SILICOSIS SURVEY:

Number examined and X-rayed	95
New cases found:	
Active	2
Inactive	5

Note.—Four cases of Silicosis found.

## MENTAL HOSPITAL SURVEYS:

	No. X-rayed	New Cases Found		
		Pulmonary		Non-Pul.
		Active	Inactive	
Ponoka Mental Hospital	1860	69	86	
Claresholm Mental Hospital	93	7	2	
Raymond Mental Hospital	99	13	5	1
	2052	89	93	1

## SUMMARY—CLINICS AND SURVEYS

	No. of Cases T.B. Found					Total Exam. & Surveyed
	Number	Pulmonary		Non-Pulmonary		
		Active	Inactive	Active	Inactive	
Stationary .....	257	113	107	14	8	3369
Travelling .....	56	22	16	6	5	943
School Surveys .....	6	5	1	.....	.....	2324
Indian Surveys .....	10	20	1	1	.....	1268
Mental Hospitals .....	3	89	93	.....	1	2052
Cadomin Survey .....	1	2	5	.....	.....	95
Staff, Central Alberta Sanatorium .....	.....	.....	.....	.....	.....	171
	333	251	223	21	14	10,222

## CLASSIFICATION OF DISCHARGED PATIENTS

TABLE I.

	On Admission.		Residence		On Discharge					
	No.	%	31 days or less	Over 31 days	A.	AA.	Q.	I.	U.	D.
I. No Disease .....	3	.....	3	.....	.....	.....	.....	.....	.....	.....
II. Undiagnosed .....	16	.....	6	10	.....	.....	.....	8	2	.....
III. Non-Tuberculous .....	25	.....	12	13	.....	.....	.....	7	4	2
IV. Tuberculosis, Active .....	11	.....	6	5	.....	.....	.....	2	3	.....
	55	.....	27	28	.....	.....	.....	17	9	2
V. Childhood T.B.:										
Parechymal .....	1	.....	.....	1	.....	.....	.....	1	.....	.....
Tracheo-Bronchial .....	1	.....	.....	1	1	.....	.....	.....	.....	.....
Combined .....	10	.....	1	9	.....	.....	4	4	.....	1
	12	4.3%	1	11	1	.....	4	5	.....	1
VI. Adult Type:										
(a) Pulmonary Clinical:										
Minimal .....	24	.....	4	20	1	1	4	14	.....	.....
Mod. Advanced .....	41	.....	3	38	.....	3	8	22	3	2
Far Advanced .....	15	.....	2	13	.....	.....	2	7	.....	4
	80	29%	9	71	1	4	14	43	3	6
(b) Pulmonary Positive:										
Minimal .....	5	.....	.....	5	.....	1	2	1	.....	1
Mod. Advanced .....	38	.....	.....	38	.....	.....	12	19	2	5
Far Advanced .....	118	.....	11	107	.....	1	6	51	13	36
Terminal .....	5	.....	5	.....	.....	.....	.....	.....	.....	.....
	166	59%	16	150	.....	2	20	71	15	42
VII. T.B. Pleurisy .....	13	4.7%	1	12	.....	.....	.....	8	2	2
VIII. Non-Pulmonary T.B. ....	8	3%	2	6	1	.....	.....	1	1	3
Total T.B., Active .....	279	.....	29	250	3	6	38	128	21	54
Total "Treated" .....	.....	.....	.....	278	3	6	38	145	30	56
"Untreated," not here 31 days .....	.....	.....	56	.....	2	.....	.....	9	27	18
Grand Total .....	334	.....	56	278	5	6	38	154	57	74

**Explanation of Abbreviations and Terms used:** The standard of classification is that of the National Tuberculosis Association. "Minimal", "Moderately Advanced" and "Far Advanced" refer to anatomical extent of disease. "A" Arrested, "AA" Apparently Arrested, "Q" Quiescent, "I" Improved, "U" Unimproved, and "D" Died.

NOTE.—Only those in residence over 31 days are classed as "Treated".

## II.—CLASSIFICATION ON ADMISSION OF 334 DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
1. No Disease .....	3	2	5
2. Undiagnosed .....	.....	10	10
3. Non-Tuberculous .....	23	16	39
4. Tuberculosis, Inactive .....	11	.....	11
5. Childhood Tuberculosis .....	5	7	12
6. Tuberculosis—Adult Type:			
Minimal .....	18	11	29
Moderately Advanced .....	38	41	79
Far Advanced .....	61	77	138
7. Tuberculous Pleurisy .....	7	6	13
8. Non-Pulmonary Tuberculosis .....	2	6	8
	168	166	334



III.—CLASSIFICATION ON DISCHARGE OF 244 "TREATED" CASES OF  
 PULMONARY TUBERCULOSIS:

On Admission	Number.	On Discharge		Died.
		Improved.	Not Improved.	
Tuberculous Pleurisy .....	12	10	.....	2
Childhood Type .....	11	10	.....	1
Adult Type:				
Minimal .....	25	24	.....	1
Moderately Advanced .....	76	64	5	7
Far Advanced .....	120	67	13	40
	244	175	18	51

## IV.—DIAGNOSIS OF NON-TUBERCULOUS CASES:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Addison's Disease .....		1	1
Atelectasis .....	1	.....	1
Bronchiectasis .....	1	3	4
Bronchitis .....	.....	1	1
Bronchogenic Carcinoma .....	3	.....	3
Bronchogenic Tumour .....	1	2	3
Carcinomatosis .....	1	.....	1
Empyema .....	.....	1	1
Hydropneumothorax .....	1	.....	1
Pleuritis .....	1	4	5
Pneumonitis .....	2	.....	2
Pulmonary Abscess .....	1	1	2
Pulmonary Fibrosis .....	4	1	5
Pulmonary Sepsis .....	4	.....	4
Rheumatic Carditis .....	1	.....	1
Psychosis .....	.....	1	1
Silicosis .....	1	.....	1
Sinusitis .....	1	.....	1
Unresolved Pneumonia .....	.....	1	1
	23	16	39

## V.—SEX:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Male .....	90	63	153
Female .....	78	103	181
	168	166	334

## VI.—SOCIAL:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Single .....	96	83	179
Married .....	62	71	133
Widowed .....	6	10	16
Separated or Divorced .....	4	2	6
	168	166	334

## VII.—RELIGION:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Baptist .....	8	5	13
Buchanan Institute .....	.....	1	1
Church of England .....	27	22	49
Christian Reformed .....	1	1	2
Confucian .....	1	.....	1
Doukhorbor .....	1	.....	1
Evangelical .....	.....	1	1
Greek Catholic .....	4	9	13
Greek Orthodox .....	1	10	11
International Bible Student .....	3	.....	3
Jewish .....	1	.....	1
Latter Day Saint .....	2	1	3
Lutheran .....	20	20	40
Mennonite .....	2	.....	2
Nazarene .....	3	.....	3
Pentecostal .....	3	.....	3
Presbyterian .....	20	11	31
Roman Catholic .....	38	56	94
Salvation Army .....	.....	1	1
United .....	28	28	56
Undenominational .....	5	.....	5
	168	166	334

## VIII.—AGE ON ADMISSION:

	Active T.B.	Non-T.B.. Inactive	Total
From 1 to 9 years .....	7		9
From 10 to 14 years .....	7	3	10
From 15 to 19 years .....	15	4	19
From 20 to 19 years .....	95	13	108
From 30 to 39 years .....	66	12	78
From 40 to 49 years .....	38	6	44
From 50 to 59 years .....	23	11	34
From 60 to 69 years .....	6	2	8
From 70 to 79 years .....	2	2	4
	<u>279</u>	<u>55</u>	<u>334</u>

## IX.—NATIVITY:

Alberta .....	116	24	140
Canada (Other Provinces) .....	60	5	65
Austria .....	2		2
Bavaria .....	1		1
Belgium .....	1	1	2
China .....	1		1
Czecho-Slovakia .....	3	1	4
Denmark .....	2		2
England .....	11	1	18
Finland .....	2		2
Germany .....	1		1
Greece .....	1		1
Holland .....	2		2
Hungary .....	1		1
Ireland .....	5	2	7
Jugo-Slavia .....		1	1
Lithuania .....	1		1
Norway .....	4		4
Peru .....	1		1
Poland .....	17	2	19
Roumania .....	1		1
Russia .....	4		4
Scotland .....	9	3	12
Sweden .....	2	2	4
Switzerland .....	1		1
Syria .....		1	1
Ukraine .....	4		4
U.S.A. .....	23	6	29
Wales .....	3		3
	<u>279</u>	<u>55</u>	<u>334</u>

## X.—OCCUPATIONS—WOMEN:

Bookkeeper .....	1		1
Clerical Worker .....		1	1
Cashier .....	1		1
Cook .....		1	1
Dressmaker .....	1		1
Housewife .....	85	7	92
Housekeeper .....	1		1
Maid .....	6		6
Nurse (Graduate) .....	7	1	8
Nurse in Training .....	5		5
Religious .....	1		1
Saleslady .....	3	1	4
Stenographer .....	5	1	6
Student .....	17	3	20
Teacher .....	5		5
Telephone Operator .....	1		1
Waitress .....	1		1
At home—Over 16 .....	16	4	20
Under 16 .....	6		6
	<u>162</u>	<u>19</u>	<u>181</u>

## XI.—OCCUPATIONS—MEN:

Accountant .....	2		2
Baker .....	1	1	2
Barber .....	1	1	2
Bar Tender .....	1		1
Bookkeeper .....	1		1
Butcher .....		1	1
Caretaker .....	1	1	2
Carpenter .....	2		2
Clerical Worker .....	5	1	6
Cook .....	3		3
Electrician .....		2	2
Engineer .....	2		2
Farmer .....	34	12	46
Gardener .....	1		1
Implement Agent .....	1		1
Labourer .....	22	3	25



## DEPARTMENT OF PUBLIC HEALTH

	Active T.B.	Non-T.B., Inactive	Total
Laboratory Assistant		1	1
Manufacturer	1		1
Mechanic	3	1	4
Meteorologist	1		1
Miner	2	3	5
Music Teacher	1	1	1
Merchant	1		1
Municipal Secretary	1		1
Mortgage Inspector	1		1
Manager	1		1
Painter	1		1
Pensioner		1	1
Plasterer		1	1
Physician	1		1
R.C.M.P.	1		1
Salesman (In store)	5		5
Salesman (Outside)	1	1	2
Station Agent	1		1
Sectionman	1		1
Storekeeper		1	1
Stonemason	1		1
Student	8	2	10
Soldier	1		1
Teacher		1	1
Trapper	1		1
Truck Driver	1		1
Vulcanizer	1		1
Welder	1		1
At home	117	36	153

## XII.—LENGTH OF RESIDENCE IN ALBERTA:

Life	118	24	142
Less than one year	1		1
One to five years	13	3	16
Six to nine years	16		16
Ten to fourteen years	33	9	42
Fifteen to nineteen years	16	3	19
Twenty to thirty years	59	7	66
Over thirty years	23	9	32
	279	55	334

## XIII.—RACIAL ORIGIN:

	Active T.B.	Non-T.B., Inactive	Total
Austrian	2		2
Belgian	2	1	3
Bohemian	2		2
Chinese	1		1
Danish	3	1	4
Dutch	5		5
English	42	13	55
Finnish	4	2	6
French	14	2	16
German	20	1	21
Greek	1		1
Hungarian	2		2
Irish	32	11	43
Indian	11		11
Japanese	2		2
Hebrew	1		1
Metis	19	2	21
Negro		1	1
Norwegian	12		12
Polish	7	2	9
Roumanian	2	1	3
Russian	4	2	6
Scottish	44	8	52
Slavic	3	2	5
Swedish	9	3	12
Swiss	1		1
Syrian		1	1
Ukrainian	28	2	30
Welsh	6		6
	279	55	334

## RESIDENCE OF PATIENTS DISCHARGED IN 1940

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
<b>CITIES:</b>	49	.....	49
Calgary .....	4	.....	4
Drumheller .....	10	44	54
Edmonton .....	6	.....	6
Lethbridge .....	7	.....	7
Medicine Hat .....	2	.....	2
Red Deer .....	.....	1	1
Wetaskiwin .....	.....	.....	.....
<b>TOWNS:</b>	.....	1	1
Athabasca .....	3	.....	3
Blairmore .....	1	.....	1
Cardston .....	1	.....	1
Edson .....	.....	1	1
Grande Prairie .....	2	1	3
High River .....	2	.....	2
Innisfail .....	1	.....	1
Leduc .....	.....	2	2
Lloydminster .....	.....	1	1
Morinville .....	.....	1	1
Peace River .....	.....	1	1
Ponoka .....	1	.....	1
St. Albert .....	.....	2	2
Stony Plain .....	.....	1	1
Strathmore .....	1	.....	1
Tofield .....	.....	2	2
Vegreville .....	1	2	3
Vermilion .....	.....	1	1
<b>VILLAGES:</b>	.....	.....	.....
Bashaw .....	1	.....	1
Blackie .....	1	.....	1
Bonnyville .....	.....	4	4
Czar .....	1	.....	1
Chauvin .....	.....	1	1
Edgerton .....	.....	2	2
Fort Saskatchewan .....	.....	1	1
Grimshaw .....	.....	1	1
Holden .....	.....	2	2
Hythe .....	.....	1	1
Innisfree .....	.....	3	3
Lac La Biche .....	.....	3	3
Millett .....	.....	1	1
Mirror .....	.....	1	1
Mundare .....	.....	1	1
Myrnam .....	.....	1	1
New Norway .....	.....	1	1
Penhold .....	1	.....	1
Rosebud .....	1	.....	1
Smoky Lake .....	.....	1	1
Sylvan Lake .....	.....	1	1
Trochu .....	1	.....	1
Turner Valley .....	1	.....	1
Vilna .....	.....	2	2
Viking .....	.....	1	1
National Parks—Banff .....	1	.....	1
<b>INDIAN RESERVES:</b>	.....	.....	.....
Blackfoot, Gleichen .....	3	.....	3
Ermineskin, Hobbema .....	.....	1	1
Edmonton, Edmonton .....	.....	1	1
Youville, St. Albert .....	.....	2	2
<b>MUNICIPAL DISTRICTS:</b>	.....	.....	.....
M.D. 10 .....	1	.....	1
M.D. 39 .....	1	.....	1
M.D. 70 .....	1	.....	1
M.D. 92 .....	2	.....	2
M.D. 98 .....	1	.....	1
M.D. 157 .....	1	.....	1
M.D. 159 .....	1	.....	1
M.D. 191 .....	1	.....	1
M.D. 219 .....	1	.....	1
M.D. 220 .....	1	.....	1
M.D. 221 .....	1	.....	1
M.D. 242 .....	1	.....	1
M.D. 271 .....	1	.....	1
M.D. 277 .....	1	.....	1
M.D. 305 .....	1	.....	1
M.D. 308 .....	1	.....	1
M.D. 310 .....	1	.....	1
M.D. 336 .....	1	.....	1
M.D. 338 .....	2	.....	2
M.D. 341 .....	4	.....	4
M.D. 361 .....	.....	1	1
M.D. 367 .....	2	.....	2
M.D. 371 .....	1	.....	1
M.D. 393 .....	1	.....	1
M.D. 396 .....	2	.....	2
M.D. 398 .....	1	.....	1
M.D. 399 .....	1	.....	1



## RESIDENCE OF PATIENTS DISCHARGED IN 1940—Continued

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
M.D. 421	.....	2	2
M.D. 423	.....	1	1
M.D. 431	1	.....	1
M.D. 451	.....	2	2
M.D. 455	1	.....	1
M.D. 458	2	2	4
M.D. 482	1	.....	1
M.D. 487	1	1	2
M.D. 488	.....	3	3
M.D. 489	1	.....	1
M.D. 490	.....	1	1
M.D. 491	.....	2	2
M.D. 512	.....	1	1
M.D. 514	.....	2	2
M.D. 515	1	.....	1
M.D. 516	.....	2	2
M.D. 519	.....	1	1
M.D. 541	.....	2	2
M.D. 544	1	.....	1
M.D. 545	.....	1	1
M.D. 546	.....	2	2
M.D. 547	.....	2	2
M.D. 551	.....	3	3
M.D. 552	.....	1	1
M.D. 553	.....	.....	.....
M.D. 573	.....	1	1
M.D. 575	.....	3	3
M.D. 577	1	.....	1
M.D. 578	.....	4	4
M.D. 579	.....	1	1
M.D. 580	.....	2	2
M.D. 581	.....	1	1
M.D. 582	.....	3	3
M.D. 637	.....	1	1
M.D. 739	1	.....	1
<b>LOCAL IMPROVEMENT DISTRICTS:</b>			
No. 9	1	.....	1
No. 66	1	.....	1
No. 67	1	.....	1
No. 71	1	.....	1
No. 122	1	.....	1
No. 123	1	.....	1
No. 151	2	.....	2
No. 181	2	.....	2
No. 183	1	.....	1
No. 217	1	.....	1
No. 276	5	.....	5
No. 331	1	.....	1
No. 403	1	.....	1
No. 461	.....	1	1
No. 466	.....	2	2
No. 583	.....	1	1
No. 604	.....	1	1
No. 631	.....	2	2
No. 635	.....	2	2
No. 665	1	.....	1
No. 667	.....	1	1
No. 695	.....	1	1
No. 706	.....	2	2
No. 731	.....	2	2
No. 741	1	.....	1
No. 764	.....	1	1
No. 771	.....	2	2
No. 795	.....	1	1
No. 796	1	.....	1
No. 825	.....	1	1
No. 873	.....	1	1
No. 946	.....	1	1
No. 1038	.....	1	1
No. 1124	.....	1	1
North West Territory	.....	1	1
	168	166	334

## The Child Welfare and Mothers' Allowance Branch

(T. R. BLAINE, *Superintendent*)

Working within the provisions of The Child Welfare Act of Alberta, The Juvenile Courts Act of Alberta, The Dominion Delinquents Act, The Children of Unmarried Parents Act, Part VII of The Domestic Relations Act.

The report of a department dealing with the child problem must of necessity be a report dealing practically with the whole social machinery, working against community irresponsibility and mitigating those tendencies that have a bearing-down influence on the whole life of the community. In the case of the adult, as a general rule the individual, either through his own efforts or the efforts of those whom he complicates, is capable of redressing the wrong society may inflict upon him. In the case of the child, it is absolutely impossible to have wrongs righted, or have redress or protection in any way, unless the adults make the child their particular concern, and develop the necessary machinery for his protection.

The space which is allotted for the presentation of an annual report for a department of this nature is absolutely inadequate to deal with the problem in all its phases, and it would be an impossibility to give in detail the stories of the various cases which have been dealt with and disposed of through the medium of this Branch during the year.

The correction of wrongs against children and the prevention of conditions becoming serious, which would soon result in criminality and pauperism, are the two main objects of this work. The fact that Alberta has been conducting this work practically without the use of institutions is significant, in as much as the system is new and gradually breaking down old traditions that expensive institutions with a great deal of machinery are necessary for handling neglected and delinquent children. In all probability statements will be advanced by those who advocate the institutional care of children that the institutional system is the only one possible, but it is sufficient to say that Alberta has found it possible to carry on a reformatory without an institution and to handle neglected children without permanently housing them within the walls of an institution, for their permanent care and protection.

The attitude assumed is that the normal child is better off in a normal home. In other words, if the child is to learn the game of citizenship, the right place for him to learn the rules of life is to live under the normal conditions surrounding the average home in the average community. Community activity is absolutely essential for carrying out any work which has for its object the prevention of criminals and the correction of defects surrounding children, whether the defects be of a municipal nature or are such defects as surround or are within the home.

It is to the credit of the good people of the Province that no great difficulty has been met in securing the right kind of homes



for the children involved, and for this we thank those friends who have come to our assistance. Without them we could not carry on the system that is now in operation in this Province.

**THE CHILD WELFARE ACT**  
**EXPENDITURES FOR YEAR ENDING MARCH 31, 1941**

Salaries .....	\$13,051.06
Expenses:	
Board .....	31,024.66
Clothing .....	9,655.24
Hospital and Medical Supplies .....	3,268.98
Medical Services .....	3,707.98
Printing, Stationery and Office Supplies .....	1,062.08
Telegrams and Telephones .....	1,121.01
Travelling Expenses .....	4,708.69
Postage .....	686.67
Unclassified .....	638.76
	<b>\$68,925.33</b>

**CHILDREN MADE WARDS OF THE SUPERINTENDENT OF CHILD WELFARE**

Age	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
1 year and under .....	157	159	145	167	148	194	229	206	255	269
2 years .....	13	5	13	8	8	9	7	11	12	9
3 years .....	9	5	5	8	5	7	12	4	6	7
4 years .....	7	1	4	4	5	10	5	8	12	14
5 years .....	2	3	3	7	10	5	5	5	9	15
6 years .....	4	4	5	5	7	9	12	5	16	14
7 years .....	3	3	5	4	7	5	7	6	13	15
8 years .....	9	6	5	5	10	5	10	6	16	9
9 years .....	3	3	3	8	6	7	10	4	15	24
10 years .....	8	5	10	8	15	5	7	5	16	11
11 years .....	6	4	4	8	9	6	8	8	9	11
12 years .....	5	6	13	3	10	7	5	6	11	11
13 years .....	8	10	6	6	9	8	4	10	9	13
14 years .....	9	7	7	4	5	9	7	7	12	9
15 years .....	9	7	6	4	7	4	4	5	10	19
16 years .....	3	11	8	8	12	8	3	9	8	9
17 years .....	4	3	4	1	5		2	1	3	5
Total .....	259	242	246	258	278	298	337	306	432	464

**NEGLECTED CHILDREN—CAUSE**

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Neglected .....	80	45	51	49	85	52	53	71	50	23
Mother Unable to Support .....	161	157	152	168	176	213	247	204	237	271
Abandoned .....	1							10	8	11
Immoral Conduct .....	1	1						3	1	6
Morals of Parent or Parents .....	10	24	15	30	7	9	10	5	35	40
Orphans .....	5	1	5	5	4		7	4	39	6
Cruelty of Parents .....			4				8	3	2	
Inadequate Parental Control .....				1			4	1	6	23
Father Dead, Mother Insane .....							4			
Mother in Gaol .....							1		4	
Incorrigible .....	1	2	3	1					4	9
Mother in Mental Hospital .....							1	3	10	12
Mother not Capable .....			4	1						
Mother Dead .....		12	1				1		19	
Mother Deserted .....							1			
Mother Drinking .....							2			
Home Conditions .....								5	19	47
No Proper Guardianship .....								1		16

**NEGLECTED CHILDREN—NATIONALITY**

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Canadian .....	167	114	219	236	248	268	333	303	426	455
American .....	7	2		1	2	2	2	1	1	2
Polish .....		1		5		1		2	3	2
Scotch .....	4	13	2	1				2		1
French .....	7	1	3	2	2	2				1
Russian .....	26	24	5	1	10	19				1
English .....	27	36	5	3	1	1				
German .....	19	27	3		5	4				
Irish .....	2	6	1	1	4					
Halfbreed .....		2	2				1			
Ukrainian .....		4	2	2						
Welsh .....									2	
Syrian .....					5					
Italian .....					1					
Chinese .....						1				
Swedish .....		1								
Danish .....		1								
Austrian .....		10	4	6						
Jewish .....										2
Czechoslovakian .....										1
Legitimate .....	136	85	94	84	118	105	69	87	167	176
Illegitimate .....	123	157	152	174	160	193	268	219	265	288









## DELINQUENTS—SENTENCES

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Suspended Sentence .....	76	70	103	79	105	164	94	108	139	123
Probation .....	187	112	194	161	207	227	149	207	213	191
Made Wards .....	14	20	4	42	32	35	49	55	78	48
To be Strapped .....	2	1	...	1	3	4	11	35	13	20
Adjourned Sine Die .....	7	6	39	19	8	22	34	56	32	50
Fined .....	61	6	8	27	59	32	151	15	23	39
Costs .....	137	37	51	69	116	128	...	202	247	344
Restitution .....	71	52	38	38	19	4	62	129	86	102
Reprimanded .....	6	43	58	30	25	48	49	29	39	47
Warned .....	88	22	32	54	73	52	39	93	117	39
Industrial School including suspended sentence .....	16	15	15	10	1	14	13	12	2	...
Remanded to Police Court .....	...	...	4	...	...	2	12	38	37	19
Cautioned .....	70	...	...	...	...	...	9	13	...	...
School for Mental Defectives .....	...	...	1	...	...	...	...	...	...	...
Returned to Parents .....	9	...	...	...	...	6	6	4	...	...
Dismissed .....	5	13	12	...	51	10	...	...	...	...
Remanded .....	13	36	39	61	15	21	...	...	...	...
Supervision .....	14	4	27	...	...	...	...	...	...	...
Driver's License Suspended .....	...	...	...	...	...	...	...	1	5	...
Bicycle Surrendered for period .....	...	...	...	...	...	...	...	48	30	25
Rifle Confiscated .....	...	...	...	...	...	...	...	2	4	...
Write Charge a number of times .....	...	...	...	...	...	...	...	32	64	67
Write Summons a number of times .....	...	...	...	...	...	...	...	...	17	...

## THE CHILDREN OF UNMARRIED PARENTS ACT

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Number illegitimate births registered .....	545	487	497	496	548	481	561	668	583	628
Number cases dealt with .....	224	200	244	221	177	159	248	377	388	466
Number cases closed .....	321	287	253	275	371	322	313	291	195	162

## AMOUNT RECEIVED FROM PUTATIVE FATHERS

1931 .....	\$ 7,871.01	1936 .....	6,362.74
1932 .....	7,603.78	1937 .....	8,701.70
1933 .....	5,526.93	1938 .....	12,970.78
1934 .....	6,746.00	1939 .....	12,627.16
1935 .....	5,811.61	1940 .....	12,903.70

## APPRECIATION

We would like to express our appreciation of the very practical and sympathetic interest taken in the work for children by the Hon. Dr. W. W. Cross, Minister of Public Health for the Province, and the very valuable assistance rendered by the various organizations and individuals who have so very kindly co-operated with us.

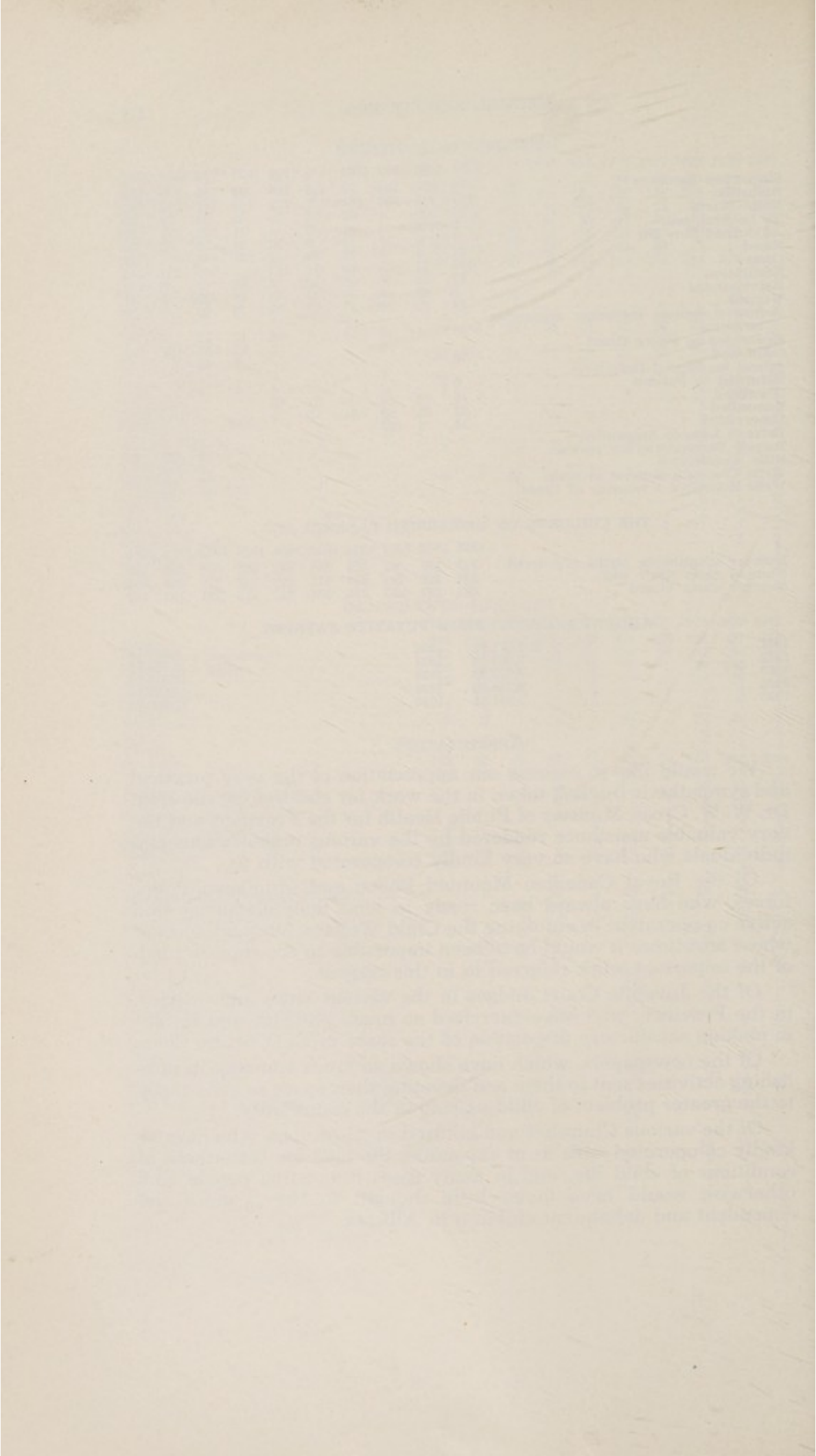
Of the Royal Canadian Mounted Police and Municipal Police forces, who have always been ready to lend their assistance and active co-operation in enforcing the Child Welfare Act, and without whose assistance it would have been impossible to accomplish much of the important work referred to in this respect.

Of the Juvenile Court Judges in the various cities and districts in the Province, who have exercised so much patience and insight in making satisfactory disposition of the cases brought before them.

Of the newspapers, which have shown so much courtesy in publishing activities sent to them and devoting their space so generously to the greater problem of child-placing in the community.

Of the various Churches and kindred organizations, who have so kindly co-operated with us in expanding the plan for betterment of conditions of child life, and in many cases interesting people who otherwise would have given little thought to the good of the dependent and delinquent children in Alberta.





ANNUAL REPORT  
OF THE  
**Vital Statistics Branch**  
OF THE  
DEPARTMENT OF PUBLIC HEALTH  
PROVINCE OF ALBERTA  
1940





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# VITAL STATISTICS BRANCH

(DONALD MACKIE, *Deputy Registrar General*)

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The outstanding features revealed by the Vital Statistics for the Province of Alberta for the year 1940 are a substantial increase in the birth rate, a slight increase in the death rate and a large increase in the marriage rate.

The birth rate is the highest since the year 1934, and indications are that a halt has been made in the continuous decline which has been recorded for so many years. This increase is undoubtedly partly due to the higher marriage rate during recent years. Alberta again has the highest rate of all provinces west of Quebec.

The large increase in the marriage rate is no doubt due to the war. This increase is general all over Canada.

The death rate from epidemic and contagious diseases, taken as a whole, is higher than that of the previous year, the increase being in Whooping Cough, Influenza and Diphtheria, whilst there are decreases in Scarlet Fever, Poliomyelitis and Typhoid. The rate for measles is the same as last year. The rate from Cancer, unfortunately, shows a considerable increase, and is the highest yet recorded for the Province. However, it is the second lowest in Canada, Saskatchewan showing a lower rate. Deaths from affections of the circulatory system are still leading, this being partly accounted for by the increasing proportion of elderly persons. Deaths by violence have risen considerably, most causes showing an increase. There is a decrease, however, in automobile accidents, also in accidents in mines and quarries.

## POPULATION

The population of the Province of Alberta for the year 1940 has been estimated by the Dominion Bureau of the Census at 790,000. All rates in this report have, therefore, been based on that figure.

## BIRTHS

The number of children born alive and registered during the year amounted to 17,359, being a birth rate of 21.8 per 1,000 population. This is 889 more than in the previous year, and is an increase of .9 in the rate. Comprising the total births, 8,822 were males and 8,537 were females, being a ratio of 1,033 males to 1,000 females, which is below the average for the last ten years. This ratio moves in a narrow limit, the high during the past 25 years being 1,074 and the low being 1,019. These figures are contrary to the popular idea that the ratio of boys to girls is higher in war years than in years of peace. There were 464 twins (232 sets) and one set of triplets born during the year.

Illegitimate births numbered 681, being 64 more than the previous year, and constituting a rate of 3.9 per 100 births. From the number of false registrations that are subsequently discovered through various sources by the Department, this rate is considerably lower than the actual rate.

Of the total births registered, 9,120 occurred in the cities and towns of over 1,000 population, 7,346 in the rural districts, and 893



were Indians. In the four large cities the births were as follows: Edmonton 3,089, Calgary 1,938, Lethbridge 736, and Medicine Hat 404.

For the purposes of comparison, the following are the birth rates for Canada and the Provinces for the year 1940:

## BIRTH RATES

Canada .....	21.4	Ontario .....	18.1
Prince Edward Island .....	21.3	Manitoba .....	20.2
Nova Scotia .....	22.8	Saskatchewan .....	20.1
New Brunswick .....	25.5	ALBERTA .....	21.8
Quebec .....	25.8	British Columbia .....	17.7

## MARRIAGES

There were 8,782 marriages registered during the year. This is 944 more than the number for the previous year, and is 2,145 more than the average for the five preceding years. This is the largest number of marriages in the history of the Province, and constitutes a rate of 11.0, which is also a high record. The marriage rate was highest in the cities, where 56.6 per cent. were celebrated, although the cities account for only 26.3 of the population. This high rate in the cities is due to the tendency of people from the rural districts resorting to the cities for purposes of celebration.

Of the 8,782 marriages, 147 are brides of 16 years of age and under, 1,734 are between the ages of 17 and 19, and 4,065 between the ages of 20 and 24. There were 76 grooms and 39 brides over 60 years of age, 19 of these grooms and 5 of these brides being over 70 years of age. The number of marriages in the four largest cities are as follows: Edmonton 2,088, Calgary 1,892, Lethbridge 344 and Medicine Hat 267.

For purposes of comparison, the following are the marriage rates per 1,000 population for Canada and the Provinces for the year 1940:

## MARRIAGE RATES

Canada .....	10.8	Ontario .....	10.9
Prince Edward Island .....	7.3	Manitoba .....	12.1
Nova Scotia .....	11.4	Saskatchewan .....	8.2
New Brunswick .....	10.6	ALBERTA .....	11.8
Quebec .....	10.8	British Columbia .....	12.4

## DIVORCES

There were 273 divorces granted by decree absolute during the year, which is 6 more than in the previous year and is 34 more than the average for the preceding 5 years; 119 were granted to husbands and 154 to wives. In addition to the divorces, 1 decree of nullity was issued.

## DEATHS

During the year, deaths (including Indians) numbered 6,203, of whom 3,683 were males and 2,520 were females. This number is 414 more than in the previous year, and constitutes a death rate of 7.8 or .5 more than in the preceding year. There were 433 males and 337 females 80 years of age or over at the time of death, whilst 2 males and 2 females were centenarians.

For purposes of comparison the following are the death rates per 1,000 population for Canada and the Provinces for the year 1940:

## DEATH RATES

Canada .....	9.7	Ontario .....	10.2
Prince Edward Island .....	11.0	Manitoba .....	8.6
Nova Scotia .....	11.0	Saskatchewan .....	6.7
New Brunswick .....	10.9	ALBERTA .....	7.8
Quebec .....	10.1	British Columbia .....	10.7



Heart Disease still leads in the number of deaths, the rate being 137 per 100,000 population compared with 126 for the previous year. The Cancer death rate increased from 82 for the previous year to 95 for the present year. This large increase is partly due to the fact that there was a decline last year over the previous year, and as this disease constantly shows an upward trend, this year has absorbed the decline of the previous year.

There was an increase in the deaths from Pneumonia, the number being 376 as against 362 the previous year, the respective rates being 47 and 46. There is a decrease in the deaths from diseases of the arteries, the number for the present year being 517 compared with 550 for the previous year, and the rate being 65 as against 70. The deaths from Influenza showed a considerable increase, the number being 255 as against 216 for the previous year, the respective rates being 32 and 27. Deaths by violence (excluding suicide) numbered 415, being a rate of 52 as compared with 364 and a rate of 46 for the previous year. The death rate from Pulmonary Tuberculosis was higher than in the previous year, the number being 232 as against 217, and the rates being 29 and 27 respectively.

As previously mentioned, deaths from contagious diseases are slightly higher, comparison with previous years being shown on the following table. There were again no deaths from Smallpox. Deaths resulting from pregnancy and childbirth numbered 69, being 10 more than in the preceding year and constituting a death rate of 9 per 100,000 population, or 3.9 per 1,000 live births compared with 3.5 for the previous year.

The following table shows certain principal causes of death during the year. Both the actual number and the rate per 100,000 population of each is given, together with the figures for the four preceding years:

Causes of Death	1940		1939		1938		1937		1936	
	Number of Deaths	Rate per 100,000 Population	Number of Deaths	Rate per 100,000 Population	Number of Deaths	Rate per 100,000 Population	Number of Deaths	Rate per 100,000 Population	Number of Deaths	Rate per 100,000 Population
Diseases of the Heart .....	1086	137	997	126	895	114	849	109	801	103
Cancer .....	759	95	647	82	682	87	598	77	640	82
Diseases of the Arteries .....	517	65	550	70	455	58	453	58	427	55
Violent Deaths (Suicides ex- cepted) .....	415	52	364	46	357	46	372	48	419	54
Pneumonia (all forms) .....	376	47	362	46	488	62	464	59	440	57
Pulmonary Tuberculosis .....	232	29	217	27	206	26	266	34	294	38
Influenza .....	255	32	216	27	174	22	473	61	340	44
Nephritis .....	217	27	214	27	243	31	240	31	190	24
Appendicitis .....	96	12	109	14	146	18	108	14	155	20
Suicides .....	96	12	103	13	100	12	101	13	87	11
Cerebral Haemorrhage .....	116	15	96	12	102	13	104	13	105	13
Diabetes Mellitus .....	90	11	90	11	85	11	70	9	70	9
Diarrhoea and Enteritis .....	92	12	90	11	118	15	115	15	124	16
Puerperal Causes .....	69	9	59	8	68	8	77	10	91	11
Whooping Cough .....	56	7	33	4	30	4	49	6	73	9
Scarlet Fever .....	9	1	19	2	25	3	24	3	23	3
Diphtheria .....	12	2	7	1	18	2	10	1	9	1
Typhoid and Paratyphoid .....	3	...	7	1	12	2	6	1	20	2
Measles .....	6	1	6	1	30	4	123	16	25	3
Poliomyelitis .....	4	...	5	1	15	2	13	2	4	...

The foregoing list comprises 4,506 deaths, and amounts to 72.6 of the total deaths for the year.



## INFANT DEATHS

The deaths of children under one year of age numbered 834 as against 763 for the previous year, the corresponding rates per 1,000 births being 48 and 46, an increase of 2 in the rate and 71 more in the number of deaths. Whooping Cough and Influenza were chiefly responsible for this increase. The present infant death rate is 7 less than the average of the preceding 5 years.

For the purposes of comparison, the following are the infantile mortality rates per 1,000 births for Canada and the Provinces for the year 1940:

## INFANT MORTALITY RATES PER 1,000 BIRTHS

Canada .....	56	Ontario .....	43
Prince Edward Island .....	66	Manitoba .....	51
Nova Scotia .....	62	Saskatchewan .....	50
New Brunswick .....	80	ALBERTA .....	48
Quebec .....	70	British Columbia .....	38

The number of deaths by suicide is 96, a decrease of 7 from the previous year, whilst the deaths from murder and manslaughter were 20, being an increase of 7.

Stillbirths numbered 378, being 43 more than the number for the previous year.

## DIVISIONS OF ALBERTA FOR CENSUS AND VITAL STATISTICS PURPOSES

As the Province of Alberta is not divided into Counties, and the political divisions are not permanently fixed, it has been found advisable to use as smaller areas, the Dominion Census Divisions.

These Divisions are fixed, and as the population increases, may be subdivided without destroying their value for purposes of Vital Statistic comparison with preceding years.

The following table shows Census areas divided into Municipalities, Local Improvement Districts, Cities, Towns and Villages with the 1936 and 1931 official Division population figures.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNI-  
CIPALITIES FOR CENSUS YEARS, 1936 AND 1931

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1936	1931		1936	1931
<b>Province</b> .....	<b>772,782</b>	<b>731,605</b>	<b>Division No. 2—Continued:</b>		
<b>Division No. 1: Medicine Hat</b>	<b>29,699</b>	<b>28,849</b>	<b>Towns—Continued:</b>		
1 L.I.D. ....	93	90	Coleman .....	2,129	1,704
2 L.I.D. ....	162	128	Diamond City .....	143	119
3 L.I.D. ....	172	152	Granum .....	255	329
4 L.I.D. ....	555	526	Macleod .....	1,365	1,447
5 L.I.D. ....	1,251	1,097	Magrath .....	1,217	1,224
6 L.I.D. ....	643	678	Pincher Creek .....	999	1,024
31 L.I.D. ....	64	38	Raymond .....	2,094	1,849
32 L.I.D. ....	592	580	<b>Villages:</b>		
33 Flowery Plains .....	533	477	Coaldale .....	255	251
34 Burlington .....	958	793	Coalhurst .....	774	953
35 L.I.D. ....	430	307	Cowley .....	141	151
36 Warner .....	1,305	1,214	Frank .....	258	268
61 L.I.D. ....	821	808	Monarch .....	103	117
62 L.I.D. ....	716	684	Pincher City .....	38	45
63 L.I.D. ....	625	570	Stirling .....	392	376
64 Forty Mile .....	1,148	1,060	<b>Division No. 3: Bow</b>	<b>14,710</b>	<b>15,066</b>
65 Eureka .....	1,190	1,148	96 McLean .....	1,234	713
66 L.I.D. ....	2,549	2,082	121 L.I.D. ....	2,785	452
91 L.I.D. ....	1,170	1,115	122 L.I.D. Pt. Jubilee .....	2,020	.....
92 Excelsior .....	974	905	123 Pt. Bow Slope .....	4,416	209
93 L.I.D. ....	890	852	125 L.I.D. ....	435	713
94 Bow Island .....	614	605	127 Pt. Clifton .....	914	.....
<b>Cities:</b>			<b>Towns:</b>		
Medicine Hat .....	9,592	10,300	Bassano .....	574	615
<b>Towns:</b>			Brooks .....	697	708
Bow Island .....	308	314	Redcliffe .....	990	1,192
Irvine .....	278	234	<b>Villages:</b>		
Taber .....	1,341	1,279	Duchess .....	150	114
<b>Villages:</b>			Empress .....	303	314
Burdett .....	90	121	Enchant .....	83	92
Milk River .....	326	350	Jenner .....	49	62
Warner .....	309	342	Retlaw .....	60	84
<b>Division No. 2: Macleod</b>	<b>57,499</b>	<b>57,186</b>	<b>Division No. 4: Nanton</b>	<b>28,285</b>	<b>29,067</b>
7 L.I.D. ....	330	369	97 L.I.D. ....	2,933	2,258
8 L.I.D. ....	1,394	1,474	98 Little Bow .....	1,526	1,589
9 L.I.D. ....	1,547	1,580	127 Clifton Pt. ....	867	.....
10 Cochrane .....	1,613	1,320	128 Harmony .....	1,052	1,157
37 Sugar City .....	2,192	1,993	129 Clear Lake .....	2,021	2,231
38 L.I.D. ....	1,176	1,276	130 L.I.D. ....	348	395
39 Kerr .....	1,830	2,007	131 L.I.D. ....	38	46
40 Castle River .....	606	540	157 Marquis .....	1,773	1,923
67 L.I.D. ....	4,635	4,691	158 Royal .....	1,580	1,751
68 L.I.D. ....	2,467	2,340	159 Riley .....	1,834	1,959
69 Bright .....	1,198	1,442	160 L.I.D. ....	676	381
70 Livingstone .....	1,466	1,502	161 L.I.D. ....	43	40
71 L.I.D. ....	4,369	4,282	189 Dinton .....	1,887	1,990
99 Argyle .....	1,811	1,900	190 Sheep Creek .....	1,978	1,988
100 L.I.D. ....	571	677	191 Stockland .....	2,957	2,907
101 L.I.D. ....	173	192	192 L.I.D. ....	9	8
<b>Indian Reserves</b>	<b>1,991</b>	<b>1,798</b>	<b>Unorganized parts</b>	<b>4</b>	<b>.....</b>
<b>Cities:</b>			<b>Towns:</b>		
Lethbridge .....	13,523	13,489	High River .....	1,359	1,459
<b>Towns:</b>			Nanton .....	709	739
Blairmore .....	1,682	1,629	Okotoks .....	571	760
Cardston .....	1,711	1,672	Stavely .....	301	303
Claresholm .....	1,051	1,156	Vulcan .....	869	803



## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1936 AND 1931—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1936	1931		1936	1931
<b>Division No. 4—Continued:</b>			<b>Division No. 6—Continued:</b>		
Villages:			Olds	1,197	1,056
Arrowwood	252	293	Strathmore	531	523
Barons	264	284	Three Hills	659	581
Black Diamond	657	683	Villages:		
Blackie	225	251	Acme	291	234
Carmangay	234	279	Airdrie	214	198
Cayley	135	127	Albert Park	332	.....
Champion	328	310	Beiseker	230	230
Lomond	127	176	Carbon	374	355
Milo	136	135	Carstairs	356	387
Nobleford	117	143	Cluny	142	134
Turner Valley	475	656	Cochrane	336	293
			Crossfield	333	321
<b>Division No. 5: Acadia</b>	<b>21,391</b>	<b>26,651</b>	Forest Lawn	471	.....
122 Pt. Jubilee	154	.....	Hussar	104	151
214 Berry Creek	1,793	581	Irricana	160	161
241 Acadia	826	1,029	Langdon	101	83
242 Cereal	1,176	1,103	Newcastle	1,278	304
243 Collholme	496	807	Rockyford	211	194
271 Bertawan	853	1,186	Rosebud	114	101
272 Golden Centre	790	1,227	Standard	205	218
273 Sounding Creek	345	740	Swalwell	112	95
274 Richdale	536	788	Trochu	464	506
275 Hand Hills	1,097	1,189	<b>Division No. 7: Battle River</b>	<b>37,647</b>	<b>38,106</b>
276 Pt. L.I.D.	2,436	.....	305 Pt. Dowling Lake	168	.....
277 Michichi	1,290	2,178	331 L.I.D.	1,069	1,180
301 Canmer	534	814	332 L.I.D.	806	1,015
302 Stewart	678	372	333 L.I.D.	1,130	1,255
303 Wiste	817	1,199	334 Coronation	1,941	2,022
304 Hiram	539	796	361 Rosenheim	1,470	1,744
305 Dowling Lake	1,285	1,482	362 Hillcrest	1,176	1,200
306 Lambton	1,390	1,651	363 Stocks	1,173	1,186
307 Starland	1,297	1,446	364 Flagstaff	1,796	1,683
Towns:			365 Progress	2,262	1,999
Hanna	1,405	1,490	391 Sifton	1,477	1,475
Youngstown	187	372	392 Vale	1,044	958
Villages:			393 Huamha	1,275	1,233
Cereal	131	185	394 Asquith	1,235	1,205
Chinook	134	176	395 Wheatland	1,809	1,819
Craigmyle	214	236	421 Ribstone	1,644	1,452
Delia	279	286	422 Gilt Edge	1,767	1,674
Morrin	146	149	423 Battle River	1,530	1,466
Munson	146	164	424 Kinsella	1,240	1,237
Oyen	298	401	425 Stirling	2,049	1,925
Richdale	38	44	455 Iron Creek	2,270	2,121
Rumsey	81	83	Towns:		
<b>Division No. 6: Calgary</b>	<b>141,806</b>	<b>140,624</b>	Castor	592	634
123 Pt. Bow Slope	547	.....	Coronation	605	738
217 L.I.D.	704	794	Hardisty	524	428
218 Blackfoot	1,528	1,590	Wainwright	1,048	1,147
219 Bow Valley	1,738	1,679	Villages:		
220 Shepard	2,057	3,048	Alliance	263	260
221 Springbank	2,539	2,166	Cadogan	84	128
222 L.I.D.	471	438	Chauvin	321	269
247 L.I.D.	958	1,073	Compeer	88	94
248 Grasswold	1,421	1,448	Consort	252	299
249 Keoma	1,518	1,525	Czar	138	140
250 Beddington	2,259	2,272	Edgerton	222	189
251 L.I.D.	1,472	1,427	Forestburg	226	291
252 L.I.D.	350	277	Galahad	152	150
276 L.I.D. Pt.	2,850	.....	Hughenden	203	191
278 Carbon	1,896	5,365	Irma	240	196
279 Norquay	2,342	2,170	Killam	329	326
280 Rosebud	2,366	2,177	Lougheed	217	218
281 Beaver Dam	2,282	1,926	Monitor	99	137
282 L.I.D.	953	593	Provost	490	533
308 Ghost Pine	2,340	2,129	Sedgewick	353	338
309 Stauffer	2,327	2,027	Strome	210	172
310 Mountain View	2,748	2,506	Veteran	180	180
311 Westerdale	2,631	2,420	Viking	480	492
Unorganized Parts	1,752	2,238	<b>Division No. 8: Red Deer</b>	<b>65,439</b>	<b>61,016</b>
Indian Reserves	1,882	2,109	336 Success	1,427	1,705
Banff	2,037	1,519	337 Vimy	1,015	1,074
Cities:			338 Hays	2,736	2,364
Calgary	83,407	83,761	339 Pine Lake	2,442	2,098
Drumheller	2,912	2,987	340 Arthur	2,487	2,177
Towns:			366 Dublin	1,322	1,425
Didsbury	846	801	367 Waverly	2,061	1,995
Gleichen	458	514			



## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1936 AND 1931—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1936	1931		1936	1931
<b>Division No. 8—Continued:</b>			<b>Division No. 10: Victoria</b>	<b>61,358</b>	<b>58,049</b>
396 Haig	1,572	1,486	451 Merton	1,948	1,792
397 Lakeside	1,615	1,622	452 Grizzly Bear	1,553	1,396
398 Lamerton	2,600	2,205	453 Buffalo Coulee	1,554	1,292
399 Crown	4,105	3,689	454 Lakeview	1,548	1,525
426 Melrose	2,874	2,537	481 Wellington	2,124	1,888
427 Evergreen	2,788	2,592	482 Vermilion Valley	2,052	1,843
428 Waterglen	1,510	1,386	483 Melberta	2,019	1,992
429 Fertile Valley	4,512	3,856	484 Birch Lake	2,478	2,312
456 Parkland	2,858	2,971	485 Patricia	2,284	2,111
457 Lloyd George	2,973	2,791	486 Beaver Lake	3,168	3,028
458 Montgomery	3,553	3,329	511 Streamstown	2,641	2,254
459 Bigstone	3,452	2,807	512 Ethelwyn	3,302	3,035
Indian Reserves	1,199	1,141	513 Ukraina	3,365	3,245
Cities:			514 Sobor	3,460	3,326
Red Deer	2,384	2,344	515 Norma	3,301	3,201
Wetaskiwin	2,058	2,125	516 The Pines	3,702	3,464
Towns:			545 Eagle	4,255	4,100
Big Valley	359	455	546 Wostok	4,733	4,584
Camrose	2,263	2,258	547 Leslie	3,666	3,725
Daysland	366	404	Towns:		
Innisfail	1,124	1,024	Lloydminster Pt.	498	539
Lacombe	1,414	1,259	Vegreville	1,672	1,659
Ponoka	1,045	836	Vermilion	1,291	1,270
Stettler	1,202	1,219	Villages:		
Villages:			Andrew	137	115
Alix	333	241	Bruderheim	253	280
Bashaw	423	385	Chipman	249	284
Bawlf	236	183	Derwent	144	107
Bittern Lake	32	47	Holden	273	230
Blackfalds	105	84	Innisfree	245	227
Botha	98	107	Islay	155	141
Clive	242	215	Kitscoty	254	280
Delburne	236	193	Lamont	470	507
Donalda	182	169	Lavoy	151	151
Edberg	110	131	Mannville	370	307
Elnora	149	153	Minburn	132	119
Erskine	164	174	Mundare	777	832
Ferintosh	120	161	Myrnam	159	131
Gadsby	139	144	Ranfurlly	112	122
Halkirk	139	160	Ryley	268	236
Heisler	156	125	Two Hills	200	149
Millet	357	300	Willington	395	250
Mirror	585	534	<b>Division No. 11: Edmonton</b>	<b>139,017</b>	<b>126,832</b>
New Norway	177	142	487 Cornhill	2,936	2,753
Ohaton	46	69	488 Black Mud	4,005	3,797
Penhold	94	125	489 Liberty	4,993	4,662
<b>Division No. 9: Rocky Mountain House</b>	<b>29,859</b>	<b>24,503</b>	490 Pioneer	3,223	2,603
312 Waterloo	1,343	1,008	491 L.I.D.	1,226	907
341 Poplar Grove	3,003	2,540	517 Clover Bar	2,997	2,754
342 Raven	2,242	1,712	518 Strathcona	3,871	3,555
343 Prairie Creek	846	610	519 Spruce Grove	4,251	3,499
344 L.I.D.	74	48	520 Inga	3,096	2,851
371 Golden West	2,526	2,266	521 Tomahawk	1,705	1,432
400 Lorne	2,584	2,284	548 Sturgeon	4,911	4,302
401 Lochearn	2,913	2,221	549 Ray	3,523	3,558
403 L.I.D.	363	347	550 Woodford	2,960	2,408
430 Blindman	1,599	1,376	551 Morthen	2,763	2,224
431 Last West	1,736	1,074	Indian Reserves	954	336
432 L.I.D.	53	17	Cities:		
433 L.I.D.	164	24	Edmonton	85,774	79,197
434 L.I.D.	287	366	Towns:		
460 Columbia	1,646	1,104	Beverly	998	1,111
461 L.I.D.	1,127	712	Fort Saskatchewan	899	1,001
462 L.I.D.	307	101	Leduc	926	900
463 L.I.D.	90		Morinville	554	570
466 L.I.D.	1,790		St. Albert	811	825
Unorganized Parts	1,094	2,895	Stony Plain	499	497
Indian Reserves	95	249	Tofield	544	497
Jasper	1,322	1,230	Villages:		
Villages:			Alberta Beach	57	38
Bentley	250	233	Hay Lakes	156	125
Bowden	270	233	Onoway	128	149
Eckville	159	169	Seba Beach	59	41
North Red Deer	359	318	Wabamun	198	164
Rimbey	313	304	<b>Division No. 12: Edson</b>	<b>16,024</b>	<b>13,815</b>
Rocky Mountain House	652	646	466 L.I.D. Pt.	1,704	
Sylvan Lake	652	416	493 L.I.D.	26	4



## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1936 AND 1931—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1936	1931		1936	1931
<b>Division No. 12—Continued:</b>			<b>Division No. 14—Continued:</b>		
522 Rocky Rapids	1,728	1,148	726 L.I.D.	396	274
523 L.I.D.	87	13	727 L.I.D.	86	76
525 L.I.D.	24	24	728 T. 7-74, R. 22-24, W. 4, N. of Athabasca R.	26	.....
526 L.I.D.	136	116	729 L.I.D.	218	120
527 L.I.D.	490	244	Indian Reserves	21	.....
552 Pembina	2,431	2,041	Towns:		
553 L.I.D.	1,037	728	Athabasca	608	573
554 L.I.D.	870	685	Villages:		
555 L.I.D.	733	655	Barrhead	307	222
556 L.I.D.	240	274	Clyde	153	186
558 L.I.D.	59	57	Lac La Biche	410	313
582 Kitchener	2,478	2,340	Legal	394	350
583 L.I.D.	759	654	Smoky Lake	428	366
584 L.I.D.	574	543	Westlock	507	536
612 L.I.D.	472	341	Waskatenau	241	.....
Territorial Units 615, 585	18	12	<b>Division No. 15: Clearwater</b>	15,739	13,664
Unorganized Parts	199	1,133	613 L.I.D.	182	53
Towns:			641 L.I.D.	804	543
Edson	1,600	1,547	642 L.I.D.	22	9
Villages:			705 L.I.D.	24	24
Entwistle	150	189	706 L.I.D.	292	270
Mayerthorpe	209	159	707 L.I.D.	209	141
<b>Division No. 13: Beaver R.</b>	30,602	24,936	708 L.I.D.	84	25
541 L.I.D.	910	745	709 L.I.D.	31	42
542 Lincoln	1,249	933	710 L.I.D.	82	78
543 Laurier	3,141	2,646	730 L.I.D.	156	175
544 Champlain	2,399	2,257	731 L.I.D.	431	363
571 L.I.D.	267	65	732 L.I.D.	670	578
572 Bonnyville	1,859	1,419	733 L.I.D.	678	504
573 St. Vincent	2,951	2,554	734 L.I.D.	112	149
574 St. Lina	1,146	817	735 L.I.D.	164	147
575 Vilna	3,903	3,756	736 L.I.D.	56	41
601 L.I.D.	1,195	760	737 L.I.D.	61	23
602 L.I.D.	1,567	1,105	738 L.I.D.	621	414
603 L.I.D.	1,016	615	764 L.I.D.	1,420	1,333
604 L.I.D.	640	497	765 L.I.D.	1,176	1,101
605 Ashmont	1,814	1,616	766 L.I.D.	534	503
631 L.I.D.	951	677	767 L.I.D.	84	24
633 L.I.D.	44	82	794 L.I.D.	180	141
634 L.I.D.	255	186	795 L.I.D.	802	648
635 L.I.D.	915	568	796 L.I.D.	2,791	2,408
663 L.I.D.	17	.....	824 L.I.D.	18	10
664 L.I.D.	22	13	825 L.I.D.	251	215
666 L.I.D.	545	320	826 L.I.D.	764	891
695 L.I.D.	308	218	855 L.I.D.	577	477
Territorial Units 632, 661	5	5	Territorial Units 622, 670, 676, 677, 678, 679 and un- organized parts	148	47
Indian Reserves	1,720	1,514	Indian Reserves	963	909
Villages:			Towns:		
Bellis	127	117	Grouard	185	261
Bonnyville	433	362	Peace River	883	864
St. Paul	950	938	Villages:		
Vilna	253	151	Falher	284	253
<b>Division No. 14: Sturgeon</b>	45,790	39,508	<b>Division No. 16: Peace River</b>	29,204	27,945
576 Smoky Lake	4,319	4,268	739 Grande Prairie	2,388	2,389
577 Unity	4,871	4,919	740 Bear Lake	2,815	2,683
578 Opal	3,318	3,286	741 L.I.D.	1,599	1,566
579 Hazelwood	3,627	3,438	742 L.I.D.	466	460
580 Lockerbie	2,845	2,444	769 L.I.D.	661	514
581 Pershing	2,158	1,664	770 L.I.D.	981	871
606 L.I.D.	148	131	771 L.I.D.	1,850	1,730
607 L.I.D.	1,828	887	772 L.I.D.	1,193	1,358
608 Tawatnaw	2,223	8,147	797 L.I.D.	658	549
609 Pibroch	2,380	2,210	800 L.I.D.	336	296
610 Shoal Creek	2,553	2,095	801 L.I.D.	173	167
611 L.I.D.	909	406	827 L.I.D.	126	161
636 L.I.D.	540	217	828 L.I.D.	633	381
637 Cartier	1,413	1,273	829 Spirit River	1,890	1,800
638 Nelson	1,701	1,486	830 L.I.D.	878	738
639 L.I.D.	848	757	831 L.I.D.	520	487
640 L.I.D.	953	687	858 Peace	2,155	1,990
665 L.I.D.	1,151	1,130	858 Fairview	2,443	2,264
667 L.I.D.	1,622	1,342	859 L.I.D.	705	519
668 Grosmont	805	886	886 L.I.D.	497	508
669 L.I.D.	506	79	887 L.I.D.	744	525
696 L.I.D.	212	144	888 L.I.D.	597	581
697 L.I.D.	572	499			
698 L.I.D.	34	40			
699 L.I.D.	459	357			

## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1936 AND 1931—Continued

Census Divisions and Municipalities	Population		Census Divisions and Municipalities	Population	
	1936	1931		1936	1931
<b>Division No. 16—Continued:</b>			<b>Division No. 16—Continued:</b>		
889 L.I.D. ....	574	425	Fairview .....	393	260
890 L.I.D. ....	58	34	Grimshaw .....	129	137
891 L.I.D. ....	114	77	Hythe .....	260	278
916 L.I.D. ....	237	231	Sexsmith .....	298	304
917 L.I.D. ....	338	298	Spirit River .....	234	232
Unorganized Parts .....	220	72	Wembley .....	173	183
Indian Reserves .....	83	1,068	<b>Division No. 17: Athabasca</b> .....	<b>8,713</b>	<b>5,788</b>
Towns:			Remainder of the Province		
Grande Prairie .....	1,478	1,464	comprising northern parts	5,465	4,312
Villages:			Indian Reserves .....	3,248	1,476
Beaver Lodge .....	203	211			
Clairmont .....	104	110			



VITAL STATISTICS BRANCH

TABLE 1.—GENERAL SUMMARY OF BIRTHS, DEATHS AND MARRIAGES IN THE PROVINCE OF ALBERTA BY DIVISIONS, CITIES TOWNS AND VILLAGES OF 1,000 POPULATION AND OVER, 1940

Divisions, Cities, Towns and Villages	Births (Exclusive of Still-births)			DEATHS										Stillbirths	Marrriages				
	Total	All Ages		Under 1 year		1-4 years		5 years and over		Total	M.	F.	Total			M.	F.		
		M.	F.	M.	F.	M.	F.	M.	F.									M.	F.
<b>TOTAL FOR THE PROVINCE</b>	17359	8822	8537	6203	3683	2520	468	366	128	81	3087	2073	378	8782					
Division No. 1	541	272	269	205	132	73	19	7	1	2	112	64	11	352					
Division No. 2	1637	819	818	512	304	208	47	35	9	6	248	167	32	717					
Division No. 3	303	154	149	87	51	36	6	9	1	1	44	26	10	118					
Division No. 4	392	194	198	147	95	52	7	4	2	2	86	46	4	188					
Division No. 5	185	101	84	86	60	26	4	2	1	1	55	24	3	84					
Division No. 6	2883	1457	1426	1293	742	551	51	55	17	16	674	480	93	2347					
Division No. 7	748	389	359	247	149	98	14	13	5	1	130	84	15	254					
Division No. 8	1501	772	729	601	348	253	34	32	14	11	300	210	33	634					
Division No. 9	452	221	231	157	102	55	16	9	3	3	77	43	7	154					
Division No. 10	1214	629	585	348	207	141	27	20	5	2	175	119	22	499					
Division No. 11	3602	1848	1754	1407	817	590	82	54	23	14	712	522	66	2331					
Division No. 12	305	151	154	95	61	34	11	11	3	3	47	22	9	58					
Division No. 13	959	504	455	264	166	98	52	37	8	3	106	58	25	229					
Division No. 14	1065	530	535	301	186	115	46	27	10	6	130	82	23	321					
Division No. 15	463	232	231	131	80	51	13	18	5	2	62	31	7	142					
Division No. 16	746	375	371	187	113	74	16	16	4	2	93	57	12	268					
Division No. 17	363	174	189	135	70	65	23	18	11	9	36	38	6	86					
<b>CITIES:</b>																			
Calgary	1938	977	961	889	503	386	29	34	4	9	470	343	63	1892					
Drumheller	241	117	124	65	39	26	7	1	1	1	31	24	8	91					
Edmonton	3089	1574	1515	1152	655	497	60	42	19	11	576	444	53	2088					
Lethbridge	736	393	343	213	120	93	21	17	3	2	96	74	11	344					
Medicine Hat	404	198	206	139	87	52	12	3	1	2	74	47	7	267					
Red Deer	151	82	69	54	35	19	4	3	3	1	28	15	7	138					
Wetaskiwin	204	104	100	52	23	29	4	5	1	1	18	24	9	71					
<b>TOWNS:</b>																			
Blairmore	38	22	16	8	3	5	2	2	1	1	2	5	1	34					
Camrose	238	118	120	43	19	24	2	4	2	2	17	22	5	77					
Cardston	204	101	103	27	15	12	4	4	2	1	9	8	2	102					
Claresholm	74	31	43	22	17	5	1	1	1	1	17	4	3	19					
Coleman	56	19	37	20	9	11	2	2	1	1	9	8	1	43					

Edson	100	43	57	27	16	11	4	4	1	12	6	3	31
Grande Prairie	237	123	114	47	25	22	3	2	1	22	19	6	98
Hanna	114	61	53	30	19	11	1	1	1	17	10	2	42
High River	154	79	75	41	28	13	3	1	1	25	12	2	68
Innisfail	152	78	74	38	19	19	3	3	3	13	16	3	33
Lacombe	152	80	72	27	19	8	3	1	1	16	6	3	78
Macleod	61	29	32	32	22	10	3	1	1	19	9	4	40
Magrath	10	2	8	7	4	3	1	1	1	3	3	1	11
Olds	115	62	53	13	6	7	1	1	1	5	6	3	54
Ponoka	37	21	16	100	58	42	2	1	1	56	41	1	25
Raymond	21	12	9	10	1	9	1	1	1	1	8	1	8
Stettler	142	78	64	35	21	14	1	2	2	20	12	3	62
Taber	11	7	4	9	7	2	1	1	1	6	2	1	35
Vegreville	220	119	101	56	38	18	6	1	1	32	16	2	56
Vermillion	141	59	82	30	12	18	1	2	1	12	16	2	61
Wainwright	79	42	37	24	13	11	1	1	1	11	10	1	28
VILLAGE:													
Newcastle	1	1		4	4					4			



TABLE 2.—BIRTHS (EXCLUSIVE OF STILLBIRTHS), BY MONTHS, CLASSIFIED AS RURAL AND URBAN, BY DIVISIONS, IN ALBERTA, 1940

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
<b>ALBERTA</b>	17359	1341	1299	1394	1392	1534	1551	1607	1509	1517	1390	1398	1427
Rural	6655	626	697	666	758	710	761	698	705	705	629	662	662
Urban	9120	676	673	697	726	776	841	846	811	812	761	736	765
<b>DIVISION No. 1—MEDICINE HAT</b>	541	42	38	41	32	53	49	44	49	54	50	39	50
Rural	126	11	10	11	9	14	3	9	15	10	9	8	17
Urban	415	31	28	30	23	39	46	35	34	44	41	31	33
City of Medicine Hat	404	31	28	29	22	39	43	35	33	44	38	30	32
Town of Taber	11	1	1	1	1	3	3	1	1	1	3	1	1
<b>DIVISION No. 2—MACLEOD</b>	1637	119	122	135	151	161	154	144	144	118	129	132	128
Rural	437	35	32	36	54	50	39	36	32	27	28	34	34
Urban	1200	84	90	99	97	111	115	108	112	91	101	98	94
City of Lethbridge	736	47	57	59	57	66	70	60	80	61	58	65	56
Town of Blairmore	38	4	3	1	4	3	5	6	3	1	2	6	1
Cardston	204	14	13	20	15	18	20	30	12	13	22	13	14
Clareholm	74	8	3	5	2	7	11	3	9	8	7	5	6
Coleman	56	5	6	5	6	7	2	4	3	4	5	3	6
Macleod	61	3	7	7	10	7	5	2	3	1	6	3	7
Magrath	10	1	1	1	1	2	1	2	1	1	1	1	1
Raymond	21	2	1	2	3	1	1	1	1	3	1	2	4
<b>DIVISION No. 3—BOW</b>	303	26	27	28	17	29	24	28	28	26	26	26	18
Rural	303	26	27	28	17	29	24	28	28	26	26	26	18
<b>DIVISION No. 4—NANTON</b>	392	27	26	27	23	36	31	44	37	50	27	33	31
Rural	238	16	6	17	14	23	13	32	23	31	16	24	23
Urban	154	11	20	10	9	13	18	12	14	19	11	9	8
Town of High River	154	11	20	10	9	13	18	12	14	19	11	9	8
<b>DIVISION No. 5—ACADIA</b>	185	12	19	11	15	21	18	16	12	20	17	10	14
Rural	71	3	9	5	6	10	4	7	4	6	4	6	7
Urban	114	9	10	6	9	11	14	9	8	14	13	4	7
Town of Hanna	114	9	10	6	9	11	14	9	8	14	13	4	7

<b>DIVISION No. 6—CALGARY</b>	2883	223	232	221	228	266	250	253	256	229	253	262
Rural	38	49	45	52	46	54	49	59	47	45	53	51
Urban	172	174	187	169	182	212	201	194	209	184	200	211
City of Calgary	152	140	160	141	157	188	173	162	166	149	167	183
Town of Olds	241	24	13	16	17	17	17	20	36	24	23	19
Village of Newcastle	115	5	10	12	8	1	11	12	7	11	10	9
	1											
<b>DIVISION No. 7—BATTLE RIVER</b>	748	63	51	59	66	63	74	68	76	66	54	55
Rural	669	59	41	55	56	55	66	65	70	57	47	48
Urban	79	4	10	4	3	8	8	3	6	9	7	7
Town of Wainwright	79	4	10	4	3	8	8	3	6	9	7	7
<b>DIVISION No. 8—RED DEER</b>	1501	117	107	122	107	134	138	136	137	127	122	125
Rural	425	36	37	29	21	44	51	44	30	30	37	33
Urban	1076	81	70	93	86	83	83	94	107	97	85	92
City of Red Deer	151	7	18	15	14	16	11	12	12	16	9	11
Wetaskiwin	204	17	9	21	15	13	14	22	24	17	21	18
Town of Camrose	238	19	14	14	16	14	29	29	25	18	14	25
Innisfail	152	11	11	15	11	10	12	17	9	19	9	14
Lacombe	152	10	7	10	10	13	18	12	13	11	23	13
Ponoka	37	4	4	2	1	4	6	1	2	4	1	1
Stettler	142	13	7	16	14	13	4	10	22	12	8	10
<b>DIVISION No. 9—ROCKY MOUNTAIN HOUSE</b>	452	26	37	27	48	43	42	35	35	44	37	39
Rural	452	26	37	27	48	43	42	35	35	44	37	39
<b>DIVISION No. 10—VICTORIA</b>	1214	86	90	99	100	129	129	105	96	91	92	90
Rural	853	65	59	80	67	76	91	79	66	60	65	68
Urban	361	21	31	19	33	38	50	28	30	31	27	22
Town of Vegreville	220	17	18	11	22	24	27	19	15	20	18	10
Vermilion	141	4	13	8	11	14	23	9	15	11	9	12
<b>DIVISION No. 11—EDMONTON</b>	3602	294	243	283	312	308	347	316	300	290	299	303
Rural	513	56	31	51	37	34	54	42	31	43	46	43
Urban	3089	238	212	232	275	274	293	274	269	247	253	260
City of Edmonton	3089	238	212	232	275	274	293	274	269	247	253	260
<b>DIVISION No. 12—EDSON</b>	305	23	21	23	27	31	28	22	27	27	24	30
Rural	205	18	13	18	18	16	20	15	21	16	19	21
Urban	100	5	8	5	9	15	8	7	6	11	5	9
Town of Edson	100	5	8	5	9	15	8	7	6	11	5	9
<b>DIVISION No. 13—BEAVER RIVER</b>	959	75	98	72	76	85	86	87	98	62	80	63
Rural	959	75	98	72	76	85	86	87	98	62	80	63
<b>DIVISION No. 14—STURGEON</b>	1065	87	71	96	87	101	88	94	106	86	77	77
Rural	1065	87	71	96	87	101	88	94	106	86	77	77



TABLE 2.—BIRTHS (EXCLUSIVE OF STILLBIRTHS), BY MONTHS, CLASSIFIED AS RURAL AND URBAN, BY DIVISIONS,  
IN ALBERTA, 1940—Continued

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
<b>DIVISION No. 15—CLEARWATER</b>	463	44	32	36	35	52	34	51	32	40	30	39	38
Rural	463	44	32	36	35	52	34	51	32	40	30	39	38
<b>DIVISION No. 16—PEACE RIVER</b>	746	54	62	64	53	70	54	76	74	58	57	55	69
Rural	509	34	42	52	40	50	36	48	40	41	41	38	47
Urban	237	20	20	12	13	20	18	28	34	17	16	17	22
Town of Grande Prairie	237	20	20	12	13	20	18	28	34	17	16	17	22
<b>DIVISION No. 17—ATHABASCA</b>	363	36	32	39	39	42	27	22	17	20	32	26	35
Rural	363	36	32	39	39	42	27	22	17	20	32	26	35

TABLE 3.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) CLASSIFIED AS LEGITIMATE OR ILLEGITIMATE FOR THE PROVINCE AND IN CITIES OF 5,000 POPULATION AND OVER, 1940

Province and Cities	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>TOTAL FOR PROVINCE</b> .....	17359	8822	8537	16678	8475	8203	681	347	334
<b>CITIES:</b>									
Calgary .....	1938	977	961	1808	913	895	130	64	66
Edmonton .....	3089	1574	1515	2798	1424	1374	291	150	141
Lethbridge .....	736	393	343	722	388	334	14	5	9
Medicine Hat .....	404	198	206	397	196	201	7	2	5

TABLE 4.—PLURAL BIRTHS CLASSIFIED TO SHOW THE NUMBER OF CHILDREN BORN ALIVE AND STILLBORN BY SEX, IN ALBERTA, 1940

Classification of Births	Total
<b>CASES OF TWINS</b> .....	232
Two males (both living) .....	66
One male and one female (both living) .....	75
Two females (both living) .....	70
One male living and one male stillborn .....	7
One male living and one female stillborn .....	2
One male stillborn and one female living .....	4
One female living and one female stillborn .....	2
Two males (both stillborn) .....	2
One male and one female (both stillborn) .....	1
Two females (both stillborn) .....	3
<b>CASES OF TRIPLETS</b> .....	1
Three males (all living) .....	1
<b>Total multiple confinements</b> .....	Number 233
	Male 235
	Female 232
<b>Total single live births</b> .....	Number 16919
	Male 8603
	Female 8316
<b>Total single still births</b> .....	Number 351
	Male 193
	Female 158
<b>Total confinements</b> .....	17503



TABLE 5.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) CLASSIFIED ACCORDING TO BIRTHPLACES OF PARENTS, IN ALBERTA, 1940

Birthplace of Father	Birthplace of Mother																																			
	Canada											British Isles					Europe										Asia	United States	Not Specified							
	P. E. Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Prov. not Specified	England	Ireland	Scotland	Wales	Other	British Possessions	Austria	Belgium	Denmark	Finland	France	Germany	Holland	Hungary	Italy	Norway	Poland	Roumania	Russia*	Sweden	Other	China	Japan	Other	United States	Various
9542	12	54	28	193	350	327	758	6118	155	6	281	38	140	22	3	7	17	8	9	6	26	7	10	5	20	110	26	54	17	17				716	2	
40	2	1	1	3	1	3	3	18	2	3	3	12	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	
132	1	5	1	1	5	8	6	62	6	5	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19	10	
78	3	6	1	5	4	11	32	5	5	9	2	5	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	41	151	
360	3	4	107	17	13	23	124	21	5	1	54	11	35	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	151	54	
1042	2	10	4	16	145	50	89	426	21	1	35	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	84	84
589	4	4	4	5	28	84	73	255	12	1	19	9	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
842	2	5	2	7	30	32	204	399	15	1	133	14	75	14	2	5	16	3	7	3	20	5	8	3	15	92	20	37	12	9	1	1	1	340	1	
6240	1	23	6	54	111	124	332	4676	76	3	11	1	6	1	2	5	16	3	7	3	20	5	8	3	15	92	20	37	12	9	1	1	1	13	1	
215	1	1	1	2	8	9	16	123	18	1	1	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4							1	3																												
1617	18	4	11	101	56	99	705	37	37	191	51	129	24	1	1	2	1	2	1	2	6	6	1	1	7	4	1	7	2	3	3	3	145			
887	11	3	7	56	26	58	398	23	23	132	10	35	11	1	1	1	1	1	1	1	3	5	1	1	6	3	1	4	1	3	3	85				
169	3	2	6	4	13	55	5	5	5	14	35	8									2	1	1	1	1	1	1	1	1	1	1	1	18			
465	4	1	1	34	21	23	208	8	8	38	6	78	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
96			1	5	5	5	44	1	1	7	7	8	9								1	1	1	1	1	1	1	2				9				
45	1		4	1	1	1	22	1	1	4	1	1																						8		
17			2	1	10					1	1	1																						3		
28	1		2	1	1	1	12	1	1	3	1	1																					5			
3343	2	2	7	39	68	144	1142	22	22	39	5	19	6																					194	2	
261			13	9	125					85																								6		
23	1	1	1	1	12					2	1	1	1																				1			
166	1	1	1	6	4	13	57	10	10	4	1	2																					23			
14																																		2		
26			1	3	1	2	9	1	1	1																								2		
219			1	3	7	12	95	2	2	4	4	5	1																					12	1	
78			1	1	1	1	33	1	1	3	1	2	1																				7			
155							12	21	1	1	2	1																						5		

























159	Premature birth	231	131	100	11	8	12	8	7	6	11	5	13	14	12	12	11	13	12	6	9	8	16	9	7	3	10	8
160	Injury at birth	55	34	21	2	5	2	1	5	1	5	2	2	2	2	2	1	2	5	2	2	2	2	3	1	3	2	2
161	Other diseases peculiar to early infancy (under 3 months)	63	34	29	2	1	4	3	5	4	2	4	4	3	2	4	4	1	3	1	1	1	2	3	2	2	3	2
	(a-e) Specified diseases	48	27	21	2	1	3	2	5	3	2	2	3	2	3	3	2	1	1	1	1	1	1	2	2	2	2	2
	(f) No cause given, no doctor in attendance	15	7	8	1	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
173-175	Homicide	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
176-198	Other external causes	12	5	7	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	Other specified causes	14	9	5	1	1	2	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
199, 200	Unspecified or ill-defined causes	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

TABLE 12.—INFANTILE DEATH AND STILLBIRTH RATES, ALSO NUMBER OF BIRTHS WITH OR WITHOUT A PHYSICIAN, BY DIVISIONS AND CITIES, 1940

Divisions and Cities	Death rate of children under one year of age to each 1,000 births						Births with or without a physician in attendance						Rates of still-born children to 1,000 live births	
	Rate per 1000 births	Number of deaths	Total births	With physician	Without physician	Not stated	With physician	Without physician	Not stated	Number of stillbirths	Rate per 1000 live births			
												Number of deaths	Total births	With physician
Division No. 1—Medicine Hat (City of Medicine Hat excepted)	80	11	137	58	70	9	58	70	9	4	29.2	4	29.2	
Division No. 2—Macleod (City of Lethbridge excepted)	49	44	901	782	114	5	782	114	5	21	23.3	21	23.3	
Division No. 3—Bow	50	15	303	251	49	3	251	49	3	10	33.0	10	33.0	
Division No. 4—Nanton	28	11	392	366	24	2	366	24	2	4	10.2	4	10.2	
Division No. 5—Acadia	32	6	185	160	23	2	160	23	2	3	16.2	3	16.2	
Division No. 6—Calgary (Cities of Calgary and Drumheller excepted)	50	35	704	577	126	1	577	126	1	22	31.3	22	31.3	
Division No. 7—Battle River	36	27	748	728	20	5	728	20	5	15	20.1	15	20.1	
Division No. 8—Red Deer (Cities of Red Deer and Wetaskiwin excepted)	44	50	1146	985	156	2	985	156	2	7	14.8	7	14.8	
Division No. 9—Rocky Mountain	55	25	452	367	83	2	367	83	2	7	15.5	7	15.5	
Division No. 10—Victoria	39	47	1214	1014	194	6	1014	194	6	22	18.1	22	18.1	
Division No. 11—Edmonton (City of Edmonton excepted)	66	34	513	291	217	3	291	217	3	13	25.3	13	25.3	
Division No. 12—Edson	72	22	305	175	127	3	175	127	3	9	29.5	9	29.5	
Division No. 13—Beaver River	93	89	959	580	367	12	580	367	12	25	26.1	25	26.1	
Division No. 14—Sturgeon	69	73	1065	640	408	17	640	408	17	23	21.6	23	21.6	
Division No. 15—Clearwater	67	31	463	255	199	9	255	199	9	7	15.1	7	15.1	
Division No. 16—Peace River	42	31	746	488	241	17	488	241	17	12	16.1	12	16.1	
Division No. 17—Athabasca	113	41	363	115	245	3	115	245	3	6	16.5	6	16.5	
City of Edmonton	33	102	3089	3068	19	2	3068	19	2	53	17.2	53	17.2	
City of Calgary	33	63	1938	1935	2	1	1935	2	1	63	32.5	63	32.5	
City of Lethbridge	52	38	736	732	4	1	732	4	1	11	14.9	11	14.9	
City of Medicine Hat	37	15	404	378	26	1	378	26	1	7	17.3	7	17.3	
City of Red Deer	46	7	151	151	1	1	151	1	1	7	46.4	7	46.4	
City of Wetaskiwin	44	9	204	203	1	1	203	1	1	9	44.1	9	44.1	
City of Drumheller	33	8	241	240	1	1	240	1	1	8	33.2	8	33.2	
Divisions	56	592	10596	7832	2663	101	7832	2663	101	220	20.8	220	20.8	
Cities	36	242	6763	6707	53	3	6707	53	3	158	23.4	158	23.4	
Whole Province	48	834	17359	14539	2716	104	14539	2716	104	378	21.8	378	21.8	









TABLE 14.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTION OF CHILDREN UNDER ONE YEAR OF AGE, CLASSIFIED ACCORDING TO RESIDENTS OF DECEDENTS, IN CITIES OF 5,000 POPULATION AND OVER, IN ALBERTA, 1940

Cities	All Deaths under one year						Deaths in Institutions						Deaths elsewhere than in Institutions												
	Residents			Non-resident in city where death occurred and			Residents			Non-resident in city where death occurred and			Residents			Non-resident in city where death occurred and									
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female							
Calgary	63	29	34	53	24	29	10	5	5	50	22	28	40	17	23	10	5	5	13	7	6	13	7	6	
Edmonton	102	60	42	53	35	18	48	24	24	94	54	40	47	31	16	46	22	24	1	8	6	2	6	4	2
Lethbridge	38	21	17	15	8	7	23	13	10	35	20	15	13	7	6	22	13	9	3	3	1	2	1	1	1
Medicine Hat	15	12	3	6	3	3	7	7	2	12	9	3	4	1	3	6	6	2	2	3	3	3	2	2	1

TABLE 15.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTIONS OF CHILDREN UNDER ONE YEAR OF AGE, SHOWING THE NUMBER NON-RESIDENT IN ALBERTA, 1940

Total for the Province	All Deaths under one year						In Institutions					
	Total			Non-resident in Province			Total			Non-resident in Province		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
834	468	366	8	4	4	463	261	202	7	3	4	











VITAL STATISTICS BRANCH

TABLE 16.—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), TRANSFERRED TO REGULAR RESIDENCE, 1940—Continued

DIVISION No. 5—ACADIA

Municipality No.	Population, 1940	Number of Births	Birth Rate per 1,000	Number of Deaths	Death Rate per 1,000	Number of Deaths (under 1 year)	Infant Mortality Rate (per 1,000 births)	Number of Stillbirths	Typhoid and Paratyphoid	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Acute Poliomyelitis	Meningococcal Meningitis	Pulmonary Tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of the Arteries	Pneumonia (all forms)	Diarthraea and Enteritis (under 2 years of age)	Diarthraea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Fueral State	Violent Deaths (suicides and homicides excepted)		
214	1835	16	8.7	7	3.8														1	1											1		
241	854	14	16.4	1	1.2			1											1	1													
242	3335	44	13.2	15	4.5	1	22.7												1	1													
243	296																																
273	683	13	19	9	13		125							1					1	1											1		
274	596	8	13.4	4	6.7																											1	
275	1130																																9
276 Pt.	2490	80	32.1	29	11.6	1	125	1						2					6	1													
277	1461	16	10.9	10	6.8		625											1	1														
301	533	1	1.9																														
304	562	1	1.8																														
305	3016	69	22.9	21	6.9		145	2											1	1													
306	1963	42	21.4	13	6.6		23.8												3	3													
307	1595	25	15.1	6	3.1			3																									
331 Pt.	1513	10	6.6	6	3.96		100							1																			
<b>Total</b>	<b>21802</b>	<b>339</b>	<b>15.5</b>	<b>121</b>	<b>5.5</b>	<b>7</b>	<b>20.6</b>	<b>7</b>					<b>1</b>	<b>4</b>				<b>2</b>	<b>15</b>	<b>1</b>				<b>1</b>	<b>26</b>	<b>13</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>5</b>		<b>12</b>	
Death Rate per 100,000 Population																	68.7	4.6	9.1	9.1	18.3	4.6	118.9	59.5	22.9	4.6	4.6	18.3	22.9	4.6	18.3	22.9	54.9





TABLE 16.—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY MUNICIPALITIES (EXCLUDING CITIES), TRANSFERRED TO REGULAR RESIDENCE, 1940—Continued

DIVISION No. 7—BATTLE RIVER—Continued

Municipality No.	Population, 1940	Number of Births	Birth Rate per 1,000	Number of Deaths	Death Rate per 1,000	Population	Number of Deaths (under 1 year)	Infant Mortality Rate (per 1,000 births)	Number of Stillbirths	Typhoid and Paratyphoid	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Acute Poliomyelitis	Meningococcal Meningitis	Pulmonary Tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of the Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State	Violent Deaths (suicides and homicides excepted)	
395	2550	47	18.4	18	7.1	7.1	4	85.1	2						2			1	1	1	1	2	4	2	2				1				
421	2059	38	18.5	17	8.3	8.3	1	19.6	1						1			1		4	2			3	4	2				1			
422	2907	51	17.5	22	7.5	7.5	1	27.8	1						1					3	3	1		3	1	1				1			2
423	1854	36	19.4	13	7	7	1		2											3	1			2	2	1				1			
424	1291	24	18.6	6	4.7	4.7	1	17.2	1											3	1			1	2	4				1			
425	2743	58	21.1	9	3.2	3.2	7	120.7	2						4					3	3			5	1	2				1			
455	2880	58	20.1	31	10.8	10.8	19		15						19			2	3	38	8			46	24	18				6	16	1	6
<b>Total</b>	<b>39102</b>	<b>709</b>	<b>18.1</b>	<b>275</b>	<b>7.0</b>	<b>7.0</b>	<b>27</b>	<b>38.1</b>	<b>15</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>48.6</b>	<b>5.1</b>	<b>7.7</b>	<b>97.1</b>	<b>20.5</b>	<b>2.5</b>	<b>12.7</b>	<b>117.6</b>	<b>61.4</b>	<b>46</b>	<b>15.3</b>	<b>40.9</b>	<b>2.5</b>	<b>15.3</b>	<b>40.9</b>	<b>2.5</b>	<b>15.3</b>	<b>40.9</b>	<b>2.5</b>	<b>15.3</b>	

DIVISION No. 8—RED DEER

336	1508	38	25.2	12	7.9	7.9	1	26.3							1					2	1			2	1	3				1			1
337	1425	28	19.6	19	13.3	13.3	3	41.7	1						1					2	1			4	3	1				1			1
338	3312	72	21.7	26	7.9	7.9	1	32.3	2						1					3	1			4	3	3				1			1
339	2527	31	20.3	19	7.5	7.5	1	67.6	2						1					4	1			2	1	3				1			1
340	3857	74	19.2	45	11.7	11.7	5	22.2	2						2					4	2			1	8	3				3			1
366	1769	45	25.4	15	8.5	8.5	2	29.9	3						2					2	1			8	1	1				2			1
367	3567	67	18.8	30	8.4	8.4	1	27	1						1					3	1			4	1	1				1			1
396	1855	37	19.9	7	3.8	3.8	1	24.4	3						1					5	1			3	2	1				1			1
397	2152	41	19.1	14	6.5	6.5	1	31.5	1						2					1	1			1	1	1				1			1
398	3948	73	18.5	31	7.9	7.9	3		1						2					5	1			6	2	1				1			1























TABLE 16.—POPULATION, BIRTHS, DEATHS, RATES AND SELECTED CAUSES OF DEATH (EXCLUDING INDIANS), BY CITIES, 1940—TRANSFERRED TO REGULAR RESIDENCE

Cities	CITIES																													
	Population, 1940	Number of Births	Birth Rate per 1,000 Population	Number of Deaths	Death Rate per 1,000 Population	Number of Deaths (under 1 year)	Infant Mortality Rate (per 1,000 births)	Number of Stillbirths	Typhoid and Paratyphoid	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Acute Poliomyelitis	Meningococcal Meningitis	Pulmonary Tuberculosis	Tuberculosis (other forms)	Cancer (all forms)	Diabetes	Pernicious Anaemia	Apoplexy, Cerebral Haemorrhage & Thrombosis	Heart Diseases (all forms)	Diseases of the Arteries	Pneumonia (all forms)	Diarrhoea and Enteritis (under 2 years of age)	Diarrhoea and Enteritis (over 2 years of age)	Appendicitis	Nephritis (acute and chronic)	Puerperal State
Edmonton	91452	1797	19.6	764	8.3	55	30.6	28	1	1	6	27	2	1	9	8	124	12	8	24	147	83	51	2	1	9	18	5	37	
Death Rate per 100,000 Population									1.1	1.1	6.6	29.5	2.2	1.1	9.8	8.7	135.6	13.2	8.7	26.2	160.7	90.7	55.9	2.2	1.1	9.8	19.7	5.5	40.4	
Calgary	87009	1457	16.7	749	8.6	51	35.0	44	1	1	15	4	17	2	128	12	7	19	147	96	33	4	1	6	33	3	42			
Death Rate per 100,000 Population									1.2	1.2	17.2	4.6	19.5	2.3	135.6	13.8	8	21.8	157.5	110.3	37.9	4.6	1.2	6.9	37.9	3.4	48.3			
Lethbridge	14050	274	19.5	119	8.5	16	58.3	2	1	1	6	2	22	6	1	4	13	15	2	1	2	1	12							
Death Rate per 100,000 Population									7.1	7.1	42.7	14.2	156.6	42.7	7.1	28.5	92.5	107.8	14.2	7.1	14.2	7.1	14.2	7.1	85.4					
Medicine Hat	9834	159	16.2	82	8.3	6	37.7	4	3	3	13	2	1	1	14	15	2	1	1	3	8									
Death Rate per 100,000 Population									30.5	30.5	132.2	20.3	10.2	142.4	152.5	20.3	10.2	10.2	30.5	10.2	30.5	81.4								

Red Deer	2494	70	28.5	29	11.6	5	71.4	4	1	5	1	3	2	1	1	3
Death Rate per 100,000 Population						200.5	40.1	40.1	120.2	240.6	80.2	40.1	40.1	120.2		

Drumheller	3120	93	29.8	38	12.2	6	64.5	2	1	4	1	6	4	2	1	2
Death Rate per 100,000 Population						128.2	32.1	64.1	192.3	128.2	64.1	32.1	32.1	96.1	64.1	64.1

Wetaskiwin	2125	41	19.3	21	9.9	1	24.4	1	2	3	1	3	5	2		
Death Rate per 100,000 Population						141.2	94.1	94.1	141.2	235.3	94.1	47.1	141.2	235.3	94.1	







































































TABLE 18.—CAUSES OF DEATH FOR EACH SEX BY MONTHS, FOR THE WHOLE PROVINCE, 1940—Continued

CAUSES OF DEATH	Total	MONTHS																
		January	February	March	April	May	June	July	August	September	October	November	December					
(b) Of the uterus	6	1	2	1		1	1											
(c) Of other female genital organs																		
(d) Of the brain	2				2													
(e) Of the thyroid gland	1																	
(f) Of the prostate gland	3																	
(g) Of other or unspecified sites	1				1													
	5				1													
	4																	
55 (a) Tumours of the ovary																		
(b) Of the uterus																		
(c) Of other female genital organs																		
(d) Of the brain, nature not specified	2																	
(g) Of other or unspecified sites, nature not specified	3																	
	1																	
	2																	
<b>CLASS III.—RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF THE ENDOCRINE GLANDS AND OTHER GENERAL DISEASES</b>	<b>197</b>	<b>6</b>	<b>17</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>18</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>21</b>	<b>27</b>				
56 Acute rheumatic fever	28		3	1	2	2	2	2	2	2	2	2	2	2				
57 Chronic rheumatism, osteo-arthritis	22	1	4	1	3	2	1	2	4	1	2	2	1	1				
58 Gout	7			2	1			1	1									
59 Diabetes mellitus	1																	
	38		3	5	2	4	6	2	1	2	3	3	4	6				
	52	1	2	3	6	4	4	3	4	5	4	4	6	8				



















	28	23	33	26	38	36	25	31	19	25	33	34
<b>CLASS X.—DISEASES OF THE GENITO-URINARY SYSTEM</b>												
130 Acute nephritis (including unspecified, under 10 years of age)	28 20 8	23 16 7	33 20 13	26 9 17	38 19 19	36 11 11	25 4	31 20 11	19 12 7	25 18 7	33 17 16	34 25 9
131 Chronic nephritis												
132 Nephritis, unspecified (10 years and over)												
133 Other diseases of the kidneys and ureters												
134 Calculi of the urinary passages												
135 Diseases of the bladder (tumours excepted)												
136 (a) Stricture of the urethra												
(b) Other diseases of the urethra, etc.												
137 Diseases of the prostate												
138 Diseases of the male genital organs (not specified as venereal)												
139 (a) Diseases of the ovary, Fallopian tube and parametrium (not specified as venereal)												
(b) Diseases of the uterus (not specified as venereal)												
(c) Diseases of the breast (not specified as venereal)												
(d) Others under this title												
<b>CLASS XI.—DISEASES OF PREGNANCY, CHILDBIRTH AND THE PUERPERAL STATE</b>												
140 (a) Abortion (with septic conditions)	4	4	8	3	7	11	6	4	6	5	5	6
(b) Self-induced abortion (with septic conditions)	1	2		2		1	1		1		1	
141 (a) Abortion (without mention of septic conditions)								1				
(b) Self-induced abortion (without mention of septic conditions)											1	
142 (a) Ectopic gestation, with septic conditions							1					
(b) Ectopic gestation, without mention of septic conditions												1
143 Other accidents of pregnancy (haemorrhage excluded)												
<b>Total</b>	351	23	33	26	38	36	25	31	19	25	33	34
<b>Male</b>	222	16	20	9	19	25	21	20	12	18	17	25
<b>Female</b>	199	7	13	17	19	11	4	11	7	7	16	9
<b>Male</b>	2			1		1						1
<b>Female</b>	2			4		6	8	8	6	6	9	13
<b>Male</b>	84	7	4	4	8	7	1	5	2	5	7	5
<b>Female</b>	74	7	11	9	9	3	3	3	3	2	1	2
<b>Male</b>	29	2	2	2	2	1	2	2	5	2	4	2
<b>Female</b>	26	1	2	3	2	1	2	2	2	2	2	2
<b>Male</b>	13	3	1	2	2	1		3		2	3	1
<b>Female</b>	14	1		2	4	1		2	1	1	2	
<b>Male</b>	8	1	1	1	2	1		2				
<b>Female</b>	2		1	1	1	1	1	2			1	
<b>Male</b>	8	1	1									
<b>Female</b>	2											
<b>Male</b>	1											
<b>Female</b>	1											
<b>Male</b>	77	5	11	2	5	13	9	4	2	7	4	9





<b>CLASS XIII.—DISEASES OF THE BONES AND ORGANS OF LOCOMOTION</b>		Total	16	1	1	1	1	1	1	3	2	2	10	2
154 Osteomyelitis		Male	12	1	1	1	1	1	1	3	2	1	7	1
		Female	4							1	1	1	4	1
155 Other diseases of the bones (tuberculosis excepted)		Male	9	1	1	1	1	1	1	2	1	1	7	1
		Female	2							1	1	1	4	1
156 (a) Diseases of the joints (tuberculosis and rheumatism excepted)		Male	2							1	1	1	3	1
		Female	1										1	
(b) Diseases of other organs of locomotion		Male												
		Female	1											
		Female	1											
<b>CLASS XIV.—CONGENITAL MALFORMATIONS</b>		Total	86	10	6	7	5	4	4	23	10	7	10	28
157 (a) Congenital hydrocephalus		Male	39	6	3	3	3	1	1	5	2	3	2	16
		Female	47	4	3	5	2	3	3	4	4	4	8	12
(b) Spina bifida and meningocele		Male	4			1	1					1	1	
		Female	5											
(c) Congenital malformations of the heart		Male	12	1	1	1		2	2	1	1	1	3	2
		Female	17	3	1	1		1	1	5	2	2	2	1
(e) Others under this title		Male	14	2	2	2	2			1	3	1	3	3
		Female	15	2	2	2	2			2	3	1	1	1
		Female	16	1	1	2	2			3	1	1	3	3
<b>CLASS XV.—DISEASES OF EARLY INFANCY</b>		Total	370	31	33	31	27	41	34	23	35	23	28	28
158 Congenital debility		Male	216	16	20	19	18	22	18	12	22	15	16	16
		Female	154	15	13	12	9	19	16	11	13	8	12	12
159 Premature birth		Male	17	1	2	2		3	2		1	3	1	1
		Female	4		1	1		1	1					
160 (a) Injury at birth, with mention of caesarean operation		Male	131	11	12	7	11	13	12	9	16	7	10	10
		Female	100	8	8	6	5	14	12	8	9	3	8	8
(b) Injury at birth, without mention of caesarean operation		Male												
		Female	34	2	2	5	5	2	2	2	3	3	2	2
161 Other diseases peculiar to early infancy (under 3 months)		Male	21	5	1	1		2	2	2	1	3	2	2
		Female	34	2	4	5	2	4	2	3	2	2	3	3
(a) Atelectasis		Male	29	1	3	4	4	3	4	1	3	2	2	2
		Female	14		2	3	1	2	4	1	1	1	2	2
(b) Icterus of the new-born		Male	8	1	1	1		1	3	2	1	1	1	1
		Female	2					1	2	1	1	1	2	2
(c) Sclerema and oedema		Male	3											
		Female												
(d) Athrepsia		Male												
		Female	1					1	1					























































































TABLE 21.—SPECIAL CLASSES OF ACCIDENTAL DEATHS IN ALBERTA, 1940  
(INCLUDED ALSO UNDER THE NUMBERS OF THE INTERNATIONAL LIST)

Int. list No.	CAUSES OF DEATH	Male	Female
	A.—Accidents in mines and quarries .....	14	.....
182	Accidental mechanical suffocation .....	2	.....
186	Accidental injury by fall, crushing or landslide...	11	.....
193	Accidents due to electric currents .....	1	.....
	B.—Accidents caused by machines .....	22	1
185	Accidental injury by cutting or piercing instruments .....	1	.....
186	Accidental injury by fall, crushing or landslide .....	20	1
193	Accidents due to electric currents .....	1	.....
	C.—Railway accidents .....	17	.....
178	Accidental absorption of toxic gases .....	2	.....
186	Accidental injury by fall, crushing or landslide .....	15	.....
	E.—Automobile and motorcycle accidents .....	49	24
178	Accidental absorption of toxic gases .....	4	.....
186	Accidental injury by fall, crushing or landslide .....	44	24
194	Other accidents .....	1	.....
	F.—Other land transportation .....	13	.....
186	Accidental injury by fall, crushing or landslide .....	13	.....
	G.—Water transportation .....	6	3
183	Accidental drowning .....	6	3
	H.—Air transportation .....	5	.....
186	Accidental injury by fall, crushing or landslide .....	5	5

TABLE 22.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTIONS, CLASSIFIED ACCORDING TO RESIDENCE OF DECEDENTS IN CITIES OF 5,000 POPULATION AND OVER, IN ALBERTA, 1940

Cities	All Deaths						Deaths in Institutions						Deaths elsewhere than in Institutions																							
	Total			Non-resident in city or town where death occurred and			Total			Residents			Non-resident in city or town where death occurred and			Total			Residents			Non-resident in city or town where death occurred and														
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total												
Calgary	889	503	386	678	382	296	187	105	82	24	16	8	565	329	236	383	223	160	164	94	70	18	12	6	324	174	150	295	159	136	23	11	12	6	4	2
Edmonton	1152	655	497	711	376	335	426	266	160	15	13	2	871	512	359	445	246	199	411	253	158	15	13	2	281	143	138	266	130	136	15	13	2	6	4	
Lethbridge	213	120	93	103	52	51	108	68	40	2	2	2	175	102	73	72	37	35	102	65	37	1	1	1	1	38	18	20	31	15	16	6	3	3	1	1
Medicine Hat	139	87	52	74	42	32	54	38	16	11	7	4	92	58	34	37	19	18	49	34	15	6	5	1	47	29	18	37	23	14	5	4	1	5	2	3

TABLE 23.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTIONS, SHOWING THE NUMBER NON-RESIDENT IN ALBERTA, 1940

Total for the Province	All Deaths						In Institutions					
	Total			Non-resident in Province			Total			Non-resident in Province		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
6203	3683	2520	94	57	37	3231	1919	1312	62	42	20	









TABLE 25.—MARRIAGES IN THE PROVINCE OF ALBERTA, BY MONTHS, 1940

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
Edmonton	2088	119	108	131	105	132	224	315	271	132	177	228	146
Calgary	1892	109	91	126	96	129	210	252	255	138	138	184	164
Lethbridge	344	25	19	28	17	11	43	33	50	31	30	38	29
Medicine Hat	267	11	7	11	18	7	21	36	30	19	38	40	29
Red Deer	138	10	5	8	7	7	17	26	16	6	13	11	12
Wetaskiwin	71	3	3	4	2	1	6	16	15	2	8	5	6
Drumheller	91	6	6	5	5	1	14	13	12	5	3	13	8
Rural Districts	3,891	197	216	199	188	165	439	613	399	208	408	542	317
Total for the Province	8782	480	455	512	438	453	974	1294	1048	541	815	1061	711

TABLE 26.—MARRIAGES—CONJUGAL CONDITION OF CONTRACTING PARTIES, IN ALBERTA, 1940

	Total Marriages	Marriages between						Per cent. of Bridegrooms who were			Per cent. of Brides who were					
		Bachelors and			Widowers and			Divorced men and			Divorced			Widows		
		Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced	Widows	Spinsters	
Total for the Province	8782	7801	185	176	224	158	29	173	14	22	92.9	4.7	2.4	93.4	4.1	2.6













TABLE 30.—DIVORCES AND NULLITIES BY JUDICIAL DISTRICTS  
FOR THE YEAR 1940

Judicial Districts	Divorces			Nullities		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton .....	125	61	64	.....	.....	.....
Calgary .....	109	38	71	1	.....	1
Lethbridge .....	15	5	10	.....	.....	.....
Medicine Hat .....	8	3	5	.....	.....	.....
Peace River .....	4	3	1	.....	.....	.....
Grande Prairie .....	4	3	1	.....	.....	.....
Vegreville .....	3	2	1	.....	.....	.....
Red Deer .....	2	1	1	.....	.....	.....
Wetaskiwin .....	1	1	.....	.....	.....	.....
Drumheller .....	1	1	.....	.....	.....	.....
Macleod .....	1	1	.....	.....	.....	.....
Total.....	273	119	154	1	.....	1

## DIVORCES IN ALBERTA SINCE THE PASSING OF THE ACT

Year	Granted to Husband	Granted to Wife	Total
1919 .....	3	3	6
1920 .....	74	26	100
1921 .....	53	37	90
1922 .....	80	49	129
1923 .....	57	32	89
1924 .....	66	53	119
1925 .....	59	42	101
1926 .....	79	75	154
1927 .....	83	66	149
1928 .....	91	84	175
1929 .....	77	71	148
1930 .....	64	87	151
1931 .....	69	87	156
1932 .....	68	81	149
1933 .....	56	79	135
1934 .....	62	106	168
1935 .....	74	135	209
1936 .....	74	135	209
1937 .....	102	139	241
1938 .....	105	162	267
1939 .....	104	163	267
1940 .....	119	154	273



TABLE 31.—BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS), BY MONTHS, ALBERTA, 1940

	Total	Months											
		January	February	March	April	May	June	July	August	September	October	November	December
Total for the Province	893	91	78	86	74	78	59	75	70	62	63	69	88

TABLE 32.—BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS), CLASSIFIED AS LEGITIMATE OR ILLEGITIMATE, ALBERTA, 1940

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total for the Province	893	445	448	780	385	395	113	60	53

TABLE 33.—DEATHS OF INDIAN CHILDREN (EXCLUSIVE OF STILLBIRTHS), FROM CERTAIN SPECIFIED CAUSES IN FIRST YEAR OF LIFE FOR EACH SEX, ALBERTA, 1940

Int. list No.	Causes of Death	Total	Male	Female
	<b>ALL CAUSES</b>	145	83	62
7	Measles	1	1	...
8	Scarlet fever	16	5	11
9	Whooping-cough	12	5	7
10	Diphtheria	...	...	...
11	Influenza	4	2	2
13	Dysentery	4	3	1
15	Erysipelas	3	1	2
16	Poliomyelitis and polioencephalitis (acute)	2	1	1
18	Epidemic cerebrospinal meningitis	1	1	...
23	Tuberculosis of the respiratory system	2	2	...
24	Tuberculosis of the meninges and central nervous system	4	3	1
25-32	Tuberculosis, other forms	3	1	2
34	Syphilis	2	1	1
36	Purulent infection, septicaemia	1	1	...
67	Diseases of the thymus gland	2	2	...
79	Simple meningitis	1	1	...
86	Convulsions	1	1	...
89	Diseases of the ear and mastoid process	...	...	...
105a	Croup	1	1	...
106	Bronchitis	24	15	9
107	Bronchopneumonia	20	13	7
108, 109	Pneumonia	...	...	...
115	Diseases of the buccal cavity and annexa and of the pharynx and tonsils (including adenoid vegetations)	1	...	1
116-118	Diseases of the stomach	12	7	5
119	Diarrhoea and enteritis	1	1	...
122	Hernia, intestinal obstruction	1	1	...
130	Nephritis	5	2	3
157	Malformations	4	2	2
	(a) Congenital hydrocephalus	1	...	1
	(c) Congenital malformations of the heart	9	7	2
	(b, d, e) Others under this title	6	5	1
158	Congenital debility	2	...	2
159	Premature birth	7	4	3
160	Injury at birth	3	3	...
161	Other diseases peculiar to early infancy (under 3 months)	4	1	3
	(a-e) Specified diseases	4	3	1
	(f) No cause given, no doctor in attendance	1	1	...
173-175	Homicide	2	1	1
176-198	Other external causes	4	3	1
	Other specified causes	4	2	2
199, 200	Unspecified or ill-defined causes	...	...	...

























TABLE 35.—BIRTH, MARRIAGE, DEATH AND OTHER RATES PER 1,000 POPULATION FOR THE YEARS 1925-1940

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Birth Rate	25.02	23.79	24.03	24.79	26.19	26.74	23.57	22.96	21.33	21.10	21.0	20.4	20.4	20.3	20.9	21.8
Marriage Rate	7.27	7.40	7.58	9.12	9.29	8.08	7.02	6.83	7.10	7.87	7.7	7.8	8.2	8.9	9.9	11.8
Death Rate	7.86	8.49	8.16	9.00	9.65	8.33	7.24	7.46	7.07	6.93	7.3	8.0	8.0	7.5	7.3	7.8
Rate of Natural Increase	16.16	15.31	15.87	15.79	16.54	18.41	16.32	15.50	14.24	14.01	14.0	12.5	12.4	12.8	13.6	14.1
Infantile Death Rate (per 1,000 births)	72.90	81.63	74.51	76.50	77.40	63.57	69.38	58.68	59.90	54.89	57.8	60.0	63.0	51.0	46.0	48.0
Puerperal Death Rate (per 1,000 births)	5.76	5.82	6.38	6.75	7.26	6.46	5.04	3.76	4.43	4.99	4.2	5.8	4.9	4.3	3.5	3.9

TABLE 36.—DEATHS AND DEATH RATES FROM PUERPERAL CONDITIONS, 1940

	Births	Deaths from Puerperal Conditions	Death Rate per 1,000 Births
Whole Province	17359	69	3.9
City of Edmonton	3089	12	3.9
City of Calgary	1938	6	3.1
Small Cities	1736	6	3.5
Rural	10596	45	4.2



## VITAL STATISTICS BRANCH

TABLE 37.—VITAL STATISTICS, 1905 TO 1940 INCLUSIVE

Year	Population	Births	Marriages	Deaths	Excess of Births over Deaths
1905		421	187	114	307
1906	185,000	3,003	927	1,091	1,912
1907	236,000	4,732	1,907	1,578	3,154
1908	266,000	5,973	2,032	2,188	3,785
1909	301,000	6,897	2,384	2,662	4,235
1910	336,000	8,321	3,086	3,526	4,705
1911	374,000	8,813	3,630	3,618	5,195
1912	400,000	10,284	4,429	4,232	6,052
1913	429,000	11,871	5,053	4,432	7,439
1914	459,000	13,685	4,623	4,417	9,538
1915	480,000	13,452	4,202	3,588	9,864
1916	496,000	13,331	4,230	4,058	9,273
1917	508,000	13,576	4,270	4,047	9,529
1918	522,000	14,890	4,048	7,924	6,966
1919	522,000	14,130	4,718	5,507	8,623
1920	565,000	16,565	5,110	5,675	10,890
1921	588,000	16,414	4,661	4,940	11,474
1922	592,000	16,163	4,272	5,281	10,882
1923	593,000	15,153	4,177	4,843	10,320
1924	597,000	14,598	4,160	4,907	9,691
1925	602,000	15,014	4,363	4,717	10,297
1926	608,000	14,455	4,498	5,156	9,299
1927	633,000	14,897	4,707	5,059	9,838
1928	658,000	15,692	5,776	5,699	9,993
1929	684,000	16,924	6,004	6,239	10,685
1930	708,000	17,649	5,334	5,396	12,153
1931	732,000	17,252	5,142	5,302	11,950
1932	740,000	16,990	5,054	5,521	11,469
1933	748,000	16,123	5,389	5,346	11,093
1934	756,000	16,236	6,053	5,337	10,899
1935	770,000	16,183	6,010	5,729	10,454
1936	772,782	15,786	6,020	6,147	9,639
1937	778,000	15,903	6,345	6,261	9,642
1938	783,000	15,891	6,973	5,871	10,020
1939	789,000	16,470	7,838	5,789	10,681
1940	790,000	17,359	8,782	6,203	11,156

## POPULATION, BIRTH, MARRIAGE AND DEATH RATES, 1940

Population	790,000
Birth Rate per 1,000	21.8
Marriage Rate per 1,000	11.8
Death Rate per 1,000	7.8

## RATIO OF MALE TO FEMALE BIRTHS, AND OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths
1905	1,059	3.11	1923	1,072	3.13
1906	1,094	2.07	1924	1,936	2.97
1907	1,075	2.96	1925	1,042	3.18
1908	1,077	2.73	1926	1,053	2.80
1909	1,086	2.59	1927	1,065	2.94
1910	1,065	2.69	1928	1,064	2.75
1911	1,103	2.43	1929	1,042	2.71
1912	1,084	2.43	1930	1,027	3.21
1913	1,053	2.67	1931	1,075	3.25
1914	1,081	3.30	1932	1,052	3.08
1915	1,000	3.47	1933	1,053	3.01
1916	1,063	3.29	1934	1,032	3.04
1917	1,061	3.25	1935	1,055	2.81
1918	1,069	1.88	1936	1,049	2.57
1919	1,074	2.56	1937	1,019	2.38
1920	1,055	2.92	1938	1,046	2.70
1921	1,055	3.32	1939	1,046	2.85
1922	1,034	3.06	1940	1,033	2.79

