

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

Contributors

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ANNUAL REPORT

OF THE

Department of Public Health

PROVINCE OF ALBERTA

INCLUDING

Vital Statistics Branch
1950

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
PRINTED BY A. SHNITKA, QUEEN'S PRINTER FOR ALBERTA
1952

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December 31, 1951.

To His Honour,

J. J. BOWLEN,

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 1950.

I have the honour to be, Sir,

Your obedient Servant,

W. W. CROSS,

Minister of Health.

December 31, 1951

To His Honor
J. Stewart

Executive Director of the Province of Alberta

I have the honor to transmit herewith the Annual Report of
the Department of Public Health for the year 1951.

I have the honor to be, Sir,

Your obedient servant,

William Wallace Cross
Minister of Health

Edmonton, December 31, 1951.

TO THE HONOURABLE DR. W. W. CROSS,
Minister of Health,
Administration Building, Edmonton, Alberta.

SIR:

I have the honour to submit herewith, the Thirty-second Annual Report of the Department of Public 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.

Edmonton, December 31, 1951.

To the Honourable Dr. W. Cross,
Minister of Health,

Administration Building, Edmonton, Alberta.

Sir:

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


I have the honour to be, Sir,

Your obedient servant,

Marion H. Bow, B.A., M.D., C.M., R.P.H.,
Deputy Minister.

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

Divisions:

1. Communicable Diseases.
2. Entomology.
3. Cancer Services.
4. Public Health Education.
5. Nutrition.
6. Public Health Nursing.
7. Social Hygiene.
8. Provincial Laboratory.
9. Sanitary Engineering and Sanitation.
10. Hospital and Medical Services.
11. Tuberculosis Control and Central Alberta Sanatorium,
Calgary.
12. Mental Health.
Institutions: Provincial Mental Hospital, Ponoka.
Provincial Auxiliary Hospital, Claresholm.
Provincial Auxiliary Hospital, Raymond.
Provincial Mental Institute, Oliver.
Provincial Training School, Red Deer.
Guidance Clinics.
Eugenics Board.
13. Vital Statistics.

A report containing a summary of the work of each of these Divisions is included herewith.

PROVINCIAL BOARD OF HEALTH

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

REGULATIONS PASSED DURING THE YEAR

O.C. 20-50: Regulations respecting Water and Ice (O.C.'s 204-37) amended to provide that each city, town, village and municipal district for hamlets shall provide a safe water supply for the benefit of its inhabitants.

O.C. 21-50: Regulations Respecting Dairy Farms, Milk Plants, Fluid Milk and Table Cream (O.C.'s 525-34, 733-34, 544-35, 282-36, 530-37, 1361-41, and 129-46) amended to set the temperature for pasteurizing as not less than 143° for 30 minutes, and to include margarine in the list of products, the milk content of which must be produced in accordance with the regulations.

O.C. 1383-50: Regulations Respecting Dairy Farms, Milk Plants, Fluid Milk and Table Cream (O.C.'s 525-34, 733-34, 544,35, 836-36, 530-37, 1361-41, 129-46 and 21-50) amended by renumbering the regulations.

O.C. 1384-50: Regulations Relating to Conduct of Funerals and Interment of Dead Bodies (O.C.'s 1124-38 and 1264-40) amended by renumbering the regulations.

LEGISLATION PASSED DURING THE YEAR

Cemetery Act Amendment Act (Chapter 9).

This Act amends The Cemetery Act, being chapter 256 of the Revised Statutes of Alberta, 1942.

Section 2 of the Act is amended. The amendment enables persons owning plots in existing cemeteries to incorporate a company for the purpose of taking over the cemetery without the necessity of first subscribing twenty-five per cent of the capital stock of the proposed company. At present they are unable to do so.

This Act came into force on July 1st, 1950.

Hospitalization of City Residents Act (Chapter 29).

This is a new Act to be known as "The Hospitalization of City Residents Act."

The Act provides that the council of any city may pass bylaws establishing a hospitalization scheme under which ratepayers and non-ratepayers of the city may receive standard ward hospitalization at a cost to the patient of one dollar per day or less for each day the patient is in hospital. In the case of ratepayers the money to operate the scheme may be raised by a mill rate tax. In the case of non-ratepayers the money to operate the scheme may be raised by a tax on the non-ratepayers or by a contract plan for hospitalization.

The Act provides that notwithstanding anything contained in any city charter or any other Act any bylaw mentioned above that is passed by the council shall be valid and may be carried into effect without the necessity of any vote of the residents or of the electors entitled to vote on money bylaws.

This Act came into force on April 5th, 1950.

Hospitals Act Amendment Act (Chapter 30).

This Act amends The Hospitals Act, being chapter 184 of the Revised Statutes of Alberta, 1942.

Section 2 is amended by the addition of definitions of two new terms, namely, "ratepayer" and "standard ward hospitalization."

A new section 2a is added enabling the Minister to classify approved hospitals into groups according to the standard of services available in the hospital.

Several new sections are added immediately after section 3. The new section 3a enables the Minister to pay a hospitalization grant. This grant is payable to the board of any municipal hospital district that hospitalizes its ratepayers in a hospital operated by the board and to the board of any municipal hospital district or to the local authority of any municipality that has made arrangements for the hospitalization of its ratepayers by means of an agreement with an approved hospital. Such an agreement is subject to the approval of the Minister and it must provide for the hospitalization of ratepayers at a direct cost to the patient of one dollar or less per day for standard ward hospitalization and it must provide for a voluntary contract plan for hospitalization whereby its non-ratepayers may obtain standard ward hospitalization at a direct cost to the patient of one dollar or less per day. Where an agreement is entered into the hospitalization and services provided under the

agreement must be equivalent to the hospitalization and services available to ratepayers of the municipal hospital district that operates the hospital.

Section 3b provides that the hospitalization grant may be paid on a per diem basis for each day of hospitalization received by a ratepayer or his dependants in the hospital operated by the municipal hospital district or the hospital with which the municipal hospital district board or the local authority has made an agreement. The section fixes the amount of the per diem grant which varies with the grouping of the hospital in which the hospitalization is received and according to the age of the patient. Hospitalization grants are to be paid out of moneys appropriated by the Legislature for the purpose.

Section 3c deals with the case of a ratepayer who receives hospitalization as an emergency admission or as medically referred admission in a hospital other than the hospital operated by the municipal district or the hospital with which his municipal hospital district board or his local authority has entered into an agreement. In such a case, if the local authority or the municipal hospital district which would have been responsible for his hospitalization pays on account of the hospitalization of the patient an amount equivalent to the cost of the hospitalization to which he would have been entitled if he had been hospitalized in the hospital operated by the municipal hospital district or the hospital with which his municipal hospital district board or his local authority had entered into an agreement, the Minister is authorized to pay to the local authority or the municipal hospital district, as the case may be, the usual per diem hospitalization grant in respect of such patient.

Section 3d provides that the grant shall not be paid in respect of a ratepayer whose hospitalization is being provided under The Workmen's Compensation Act, 1948, or under other legislation passed by the Province, or in respect of any persons or classes of persons who may be excluded by order in council.

Section 3e provides for cases where the per diem rate of grant may be reduced. This section provides that in a case where the municipal hospital district board or the local authority makes an agreement for hospitalization at a daily rate lower than the figures set out in the section the per diem hospitalization grant may be proportionately reduced. It also provides that the total amount of the per diem hospitalization grant in respect of patients hospitalized in any hospital may be reduced by the amount of any increase in the total sum that the Province pays for the hospitalization of pensioners and of maternity and indigent patients in that hospital.

Section 3f enables the Minister, with the approval of the Lieutenant Governor in Council to make regulations in connection with the administration or payment of the hospitalization grants.

Section 5 (5) is amended. In cases of sudden emergent necessity the hospital has been required to send a notice to the local authority within ten days of the date of admission of an indigent sick person. The amendment increases the time within which the notice can be sent from ten to twenty days.

The proviso to section 6 (5) is amended by increasing the amount from two hundred to three hundred dollars. A similar change was made to section 6 (4) and to section 7 (2) in 1949, and the proviso is simply amended to conform with these provisions.

This Act is to come into force on June 1st, 1950.

Lloydminster Hospital Act Amendment Act (Chapter 38).

This Act amends The Lloydminster Hospital Act, being chapter 19 of the Statutes of Alberta, 1948.

Section 9 is amended. This section gave the Lloydminster Hospital Board all the rights and privileges conferred upon hospitals and hospital boards by The Hospitals Act. The amendment makes it clear that the Lloydminster Hospital Board has the powers and duties of other hospitals as well as the rights and privileges. This section should also have contained a reference to The Municipal Hospitals Act and this omission is remedied by the 1950 amendment.

Maternity Hospitalization Act Amendment Act (Chapter 40)

This Act amends The Maternity Hospitalization Act, being chapter 9 of the Statutes of Alberta, 1944.

A new section 5a is added. This enables the Minister to pay to any woman who receives maternity hospitalization in a hospital situate outside the Province a grant on a per diem basis for a period of hospitalization not exceeding twelve days if she complies with the requirements laid down in the section. Pursuant to these requirements she must be entitled to free hospitalization and she must reside in an area where, in the opinion of the Minister, a hospital within the Province is not readily accessible to her. She is also required to submit a receipt from the hospital showing her account as paid in full. The amount of the grant is the same as would have been paid to the hospital within the Province that is nearest to her place of residence if she had been hospitalized in that hospital.

Alberta residents who live in border areas where an Alberta hospital is not readily accessible and consequently receive maternity hospitalization in another province, may now obtain the benefits provided for in this Act by reason of this amendment.

This Act is deemed to have been in force since April 1st, 1949.

Municipal Hospitals Act Amendment Act (Chapter 44).

This Act amends The Municipal Hospitals Act, being chapter 185 of the Revised Statutes of Alberta, 1942.

Section 2, clause (1), which defines the term "ratepayer" is amended. The effect of the amendment is that a person who pays a business tax is no longer a ratepayer for purposes of this Act. Section 67(4) is amended to reduce the maximum interest payable on debentures for capital expenditure from eight per cent to six per cent.

Section 74 is amended by the addition of a new subsection (1a). The new subsection provides that where a ratepayer is assessed in respect of property in more than one municipal district he shall be liable to pay the hospital tax levied on his property in each hospital district but he shall not be liable to pay the minimum hospital tax in any district except the district in which he resides.

Form A is amended by deleting references to special areas. These references were struck out of the Act in 1948, but the references in Form A were overlooked at that time.

This Act is to come into force on July 1st, 1950.

Nursing Service Act (Chapter 45).

This is a new Act to be known as "The Nursing Service Act."

The Act enables the Minister of Health to enter into a nursing service agreement with the council of any municipality or with the councils of two or more municipalities jointly for the purpose of providing nursing service of a preventive and emergent treatment nature to persons residing within the boundaries of the area described in the agreement.

The Department and the municipalities share the cost of this nursing service in the proportions set forth in the agreement, but the Department's portion cannot exceed sixty per cent of the total cost.

The municipality submits the annual budget of proposed expenditure for the nursing service to the Minister in each year for his approval.

The Department may estimate the Department's portion of the total cost of the nursing service and may pay it to the municipality in four quarterly instalments.

At the end of each year the council submits its financial statement and the Department and the council make the necessary adjustments so that the portion of the cost borne by each is in conformity with the nursing service agreement.

The Minister is authorized to employ such persons as may be required by the Department for the administration of this Act.

The nurses required are appointed by the municipalities subject to the approval of the Minister.

The Lieutenant Governor in Council is authorized to make regulations respecting the nursing service provided pursuant to the nursing service agreement. Regulations may be made prescribing the qualifications of nurses, governing their duties, accommodation, remuneration and transportation, governing the purchase of drugs, supplies and equipment and prescribing the fees to be charged for services rendered and for drugs and supplies provided.

This Act came into force on April 5, 1950, and is retroactive to January 1st, 1950.

Alberta Pharmaceutical Association Act, 1945, Amendment Act
(Chapter 50).

This Act amends The Alberta Pharmaceutical Association Act, 1945, being chapter 15 of the Statutes of Alberta, 1945.

Section 5(1) was struck out and three new subsections were substituted. The subsection to be struck out provides that the council governing the Pharmaceutical Association shall be composed of seven members. The effect of the amendment is that the number of the councillors may be increased to such larger number as the council, with the approval of the members of the Association in general meeting, may decide upon.

Section 5(3) is amended. If a vacancy occurs on the council the section to be struck out enabled the council to appoint a member of the Association to fill the vacancy for the unexpired term. Such an appointment was subject to the approval of the majority of the members of the district eligible to vote and the effect of the amendment to the section is to strike out this requirement.

Section 5(5) is amended slightly for purposes of clarification. The present subsection requires a candidate for councillor to be resident within Alberta. Under the amended subsection a candi-

date is also required to be a resident of the district of the Province in which he seeks election.

Section 8(1) is amended. This amendment is related to the amendment to section 5(1). The amended subsection provides that there shall be the same number of electoral districts as there are councillors to be elected.

Section 18(3) is amended. The effect of the amendment is that the president and vice-president shall be elected annually rather than holding office for a period of two years as has been previously provided.

Two new sections are added immediately following section 27. The new section 27a prohibits any person, other than a pharmaceutical chemist a person duly authorized so to do pursuant to any Act or regulation of the Province, from selling any products for human use which are intended for administration by hypodermic injection into the human body or from selling any article for the prevention of venereal disease.

The new section 27b prohibits any person, other than a pharmaceutical chemist, veterinary surgeon, or a person duly authorized so to do pursuant to any Act or regulation of the Province, from selling veterinary biological products for use by hypodermic injection into any animal.

This Act is to come into force on July 1st, 1950.

Public Health Act Amendment Act (Chapter 52).

This Act amends The Public Health Act, being chapter 183 of the Revised Statutes of Alberta, 1942.

Section 7(1) which authorizes the Lieutenant Governor in Council to make regulations is amended by the addition of a new clause immediately after clause (hh). The amendment enables the Lieutenant Governor in Council to make regulations governing the terms and conditions under which a grant may be paid to any city or town on account of public health nursing services.

Section 24 is amended by striking out clause (b) and by substituting a new clause. The effect of the amendment is that the term "council" is defined as meaning the Minister of Municipal Affairs in so far as special areas are concerned.

Section 25 is amended by striking out subsection (17) and substituting a new subsection. The new subsection provides that the scheme of the health unit may be varied at any time by order of the Minister made upon the recommendation of the Board of the health unit.

This Act came into force on April 5th, 1950, and is retroactive to January 1st, 1950.

University of Alberta Hospital Act, 1929, Amendment Act (Chapter 74).

This Act amends The University of Alberta Hospital Act, 1929.

Section 12 is struck out and a new section is substituted in its stead which is reworded slightly. The new section authorizes the Board, with the approval of the Lieutenant Governor in Council, or the Lieutenant Governor in Council, to make any regulation or enter into any agreement deemed necessary or advisable respecting the operation or administration of the hospital.

This Act came into force on April 5th, 1950.

DEPARTMENT OF PUBLIC HEALTH
REVENUE AND EXPENDITURE FOR THE FISCAL YEAR ENDED MARCH 31st, 1950

		Salaries	Expenses	Revenue
601.	Administration (General)	\$ 4,714.98	\$ 342.36	\$ 853.56
602.	Administration (General)	36,098.67	2,364.30	
618.	Administration (Postage)		3,941.69	
603.	Hospitals, Administration and Grants	7,789.71	1,051,871.43	45.00
605.	Communicable Diseases	7,416.07	51,578.75	1,114.95
605.	Sanitary Engineering	15,946.60	8,644.69	9,599.08
606.	Public Health Nursing	83,816.30	33,414.81	16,771.34
607.	Vital Statistics	47,786.06	9,293.99	88,226.24
608.	Municipal Hospitals	5,325.89	1,892.89	
609.	Insulin		8,432.89	
610.	Social Hygiene	1,722.05	16,583.18	40,625.77
619.	Grants to University Hospital		20,000.00	
622.	Mental Health	25,611.46	10,120.60	
626.	Public Health Laboratory		140,250.00	
631.	Poliomyelitis		42,015.91	
633.	Cancer Treatment & Prevention	41,025.81	362,090.39	239,996.66
637.	Maternity Hospitalization	3,227.73	947,542.70	
638.	Civil Service Nurse	2,575.60	810.58	
639.	Public Health Education	4,872.56	3,103.87	
640.	Division of Entomology	8,165.01	6,664.65	
641.	Health Units	2,794.87	112,447.43	
643.	Nursing Aides Act	4,659.19	773.09	918.00
644.	Pensioners—Hospital and Medical Services	9,485.25	1,133,755.48	
645.	Federal Government Health Grants	117,375.78	450,058.22	575,196.07
646.	Hospital Construction Grants		1,067,112.49	467,742.14
647.	Hospital Grants to Local Authorities	4,217.05	291,686.33	
Institutions				
604-1.	} Central Alberta Sanatorium, Calgary, and T.B. Division	\$ 409,282.76	\$ 638,483.22	\$ 195,361.47
612-1.		551,516.02	331,469.03	166,545.79
613-2.	} Prov. Mental Institute, Oliver	212,419.42	119,564.39	80,914.28
612-2.		742,985.25	462,426.10	260,372.46
613-1.	} Prov. Mental Hospital, Ponoka	30,098.47	27,890.52	11,451.42
612-4.		43,881.26	25,244.54	8,158.63
612-5.	Prov. Aux. Mental Hospital, Raymond			
		<u>\$2,474,809.82</u>	<u>\$7,381,870.52</u>	<u>\$2,163,892.86</u>
	Total Expenditure Public Health Department			\$9,856,680.34
	Less: Public Health Revenue			2,163,892.86
	Net Expenditure, Department of Public Health			<u>\$7,692,787.48</u>

VITAL STATISTICS

Vital Statistics registered during the year were as follows:

Births	25,625
Marriages	9,294
Deaths	6,856

In all cases where rates are shown, such rates are based on a population of 895,000, 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 1945 to 1950:

Year	No. of Births	Birth Rate	No. of Marriages	Marriages Rate	No. of Deaths	Death Rate
1945	19,939	24.10	7,310	8.80	6,454	7.80
1946	22,184	27.63	9,478	11.80	6,601	8.21
1947	24,631	30.00	8,797	10.70	6,543	8.00
1948	24,075	28.50	8,844	10.50	6,987	8.30
1949	24,935	28.70	9,037	10.40	7,083	8.20
1950	25,625	28.70	9,294	10.40	6,856	7.70

The birth rate for 1950 is 28.7, which is the same as the rate for 1949. The marriage rate for 1950 is 10.4 the same rate as for the previous year. The death rate for 1950 is 7.7 as compared with 8.2 for 1949.

General Health Conditions.

The deaths of 6,856 persons were registered in Alberta in 1950. Of this number 4,189 were males and 2,667 females. There were 227 fewer deaths registered than in the previous year. There were 273 deaths from pneumonia in 1950, a decrease of 103 as compared with the previous year, and 27 deaths from influenza, a decrease of 14 deaths as compared with the previous year. Deaths from pulmonary tuberculosis numbered 135 in 1950 as compared with 156 the previous year. The chief cause of death is heart disease with 2,046 deaths having been registered, as due to this cause, giving a rate of 228.6 per 100,000 population, as compared with 233.4, the rate for the previous year. Deaths from cancer registered in 1950 numbered 987, a rate of 110.4 per 100,000 population, as compared with 957 deaths from this cause and a rate of 109.9 in 1949. Deaths from violence, excluding suicides, numbered 561, as compared with 596 in 1949. The respective rates were 62.4 and 68.4.

The infantile mortality rate for 1950 is 32 as compared with 33 for the previous year. Special reference to the infantile death rate will be found in another section of this report.

The maternal mortality rate for 1950 is 0.7 as compared with 1.0 for 1949. Reference to the maternal mortality rate will be found in another section of this report.

Three deaths were reported from Whooping Cough in 1950, as compared with five deaths from this cause in 1949. It is most gratifying to note the marked reduction in the number of deaths from Whooping Cough in recent years. It was not uncommon a few years ago to record as many as fifty deaths in a single year from this disease. This great change has been accomplished by the widespread use of pertussis vaccine as a prophylactic agent. It is of vital importance that children be immunized against this serious disease, and especially all children under two years of age, in view of the fact that seventy-five per cent of the deaths from Whooping Cough occur within the first two years of life. The Department provides the vaccine used for the protection of children against Whooping Cough free of charge on the request of physicians and local health authorities, and urges that the fullest use be made of this life-saving agent.

There were 1,539 cases of Measles with 8 deaths, and 4,735 cases of Rubella with no deaths reported in 1950. There was a marked decline in the incidence of Measles in 1950, as compared with the previous year when the disease was epidemic.

There were 13 cases of Diphtheria with one death from this cause reported in 1950, as compared with 59 cases and 12 deaths in 1949. Of the 13 cases reported in 1950, 4 were reported by cities and 9 by rural areas. The death rate for Diphtheria in 1950 is 0.1, as compared with 1.4 in 1949. Five Diphtheria carriers were discovered in the course of investigations made to determine the source of Diphtheria cases.

It is important that every single person in the community be educated to the fact that Diphtheria is an entirely preventable disease. If full advantage is taken of the means that science has placed in our hands, we can eradicate it. The Department furnishes the toxoid used for the immunization of children free of charge to physicians, local health authorities and local school authorities. Children should be protected early in life and such rein-

forcement of immunity given as may be found necessary during school life. An outbreak of Diphtheria in any town or rural district is an indication that effective action has not been taken to protect the children against Diphtheria.

No cases of Smallpox were reported in 1950, and no cases of this disease have been reported since 1943. I would like to again point out that there are many areas in the Province in which not more than one-third of the pre-school and school children have been vaccinated against Smallpox. Should this disease appear in such communities, it would spread with amazing speed, and should the outbreak be of the malignant type the results would be tragic indeed. It cannot too often be emphasized that all children should be vaccinated against Smallpox within the first six months of life. Vaccination should be repeated on admission of the child to school and need not again be done excepting when an individual is exposed to the disease in after-life. In spite of the fact that there has been no Smallpox reported in the Province for seven years, an outbreak of this serious disease may occur at any time. Smallpox vaccine is provided by the Department free of charge to physicians, local boards of health and local school authorities.

In 1950, 2,309 cases of Scarlet Fever and 11 deaths from this cause were reported, as compared with 865 cases and no deaths in 1949. The vast majority of cases were of a mild type, but this should not make us oblivious to the fact that Scarlet Fever may be a mild disease as it affects one individual and serious as it affects another. All persons showing any evidence of the onset of this disease should be promptly isolated, and isolation maintained until the patient may safely be discharged.

There were 13 cases of Typhoid Fever and no cases of Paratyphoid Fever reported in 1950, the same number as in the previous year. One death was reported from Typhoid Fever in 1950.

I wish to again point out that the supervision and control of Typhoid and Paratyphoid carriers is a matter of vital importance to public health. The full co-operation of all local health authorities is essential, not only in the investigation of sources of infection, but also in the supervision and control of Typhoid and Paratyphoid carriers. Constant vigilance in the supervision and control of local water, milk and food supplies is essential for the protection of the community. Pasteurization of milk and milk products carried out under proper supervision is a safeguard of prime importance, providing protection not only against Typhoid and Paratyphoid, but also against the other milk-borne diseases. An ounce of prevention is worth a pound of cure.

Poliomyelitis.

In 1950, 143 cases of poliomyelitis were reported and 8 deaths occurred from this cause. Sixty-five cases were reported in cities, 47 in towns and villages, and 34 in rural districts.

Under the provision for free treatment of persons suffering from paralysis due to poliomyelitis, 53 patients were admitted to the University Hospital, Edmonton, and 23 to the Junior Red Cross Hospital, Calgary.

As in previous years, assistance was extended by the Department of Public Welfare by which a number of poliomyelitis patients were enabled to complete academic and secretarial courses and to take vocational training.

Tuberculosis.

During 1950, 171 deaths were reported from tuberculosis (all forms), as compared with 211 deaths from this cause in 1949. Of these 171 deaths, 80 were deaths of Indians. The death rate for all forms of Tuberculosis in 1950 (including Indians) is 19.3. Excluding deaths of Indians, the death rate is 10.1 per 100,000 population.

Division of Entomology.

This Division deals with epidemiological problems associated with insect-borne diseases, more especially investigations relating to Sylvatic Plague, Rocky Mountain Spotted Fever and Tularaemia.

In connection with Rocky Mountain Spotted Fever survey work, 1,038 host ticks and 4,190 drag ticks were taken in 56 collections. Most of the investigations in 1950 were carried on in new territory and no positive specimens were reported.

During the course of the Sylvatic Plague survey, 161 collections consisting of 1,326 fleas and 228 tissue specimens were made from 928 animals. None of the fleas nor any of the material submitted to the laboratory was found positive for plague. To date, nine separate areas of plague infection among Richardson ground squirrels have been delimited. These are located as follows: Hanna, Stanmore-Youngstown, Naco-Oyen, Rose Lynn-Pollockville; Kinmundy, Gleichen, Brooks, Lomond and Suffield.

With a threat imposed by the invasion of Norway rats from Saskatchewan, the danger of plague infection being transmitted from infected Richardson ground squirrels to rats and thence to humans becomes a very real problem, and one that must be kept constantly in mind in dealing with the rat menace. In contrast with the Richardson ground squirrel, the rat takes up his habitation in close association with man. Should rats be infected by Richardson ground squirrels, the hazard to human health is therefore greatly increased.

The investigations in regard to Tularaemia were carried on as in previous years, and three collections of ticks taken at Elkwater, Redcliff and Atlee were reported positive for Tularaemia.

Educational work in regard to the prevention and control of insect-borne diseases was carried on as in previous years, through the use of moving picture films, by means of lectures and the distribution of bulletins and pamphlets.

The assistance extended by the Department of National Health and Welfare in providing the laboratory service which is so essential in this work, is gratefully acknowledged.

Diseases of the Heart and Circulatory System.

Diseases of the heart accounted for 2,046 deaths in 1950, as compared with 2,033 in 1949. These 2,046 deaths represent 29.8 per cent of the deaths reported for the year, giving a death rate of 228.6 (per 100,000 population), as compared with 233.4 for 1949.

Diseases of the arteries were reported as the cause of 133 deaths in 1950, as compared with 128 in 1949. The aging of our population is reflected in the increased number of deaths reported from diseases of the heart and circulatory system. Periodic medical examinations of all children as well as adults would reveal many of these heart conditions in the earliest stages, when effective measures might be taken to deal with them. Early recognition and prompt attention of skilled physicians would prevent much disability due to

diseases of the heart and circulatory system, and would prolong many lives. There is need for much more in the way of health education in this field.

Cancer.

In 1950, 987 deaths were registered as due to Cancer, as compared with 957 during the previous year. The death rate from Cancer in 1950 was 110.4 (per 100,000 population), as compared with 109.9 in 1949. Cancer occupies second place in the list of causes of death in 1950, and accounted for 14.3 per cent of the total deaths registered in the Province. It cannot too often be repeated that early recognition of Cancer and prompt and effective treatment by competent physicians would save many lives.

The importance of educational work in regard to Cancer therefore cannot be over-emphasized. As in previous years, educational work has been carried on by the Division of Cancer Services of the Department in co-operation with the Alberta Branch of the Canadian Cancer Society for the Control of Cancer, and the Alberta Division of the Canadian Medical Association.

The Diagnostic Clinics were busy throughout the year. On October 1st, a new Cancer Clinic was established in Lethbridge and is located in the Galt Hospital.

The following is a brief summary of the work done by the Diagnostic Clinics in 1949:

NUMBER OF PATIENTS EXAMINED			
	New	Follow-up	Total
Edmonton	3,090	3,192	6,282
Calgary	2,002	1,767	3,769
Lethbridge	177	78	255
Totals	5,269	5,037	10,306

It will be noted that the total number of new patients examined in 1950 and the first three months of 1951 is 5,269, as compared with 3,516 in 1949, and 3,220 in 1948. Of the 5,269 new patients examined in 1950, 3,203 or 60.7 per cent were found to be non-malignant.

During the year, 3,141 patients were referred to hospitals, 1,374 patients were referred for x-ray and radium therapy, and 1,271 patients were referred for major surgical treatment. Detailed information concerning the number of patients referred for various diagnostic procedures will be found in the report of the Division of Cancer Services.

Deaths Due to Violence.

Deaths reported as due to violence (excluding suicides and homicides) numbered 562 in 1950, representing 8 per cent of the total deaths registered in the Province for the year.

There were 82 suicides in 1950, an increase of 2, and 12 homicides, a decrease of 3 over the previous year.

Deaths from motor vehicle accidents totalled 159, a decrease of 5 as compared with the previous year.

Accidents in mines and quarries accounted for 25 deaths. Accidents on farms 28, and forestry operations 17. Thirty-five deaths occurred from accidental drowning,, and fires were responsible for 39 deaths.

Highway accidents constitute one of the important causes of death, and when the serious injuries suffered by many other per-

sons involved in highway accidents and the great expenses incurred in providing hospital and medical care are taken into account, it is apparent that this is a problem of major proportions. Closest co-operation of all organizations concerned is required if this problem is to be solved.

Drowning still accounts for far too many deaths. An excellent programme is being carried out by the Water Safety Division of the Red Cross Society, and learn-to-swim campaigns have been sponsored by various organizations. There would be very few deaths from drowning if everyone were familiar with the fundamental requirements in water safety and made it their business to see that these rules were carried out in practice.

It is once again necessary to direct attention to the number of deaths due to fire in 1950, namely 39, more than double the number reported for the previous year. In all too many cases, these deaths occur as a result of children of tender years being left alone at home, with no responsible person in charge.

In the following table, the deaths due to violence are classified:

Suicides	82	Injury by animals	4
Homicides	12	Hunger or thirst	8
Railway accidents excluding motor vehicles	21	Excessive cold	7
Motor vehicle accidents	159	Excessive heat	1
Street car and other transport acci- dents	7	Lightning	1
Water transport	8	Food poisoning	—
Air transport	10	Accidental absorption of poisonous gas	9
Accidents in mine and sand quarries	25	Acute accidental poisoning by solids or liquids	9
Agriculture and forestry	45	Conflagration	39
Other accidents involving machinery	31	Accidental burns (conflagration ex- cepted)	2
Accidental drowning	35	Accidents due to electric currents ..	7
Accidental mechanical suffocation ..	25	Other accidents	—
Accidental injury by firearms	20	Legal executions	2
Accidental injury by cutting or piercing instruments	2		—
Accidental injury by fall	85		656

Infantile Mortality.

There were 831 deaths of children under one year of age registered in 1950, as compared with 823 such deaths in 1949, an increase of 8 deaths. However, the infantile mortality rate 1950 is 32, as compared with 33 for 1949.

Of the 831 deaths of children under one year of age in 1950, 518 or 62 per cent occurred within the first month of life, and of these, 250 on the first day of life. In the development and expansion of our preventive health programme and through the organization of additional full-time District Health Units, lies the solution of this problem. It is significant that in districts which have had the advantage of the preventive health services provided by full-time Rural Health Units over a period of years, the infantile death rate gradually falls until it approximates the rate with the cities of the Province with full-time public health services. Tables setting-out the causes of the infant deaths will be found in the report of the Bureau of Vital Statistics.

Maternal Mortality.

The maternal death rate (deaths per 1,000 living births) in 1950 is 0.7, as compared with 1.0 in 1949. The average maternal death rate for the past five years is 1.38.

The following are the chief causes of maternal deaths registered in 1950:

Sepsis of pregnancy, childbirth and the puerperium	2
Toxemias of pregnancy and the puerperium	4
Haemorrhage of pregnancy and childbirth	2
Abortion without mention of sepsis or toxemia	—
Abortion with sepsis	2
Other complications of pregnancy, childbirth and the puerperium	9
Total	19

The progressive reduction in the maternal death rate in recent years has been most gratifying. We can look forward with every confidence to still further reductions in our maternal and infant death rates with the expansion of the preventive health programme in both rural and urban districts. Of the 25,625 births registered in the Province in 1950, 97.9 occurred in approved hospitals.

Full-time Rural Health Units.

The work of the Full-time Rural Health Units has been conducted along the same general lines as in recent years. During the year, full-time medical officers of health were in charge of five of these Units, and part-time service was provided in two. A shortage of well-qualified public health nurses has continued, and has made it very difficult for district boards of health to keep their staff up to strength. The eight Health Units established in 1944 and those established in 1945, with one public health nurse in charge of the service in each of these Units, have continued to operate. Requests have been received from a number of municipalities for the establishment of additional health units, but as the public health staff required to staff such units has not been available, no additional units were established in 1950.

The activities of full-time health units include the prevention and control of communicable diseases, infant and maternal hygiene, medical examination and supervision of the health of pre-school and school children, immunization of children against such diseases as smallpox, diphtheria and whooping cough, health education, home nursing and first-aid instruction, supervision of water and milk supplies, food inspection, general sanitation, routine laboratory services, records and statistics, etc.

Health Education.

Health educational work is carried on through the publication of bulletins, pamphlets, articles in the press and by means of lectures, radio talks, movies, health exhibits and demonstrations. Over 100,000 copies of various health publications were distributed by the Health Education Division in 1950. The two films produced in 1949, one on Mental Health and the other on District Nursing, have been used to good advantage.

With funds available under the Dominion Health Grants, 51 new health films were added to our Film Library, and three new filmstrips were produced—"The School for Nursing Aides," "Rural Sanitation," and "School Sanitation." With funds made available under another Dominion Health Grant, suitable health films were made available to various schools of nursing in the Province for use in their educational programme.

We now have 180 health films and 60 filmstrips in the Department's Film Library. The total audience viewing these in 1950 was approximately 60,000.

The Department's radio programme was broadcast over four stations, along the same general lines as in previous years, and we wish to express our sincere appreciation of the splendid co-operation of the radio stations in broadcasting this programme.

A health workshop for teachers was one of the new developments in health education in 1950, and proved of great interest to all concerned. In our opinion, such workshops are a most effective means in developing broader interest in, and better understanding of, public health.

Health education is one of the most important activities of the modern public health department. We are finding an ever-increasing demand for up-to-date literature, health films, radio talks, and lectures on various phases of health and a very receptive audience. An expanding health educational programme is required to keep pace with these requests.

Detailed information concerning the various activities in the field of health education will be found in the report of the Division of Health Education.

Nutrition.

The work of the nutrition service has been carried on along the same general lines as in previous years. This programme is one of health education carried on with the active participation of public health personnel in the field. Literature, exhibits and films on nutrition have been discussed with local medical officers of health and public health and district nurses. Information and advice concerning school lunch programmes has been made available to public health personnel. Field visits have been made by the Public Health Nutritionist in the course of the development of this programme. Talks have been given to many community organizations, and classes on nutrition were arranged for home nursing groups.

During the year the project undertaken in 1949 under which the Public Health Nutritionist extended assistance and advice on the invitation of small hospitals, school dormitories and other organizations interested in group feeding, was expanded.

Inquiries were received from numerous organizations, as well as private individuals, concerning various phases of nutrition, and all such inquiries received careful attention by the Public Health Nutritionist. Nutrition is one of the most important services from the public health point of view, and one in which there is evidence of an ever-increasing public interest. More detailed information concerning nutrition services will be found in the report of the Public Health Nutritionist.

Public Health Nursing.

There are 40 nurses on the staff of the Division of Public Health Nursing (exclusive of public health nurses serving in District Health Units). One is in charge of the Child Hygiene Clinic serving the Calgary District, one in charge of the Clinic serving the Medicine Hat and Redcliff Districts, and one serves the Municipal District of Norma and the Town of Vegreville. We have 35 district nurses stationed in the various outlying districts. Service is provided in two of these districts by part-time married nurses living in the district who are formerly full-time members of the staff.

Miss Jean Clark, the Director of the Division of Public Health Nursing, was granted extended leave of absence for the purpose of

taking post graduate work abroad. Miss Marguerite Fitzsimmons was appointed Acting Director of the Division, and Miss Blanche A. Emerson, Acting Assistant Director.

The Nursing Service Act which was passed in April, came into operation, and as a result a great deal of our organization of districts was required. Splendid co-operation has been given by everyone concerned in this undertaking.

With the opening of the Glendon Municipal Hospital, making medical and hospital services available, the district of Malloy was closed in March. A new municipal nursing service was established at Warner in August, and is meeting a real need.

Miss Martha Hagerman, who served so efficiently for 21 years as public health nurse in charge of the Child Welfare Clinic in Medicine Hat and District, retired in June. Miss Hagerman gave outstanding service, and will be greatly missed by the people in her district. The Department was fortunate in obtaining the services of Miss Marion Story to succeed Miss Hagerman.

We have been most fortunate in being able to find suitable replacements for practically all the public health nursing personnel who have resigned or retired from the staff during the year. It is a pleasure to record the fact that the high quality of service rendered by our public health and district nurses has been well maintained during the year.

A brief summary of the work of our District Nurses is shown in the following table:

Treatment consultations	23,657
Miscellaneous Public Health consultations	6,823
Antepartum consultations	1,519
Postpartum consultations	352
Infant and pre-school consultations	4,241
Treatment home visits	5,412
Miscellaneous Public Health home visits	1,157
Communicable disease home visits	651
Maternal welfare home visits	504
Infant and pre-school Public Health home visits	918
Deliveries	76
Abortions	53
Cases sent to hospital or doctor	1,245
Deaths (under 1 year)	6
Deaths (over 1 years)	37
Total number doses toxoid vaccine and sera given	10,395
Communicable diseases cases reported	1,220
Public Health literature distributed	4,381
IMMUNIZATIONS:	
Measles prophylactic	30
Diphtheria toxoid	3,398
Scarlet fever toxin	1,351
Smallpox vaccine	1,322
Whooping cough vaccine	2,934
Typhoid fever vaccine	1,339
Mantoux and T.B. patch tests	21
Total number of doses	10,395

Detailed information concerning the activities of the Division of Public Health Nursing will be found in the report of this Division.

Social Hygiene.

Five clinics are operated by the Division of Social Hygiene, one in Edmonton, one in Calgary, one in Lethbridge, one in Medicine Hat, and one in the Slave Lake District. In addition, clinics are operated in each of the two Provincial Gaols.

The additional personnel appointed under the assistance available in connection with the Federal Public Health Grants, has enabled the work of venereal disease prevention and control to be carried forward in a very satisfactory manner.

The Research Project under the Federal Public Health Grant dealing with the results of Malaria Pyrexia Therapy in the treatment of neurosyphilis in Alberta covering a period of twenty-five years, has been continued, and it is expected the report of the group associated in this study, will be available by the end of the year.

New cases under treatment in all clinics during 1950 are as follows: Syphilis 52, Gonorrhoea 951.

Cases reported by doctors and military authorities are as follows: Syphilis 110, Gonorrhoea 437.

The total cases of Syphilis reported in Alberta in 1950 numbered 162, and the total number of cases of Gonorrhoea 1,388.

It is again noteworthy that approximately 85% of the alleged sources of infection in venereal disease cases in Alberta have been found, and the necessary steps taken to bring the same under treatment.

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

Provincial Laboratory.

The staff of the Provincial Laboratory of Public Health, Edmonton, made 142,268 examinations in 1950. In addition, 49,860 examinations were carried out by the staff of the Southern Branch of the Provincial Laboratory of Public Health in Calgary, making a total of 192,128 examinations carried out in both Laboratories. The estimated value of the work done by the Laboratory in 1950, if minimum charges had been made for the same, is approximately \$250,000.00.

The work of the Provincial Laboratory of Public Health and the Southern Branch Laboratory, includes examinations of water, ice, sewage, milk, food, various examinations in connection with the diagnosis and control of communicable diseases, bacteriological, serological and pathological examinations of specimens submitted by physicians, local health authorities and hospitals, medical-legal examinations, and a great many other examinations, many of which are highly technical and time-consuming.

The Provincial Laboratory serves as the main centre, and the Southern Branch Laboratory as a sub-centre for the distribution of vaccines and sera which are made available by the Department for the prevention and treatment of various communicable diseases.

The new Provincial Laboratory of Public Health building was occupied in December. The completion of this fine new Laboratory building, which is located directly west of the University Hospital, marks a distinct forward step in public health service in Alberta. We have been most fortunate in the high quality of the service provided by the staff of the Provincial Laboratory of Public Health from the inception of this service in the first decade of the present century. Dr. R. D. Stuart succeeded Dr. R. M. Shaw as Director of the Provincial Laboratory of Public Health, on September 1st, 1950.

The Southern Branch of the Provincial Laboratory of Public Health at Calgary was opened in January, 1950, and this also is an important milestone in the extension of public health laboratory facilities in the Province. The Southern Branch Laboratory is located on the grounds of the Central Alberta Sanatorium, thus

making this service available to all parts of southern Alberta and providing laboratory services for the Sanatorium. Dr. D. Shute is the Director of the Southern Branch Laboratory.

All public health laboratory service is provided free of charge with the exception of a few examinations which involve highly specialized procedures. Public health laboratory service is of vital importance in the development of a public health programme, and the developments which have taken place in this important field in Alberta in recent years, have been significant.

Detailed information concerning the work of the Provincial Laboratory of Public Health and the Southern Branch Laboratory will be found in the report of the Laboratory.

Sanitary Engineering and Sanitation.

Plans and specifications submitted to the Provincial Board of Health for waterworks, sewerage and sewage disposal plants, as well as extensions of the same, have been carefully examined and, where approved, the necessary certificates issued under the authority of the Public Health Act and regulations.

The tremendous expansion in the construction of waterworks and sewage disposal plants and in the extension of existing plants in cities, towns and villages which has been noted in recent years, has continued on an ever greater scale in 1950. This unprecedented increase in the number of waterworks and sewage disposal systems has resulted in an enormous increase in the demand for supervision and assistance which is absolutely essential if proper maintenance and operation procedures and essential public health precautions are to be observed. Additional staff well qualified in this field is urgently needed.

A stream sanitation project was undertaken in July with assistance extended under the Dominion Health Grants. Mr. P. Bouthillier, lecturer in Civil Engineering, University of Alberta, was placed in charge of this programme. It is proposed to make a complete survey of the large rivers of the Province with a view to determining the present condition of these rivers and what is required by way of water and sewage treatment facilities in the light of the great industrial development now taking place in the Province. It is estimated that five years will be required to properly complete this survey, which marks an important development in public health in Alberta.

The marked increase in plumbing installations referred to in the reports of previous years, has continued in 1950. One thousand six hundred and thirteen permits were issued, and \$10,625 was received in plumbing fees. It is essential that careful supervision be exercised over installations of plumbing in cities, villages and rural areas.

I would once again direct the attention of municipal authorities to the responsibility which falls on them for safeguarding public water supplies. Any failure to insure that the public water supply is safe for human consumption, will sooner or later result in a serious outbreak of water-borne disease.

I also wish to direct the attention of municipal authorities to the responsibility resting on them for the supervision and control of their milk supplies. Any municipality which permits the sale of unsafe milk is remiss in its duty, and in inviting serious trouble. It is encouraging to note the increasing number of municipalities

which have passed bylaws requiring pasteurization of their milk supplies. One new pasteurization plant was installed in 1950.

Mr. D. R. Stanley, B.Sc., S.M. (C.E.), Provincial Sanitary Engineer, was granted leave of absence in September, in order to take a post-graduate course at Harvard University. The Department was fortunate in obtaining the services of Mr. J. A. Beveridge, B.A.Sc., M.S.E., as Acting Provincial Sanitary Engineer during the absence of Mr. Stanley.

Detailed information concerning the various activities of the Sanitary Engineering Division will be found in the report of the Division.

Division of Hospital and Medical Services.

In 1950 there were 100 approved hospitals in the Province. In addition, 16 private hospitals were licensed under the Private Hospitals Act, a decrease of 6 as compared with the previous year. In addition to these hospitals, the Lloydminster United Municipal Hospital, located on the Saskatchewan side of the border, and the Fort Smith Hospital in the Northwest Territories, received the Government Grant covering Alberta patients admitted to these hospitals.

On the basis of a population of 895,000, there was one hospital bed available (including cribs and bassinets) for every 150 of our population. The hospital capacity was 5.6 beds per 1,000 population, and the complement 6.7.

Patient days (excluding newborn) in 1950 totalled 1,468,312. There were in addition, 215,799 patient days for the newborn. Of the 25,646 births registered in Alberta in 1950, 97.9% occurred in approved hospitals.

Construction of the following new hospital was started in 1950: Magrath Municipal Hospital; bed capacity, 28.

Construction of additions to the following hospitals was undertaken in 1950:

Name of Hospital	Additional Beds (excluding Bassinets)
Berwyn Municipal Hospital	10
Fairview Municipal Hospital	25
Innisfail Municipal Hospital	1
St. Michael's Hospital, Lethbridge	83
Red Deer Municipal Hospital	57
General Hospital, Vegreville	21

There were 50 municipal hospitals in operation in 1950, with a total bed capacity of 1,746 beds, including bassinets.

The daily average number of patients in all approved hospitals was 4,611. The average stay in hospital, 8.8 days.

The nursing situation to which reference was made in previous years, reports showed some improvement in 1950, although there was still a definite shortage of nurses, particularly in the smaller hospitals. Since the School of Nursing Aides was established in January, 1946, 687 women have been trained as nursing aides, and 454 of these were employed in Alberta as at December 31st, 1950. These nursing aides have given excellent service in the various hospitals in which they have been placed, and have been of the greatest assistance in helping to meet a critical nursing situation.

The cost of hospital construction has continued to rise in 1950, and as yet has shown little indication of levelling off. The cost of practically every type of material used in hospital construction and the steadily increasing costs of all kinds of hospital supplies, have

given a good deal of concern to those responsible for the administration of hospitals and to the public requiring hospital services.

Detailed statistical information concerning approved hospitals will be found in the report of the Division of Hospital and Medical Services.

Cerebral Palsy Clinics.

The Department established the first clinic in the Province for the diagnosis and treatment of cerebral palsy, in the summer of 1950. Dr. F. G. Day, an orthopaedic surgeon with special training in cerebral palsy, was appointed Director of this service. The clinic was established in temporary quarters until such time as permanent quarters could be made available. It is expected that construction of a suitable building to house the clinic will be undertaken in 1951. The South Edmonton Kiwanis Club, which is keenly interested in cerebral palsy, has undertaken to erect a suitable building adjoining the clinic to provide recreation and playground facilities. While the temporary clinic is well furnished with the necessary equipment, there is a considerable amount of equipment that cannot be put into use until the new clinic quarters are available. When the new building is completed, the clinic staff will be augmented by the appointment of a brace maker, a speech therapist, a physiotherapist, and a school teacher with special experience in the instruction of children with cerebral palsy. In the summer of 1951, it is planned to establish a similar cerebral palsy clinic service, with headquarters in Calgary, which will serve the city of Calgary and southern Alberta. The co-operation of various voluntary organizations in this service has been outstanding, and the Department desires to place on record its sincere appreciation of the splendid assistance which these organizations, as well as many individuals, have rendered. Because of this fine co-operation, the cerebral palsy clinic service has been established and has functioned with a minimum of difficulty.

Canadian Red Cross Blood Transfusion Service.

This service which was instituted by the Canadian Red Cross Society in 1947, has during the three-year period, January 1st, 1948, to December 31st, 1950, provided 61,155 bottles of whole blood for patients, and in addition, 7,845 bottles of plasma. If the value of this completely free service were estimated at only \$15.00 per transfusion, the resulting saving to the 38,482 patients who received whole blood and plasma during the above-mentioned three-year period would amount to more than \$1,000,000.

No estimate has been placed on the value of the thousands of Rh investigations, as well as the many other blood examinations undertaken.

This is a service of prime importance from the public health standpoint, and it is gratifying to note the splendid response of the public as blood donors. We sincerely trust that the keen interest and fine support of the public will continue in order that the increasing demands for blood transfusions in grave illnesses in which such transfusions are essential can be adequately met.

Division of Tuberculosis Control.

The number of treatment beds available for tuberculosis in 1950 was 490. Patient days for all sanatoria and hospitals totalled 175,647.

Non-pulmonary tuberculosis cases for whom free treatment was provided as a project under the Federad Tuberculosis Grant, accounted for 16,331 of the above-mentioned days.

During the year, free diagnostic services were extended to a total of 128,363 persons in the Province. In addition, diagnostic services were provided by the Indian Affairs Branch of the Department of National Health and Welfare to 12,664 persons. Mobile X-ray Unit surveys accounted for 72,963 of the above-mentioned 128,363 examinations.

There were 926 new cases (all forms, excluding Indians) of active and inactive pulmonary tuberculosis found in 1950. The classification of 830 of these new cases of active and inactive pulmonary tuberculosis (excluding Indians) in 1950, indicated that 377 or 45 per cent were found minimal; 201 or 24 per cent were moderately advanced; 85 or 10 per cent far advanced; 88 or 10 per cent primary; and 79 or 9 per cent tuberculous pleurisy with effusion.

There were 599 patients admitted to the sanatoria and other hospitals. The Edmonton hospitals provided beds for tuberculosis patients under an agreement with the Department. A total of 1,032 patients were treated in the Sanatorium and all hospitals during the year.

The two Mobile X-ray Clinics examined 72,963 persons in 1950. These two completely equipped Mobile X-ray Units, gifts of the Alberta Tuberculosis Association, are operated by the Tuberculosis Control Division of the Department, and have made a noteworthy contribution in the campaign against tuberculosis in Alberta.

The general programme of the Alberta Tuberculosis Association has been carried on along the same general lines as in previous years. Under this programme, X-ray equipment to provide for diagnostic services has been installed in a number of hospitals, and assistance has been extended in connection with academic as well as vocational training. Through such training, it has been possible for many patients to become re-established and to become largely and completely self-supporting.

The arrangements noted in the 1949 Report for the instruction in tuberculosis nursing of nurses in training in general hospitals has continued, four hospitals co-operating in this plan, which has functioned quite satisfactorily.

Dr. A. H. Baker, General Medical Superintendent and Director of the Division of Tuberculosis Control, retired from the service of the Department on superannuation on October 31st, after the completion of thirty years' outstanding service in the field of tuberculosis. Dr. Baker ranks as one of the outstanding authorities in the field of tuberculosis. This Province has been fortunate indeed in having a physician of his exceptional ability, fine judgment and wonderful personality as the Director of the Tuberculosis Services, from the very beginning. A farewell party arranged by ex-patients and the Sanatorium staff was held at the Central Alberta Sanatorium on September 30th. Dr. Baker was presented with an automobile as a token of the high esteem in which he is held by everyone.

It is expected that the Aberhart Memorial Sanatorium in Edmonton will be completed late in 1951, and ready for occupation early in 1952. This new Sanatorium, which will rank with the most modern on the continent, will provide accommodation for 310 patients. A Nurses' Home and a service building are being con-

structed as a part of this development. These splendid new facilities will mean much in the development of our tuberculosis programme in Alberta.

The addition to the Administration Building at the Central Alberta Sanatorium was started in the fall. This addition will provide space on the main floor for a second X-ray machine and an additional operating room. It will also provide space for the out-patient clinic and doctors offices. On the second floor, accommodation will be provided for 18 additional surgical patients. The completion of this addition will do much to facilitate the out-patient, X-ray and surgical services at the Central Alberta Sanatorium.

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

Mental Health Division.

On January 1st, 1950, there were 3,171 patients in all mental institutions, and on December 31st, 1950, 3,369 (2,043 males, 1,326 females), representing an increase of 198 patients during the year. The rate of hospitalized mental patients to general population has increased from 156 per 100,000 population in 1921 to 354 in 1950.

The number of patients in residence at the Provincial Mental Hospital, Ponoka, on January 1st, 1950, was 1,394 (839 males and 555 female). The number in residence at the end of the year was 1,488 (891 male and 597 female). The overall increase in patients was 94. There were 647 patients admitted, 495 discharged and 56 deaths occurred during the year.

There were 1,273 patients in the Provincial Mental Institute at Oliver at the beginning of 1950, and 1,285 at the end of the year, representing an increase of 12 patients. There were 297 patients admitted, 248 discharged, and 56 deaths occurred during the year.

In the Auxiliary Mental Hospital at Claresholm there were 98 female patients on January 1st, 1950, and the same number at the end of the year. During the year, 9 patients were admitted, 7 discharged, and 2 deaths occurred.

In the Auxiliary Mental Hospital at Raymond there were 113 female patients in residence on January 1st, 1950, and 133 at the end of the year. During the year, 27 patients were admitted, 6 discharged, and 1 death occurred.

During the year, 101 patients were admitted to the Training School for Mental Defectives at Red Deer, 19 were discharged, and 10 deaths occurred. There were 293 patients in residence at the beginning of 1950 and 365 at the end of the year.

The construction programme in 1950, which was quite an extensive one, got under way early in the spring. This programme included completion of a new dormitory for girls at the Provincial Training School, Red Deer. At this institution, work was also continued on the alterations of the kitchen and staff dining halls. The new Power House at the Training School was practically completed, as well as a new root cellar and new accommodation for stores. Work was continued on the construction of the new Tuberculosis Building at the Provincial Mental Institute, Edmonton, and it is expected that at least part of this accommodation will be available in 1951. Here also, a new section of the corridor system was erected and a number of alterations, made to the main kitchen.

Guidance Clinics.

The services of the Provincial Guidance Clinics were carried on along much the same lines as in previous years. In addition to the centres visited in the previous year, two visits were paid to the Peace River country.

Alberta pioneered in providing preventive services in the field of mental health, the first clinic being established in Calgary in 1929. The organization of Travelling Guidance Clinics marks a further expansion of this preventive programme which has given convincing proof of its value. The plans for this programme call for three additional Travelling Guidance Clinics, one centred at Lethbridge serving the southern and southeastern parts of the Province; one centred at Red Deer serving the central area; and one with headquarters at Grande Prairie to serve the Peace River country. It is proposed that from the above-mentioned centres, this service will be carried out to various sub-centres in the districts to be served. In this way, this important service will be made accessible with a minimum of inconvenience to those requiring it.

During the year, 1,629 new cases were presented at the various Guidance Clinics. Since the inception of this service in 1929, 10,560 patients have passed through the clinics. The co-operation received from parents, physicians, school and health authorities, welfare and other community organizations has been outstanding, and has contributed in a very large measure to the success of the work in this field.

Eugenics Board.

The work of the Eugenics Board is carried on under the authority of The Sexual Sterilization Act. Nine meetings of the Board were held in 1950. Ninety-eight cases were presented for the Board's consideration, and 67 operations were performed during the year (Male 21, female 46). Since The Sexual Sterilization Act was proclaimed in 1929, 2675 cases have been presented to the Board (male 1,309, female 1,366). The total number of cases operated on from 1929 to 1950 inclusive was 1,241 (male 946, female 745). As in previous years, all operations were performed at the Provincial Mental Hospital, Ponoka.

On the recommendation to the Senate of the University of Alberta, Dr. R. K. Thomson was appointed to the Eugenics Board in January, 1950, to fill the vacancy caused by the death of Dr. E. L. Pope.

The Department again wishes to express to the members of the Eugenics Board, the honorary surgeons and the staffs of our various Mental Institutions and Guidance Clinics, its sincere appreciation of the fine service rendered by each and all, in the discharge of their various responsibilities.

Detailed information concerning the activities of the Mental Institutions, Guidance Clinics and Eugenics Board will be found in the reports of these services.

Board of Visitors.

The Board of Visitors is constituted as follows: Dr. J. M. MacEachran, Chairman; Dr. E. R. Selby, Dr. R. K. Thomson, and Mrs. R. B. Gunn.

The Board visited the various Institutions which come under the administration of the Department, as well as the Provincial Guid-

ance Clinics, during the second-half of October, and a report on each of these Institutions has been submitted to the Board.

The Department desires to express to the members of the Board its sincere appreciation of the outstanding service they have rendered.

General Administration.

The statement of revenue and expenditure for the year ending March 31st, 1951, will be found on page 15 of this report. An analysis of this statement shows that the total expenditure for all activities of the Department was \$9,856,680.34, an increase of \$1,034,397.28 over the previous year. The total revenue was \$2,163,892.86, an increase of \$310,942.65 as compared with the previous year. The net expenditure of the Department was \$7,692,787.48, an increase of \$723,454.63 over the previous year. The sum of \$2,547,495.00 was expended for the maintenance and operation of the various mental institutions which are under the administration of the Department. The sum of \$1,047,765.98 was expended for the maintenance and operation of the Central Alberta Sanatorium at Calgary, in providing hospital accommodation and medical care for tuberculosis patients in Edmonton and other hospitals, and in providing diagnostic and other services. The sum of \$1,051,871.43 was expended in grants to approved hospitals. The sum of \$950,770.43 was expended in providing free maternity hospitalization; \$1,143,240.73 was expended in providing hospital, medical, dental and other services for pensioners and those in receipt of mother's allowances and their dependents. The sum of \$1,067,112.49 was expended in hospital construction grants under the Federal Government programme of matching grants in aid of hospital construction, of which amount the Federal Government contributed \$467,742.14; \$403,016.20 was expended in providing cancer diagnostic and treatment services; \$140,250.00 was expended in grants providing for the operation of the Provincial Public Health Laboratory, and the southern branch Laboratory in Calgary; \$117,231.11 was expended in providing public health and district nursing services; \$115,242.30 was expended in grants to district health units. The sum of \$575,196.07 was received from the Federal Government in grants covering various health services under the Federal Health Grants programme. Through these grants, the expansion of existing health services and the development of a number of new health services and activities was made possible in an expanding health programme. More detailed information concerning the same will be found in the reports of the various Divisions of the Department.

In concluding this summary of the activities of the Department for the year 1950, I desire to record my sincere appreciation of the fine spirit of co-operation and the splendid service given by the Directors and members of the staff of all Divisions of the Department, including the Superintendents and members of the staff of the various Institutions which come under the administration of the Department. This Department is fortunate in the high quality of its personnel.

Respectfully submitted,

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

Communicable Disease Division

(N. BASTER, M.D., B.Ch., D.P.H., *Director*)

The Division of Communicable Disease is responsible for the co-ordination of measures taken to control communicable diseases throughout the Province. The carrying out of control measures is the responsibility of the Provincial Government in those areas of the Province which it administers directly. In areas organized for local government the local government authority is responsible. The Division carries out the necessary control measures in those parts of the Province for which the Provincial Government is responsible. Many of the necessary control measures are beyond the power of the smaller municipalities to perform and assistance is sought from the Division by these authorities. In addition, the Division acts where an outbreak involves more than one local authority and some co-ordinated action is necessary. In short, this Division endeavours to ensure that local authorities take necessary action to control communicable disease, and renders them every assistance it is able. Where there is no local authority it acts directly.

Ascertainment is the first step in control; this is carried out by notification and in various other ways. Notification is required by every doctor treating a case listed in the schedule of communicable diseases. The diseases are to be notified to the local authority where one exists, otherwise directly to the Provincial Health Department. This forms the basis of ascertainment, and is wholly inadequate. In fact, in most diseases, even those of a serious nature, the number of cases notified bears little relationship to the number occurring. Used as a measure of the incidence of disease, the figures obtained are useless, and one can only infer from them that the incidence is not less than that shown by notification. Ascertainment by other measures, such as local enquiry is often used, and often produces better results than can be obtained by notification.

The number of cases of each disease notified is transmitted to the Dominion Government and to all the principal local health authorities in the Province and to neighbouring provinces and the nearby states of the United States. Similar returns are received from the Dominion Government, the neighbouring provinces and states. By this means, health departments can be kept aware of what is happening in adjacent areas. This information is of considerable value in controlling infectious diseases.

In addition to keeping records of the known cases of communicable diseases, the Division keeps a register of carriers of certain diseases, and from time to time these carriers are checked. It is necessary for the carriers of certain diseases, such as typhoid, to be kept to some extent under surveillance, as their liberty may constitute a hazard to the health of others. Every effort is made to ensure that carriers are rendered free of infection as soon as possible, but in spite of all the efforts a small proportion of them remain infectious.

During 1950 there was an increase in the number of cases reported of most diseases. A good deal of this is probably due to increased notification, and does not necessarily reflect an increased incidence. Public health agencies were far more active during the year, particularly the health units, which had in general more adequate staff, and strenuous efforts were made by them to have cases of infectious diseases notified in order that a better picture of the true incidence could be ascertained. It is not possible for adequate control to be instituted unless notifications are received by the public health authority. When diseases are notified, a considerable amount can be done to limit their spread. The presence of an active medical officer of health in the area does much to ensure more adequate notification.

Though the mortality for the major infectious diseases is now reduced, with the exception of tuberculosis, to negligible proportion, the morbidity remains high, and the amount of residual damage, discomfort and distress must be considerable. The economic loss occasioned by them must also be far from negligible. The present comparatively low death rate under the communicable disease headings is no longer any indication of the harmful effect on the community. For instance, outbreaks of Scarlet Fever at schools during the year caused considerable interference with the educational program in many schools due to the substantial proportion of pupils being absent, in some cases proportions so high that it was not worth-while to keep the school open. In several instances typhoid occurred in relation to families engaged in dairying and considerably interfered with their livelihood. It would seem that there is still far to go in the reduction of the extensive morbidity ascribed to these diseases.

TYPHOID

(13 Cases, 1 Death)

The number of cases of typhoid reported is low, and most probably does not reflect the true incidence of the disease. I feel sure that as notification improves the figure will rise considerably. Routine Widal Tests show a very considerable number of positives which cannot be attributed to previous immunization.

The prompt treatment of pyrexia with chloromycetin before a diagnosis is made, a common procedure, probably cuts short many typhoid attacks. The effect of this on the production of carriers is difficult to ascertain. In view of the expensiveness of the drug, the courses are usually short, so that the possibility of cases becoming carriers would seem considerable. One cannot stress too greatly the desirability of making a diagnosis and of using blood and stool examinations for this purpose, and not relying on a Widal examination taken in the first week of illness.

PULMONARY TUBERCULOSIS

(952 Cases, 137 Deaths)

There is an increase in the number of cases reported but a decline in the number of deaths (774 cases and 156 deaths being recorded in 1945). It probably represents no true increase in the incidence of the disease. In view of the reduction in the number of deaths, it would seem fair to suppose a fall in the incidence as the ratio of deaths to cases remains fairly steady, showing a general decline. The increased number of cases would therefore appear to be due to increased ascertainment.

WHOOPING COUGH (120 Cases, 3 Deaths)

Immunization against whooping cough has become general during the past few years. Controlled trials in various parts of the world have demonstrated its power to reduce greatly the incidence of the disease and its severity in the individual cases which do occur. While no controlled trials were carried out in the Province, the decline in the incidence and severity of the disease seems to be in keeping with findings elsewhere. During the year one or two localized epidemics were reported amongst children of paroxysmal coughing without the characteristic whoop. This type of case presents a considerable diagnostic problem. If the disease is whooping cough, some effort at isolation should be made. If it is not and isolation is enforced, unnecessary hardship is inflicted on the family by the three weeks enforced isolation. During the year the Provincial Laboratory made arrangements for the examination of pre-nasal swabs, and sets of equipment were made for the taking and transmission of specimens. Pre-nasal swabbing is considered to be the most effective method of recovering the organisms. The writer has used this method in the control of whooping cough with some success, using swabbing for diagnosis and discharging on negative swabs. In Alberta the problem of transmission, with a probable fall in the number of positives, and the time lag, reduces its effectiveness as a control measure, but general encouragement in the use of pre-nasal swabbing as a diagnostic measure is being given. All suspicious cases should be swabbed, if possible, at least twice and kept in isolation until the results are available. If this is not done and great care exercised to make a diagnosis, many cases of simple bronchitis will be isolated and their immediate contacts quarantined, while many cases of whooping cough are allowed to mix freely and to spread infection.

The small number of deaths would support the impression that immunization greatly reduces the severity of the disease.

MEASLES (1,539 Cases, 8 Deaths)

In most parts of the Province 1950 was a quiet year for measles, though there were one or two small outbreaks which did not follow the pattern of an epidemic in alternate years. During the year doctors and public health agencies were encouraged to use Gamma Globulin for the protection of younger members of the family who were contacts with a case in the household. This gives them short-term protection, which will usually see them through the period of danger from the household contact, and in most cases right through the epidemic. Once again when it does not prevent the disease entirely, it greatly modifies it, which if the child is fit and old enough is an ideal result, as it gives prolonged immunity. The protection of infants is of the greatest importance, as this is the age group which suffers the most severe complications and amongst whom deaths from broncho-pneumonia following measles occurs. A supply of gamma globulin has been made available on request from the Provincial Laboratory. It should be obtained and given early to obtain protection.

POLIOMYELITIS
(143 Cases, 7 Deaths)

Poliomyelitis showed, rather unexpectedly, a slight increase in incidence. There was, however, a decline in the number of deaths. It is felt that the increase in notifications was probably due to improving ascertainment.

SCARLET FEVER
(2,309 Cases, 11 Deaths)

There was a considerable increase in the number of cases of scarlet fever reported. This again probably reflects better ascertainment. It can only represent a small portion of the number of cases of streptococcal sore throat with a rash. In one instance I visited a village of about six hundred people. From questioning a sample of the population, it appeared that almost everyone had suffered either a sore throat or scarlet fever. Swabbing of a sample group gave almost a hundred per cent positive for haemolytic streptococci or haemolytic staphylococci. Efforts to control the infection by the indiscriminate distribution of sulpha, inoculation of children during the epidemic and school closure had in all probability, due to their complete lack of co-ordination, greatly extended the epidemic. This particular village had no public health service whatsoever, so that no co-ordinated action was taken to deal with the outbreak. It had been in progress for six weeks before, quite by chance, its existence became known to the Department. For the whole of this time the schools were closed. This emphasizes the importance of some public health service being provided for the whole of the settled part of the Province, as outbreaks such as this can be prevented by prompt action in the early stages, though scarlet fever control is undoubtedly difficult due to the widespread distribution of the organism concerned and the general susceptibility of the population. Inoculation is no doubt of some value, though it is unfortunately only partly successful. It is a long drawn out procedure and needs careful supervision. Isolation and quarantine are of value if properly carried out under supervision and combined with examination and throat swabbing of contacts. In view of the general mildness of the infection and the speed with which modern therapy clears the throat, serious thought should be given to reducing the period of isolation.

DIPHTHERIA
(13 Cases, 1 Death)

There was a striking decline in this disease during the year. The program of immunization is successfully stamping out this disease. It is of interest to note that nine out of the thirteen cases occurred in rural districts where the level of immunization is relatively low.

RUBELLA
(3,735 Cases, 0 Deaths)

There was a considerable rise in the number of cases of rubella during the year. Though it is not of itself a serious disease, the part it plays in producing congenital defects in babies has been clearly shown, and therefore widespread rubella, with cases occurring in adult women, must now be regarded with some seriousness, and the question of taking active steps to prevent the disease is worth further study.

DEPARTMENT OF PUBLIC HEALTH

TABLE 1
NUMBER OF CASES OF COMMUNICABLE DISEASES REPORTED, 1949-1950

	1949	1950		1949	1950
Actinomycosis	3	....	Mumps	1,013	5,053
Anthrax .....	....	....	Paratyphoid	1	1
Acute anterior polio	127	143	Rocky Mountain spotted fever .....	....	....
Chickenpox	3,067	2,982	Rubella	1,575	4,735
Diphtheria	59	13	Scarlet fever	865	2,309
Dysentery	17	1	Smallpox .....	....	....
Encephalitis	2	4	Tetanus	1	....
Erysipelas	24	14	T.B. meningitis .....	....	5
Food poisoning	14	5	Tuberculosis, pulmonary	774	952
Glandular fever	1	....	Tuberculosis, non-pulmonary	356	106
Infectious Hepatitis	6	24	Trachoma	1	....
Infectious mononucleosis	7	....	Tularemia	1	4
Malaria	2	....	Typhoid	13	13
Measles	9,179	1,539	Undulant fever	19	14
Cerebro-spinal meningitis	8	5	Whooping cough	98	120

TABLE 2
DEATHS ASCRIBED TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA FOR THE YEAR 1949-1950

Disease	1949		1950	
	Total Deaths	Rate Per 100,000 Population	Total Deaths	Rate Per 100,000 Population
Acute Poliomyelitis and Polioencephalitis.....	9	1.0	7	0.9
Diarrhoea and Enteritis	63	7.2	*	*
Diphtheria	12	1.4	1	0.1
Influenza	*	*	26	2.9
Measles	19	2.2	8	0.9
Meningococcal Meningitis	1	.11	....	....
Pneumonia	*	*	269	30.7
Scarlet Fever .....	....	....	6	0.8
Smallpox .....	....	....	....	....
Tuberculosis, Respiratory	155	17.8	137	15.3
Tuberculosis, Other	54	6.2	36	4.0
Typhoid	1	0.11	1	0.1
Whooping Cough	5	0.57	3	0.3

*Figures not available on a comparable basis.

TABLE 4
INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES FOR
THE TEN YEAR PERIOD, 1940-1950

DIPHTHERIA				
	Population	Total Cases	Total Deaths	Mortality Rate per 100.00)
1940	795,000	52	12	1.5
1941	796,169	31	6	0.8
1942	805,152	58	11	1.4
1943	792,000	46	11	1.4
1944	818,000	57	5	0.6
1945	826,000	53	9	1.1
1946	803,330	48	7	0.9
1947	822,000	86	7	0.9
1948	846,000	52	6	.7
1949	871,000	59	12	1.4
1950	939,501	13	1	0.1

TYPHOID FEVER				
	Population	Total Cases	Total Deaths	Mortality Rate per 100.00)
1940	795,000	36	3	.40
1941	796,169	33	5	.60
1942	805,152	18	1	.10
1943	792,000	11	1	0.1
1944	818,000	101	8	1.0
1945	826,000	20	2	0.2
1946	803,330	9	.....	.....
1947	822,000	17	1	0.12
1948	846,000	13	.....	.....
1949	871,000	13	1	.11
1950	939,501	13	1	0.1

ACUTE ANTERIOR POLIOMYELITIS				
	Population	Total Cases	Total Deaths	Mortality Rate per 100.00)
1940	795,000	.....	4	.....
1941	796,169	167	8	1.0
1942	805,152	8	.....	.....
1943	792,000	24	.....	.....
1944	818,000	107	1	0.1
1945	826,000	19	.....	.....
1946	803,330	78	8	1.0
1947	822,000	84	7	0.9
1948	846,000	380	28	3.3
1949	871,000	127	9	1.0
1950	939,501	143	7	0.8

WHOOPIING COUGH				
	Population	Total Cases	Total Deaths	Mortality Rate per 100.00)
1940	795,000	1,158	55	7.0
1941	796,169	364	23	2.9
1942	805,152	1,131	12	1.5
1943	792,000	1,520	12	1.5
1944	818,000	757	42	5.7
1945	826,000	694	43	5.2
1946	803,330	308	19	2.3
1947	822,000	972	9	1.1
1948	846,000	1,178	11	1.3
1949	871,000	98	5	.57
1950	939,501	120	3	0.3

SCARLET FEVER				
	Population	Total Cases	Total Deaths	Mortality Rate per 100.00)
1940	795,000	779	9	1.1
1941	796,169	792	6	0.8
1942	805,152	2,265	11	1.4
1943	792,000	1,676	7	0.9
1944	818,000	2,615	9	1.1
1945	826,000	1,358	1	0.1
1946	803,330	482	1	0.1
1947	822,000	225	.....	.....
1948	846,000	248	.....	.....
1949	871,000	865	.....	.....
1950	939,501	2,309	6	0.8

TABLE 5.—COMMUNICABLE DISEASES REPORTED IN 1950 BY SEX, AGE AND MONTH OF REPORTING

1950	Sex		MONTHS												AGES					TOTAL			
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Not Stated		
			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			1	1
Edmonton	1	1							1					1									1
Lethbridge		1																					1
Urban		1																					1
Rural	1	1									1												2
MUMPS																							
Calgary	405	304	16	32	68	63	66	26	16	22	22	34	192	152	2	64	587	16	31	9	709		
Edmonton	1042	1061	268	298	268	307	262	221	135	114	69	71	84	15	395	1428	115	160	20	2133			
Lethbridge	422	427	1	1	2	17	20	54	16		28	73	347	291	5	73	717	13	40	1	849		
Medicine Hat	86	70	39	40	30	29	7	7	1		1	1	2	2		20	100	15	21		156		
Urban	202	262	22	14	30	19	11	29	14	25	38	49	76	137		43	308	36	42	35	464		
Rural	403	339	21	44	90	60	46	33	15	40	21	66	199	107	1	70	490	59	66	56	742		
PARATYPHOID																							
Rural		1	1																				1
POLIOMYELITIS																							
Calgary	4	12								9	3	1	3					1	3	3		16	
Edmonton	19	19							5	25	3	4	1					3	3	12		38	
Lethbridge	6	4							1	1	7	1	1		1	2	2	1	1	4		10	
Medicine Hat		1																				1	
Urban	25	22	2		1			1	2	7	8	3	3	1	8	17	10	12	12			47	
Rural	20	11								20	10	1				5	12	5	9			31	

WHOOPING COUGH

	Sex		MONTHS												AGES					TOTAL	
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Not Stated
			1950																		
PULMONARY TUBERCULOSIS																					
Calgary	10	5	1	1	1	1	2	3	3	3	3	1	4	1	1	3	11	1	1	1	15
Edmonton	15	9	1	1	1	3	3	6	3	6	2	2	3	3	2	13	9	1	1	1	24
Lethbridge	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	3
Medicine Hat	3	4	1	1	1	1	1	1	2	2	4	4	6	4	2	4	1	1	1	1	7
Urban	5	9	1	1	1	1	1	1	2	2	4	4	6	4	1	8	3	1	1	1	14
Rural	26	31	7	7	7	4	3	3	3	6	7	7	7	7	6	26	24	1	1	2	57
Calgary	38	42	4	8	6	4	6	9	6	5	15	1	8	11	1	5	4	3	3	60	80
Edmonton	88	87	13	8	16	10	14	21	20	24	14	8	18	9	1	7	18	15	134	175	
Lethbridge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Medicine Hat	96	105	12	20	14	18	32	16	14	14	21	14	24	16	1	10	16	11	153	201	
Urban	250	244	26	32	28	35	26	30	35	65	71	67	42	37	2	22	67	45	351	494	
Rural																					
NON-PULMONARY TUBERCULOSIS																					
Calgary	2	8	3	1	1	1	1	1	1	5	2	2	6	5	1	1	4	1	8	1	10
Edmonton	15	12	4	2	2	2	2	1	3	3	8	6	6	1	1	2	1	3	21	2	27
Urban	8	10	3	3	3	3	3	2	3	1	4	2	1	1	2	2	1	3	10	2	18
Rural	26	25	2	1	1	8	1	2	8	7	7	3	6	5	2	2	13	5	28	3	51

Year	MONTHS												AGES					TOTAL				
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over					
1949	10	15	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
1950	15	12	4	2	2	2	2	1	3	3	8	6	6	1	1	2	1	3	10	2	2	27
1951	8	10	3	3	3	3	2	3	1	4	2	1	1	1	2	2	1	3	10	2	2	18
1952	26	25	2	1	1	8	1	2	8	7	7	3	6	5	2	2	13	5	28	3	51	

Division of Entomology

J. H. BROWN, B.Sc., M.Sc., F.A.P.H.A.

The following is the Seventh Annual Report of this Division and a summary of the Thirteenth Annual Report of the Rocky Mountain Spotted Fever and Sylvatic Plague survey for the year ending December 31, 1950.

This Division deals with epidemiological problems associated with insect-borne diseases. Particular attention is paid to Spotted Fever, Sylvatic Plague and Tularaemia, with considerable time being devoted to investigations relating to these diseases. Fly and mosquito control is becoming an important part of the work of the Division as the newer insecticides and modern methods for application put such control programs within the financial ability of most municipalities.

Spotted Fever Survey.

During the course of the spotted fever survey a total of 5,228 host and drag ticks were recovered in 56 collections. Of these, 1,038 were host ticks taken from small wild animals, and 4,190 were taken by drag. The 1,038 host ticks were collected from 463 animals, of which 450 were shot and 13 trapped. As most of the investigation was carried on in new territory, no spotted fever positives were found.

A total of 722 protective inoculations against Rocky Mountain spotted fever were made in the known infected areas. Of these, 304 were made at Manyberries, 291 at Redcliff, 93 at Thelma-Elkwater, and 34 at Medicine Hat. The treatments were about equal as far as sex is concerned, with 328 females and 394 males being protected.

A case of Rocky Mountain spotted fever, determined on clinical basis, occurred in a 41-year-old male at Wrentham, Alberta, during June. An investigation of this case indicates that the patient contracted the infection from a tick bite at Lake Newell in the Brooks area. The Brooks area is a known spotted fever infected district. The case was mild, and the patient discharged as recovered.

Plague Survey.

During the course of the Sylvatic Plague survey 161 collections were made, consisting of 928 animals, of which 498 were shot, 423 trapped, and 7 found dead. A total of 1,326 fleas and 228 tissue specimens, mostly from *Citellus richardsonii*, the prairie gopher, were recovered and submitted to the laboratory for bacteriological examination. None of the material was positive for plague.

No further extension of the known plague area was discovered, but four Norway rats were trapped at Alsask, about six miles east of the eastern boundary of the plague area. These were the first rats to be found established in a colony in the Province of Alberta. This discovery indicates that within a short time rats will be established in the known plague area east of Youngstown, and will consequently greatly increase the health hazard of this disease.

To date, there are nine separate areas of plague infection in the Province. These are located as follows: Hanna, Stanmore-Youngstown, Naco-Oyen, Rose Lynn-Pollockville, Kimmundy, Gleichen, Brooks, Lomond and Suffield. Although all of these areas hold a potential health threat, it is considered that on account of their high human population the Gleichen, Brooks and Lomond areas are of prime importance. Furthermore, the discovery of these areas, which occurred during the past five years, indicates that the infection is spreading in a southwestward direction into areas of high human population.

Tularaemia.

The tularaemia investigation showed that this disease is widespread in the Province. The greatest incidence is in the wooded areas north of Edmonton, where most of the cases were traced to contact with such infected animals as rabbits and game birds. The majority of the cases in the area south of Edmonton occurred in the extreme southeast corner where the spotted fever tick, *Dermacentor andersoni*, is known to be the main source of infection. One case of tularaemia in man was traced to infected material in the sump pit of the Canadian Pacific Railway roundhouse at Lethbridge.

The importance of tularaemia as a health problem is being increasingly recognized by physicians, with the result that a more precise diagnosis is now being made and the sources of infection established. The ramifications of tularaemia in nature in the Province is now known to include such various and diverse sources as cats, field mice, gophers, grouse, gulls, mink, rabbits, sheep, skunk, swine and ticks. Three tick collections taken at Elkwater, Redcliff and Atlee were positive for tularaemia.

Rat Survey.

The expected rat invasion of Alberta, as forecasted from a study of their migration rate in Manitoba and Saskatchewan, materialized when a colony was found on a farm in Section 36, Township 26, Range 1, West of the 4th Meridian, at Alsask. This colony was found on July 18, 1950. Through investigation it was demonstrated that this infestation was an extension of the Saskatchewan infestation. Following this discovery, and in view of the fact that the rat problem was primarily rural, the Department of Agriculture, on September 1, 1950, took over the rat control work and formulated a control program. However, this division still maintains an interest in the rat problem, and all rats collected in the Alsask area are shipped to it for examination for the presence of bubonic plague. Only four of the rats in the colony, two males and two females, were trapped, and the rest, estimated to number approximately twelve, were destroyed through the use of poison gas.

Mycology.

The Division continued to render service to Dr. E. Silver Keeping of the Provincial Laboratory, through the collecting of animal, particularly mice, tissue which was used to determine the incidence of *Haplosporangium* infection.

General.

An increasing number of requests are being received from Medical Officers of Health for assistance in the control of insect pests, particularly flies and mosquitoes. The fly problem has become quite important, as there is considerable evidence that flies

are involved in the transmission of poliomyelitis. During the year assistance was given to the Medical Officer of Health for Lethbridge in organizing and carrying on a successful fly control campaign within the city boundaries. Information and assistance was also supplied to the local Medical Officer of Health in a number of villages and towns.

Mosquito control programs were formulated and put in force in a number of recreational centres in various parts of the Province.

Conferences were held with representatives of hydro-power developments and Water Resources engineers in regard to the feasibility of preventing mosquito grounds from becoming established during the construction of power dams and irrigation systems. In most cases excellent results were achieved. However, it should be pointed out that unless proper precautions are taken, stagnant water associated with power reservoirs, irrigation dams and irrigation ditches will eventually become breeding places for enormous numbers of mosquitoes.

The inspection of insect infestation in foodstuffs continues, but through the co-operation of the Food and Drug Division of the Department of National Health and the Division of Entomology of the Dominion Department of Agriculture, the Pest Act regulations in regard to the importation of foodstuffs have been enforced, with a consequent decrease in the incidence of imported infestations.

Good progress has been made in arranging and determining the collection of native insects known to be incriminated in the transmission of various diseases.

The Flea collection is practically complete, with some 53 species having been determined. Of these, 11 species are known plague carriers. Work is now progressing on determining the distribution of these species.

The Tick collection numbers 9 species, three of which are important transmitters of Rocky Mountain spotted fever and tularaemia. The distribution of all of the species has been fairly well determined.

The Mite collection, due to the difficulty of finding someone qualified to undertake the determinations, has not yet been determined, except for four species which are common and easily identifiable.

The Mallophaga, or feather lice, collection has been practically all determined, with some 37 species being represented in Alberta.

The Anoplura, or sucking louse, collection is still in the process of being arranged, and only eight species have been determined so far.

An interesting development was the discovery of two known and three new species of chiggers, which are related to the mites. The chiggers are incriminated of the transmission of rickettsialpox, and although the disease has not yet occurred here, we now know that both the mouse (which is the reservoir for the infection) and the chigger (which is the transmitter) are present at various points in Alberta.

Assistance was rendered to the Alberta Liquor Commission in formulating plans for insect control, particularly cockroaches in licensed hotels.

A considerable amount of time was devoted to the identification of agricultural insect pests submitted by the Department of Agri-

culture. Following the identification, recommendations for control methods were forwarded to that Department.

The usual procedure of keeping the provincial, city, municipal and Liquor Commission sanitarians informed on the latest methods for control of pest insects was continued through the medium of formal and informal meetings, bulletins, correspondence, etc.

Preliminary investigations into the possible occurrence of mite-produced asthma in human beings was undertaken, and considerable information relative to the occurrence of asthma in persons working in dusty surroundings was compiled. Work elsewhere has shown that asthma in such people is often caused by two species of mites, both of which occur in Alberta.

Mosquitoes and Encephalomyelitis.

Good progress is being made on collecting information relative to the native mosquito species and their distribution. To date, 31 species are known to be present. Six of these are transmitters of Equine Encephalomyelitis.

Educational Work.

The usual educational work in regard to the control of insect-borne diseases was carried on through the media of newspapers, radio, motion pictures and addresses. A number of lectures were given to the medical fraternity, Faculty of Education, Home and School Associations, and various organizations and groups.

During the year two papers were published, one in the Canadian Journal of Research. They are:

The Ticks of Alberta with Special Reference to Distribution. J. H. Brown, M.Sc., and Glen M. Kohls. The Canadian Journal of Research, D, 28: 197-205, 1950.

Pamphlet on Rocky Mountain Spotted Fever. J. H. Brown, M.Sc., Public Health Entomologist.

Cancer Services

V. W. WRIGHT, M.D., *Director of Diagnostic Clinics.*

On October 1st, 1950, a new Cancer Clinic was opened in the Galt Hospital in Lethbridge under the directorship of Dr. P. M. Campbell.

NUMBER OF PATIENTS EXAMINED

	New	Follow-up	Total
Edmonton	3,090	3,192	6,282
Calgary	2,002	1,767	3,769
Lethbridge	177	78	255
Totals	5,269	5,037	10,306

It will be noted that the total number of new cases is 5,269, including the first three months of 1951, compared with 3,516 in 1949, 3,220 in 1948, 2,916 in 1947, 2,258 in 1946, 1,794 in 1945, 1,726 in 1944, 1,670 in 1943, 1,186 in 1942, and 1,142 in 1941.

Of these cases 3,203 were found to be non-malignant, and therefore did not require treatment under the Cancer Clinics.

A summary of the anatomical distribution of the cancerous lesions in order of frequency is attached hereto, 2,066 in number.

The following are the number of Procedures authorized by the Clinics:

The total number of cases referred to hospitals:

Edmonton	2,103
Calgary	989
Lethbridge	49
Total	3,141

The total number of cases referred for X-ray and Radium therapy:

Edmonton	822
Calgary	476
Lethbridge	76
Total	1,374

The total number of cases referred for major surgery, radical mastectomies, abdominal-perineal resections, fastrectomies, colon resections, thoractomies, craniotomies, etc.:

Edmonton	740
Calgary	509
Lethbridge	22
Total	1,271

Following are the number of cases referred for Diagnostic Procedures:

Exploratory Laparotomies:		
Edmonton		137
Calgary		50
Lethbridge		5
Total		192

Breast and Small Biopsies:		
Edmonton		746
Calgary		323
Lethbridge		30
Total		1,099

Diagnostic Curettages:		
Edmonton		319
Calgary		48
Lethbridge		2
Total		<u>369</u>
Encephalograms and Ventriculograms:		
Edmonton		51
Calgary		1
Lethbridge .....		..
Total		<u>52</u>
Bronchoscopies and Cesophagosopies:		
Edmonton		132
Calgary		47
Lethbridge .....		..
Total		<u>179</u>
Sigmoidoscopic Examinations:		
Edmonton		164
Calgary		4
Lethbridge		3
Total		<u>171</u>
Cystoscopic Examinations:		
Edmonton		224
Calgary		114
Lethbridge		1
Total		<u>339</u>
Edmonton		168
Calgary		56
Lethbridge		2
Total		<u>226</u>
Edmonton		339
Calgary .....		..
(The Calgary Cancer Clinic has its own Laboratory facilities)		..
Lethbridge		5
Total		<u>344</u>
Referred for X-ray Examinations:		
Edmonton		1,709
Calgary		846
Lethbridge		51
Total		<u>2,606</u>

Since the opening of the Clinics in 1941, the total number of cases examined, exclusive of re-examinations, is 24,697. Of these, 11,346 were diagnosed as Cancer.

ANATOMICAL DISTRIBUTION OF CANCEROUS LESIONS IN ORDER
OF FREQUENCY

EDMONTON		CALGARY		LETHBRIDGE	
Skin	186	Skin	173	Skin	41
Breast	128	Breast	142	Breast	17
Stomach	90	Lip	69	Lip	17
Colon	84	Stomach	64	Stomach	7
Cervix	67	Colon	55	Colon	3
Lip	61	Cervix	47	Uterus	3
Prostate	44	Bladder	37	Cervix	3
Rectum	41	Prostate	32	Mouth	2
Lung	37	Uterus	31	Pancreas	2
Uterus	37	Rectum	27	Leukaemia	2
Bladder	29	Lung	26	Thyroid	2
Leukaemia	28	Hodgkin's	21	Bladder	1
Lymphos	28	Mouth	19	Caecum	1
Primary Unknown	22	Abdomen	16	Rectum	1
Ovary	22	Larynx	11	Testicle	1
Brain	18	Ovary	11		
Hodgkin's	17	Parotid	10	Total	103
Kidney	14	Leukaemia	9		
Pancreas	13	Bone	9		
Testicle	12	Oesophagus	7		
Bone	11	Kidney	7		
Gall-bladder	11	Eye	6		
Miscellaneous	12	Gall-bladder	6		
Thyroid	9	Miscellaneous	5		
Oesophagus	6	Lymph Gland	5		
Larynx	6	Testicle	5		
Mouth	5	Pancreas	4		
Liver	5	Brain	4		
Vulva	4	Sarcoma	4		
Bile Dust	3	Nose	3		
Eye	3	Penis	2		
Multiple Myeloma	2	Thyroid	2		
Malignant Melanoma	2	Nasopharynx	2		
Maxillary Sinuses	2	Salivary Gland	2		
Sarcoma	2	Back	1		
Fibro Sarcoma	2	Caecum	1		
Penis	2	Cheek	1		
Parotid	1	Chest	1		
Chondro-Myxo- Sarcoma	1	Ear	1		
Fibro-Myxo-Sarcoma	1	Hip	1		
Neurogenic Sarcoma	1	Leg	1		
Anaplastic Sarcoma	1	Polycythaemia Vera	1		
Salivary Gland	1	Septum	1		
Urethra	1	Vulva	1		
Vocal Cords	1				
Pharynx	1	Total	883		
Nasal Polyp	1				
Vaginal Wall	1				
Left Mastoid	1				
Antrum	1				
Ureter	1				
Meloma Epithelioma	1				
Total	1080				

Cerebral Palsy Clinics

DR. F. G. DAY, *Director.*

The Alberta government, in the summer of 1950, opened and began operating the first clinic in the Province for the diagnosis and treatment of cerebral palsy. The location was the Kingsway Legion Hall, which soon proved inadequate, and the present temporary quarters at 10560 105th Street were engaged for the remainder of the time until permanent quarters are built by the government.

Equipment.

The clinic is well furnished with the necessary equipment, but there is much that cannot be used until larger quarters are available.

Staff.

The staff consists of the director, secretary, and occupational therapist. This will be greatly augmented.

Clinics.

Clinics are held on Saturday mornings for examination of new cases one week and for progress review of treated cases the next week. We have seen and diagnosed 58 cases, of which 80% were Cerebral Palsy.

Out-patient treatment is continued for the remainder of the week, wherein 10-15 cases are treated daily.

Future Plans.

Plans are well under way to construct a Clinic Building, for which three lots have been purchased at 115th Street and 74th Avenue. The staff will shortly be augmented by a Brace Maker, a Speech Therapist, a Specialized School Teacher and a Physiotherapist. It is planned to duplicate these services in Calgary as soon as the Edmonton Unit is well under control.

After considerable research, it is my estimation that there are very close to 500, if not over 500, cases of cerebral palsy in the Province of Alberta who are under the age of 15, and that approximately two-thirds of these could be very definitely benefitted by treatment. Since we will be able to treat not more than 30 in the Edmonton Clinic, and approximately the same in Calgary at a later date, it would appear that our facilities are very inadequate. However, the birth rate in the Province at the present time should remain under 50 new cases per year, and consequently, though we will be unable to cope with them all at the present, I believe that our facilities are probably adequate, and we will certainly not end up with a program too large for our Province in the future.

I have seen great improvement in many of the cases that have been treated during the past six months. No case has been discharged as cured, but on the other hand, no case has been maintained persistently at the clinic who has not shown a definite improvement.

We have been greatly assisted by the Cerebral Palsy Association, who have paid the rent on the existing quarters and maintained a bus to provide transportation, and by the City Firemen who drive the bus. The South Edmonton Kiwanis Club have assisted us in preliminary equipment and expenses, and are raising funds to build a Recreation Building and Playground adjoining the Government Clinic. The Canadian Travellers Association has given financial assistance wherein they purchased the transportation bus and many other clubs, organizations and individuals, too numerous to mention, have offered financial and moral support for the present and the future to allow us to maintain the program and expand the extraneous services as we see fit.

Health Education

C. C. Evoy, B.Sc., *Director*

Health education is an art. As an art it draws upon scientific knowledge amassed in the pursuit of numerous sciences. These sciences are medicine and its allied sciences—biology, psychology, and the social sciences—and many of the practical arts. The analysis (science) and the synthesis (philosophy) of this knowledge constitute the material out of which health education of the individual and the community emerges.

Problems connected with the restoration, conservation, and promotion of health have beset man since his advent on this planet. Ideas, explanations, and attempts to solve these problems have varied with the different states of culture through which society has evolved. It is only within recent years that these problems have received effective study by society. At present, owing to the rapidity of social changes, health problems have been thrown into bold relief against the background of disorganization in the economic, political and social arrangements of society.

The health problem of today is a community problem. It is no longer possible to separate the health of the individual from that of the community at large. Conditions of work, recreation, education, food supplies, communications, and transportation, which were at one time largely the personal concern of the individual, have become community problems and must be solved as such. The health of the community is measured at present by negative results—the minimum of morbidity and mortality.—Robert G. Paterson, *Foundations of Community Health, Education 1950.*

Grants for Health Education.

A project in Health Education for Alberta was approved and a grant received for that purpose. This included the purchase of 51 new health films, the production of three filmstrips, "The School for Nursing Aides," "Rural Sanitation," and "School Sanitation," and the employment of a filing clerk for the division of health education.

The schools of nursing in Alberta were the recipients of a grant for the purpose of purchasing films suitable for use in their training program. The health education division was assigned the task of administering this project. Following preview and purchase, the nursing school films were censored, code numbers assigned, and the prints placed in the provincial film library for circulation and maintenance. A satisfactory schedule was prepared and the new service launched in the fall of 1950.

A tape recorder for the preparation of talks, the training of staff in the field and recording "live" programs from the radio was received early in 1950. This piece of equipment has proved to be a valuable educational tool especially for new staff in self-criticism of material to be presented at public meetings.

The new films purchased under the health grants were selected by a committee of directors from a number of the divisions of the

Department. Subjects approved included films on sanitation, communicable disease, nutrition, entomology, family living, child welfare, mental and dental health, nursing, cancer and human biology.

On October 23rd a filing clerk and mimeograph operator was added to the staff of this division. The duties assigned to this individual include filling all orders for health education literature, filing, cutting stencils and operating the mimeograph machine.

School Health Education.

Health education is the process by which health should be attained by every child as far as it is possible for him. This process involves creating conditions conducive to good living; guiding pupils in the use of this created environment; helping them to develop understanding habits, skills, interest, and attitudes which eventuate in good living, and encouraging them to set up and progress toward appropriate goals.

Visitations to schools in the Province, approved by the Department of Education, have enabled the division to integrate the overall provincial health education program with the health program carried on in the school. Opportunity for teaching to influence toward better health attitudes and habits was present at each school. Audio-visual aids were effectively used in all grades to supplement the lessons taught.

Participating in these experiences were pupils, teachers, municipal and health unit nurses, medical officers of health units, the provincial nutritionist and the health educator. The municipal nurse welcomes the opportunity of contacting the schools of her area through a planned educational program which provides scope for concentrated teaching in preventive medicine. A yearly visit of this nature to all schools should be made possible.

The medical officer of the health unit was present at some of the classroom discussions, and spoke on the functions of the unit. His presence established the rapport and liaison desired between the local and provincial levels in health education.

Teachers interested in the school lunch programs were assisted with its organization and planned menus, for a school term. The public health nutritionist was present to assist in this service.

Eighty schools were visited and health films shown to nearly five thousand pupils.

Health Education Media.

Audio-Visual Films and Filmstrips.—It is most gratifying to note that our film library has received 51 new prints. A descriptive list of the new additions to our film library will be made available to the public early in the new year. We now have 181 films and 60 filmstrips in our library.

Films screened in 1951 numbered 1,138, according to reports received. Always there is a percentage of film users who do not report.

The total film audience approximated 60,000.

Two films on the mental health and nursing services of the department were completed this year and released for general use. The former is a documentary which clearly defines in picture and commentary the progressive steps in treatment, commencing with admission and following through to the discharge of a patient from

one of our mental hospitals. The medium used is a graduate nurse who surveys the institutional service objectively. This film has a three-fold purpose of enlightening the public upon the life within the hospital, disarming any fears about treatment, and finally as an inducement to those who are interested in psychiatric nursing.

The second film follows a district nurse through a cross-section of the service which she renders to the isolated areas of the Province. The message in this presentation is directed to high school girls who could be interested in a public health nursing career.

The Supervisor of the School of Nursing Aides applied to this division for a filmstrip to be produced outlining the important steps in the training program of that service. This filmstrip will be available for use in the spring of 1951. Its use will be for educational and recruitment purposes.

The Sanitary Engineering Division and sanitary inspectors of our health units have felt the need of an educational medium depicting the installation and service of small town water supply. A filmstrip to introduce this subject is being produced. Pictures used will be a composite of one or more water supply projects now under construction in Alberta.

A third filmstrip, "Rural School Sanitation," will be attempted in the spring of the new year. This project is a result of requests from health unit staffs. It is believed that a strip film could be a valuable aid in health education to teachers and pupils in rural areas.

A large number of films were previewed primarily with a view to purchase. Approximately seventy-five films were approved. Members serving on the preview committee are personnel from provincial, municipal and health unit staffs.

Radio.—Radio is the medium for the spoken word—not for the written word. The written word which is spoken is, in the meaning of the above, still a written word, while the spoken word even though set down on paper remains a spoken word. Those who disparage the "straight talk" in favor of the dialogue or of the dramatic presentation are unwittingly favoring those forms of presentation which can only be executed in the patterns of speech. Dull and wooden dialogue and forced or stilted drama are far worse than their counterparts in "straight talk". Dialogue and drama are laden with qualifications which limit their application in health education.

Talking "to the person" is no easy art, and yet there is no effective substitute. In the spoken word one addresses himself to the living person, while in the written word one addresses himself to the subject matter. To address oneself to a living person implies psychologically to arouse curiosity, to enlist sympathy, to lead to action. He who talks to the subject, so to say, sets out his stores to let those who will come and partake.

January through March, every day health problems such as arthritis, undulant fever, migraine, and allergies were broadcast over four stations weekly as a public service feature. The thirteen programs in the series were prepared broadcasts on loan from the American Medical Association.

Dramatic monologues, one for each of the thirteen divisions, illustrating the services through a human interest story completed

the first half of the year. These five minute plays were given over nine stations weekly at a total cost of \$1,062.

A second series of A.M.A. programs opened in the fall and carried through weekly on CKUA until the close of the year.

Publicity for CBC programmes, "In Search of Ourselves" and "The Robinson Family," was channelled through this division. Advance notices and study guides were circulated to health units, school superintendents, the Home and School Association, and many others.

On January 26, Dr. Bow introduced National Health Week to Alberta listeners with a talk on the progress and problems in public health.

Edmonton Exhibition.—Representatives from a number of the divisions of the department pooled ideas for suitable displays to be prepared for the Edmonton Exhibition. The keynote of each effort was a model demonstration of the major services of the division.

Communicable disease stressed the value of immunization through the statistical approach. Emphasizing this was a cemetery carrying the mortality figures of a variety of communicable diseases in the form of crosses. A striking caption indicated this unnecessary waste of life.

A demonstration of the most recent menace to public health was shown by the division of entomology. Live rats trapped on the south-east border of the Province focused attention on the programme of rat control undertaken by the Department of Public Health. Statistical estimates of damage caused by rats strengthened the appeal for immediate action.

The division of sanitary engineering showed by contrast through model buildings and environment the effect of good and poor sanitation on the farm. The location of buildings and water supply from recognized sources of diseases was realistically planned. This lesson in the development of proper health attitudes spoke for itself.

A new exhibit in our group was the display prepared by the Red Deer health unit. In addition to posters describing the service of the health unit, a model building of a health unit centre called attention to the functioning of the programme in preventive medicine.

The Hospital and Medical Services and Municipal Hospital Division illustrated their programme with appropriate posters and the model of a modern municipal hospital.

Vital Statistics. This division had a picture display illustrating the six most important periods in a man's life when he is required to produce a birth certificate.

Public Health Nursing. A model arrangement of a nurse's cottage, a home and a school suggested the close relationship between these three entities in any nursing district. Services were listed on an attractive background poster.

Tuberculosis Control. Again the staff of the Sanatoria had a most attractive display of handicrafts made by tuberculosis patients from the Edmonton hospitals. Because there was an excellent quality of workmanship throughout, these articles sold quickly.

Health Education. The educational tools used in our program were displayed. The outlet for this media was portrayed as being

channelled through the home, the school, recreation centre and the church. The screening of health films on a variety of subjects attracted good audiences. Forty-five screenings were shown to approximately 1,500 people.

Nutrition Services. Canada's food rules dominated the centre of interest in the nutrition exhibit. Large models of vegetables, fruit, cereals, bread, fish, meat and a milk bottle, all in pastel tones, made this display one of the most effective.

The Provincial Laboratories supplied microscopes and slides to view a number of the pathogenic organisms.

The Guidance Clinics illustrated their services by posters.

Cancer Services. This division did not prepare an exhibit, but the Alberta Branch of the Cancer Society had an animated poster display. Representatives of this organization were in attendance each day.

Lecture Service.

Talks on various phases of public health were given by this division to twenty groups in the Province. Subjects discussed included communicable disease, services of the department, health education, family relationships, etc. A number of these requests were from district nurses, some from one-nurse health units, and the balance from organizations outside the department.

Speakers were obtained for the Home and School Association to address regular monthly meetings during the fall and winter. Blood donors, school health, cerebral palsy, city health services, care of the eyes, and dental health were subjects outlined by local men outstanding in their respective fields of medicine. This type of service is always appreciated, and speakers are most willing to respond to requests of this nature.

Seba Workshop.

In collaboration with the Department of Education, the public health nutritionist, the sanitary engineering division, and the health educator, a workshop in health education was held in Seba High School, March 24, 1950. The purpose of the workshop was to acquaint as many teachers as possible with some of the services of the Department of Public Health, to assist the teachers in the interpretation of the health program, and to encourage introduction of school lunches.

The weather made it impossible for us to hold our workshop on the date set, and it was postponed to March 24. Seventeen teachers, the superintendent, and one or two visitors were present. The morning was devoted to nutrition and sanitation. The nutritionist discussed school lunches and a survey of school needs in nutrition. The teachers were quite keenly alert to the needs in this field, and had an incentive for this program which might be felt in their school work.

Kits of literature were distributed to each teacher present, the use of the material explained and a list of other sources of information was supplied.

The next topic, sanitation, covered milk supplies, drinking and washing facilities and toilets, and the interpretation of public health in respect to these.

The discussion period following was of interest in that it released a flood of questions which overflowed into the lunch hour.

The afternoon session was a demonstration lesson by the health educator. The subject requested was "Control of Venereal Disease." A film was used to complete the demonstration. The discussion again was well worth the time spent in preparation.

This was the first Health Education Workshop attempted in the Province. The teachers present voted it a success, and suggested topics for a future institute.

Women's Institute Cancer Conference.

The Cancer Society, Alberta Division, in co-operation with the Women's Institute, sponsored a conference on services of the Department of Public Health held in the Medical Building, May 2, 3 and 4.

Representatives from each council of the Women's Institute of the northern half of the Province were present at this conference. Divisional heads from the Department of Public Health were asked to explain the functions and services of their respective divisions. The division of health education attended two meetings, and spoke to the women on "Health Education Tools and Their Use."

As a result of the discussions held in Edmonton, some of the delegates have requested assistance from this division in their programme of health education.

Literature.

An attractively printed health booklet convincingly written and dealing with a subject of immediate concern, when given to a client by a person of authority and evident integrity, constitutes as potent a supplement to the spoken word as the health official has at his command.

In the past year we were fortunate to receive a number of new free publications covering interest levels from that of the school child to middle age and subjects running through child welfare, communicable disease, nursing, safety and dental health. Sponsors included National Health and Welfare, Metropolitan Life Insurance Co., and the Canadian Dental Association.

Revision of current provincial health publications is a continuing process from year to year. New literature from the department included one pamphlet on Rocky Mountain Spotted Fever and the preparation of a Health Education Services Catalogue. This book will include a descriptive list of all health films, filmstrips and free literature classified by title, posters, displays available and lecture service.

Additional Health Education Services.

Mimeograph Service. This type of service is utilized by most of the divisions. Newsletters, circulars, forms, lists, bulletins, etc., to a total of nearly 46,000 sheets have been prepared in a four month period. The type of material delivered by the mimeograph is equal to printing for this class of literature, while the service is much better.

Circulation Service. Provincial and extra provincial reports, publications, newsletters and public health literature generally are channelled through this office to other divisions of the department. On its return this material is filed for general reference.

Health Education Service Catalogue.

A new health education service catalogue has been prepared, bringing up to date the following:

Descriptive listing of all 16 mm films and 35 mm filmstrips in the public health library.

New public health free literature; provincial, dominion and voluntary health agencies.

Lecture service.

Other informational services.

Copies of this catalogue are distributed to each health unit centre, the district nurse and boards of health in Alberta cities. Copies are also made available to all schools and voluntary agencies having 16 mm projectors.

Nutrition Services

ELVA M. PERDUE, B.Sc.H.Ec.

Nutrition is a rapidly changing science. Each month new data are worked out in research laboratories. One of the most important aims in any nutrition programme is to translate research into practical facts that may be directly applied and used in the home.

During the year the following methods were used by the Nutrition Services of the Alberta Department of Public Health to promote the dissemination of nutrition knowledge:

- (1) Distribution of educational materials.
- (2) Contact with nurses.
- (3) Direct consultation service in clinics and homes.
- (4) Work in schools.
- (5) Work with women's clubs, Women's institutes, Home and School Organizations, St. John's Ambulance classes, and similar groups.
- (6) Nutrition education at exhibitions and community affairs.
- (7) Consultant to small institutions.

Educational Materials.

The majority of the nutrition publications and posters distributed from this office are produced by the Nutrition Division, Department of National Health and Welfare, for and in consultation with provincial nutritionists.

A new publication, *Meals for One or Two* was received this year from the Nutrition Division. In addition the following materials were revised by the Federal Department and received at the provincial level for distribution: *Healthful Eating*; *Good Red Blood*; *How Well Fed Are You?*; *The Lunch Box Is On The March*; *Mother, The School Lunch*; *Canada's Food Rules and Camp Feeding*.

Mimeographed materials were prepared by the nutritionist for general distribution and for use in specific programmes. For example, to meet the need created by the larger number of enquiries concerned with the advisability of using aluminum cooking utensils. Materials were also prepared on food budgets and low cost meals stressing the protective foods.

Eighteen nutrition films and filmstrips, as well as slides and posters are all a working part of the nutritionist's teaching materials.

Contact with Nurses.

An opportunity is afforded the nutritionist while working with the public health nurses to summarize the latest advances in nutrition and interpret laboratory research in terms of practical applications to the needs of varying economic levels, nationality, backgrounds and conditions of health and disease. One of the most far reaching educational activities of the nutritionist is to be of service at all times to the nurses, providing for them such aspects of nutrition as requested and to discuss practical problems.

The Nutrition Services prepares and distributes a mimeographed release entitled "Nutrition News" to the public health nurses to keep them posted in the trends of the science of Nutrition.

During the year, 20 nurses were visited and nutrition programmes carried out in the schools and in the communities.

Talks on nutrition have been given to the pre-clinical nurses at the various Schools of Nursing in Edmonton.

Consultation in Clinics and Homes.

During the pre-natal, post-natal and the period of early childhood, mothers are particularly concerned with health and well-being, and a more receptive attitude to new information on foods is often shown.

The nutritionist attended Well-Baby Clinics when working with the public health nurses. Direct consultation in the clinic not only gives immediate help in the food problems at hand, but provides an excellent opportunity for positive health teaching, preventing malnutrition, nutritional anaemia and minor digestive disturbances.

Home visits were arranged at the request of the public health nurse. In this service the nutritionist was afforded the opportunity to evaluate the need and make recommendations to assist the nurse and mother.

Work in Schools.

The nutritionist accompanied the health educator on visits to the schools. Talks, films, filmstrips and food demonstrations were used to arouse interest in better food habits. The direct work in schools also provided teachers with devices to re-emphasize the nutrition education programme for continuous implementation.

Assistance is given in improving or securing hot lunches in the smaller schools having no home economics teachers. Hot lunch projects for the schools have been sponsored by local, civic, or Home and School Associations once the impetus was provided.

In the current year the nutritionist assisted at a Health Institute for teachers conducted in one of the School Divisions.

From the work with teachers, public health nurses and children in schools, many requests for assistance in solving specific problems have been received and dealt with.

Work with Local, Civic and Welfare Groups.

Talks have been given in communities to groups such as the Women's Institute and home and school organizations. Providing the latest nutrition information to club women is often the means of promoting nutrition programmes and study groups within the community.

Classes on nutrition were given to Home Nursing groups.

Nutrition Education at Exhibitions and Community Affairs.

A display for the Nutrition Services was prepared for the Edmonton Exhibition. This exhibit, as well as other educational exhibits, were made available on loan to convention groups and to communities for special programmes, for example, during Education and Health weeks.

Consultant to Small Institutions.

During the year the office of the Public Health Nutritionist continued to prepare and distribute to the municipal hospitals, school dormitories and other agencies interested in group feeding, mimeographed material entitled "Institutional Supper Menus." This

publication was released monthly, and included suitable recipes. The response to this material has been most gratifying.

The small hospitals requested assistance in solving their dietary problems. The nutritionist assisted seven of the hospitals in obtaining suitable quantity recipes.

Miscellaneous.

The Nutrition Services received numerous requests for information which required research in technical journals.

Public Health Nursing Division

M. M. FITZSIMMONS, R.N., P.H.N., *Acting Director*

During the year 1950 the Nursing Division had a total of 35 districts open, 3 Well Baby Clinics and 8 One-nurse Health Units. In the summer with staff changes and leaves of absence, there were several districts vacant, but when roads were difficult to travel the majority of districts were staffed.

In April, in view of the fact that Miss Jean Clark was taking a year's leave of absence to study in Scotland, Miss Fitzsimmons was appointed Acting Director, and Miss Blanche Emerson as Acting Assistant Director.

During the year there were six permanent appointments and eleven temporary appointments made. The two nurses from the Schools of Agriculture transferred to the department for summer relief work. One nurse returned from leave of absence after taking a Public Health Course at the University of Toronto. Two nurses retired from the staff: Miss M. Hagerman of the Well Baby Clinic, Medicine Hat, and Miss Amy Conroy from the Lindale district, both having given many years of outstanding service. One nurse was granted leave of absence to take her Public Health Course at the University of Toronto; two nurses were granted four months leave of absence to take the Advanced Course in Practical Obstetrics at the University of Alberta; Miss Laura Attrux was also on leave of absence to teach this course. One nurse transferred from a district to a one-nurse health unit; one nurse resigned to be married, one to join the armed forces, and seven for personal reasons.

In April the Nursing Service Act was passed, which allowed municipalities to have the services of a district nurse which formerly had been limited to local improvement districts. From the many new regulations developing from this Act, all districts had to have a new contract drawn up. This involved a great deal of extra organization for all parties concerned, but it is improving the standard of equipment in the cottages.

In March, the district of Maloy was closed in view of the opening of the Glendon Municipal Hospital.

A new Municipal Nursing Service was opened in August at Warner, with Miss Kathleen Ambrose in charge.

Rural Districts Alder Flats, Blueberry Mountain, Bonanza, Bow Island, Breton, Breynat, Craigmyle, Dixonville, Fawcett, Foremost, Fort Assiniboine, Grassland, Hemaruka, Hilda, Hines Creek, Kinuso, Lindale, Lomond, Mackay, Maloy, Milk River, New Brigden, Peers, Plamondon, Smith, Sunnynook, Tangent, Tulliby Lake, Valley View, Vauxhall, Warner, Whitecourt, Whitemud Creek, Worsley, Youngstown.

Regular clinics are held in connection with the following centres: Alder Flats at Buck Lake and Pendryl; Bow Island at Burdett, Conquerville, The Gas Company Camp at Whitla; Breton at Winfield; Fawcett at Jarvie and Flatbush; Foremost at Etzikom, Hoping School, Orion, Manyberries and periodically at Lucky Strike; Kinuso at Canyon Creek, Widewater and Faust; Milk River at

Coutts; Peers at Haddock and Shining Bank; Smith at Slave Lake; Tangent at Eaglesham; Warner at New Dayton and Wrentham; Whitecourt at Blue Ridge; Fort Assiniboine at Timeu.

Urban and Child Welfare centres are operating at Calgary, Medicine Hat and Vegreville. Miss Black at Vegreville carries on a Well Baby Clinic, school health inspections and immunization programme and welfare problems for the surrounding area.

Miss Hagerman retired after many years of service in Medicine Hat, in June, and was replaced by Miss Marion C. Story. As well as regular Well Baby clinics in Medicine Hat, Redcliff and Suffield, school work in the rural area; 31 one-day Baby Clinics were held in surrounding centres; six Guidance Clinics were attended; 26 V.D. Clinics; 35 appointments were made for chest X-ray and 30 letters sent to T.B. contacts. Ten Rocky Mountain Spotted Fever Clinics were held. The nurse assisted in the Medicine Hat city schools in giving 2,935 immunizations for Pertussis, Diphtheria, Smallpox and Scarlet Fever. A total of five lectures were given, two of which were to the Junior Red Cross Home Nursing class.

Miss Lavell reports from Calgary that they had 8,865 infants and 3,386 pre-school children attending the clinic, making a total of 12,251, of which 172 were from rural areas. New cases included 1,696 infants and 775 pre-school children, making a total of 2,471. Total attendance was 197 over any previous year. Auxiliary clinics were held on the North Hill with 602 in attendance, Currie Barracks with 428, and Bowness 24. This clinic was closed early in the year.

In October, Bowness was re-opened, employing their own nurse on a part-time basis, and 174 cases were transferred from the City Clinic to Bowness, 114 attending in the three months.

Seventy-eight students from the City Hospitals and 193 students from the Nursing Aides School were observers, and received teaching instruction at the clinic.

One-nurse Health Units.

The Nursing Division continues to give supervision to eight one-nurse health units, which include: Athabasca Health Unit, Colinton; Brooks Health Unit, Brooks; MacLeod-Pincher Creek Health Unit, Granum; Pembina Health Unit, Barrhead; Rocky Mountain Health Unit, Rocky Mountain House; Spirit River Health Unit, Spirit River; Wainwright Health Unit, Wainwright; Wheatland Health Unit, Strathmore, Alta. The nurses working alone in these areas are the only full-time health personnel, and they are doing excellent work. They are faced with the complete responsibility of the staff of the average health unit, carrying on all services of a preventive and educational programme.

Staff Education.

The Spring Conference was held as usual at the St. John Ambulance House, and was well attended. Interesting and informative lectures were generously given by several medical personnel, namely: Differential Diagnosis in Pediatrics by Dr. Brock Armstrong; Newer Drugs, Dr. F. Elliott; Information on the Workmen's Compensation Board by Mr. E. E. Owens; Treatment of Skin Diseases by Dr. P. Rentiers; Orthopedics in Relation to Foot and Back Posture by Dr. G. Wilson; Films and Their Uses by Mr. C. C. Evoy. Dr. Bow introduced Dr. N. Baster, the new Director

of Communicable Diseases and Health Units. Miss Attrux conducted a discussion on Obstetrics as applied to district nursing.

The Quarterly News Letter continues to be sent out to all staff member with information about Newer Drugs and their uses and treatment applicable to the district work. One page is devoted to news of fellow workers and general information in regard to the administration.

New staff members are given a few days orientation in the office and in a district with a senior nurse before going to a station of their own.

Supervision.

As many visits as possible were made to the different districts to assist the nurses in their problems and to meet with the Nurses Home Committees in regard to their responsibilities in maintaining and improving the nurses cottages, grounds, fences and water supply. Monthly reports and bi-monthly letters are sent in by the nurses.

Miscellaneous.

Along with the general administration duties, it has been an exceptionally busy year reorganizing the districts under the new Nursing Service Act.

A small display for the nursing office was arranged at the Edmonton Exhibition, as well as being on part-time duty at the Public Health Exhibit.

Lectures in Public Health Nursing were given to the senior nurses at each of the four city hospitals. Seven groups of fourth year medical students were shown the film, "On the District Nursing Service," and given a lecture on Public Health Nursing in Alberta.

A talk was given to each of the Alberta Women's Institutes groups for Northern and Southern Alberta, regarding the Public Health Nursing Service in the rural areas. Several lectures in Home Nursing were given to a St. John Ambulance group. The new sound-color film "District Nurse" was released for our use by the Extension Department.

The Public Health Nursing students from the University of Alberta received two weeks field work at the district nursing centres, and students from the four city training hospitals received experience at the Well Baby Clinic.

Layettes were supplied by the Provincial I.O.D.E., the F.W.U.A., and the Alberta Women's Institutes for the Alberta Maternity Fund, and were distributed throughout the Province to needy families.

Miss Frances Ferguson, and myself, as Acting Director had the privilege of attending the Canadian Nurses' Convention held in Vancouver in June.

Reports have come in of a very successful voluntary Well Baby Clinic being held at Jasper by the Edith Cavell Chapter of the A.A.R.N., with the assistance of information sent from this office.

The Public Health Nursing Division would like to extend their thanks to all those who have assisted them in their work. To the Minister of Health and the Deputy Minister of Health, who have thoughtfully dealt with problems. To the Department of Municipal Affairs, who have done such a great deal in drawing up the new

contracts under the Nursing Service Act. To the Department of Public Welfare, who have solved many problems brought to their attention, to all other Divisions of the Department, and to other Provincial and National organizations. To the medical profession, hospitals and teachers who have assisted the nursing staff with their work. To the nursing staff, who have served so faithfully and still have an appreciation to help our citizens in the newer Alberta frontiers.

TABLE 1
REPORT OF DISTRICT NURSING CENTRES (EXCLUSIVE OF WORK
DONE IN SCHOOLS)

Treatment Consultations	23,657
Miscellaneous P.H. Consultations	6,823
Antepartum Consultations	1,519
Postpartum Consultations	352
Infant and Pre-school Consultations	4,241
Treatment Home Visits	5,412
Miscellaneous P.H. Home Visits	1,157
Communicable Disease Home Visits	651
Maternal Welfare Home Visits	504
Infant and Pre-school P.H. Home Visits	918
Deliveries	76
Abortions	53
Cases sent to Hospital or Doctor	1,245
Deaths (under 1 year)	6
Deaths (over 1 year)	37
Doses of different Sera given	10,395
Cases Communicable Disease Reported	1,220
Pieces P.H. Literature Distributed	4,381
Fees Collected	\$15,239.87
IMMUNIZATION WORK DONE AT OFFICE OR CLINIC:	
Measles Prophylactic	30
Diphtheria Toxoid	3,398
Scarlet Fever Toxin	1,351
Smallpox Vaccine	1,322
Whooping Cough Vaccine	2,934
Typhoid Fever Vaccine	1,339
Mantoux and T.B. Patch Tests	21
Total	10,395
Miscellaneous:	
Old Age Pensioners Treated, free	200
Lectures	8
Demonstration to Teen Agers	1
Home Nursing Classes	6

TABLE 2
REPORT OF CHILD WELFARE CLINICS

	Calgary	Medicine Hat (Redcliff)	Vegreville
Baby Clinic:			
No. in Attendance	8,888	3,193	392
New Cases Admitted	1,696	457	77
Out of Town Cases	146	210	.....
Referred to Family Doctor	40	113	5
Discharged	48	4	30
Deaths	7	2	.....
No. of Cases on Roll	2,680	777	133
Transferred to Pre-school Clinics	1,434	1,789	21
Breast Fed	1,417	539	117
Bottle Fed	3,861	1,343	194
Other Feedings	3,587	1,267	94
Pre-School Clinic:			
No. in Attendance	3,410	1,032	14
New Cases Admitted	668	65	.....
Out of Town Cases	15	72	.....
Discharged	2,654	61	43
Referred to Family Doctor	17	.....	.....
Deaths	4	49	.....
No. of Names on Roll	7,480	2,232	14
Visits:			
Baby Visits	4,619	170	.....
Pre-school Visits	2,975	84	.....
Pre-natal Visits	2	5	.....
Special Visits	96	28	.....
Total No. Visits	7,692	437	61
Visits made to Private Hospitals	18	.....	.....
Insulin Investigations	10	.....	.....
Other Visits	99	.....	.....
No. Letters written on work	9,886	582	25
Attendance:			
Total No. Clinics Held	259	171	47
Total No. in Attendance	12,298	4,225	406
Total No. seen by Doctor	57	113	5
Immunization:			
Diphtheria .....	.....	101	513
Scarlet Fever .....	.....	673	.....
Whooping Cough .....	.....	45	505
Smallpox .....	.....	575	180
Diphtheria & Whooping Cough Combined .....	.....	2,128	.....
Rocky Mountain Fever .....	.....	21	.....

TABLE 3

SCHOOL WORK—DIVISION OF PUBLIC HEALTH NURSING
(Including that done by both District Nurses and Child Welfare Clinic Staffs)

30 Districts	1950
1. Visits to Schools	348
2. Students Inspected	6,489
3. No. with Suspected Defects	3,894
(a) Defective Vision	892
(b) Defective Hearing	104
(c) Diseased Tonsils	1,646
(d) Unsound Teeth	2,583
(e) Eye Diseases	63
(f) Ear Diseases	43
(g) Enlarged Cervical Glands	758
(h) Enlarged Thyroid Glands	261
(i) Malnutrition	636
(j) Nervous Disorders	146
(k) Faulty Posture	394
(l) Orthopaedic Defects	1
(m) Ringworm	16
(n) Impetigo	36
(o) Scabies	27
(p) Pediculosis	99
(q) Other Skin Conditions	218
(r) Exclusions, Suspect Comm. Disease	99
4. Correction of Defects	499
5. Classroom Talks	141
6. Sanitary Inspection of Schools	304
7. Consultations with Teachers	306
8. Consultations with Parents	284
9. School Follow-up Home Visits	166
Total number of doses of the following:	
Diphtheria Toxoid	1,752
Scarlet Fever Toxin	1,633
Smallpox Vaccine	1,583
Whooping Cough Vaccine	1,048
Typhoid Fever Vaccine	12
Anti-Measles Prophactic	3
Mantoux Tests and Patch Tests	155

Division of Social Hygiene

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

The syphilis rate amongst our white population in this Province has recently been extremely low, varying from 0.7 per 1,000 in 1945 to a present rate of 0.3 per 1,000. Two spot surveys, one in 1921 and one in 1935, had disclosed no evidence of syphilis in the population of Northern Alberta in excess of that of the Province as a whole. However, during the early days of World War II and with the construction of the Alaska Highway, it was soon noticed that the Indian and Metis, or half-breed, population in northern Alberta was serving as a nidus of infection, not only to the sparse civilian population of the area, but also to the American and Canadian Armed Forces stationed or transient along this route. It was further noted that the greater problem existed along the first 400 miles of the route—this is to say, between Edmonton and Peace River. One must realize that this part of the Highway runs through at least 300 miles of near wilderness, broken only here and there by small villages, the inhabitants of which are in large part Indian or "Breed" (Metis). It is in no way a fixed population. These people are true nomads and will disappear for months at a time into the forest and lake country surrounding these hamlets. In fact, they may never reappear in the same village, but wander hundreds of miles to some other "camp", taking with them their entire families and all their possessions.

Needless to say, medical and nursing facilities in this territory were meager. In the greatest danger zone there existed a 200 mile stretch entirely without medical aid. However, in 1944 with the support of both provincial and federal health authorities mass blood testing of the inhabitants of an area covering 40,000 square miles was begun. The task required fourteen months for completion, as winter travel was practically impossible, and even during the summer months many encampments could be reached only by saddle horse or wagon travel. By the summer of 1946 all preliminary work was completed, and from a total of 1,300 blood tests taken, 145 patients (111 per 1,000) were found to have positive serologic tests (Kolmer and Kahn). It was of course impossible to determine the number of biologically false positive serologic tests in this group, and it was decided that all 145 patients should receive treatment.

In September of 1946, all 145 patients were brought together in a "military type" camp situated the northwestern tip of Lesser Slave Lake, and on second testing all but six were still serologically positive. Their attendance was largely voluntary, and had been assured by the simple expediency of offering free food and camping wherewithal. As the Indian will never travel without his family, the camp personnel soon found facilities taxed to the breaking point. Instead of the original number intended, the camp soon contained in the neighbourhood of 350 men, women and children. The typical Indian family listed not only parents and children, but in many cases grandparents, uncles and so on, who "came along." The inevitable sled dog population only served to make the camp

typically Indian. The patient population consisted of 89 females and 56 males ranging in age from one year to 70 years, with the average age of the group set at 33.5 years. Cerebrospinal fluid examination was done on all but 14 patients, examination being withheld in these cases either due to advanced age or to pregnancy. Thus 137 patients revealed a positive serologic test only, whilst eight patients revealed both positive blood and cerebrospinal fluid. Of these eight, one showed clinical and laboratory evidence of paresis, the remaining seven were asymptomatic and revealed grade two to grade three cerebrospinal fluid findings. Two cases of leuticaortitis with aortic insufficiency were discovered. A total of 18 patients had congenital syphilis. The remaining 117 patients were in an early or latent stage of the disease.

During the blood survey many of the group were found to be in the primary and secondary stages of the disease, and whenever possible these patients were started on treatment (Mapharsen and bismuth) immediately. Few of the group, however, had received more than ten arsenical and ten bismuth injections. Thus a total of 75 of the 145 patients had received some previous treatment.

Two treatment schedules were instituted. Firstly, all patients were given a total of 240,000 units of penicillin-G daily. The dosage was divided into four daylight doses of 30,000 units of aqueous penicillin given at three-hour intervals. A nightly dose of 120,000 units was administered in peanut oil suspension containing 2% beeswax. The total penicillin dosage amounted to 2.4 million units given in a ten-day period.

Secondly, 75 of the patients received, in addition to the penicillin, two injections per week of mapharsen, dosage 0.04 gms., and bismuth subsalicylate 1 c.c. intramuscularly every five days. This group received in this manner a total of five arsenical and three bismuth injections. The members of this group comprised those patients who had received little or no treatment prior to their attendance at camp. No reactions of sufficient severity to warrant discontinuing treatment were encountered.

The follow-up on this treated group has been extremely difficult. In the four years since treatment, we have been able to successfully follow only 99 of the original 145 patients.

A tabulation of results is as follows.

EARLY AND LATENT GROUP: Total 117—64 serologic tests negative and clinically well; 35 no follow-up; 12 serologic tests positive; 6 deceased.

CENTRAL NERVOUS SYSTEM SYPHILIS: Total 8—3 arrested; 4 no follow-up; 1 failure.

The one parietic of the group is included in the "arrested column. However, he has received an additional nine million units of penicillin to achieve this result. The one failure has gone on to develop a parietic formula, although he remains asymptomatic.

CONGENITAL: Total 18—11 arrested; 7 no follow-up; 1 failure.

In the "arrested" group, six patients have attained a completely negative serologic test. The other five have shown marked diminution in titre until at the present time they show from one to two dilutions by the Kahn Quantitative method.

CARDIOVASCULAR SYPHILIS: Total 2—2 no follow-up.

Summary.

Of the 99 patients who have been followed up, 84% are serologically negative and 14% have remained serologically positive.

It is interesting to note the rapidity and the extent to which this population became infected with syphilis—111 per 1,000. Only 5.5% of the patients showed any evidence of central nervous system involvement.

During 1950 the Mobile Clinic undertook the following projects:

In February, 1950, five days were spent in the area around Grouard and White Fish Lake doing a serological survey. One hundred and ninety-three samples of blood were taken, and as a result five new patients were put on treatment for syphilis. In March a week was spent tracing and blood testing people who were treated at the Grouard treatment centre in 1946. During this trip, 73 blood tests were taken, and as a result three old patients were re-treated.

From the 21st of May to 30th of June a blood testing team accompanied the Indian Treaty party. Tests were taken at Treaty meetings at the following points: Slave Lake, Kinuso, Joussard, Driftpile, Sucker Creek, Sturgeon Lake, Grouard, Wabasca, Chip Lake, Lubican Lake, Desmarais, Atikameg, Calling Lake, Fort Vermilion, Boyer River Reserve, Little Red River, Upper Hay River, Hay Lake, and Lower Hay River, N.W.T. Total number of tests taken on this trip, 1,897. Nineteen new cases of syphilis were so discovered, and 23 patients are being further investigated. These people are all Treaty Indians, and further investigations and treatment are being carried out by the Indian Health Services.

This trip was undertaken as a joint project of this Division and the Indian Health Services. Part of the subsistence was provided by the Indian Health Services for members of the blood testing team as well as a portion of the car expenses and all the expense of the air travel. This Division provided a doctor and a nurse, their equipment and a vehicle.

From July, 1950, to October, 1950, the Mobile Unit undertook to carry out a further serological and follow-up survey in Lac La Biche and surrounding districts. The districts included in this survey were as follows: Caslan, Plamondon, Big Bay, Lac La Biche Mission, Beaver Lake, Owl River, Philomena, Mile 199, Conklin and Imperial Mills. A total of 410 blood samples were obtained, and the results showed 62 positive tests, 14 new cases; remaining positive tests were on cases treated previously.

During this time a clinic was established in Lac La Biche, at which point 12 new cases were treated and six old cases received further treatment. There were seven cases of gonorrhoea treated as well. The two remaining cases are still under investigation.

On three occasions, one of the medical staff of this Division visited the clinic, at which time he performed 36 spinal punctures. The results of these all proved negative. The majority of cases treated previously in 1949 and by the local doctors were located, and follow-up tests done.

ALLEGED SOURCES OF VENEREAL INFECTION OR CONTACTS
For the Period January 1st, 1950-December 31st, 1950

Location of Source of Infection or Contact	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Edmonton	471	412	87%
Calgary	286	251	87%
Lethbridge	42	33	79%
Medicine Hat	7	6	86%
Slave Lake Area	133	128	96%
Remainder of Province	322	292	91%
Alberta Totals	1261	1122	88%
Sources of Infection or Contacts reported outside of the Province of Alberta	107	58	54%
	<u>1368</u>	<u>1180</u>	<u>86%</u>

Unit Forwarding Information	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Armed Forces	121	101	83%
Private Doctors and Provincial Clinics	1158	1022	88%
Other Provinces	89	57	64%
Totals	1368	1180	86%

Sources of Infection in Alberta who could not be located by authorities concerned	139
Sources of Infection outside of Alberta who could not be located by authorities concerned	49

DETAILS OF INFORMATION ON THE FACILITATION PROCESS

How Informant Met Source of Infection or Contact	Where Informant Met Source of Infection or Contact
Pick-ups	Boarding House or Rooming House
Introduction	Restaurant or Beer Parlor
Friend	Dance Hall
Marital Partner or Common-law wife	Street or Outdoors
House of Prostitution	Friend or Private House
Appointment	Hotel
No Data Available	Marital Partner
	Recreation or Private Party
	Train, Railway Station, Bus Depot
	House of Prostitution
	Taxi or Taxi Office
	Service Station or Garage
	At Work
	No Data Available

DETAILS OF INFORMATION OBTAINED ON THE CONTACT INVESTIGATION

Place of Exposure	Occupation of Source of Infection or Contact
Rooming House or Apt.	Waitress
Private House	Housewife
Outdoors	Prostitute or Street Walker
Car or Truck	Domestic, Hotel or Hospital Maid or Porter
Train, Boat, Auto-Camp	Clerk, Salesman, Steno, Teacher or Cashier
House of Prostitution	Factory or Plant Worker
Taxi or Taxi Office	Service Personnel
Hotel	Unemployed
Room, House or Shack	Laundress or Dry Cleaners
No Data Available	Truck, Taxi or Bus Driver
	Farmer, Trapper or Fisherman
	Student or Nurse
	Dressmaker, Hairdresser or Barber
	Laborer or Transient
	Business man, Conductor or Milkman
	Tradesman, Electrician, Plumber, etc.
	Trainman or Railwayman
	No Data Available

PROVINCIAL CLINIC, EDMONTON—Provincial Building, 10048 101A Avenue

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)							14	21	398	61			494
Syphilis (Congenital)		1				1							2
Acquired—Primary									7				7
Acquired—Secondary									2	3			5
Acquired—Latent									4	2			6
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)										1			1
Type Undetermined										2			2
Totals		1				1	14	21	411	69			517

Number of cases of syphilis—Male 13, female 10

23

Number of cases of gonorrhoea—Male 412, female 82

494

Number and results of Wassermann tests: 7,280, of which 939 were positive.

Number and results of Cerebrospinal Fluid tests: 109, of which 18 were positive.

Number and results of Bacteriological tests for gonococci: 3,871, of which 562 were positive.

PROVINCIAL CLINIC, CALGARY—711 3rd Street East, Calgary

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)					1		5	45	181	123			355
Syphilis (Congenital)			1										1
Acquired—Primary									3				3
Acquired—Secondary									2	4			6
Acquired—Latent							1	2	2				5
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)													
Type Undetermined													
Totals			1		1	5	46	188	129				370

Number of cases of syphilis—Male 8, female 7

15

Number of cases of gonorrhoea—Male 186, female 169

355

Number and results of Kahn and Wassermann tests: 3,826, of which 295 were positive.

Number and results of Cerebrospinal Fluid tests: 58, of which 7 were positive.

Number and results of Bacteriological tests for gonococci: 3,538, of which 504 were positive.

PROVINCIAL CLINIC, MEDICINE HAT—Medicine Hat General Hospital, Medicine Hat

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)									2				2
Syphilis (Congenital)													
Acquired—Primary									1				1
Acquired—Secondary													
Acquired—Latent													
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)									1				1
Acquired—Tertiary (other)													
Type Undetermined													
Totals									4				4

Number of cases of syphilis—Male 2, female 0

2

Number of cases of gonorrhoea—Male 2, female 0

2

Number and results of Kahn and Wassermann tests: 65, of which 9 were positive.

Number and results of Cerebrospinal Fluid tests: 5, of which 1 was positive.

Number and results of Bacteriological tests for gonococci: 12, of which 2 were positive.

DEPARTMENT OF PUBLIC HEALTH

PROVINCIAL GAOL—Lethbridge, Alberta

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)										3			3
Syphilis (congenital)													
Acquired—Primary										1			1
Acquired—Secondary													
Acquired—Latent										2	1		3
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)													
Type Undetermined													
Totals										6	1		7

Number of cases of syphilis—Male 4

Number of cases of gonorrhoea—Male 3

Number of prisoners admitted, 1,491.

Number and results of Kahn and Wassermann tests: 1,365, of which 67 were positive.

PROVINCIAL CLINIC, LETHBRIDGE—315 10th Street South

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)							1	7	3		1		12
Syphilis (Congenital)													
Acquired—Primary													
Acquired—Secondary													
Acquired—Latent										1			1
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)													
Type Undetermined										1			1
Totals							1	7	5		1		14

Number of cases of syphilis—Male 0, female 2

Number of cases of gonorrhoea—Male 7, female 5

Number and results of Kahn and Wassermann tests: 140, of which 45 were positive.

Number and results of Cerebrospinal Fluid tests: 3, of which none were positive.

Number and results of Bacteriological tests for gonococci: 151 of which 30 were positive.

PROVINCIAL GAOL—Fort Saskatchewan, Alberta

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)							12	11	47				70
Syphilis (congenital)													
Acquired—Primary													
Acquired—Secondary													
Acquired—Latent							1	2	1				4
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)													
Type Undetermined													
Totals							13	13	48				74

Number of cases of syphilis—Male 2, female 2

Number of cases of gonorrhoea—Male 11, female 59

Number and results of Kahn and Wassermann tests: 2,016, of which 193 were positive.

Number and results of Cerebrospinal Fluid tests: 15, of which 1 was positive.

Number and results of Bacteriological tests for gonococci: 3,687, of which 125 were positive.

McLENNAN CLINIC—McLennan, Alberta

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)							3	2	9	2			16
Syphilis (congenital)													
Acquired—Primary													
Acquired—Secondary													
Acquired—Latent										1			1
Acquired—Tertiary (Cardiovascular)													
Acquired—Tertiary (Neurosyphilis)													
Acquired—Tertiary (other)													
Type Undetermined													
Totals							3	2	9	3			17

Number of cases of syphilis—Male 0, female 1

Number of cases of gonorrhoea—Male 12, female 4

Number and results of Kahn and Wassermann tests: 291, of which 7 were positive.

Number and results of Cerebrospinal Fluid tests: None.

Number and results of Bacteriological tests for gonococci: 80, of which 42 were positive.

PRIVATE PHYSICIANS REPORTING CASES

Total number of new cases of venereal disease classified as to sex and age of patient.

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Gonorrhoea (all forms)	1		1		4		20	20	202	56	25	21	350
Syphilis (Congenital)			1	1	1	1					1	1	6
Acquired—Primary							1		10	2	2	1	16
Acquired—Secondary							3	3	1		1		8
Acquired—Latent							1	14	22	1	1		39
Acquired—Tertiary (Cardiovascular)									4		1		5
Acquired—Tertiary (Neurosyphilis)									16	4	4	1	25
Acquired—Tertiary (other)							1	4	2	1			8
Type Undetermined									1			1	2
Totals	1		1	2	1	5	21	25	254	87	35	27	459

Number of cases of syphilis—Male 65, female 44

Number of cases of gonorrhoea—Male 248, female 102

Number of doctors in the Province receiving consultative service

Number of doses of Arsenicals distributed to private physicians

Number of doses of Bismuth distributed to private physicians

Number of units of Penicillin distributed to private physicians: 612 Vials (3,000,000 units) Procaine G in Oil; 1223 Vials (300,000 units) Procaine G in Oil; 23 Vials (200,000 units) Crystalline Penicillin.

NEW CASES OF SYPHILIS AND GONORRHOEA REPORTED IN ALBERTA, 1950

	Under 1 yr.		1-4 yrs.		5-14 yrs.		15-19 yrs.		20 yrs. & over		Age not stated		Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Chancroid									1				1
Gonorrhoea (all forms)	1		1		5		51	101	885	292	30	22	1388
Syphilis (Congenital)		1	2	1	1	2					1	1	9
Acquired—Primary							1		22	2	2	1	28
Acquired—Secondary								3	7	8		1	19
Acquired—Latent								3	24	29	2	2	60
Acquired—Tertiary (Cardiovascular)									4		1		5
Acquired—Tertiary (Neurosyphilis)									17	4	4	1	26
Acquired—Tertiary (other)							1	4	4	1			10
Type Undetermined									1	3		1	5
Totals	1	1	2	2	1	7	52	108	965	342	41	29	1551

Total number of cases of syphilis—Male 93, female 69

Total number of cases of gonorrhoea—Male 967, female 421

Total number of cases of chancroid—Male 1

DEPARTMENT OF PUBLIC HEALTH

CASES REPORTED BY THE VARIOUS CLINICS OF THE DIVISION
OF SOCIAL HYGIENE IN 1950

Sex	Syphilis	Gonorrhoea	Totals
Males	30	632	662
Females	22	319	341
Totals	52	951	1003

CASES REPORTED BY DOCTORS AND MILITARY AUTHORITIES

	Private Physicians	Armed Forces	Totals
Syphilis	109	1	110
Gonorrhoea	350	87	437
Chancroid .....	.....	1	1
Totals	459	89	548

Total number of cases of syphilis reported in Alberta	162
Total number of cases of gonorrhoea reported in Alberta	1388
Total number of cases of chancroid reported in Alberta	1
.....	1551
Total number of cases of syphilis reported in Alberta exclusive of armed personnel	109
Total number of new cases of gonorrhoea reported in Alberta exclusive of armed personnel	1301
Total number of new cases of chancroid reported in Alberta exclusive of armed personnel .....	.....
.....	1410

Report of the Provincial Laboratory

R. D. STUART, M.D., *Director.*

The year 1950 saw a number of important changes: the retirement of Dr. Shaw; the opening of the Southern Branch of the Provincial Laboratory in Calgary; the transference of this Laboratory to its new quarters.

Retiring Director.

Dr. R. M. Shaw joined the staff of the Provincial Laboratory in September, 1920, and succeeded Dr. A. C. Rankin as Director in September, 1945. Throughout his long association with the Laboratory he devoted his energies to it in an entirely selfless manner, and every credit should be given to his efforts, both as Director and in association with Dr. Rankin, for the rapid development of the Laboratory services in this Province. He possessed the rare and fortunate quality of inspiring respect and devotion in his staff. Indeed, he could scarcely otherwise have maintained the efficiency of the Laboratory with the ever-increasing handicap of lack of space and facilities under which it laboured for so many years.

Southern Branch of the Provincial Laboratory in Calgary.

The opening of this Branch Laboratory on January 3rd, 1950, marked the first significant development in the extension of laboratory facilities to the Province. Its location will lessen the difficulty in the transport of material from the southern part of the Province, and will obviate the serious delay in the receipt of reports due to the distance previously involved. The Laboratory has been fortunate in securing the services of Dr. Shute, an exceptionally well-trained and highly competent clinical pathologist, to direct its varied activities. As will be seen from his accompanying report, the services of the Laboratory are in ever-increasing demand by the practitioners of the area. This is particularly evident in the continued monthly increase in the number of tissue specimens sent for pathological histology examination and in the number of bloods for the diagnosis of syphilis. A total of 49,860 examinations were carried out during the year.

The New Provincial Laboratory.

The new Provincial Laboratory was occupied in December of this year, after a considerable and unfortunate delay due to unforeseen architectural difficulties. That the transference of material, equipment, and staff at this difficult time of year was achieved without any interruption in services, must be credited to the high sense of duty and to the exceptional efforts of the technical staff, who personally carried over all the current specimens and materials and continued working on them under the most unusual conditions. The late period of the year and the climatic conditions made it impossible to transfer the animals, used for diagnostic and experimental work, to their new quarters at the same time. This will entail considerable difficulty for some time, but it is hoped that the transference will be completed as early in 1951 as weather permits.

The new institute is substantially built of brick and concrete, and its elaborate air-conditioning system is expected to provide reasonable working conditions. As yet it is too early to comment on the functional suitability of the laboratories, but the relief from the appalling congestion of the old quarters is commented on by everyone concerned. One obvious matter of immediate urgency, however, is the construction of a hard surface roadway by which the building may be approached.

Laboratory Services.

Bacteriological.—The number of examinations completed during the year amounted to 142,268, an overall decrease of 31,238 from the preceding year. It is very evident that this decrease is due mainly to the transference of examinations from the southern part of the Province to the new Laboratory in Calgary. For instance in syphilis serology alone the decrease amounted to 27,560 examinations, whereas the number of such examinations recorded from the Calgary Laboratory amounted to 29,903. Consequently, it is more fitting to point out that the total of Laboratory examinations carried out in the Province showed an increase of almost 19,000.

In addition to maintaining the standard and gradually extending the scope of what may be termed public health bacteriology, it is hoped that in its new quarters the Laboratory will be able to provide better service for individual diagnostic material derived mainly from hospitals. Significant in this type of examination is the increased number (1,075) of tests carried out on the antibiotic sensitivity of organisms. Indeed, it may be true that in relation to human disease, the function of the bacteriological laboratory may be more and more the determination of a suitable therapeutic agent than the absolute identification of the species of infecting micro-organism.

During the year the number of diagnosed cases of enteric fever and of *Salmonella* infections remained about average. One small epidemic of para-typhoid fever was encountered in Fort Smith, N.W.T. The infecting organism was *S. paratyphi B*, and thirteen cases were confirmed by laboratory investigation. The outbreak, according to our records, involved three families and a few isolated cases, and originated from river water contaminated by sewage from a building a short distance upstream.

The investigation of gonococcal infections by cultural methods, for which 1,788 examinations were recorded in 1949, was not pursued during 1950. This is ascribable partly to the inherent difficulties in the procedure, especially in the satisfactory transport of material, and partly to the loss of a considerable number of experienced workers who could not be replaced immediately. This activity may be revived in 1951, and an exploration of the problems concerned is already under way.

Pathological.—Gross and histological examinations of surgical specimens sent in from rural hospitals continued to form the major portion of the work done in the Department of Pathology. It is interesting to note that the number of specimens examined continues to increase year by year, in spite of the fact that the Southern Branch is now carrying on tissue examinations for districts south of Red Deer. Routine examination of tissue removed in surgical operations is well justified by the number of unsuspected and sometimes very early cancers which are disclosed.

Smear examination as a procedure for the diagnosis of cancer is growing in popularity, and specimens of bronchial secretions, cervical secretions, gastric washings, etc., were forwarded for examination in increasing numbers. This form of diagnosis may be regarded as an adjunct to other diagnostic methods, but will not supplant surgical biopsy as the method of choice.

Examinations of autopsy tissues forwarded by rural physicians are also increasing each year, and it is gratifying indeed to see the numbers of rural practitioners who find time to carry out their own autopsies in the midst of a busy practice.

Medico-legal examinations, Ascheim Zondek tests, and haematological examinations continued at about the same level as in previous years.

Mycological.—The increasing importance of this section of the laboratory's activities deserves separate mention. The number of specimens examined, 356, may not appear significant compared with, say, the thousands of serological tests carried out in bacteriology, but each test indicates an investigation prolonged often over months and demands a very high degree of specialized knowledge and experience. Thus an increase of sixteen per cent over last year in the examinations carried out reveals an important development in the demand for this type of investigation. So far the diagnostic activities of this department have been supported largely through the courtesy of Dr. Keeping, working under a Federal Research Grant, but it seems evident that the increasing realization of the medical importance of fungal infections will soon demand a more formal organization to deal with it.

Staff and Equipment.

In July, 1950, the staff of the Department of Pathology was augmented by the addition of Dr. Douglas Waugh, M.D., Ph.D. Dr. Waugh is a graduate of McGill University, and his fine training in diagnostic histology and morbid anatomy has made him a very valuable addition also to the staff of the Provincial Laboratory.

No other significant appointments were made during the year, but it must be pointed out that the separation of the new Provincial Laboratory from the Departments of Bacteriology and Pathology entails a certain duplication of activities, and consequently a number of technical workers previously carrying out work in both laboratories will have to be transferred wholly to the department chiefly requiring their services.

Only equipment routinely required was purchased during the year, but the installation of new sterilizing equipment in the present building has relieved the previous dangerous situation in which partially derelict sterilizers were carrying loads far above their capacity. A new tissue processing machine was bought for the Pathology Department. Such machines are expensive, but its essentiality for the increasing load of histological work is demonstrated by its constant daily use.

The separation of the new building from the Medical School must also be remembered in connection with future equipment required. Workers cannot carry heavy and expensive equipment backward and forward, and a certain duplication of such equipment will be inevitable.

Note.

The appended tables show the number and character of the examinations carried out. An analysis of certain aspects of the work has been prepared along the customary lines.

TABLE 1

WORK PERFORMED IN THE PROVINCIAL LABORATORY DURING THE YEAR 1950

	Total, 1949	Total, 1950	Increase	Decrease
Sputum Examinations	973	836		137
Diphtheria and Haemolytic Streptococci	4,704	5,492	788	
Typhoid Fever (Agglutination test)	2,118	1,896		222
Milk	1,125	1,386	261	
Water	5,190	4,127		1,063
Guinea Pig Inoculations	1,716	2,047	331	
Miscellaneous Bacteriology	7,057	7,465	408	
Blood Cultures	780	680		100
Enterobacteria and Intestinal Parasites	1,079	2,928	1,849	
Urinalysis	16	25	9	
Medico-Legal Examinations (Blood, seminal, etc.)	7	7		
Cerebro-Spinal Fluids for the Wassermann Test	3,043	2,414		629
Bloods for Quantitative Kahn test	2,845	1,639		1,206
Bloods for the Wassermann Test	11,286	6,819		4,467
Bloods for the Standard Kahn Test	10,903	6,748		4,155
Bloods for the Presumptive Kahn Test	85,230	68,127		17,103
Smears for Gonococcus	12,701	8,763		3,938
Cultures for Gonococcus	1,788	1		1,787
Van Den Bergh Determinations	106			106
Pathological Histological Material	11,340	10,363		977
Blood Smear Examinations	159	88		71
Post-mortem Examinations (Edmonton)	321	385	64	
Post-mortem reports (outside points)	137	104		33
Ascheim-Zondek Tests	737	564		173
Comparative Series	13	2		11
Fluids for Cancer Cells	177	294	117	
Cancer Cytology	36	66	30	
Bone Marrows	40	51	11	
Cerebro-Spinal Fluid Examinations (Colloidal Gold, Pandy)	3,426	3,331		95
Bacteriological Examinations (P.M.)	67	22		45
B. abortus Examinations (Agglutination test)	2,118	1,860		258
F. tularensis (Agglutination test)	2,118	1,860		258
B. melitensis (Agglutination Test)		2	2	
Antibiotic sensitivities, etc.	*	1,374	1,374	
Mycological examinations	*	356	356	
Cattle Blood (Bang's Disease Agglutination test)	150	146		4
Total	173,506	142,268	5,600	36,838

*Not recorded separately.

TABLE 2

DETAIL OF EXAMINATIONS OF MILK PERFORMED THROUGHOUT THE YEAR 1950

	1949	1950
Number of milks examined bacteriologically	1,125	1,314
Number of milks examined for butterfat	155	178
Number of milks examined for B. coli	179	376
Number of milks tested by the Phosphatase Test	77	109
Number of ice creams examined	40	22
Number of rinse waters examined bacteriologically	20	50

TABLE 3

DETAILS OF THE BACTERIOLOGICAL AND CHEMICAL EXAMINATIONS OF WATER PERFORMED THROUGHOUT THE YEAR 1950

	1949	1950
Number of samples of water examined bacteriologically and found fit for human consumption	2,511	1,825
Number of samples of water examined bacteriologically and found unfit for human consumption	853	609
Number of samples of water examined bacteriologically and chemically and found fit for human consumption	386	361
Number of samples of water examined bacteriologically and chemically and found unfit for human consumption	294	228
Number of samples of water examined chemically and found fit for human consumption	867	846
Number of samples of water examined chemically and found unfit for human consumption	261	246
Number of samples of ice examined bacteriologically and found fit for human consumption	18	12
Number of samples of ice examined bacteriologically and found unfit for human consumption		

TABLE 4

DETAIL OF SOME OF THE WORK DONE BY THE LABORATORY IN RELATION TO THE CONTROL OF TUBERCULOSIS

Specimen	Examined by smear, animal inoculation and culture	Positive	% Positive	Negative	% Negative
Sputum and Gastric Washings...	631	57	9.03	574	90.9
Urine	551	49	8.89	502	91.1
Pleural Fluids	251	15	5.97	236	94.02
C.S.F.	136	17	12.5	119	87.5
Joint Fluids	95	13	13.6	82	86.31
Abdominal Fluids	18	1	5.55	17	94.44
*Miscellaneous Specimens	131	29	22.1	102	77.86
Total	1831	181		1632	
Sputums examined by smear only	836	71	8.49	763	91.26
Grand Total	2649	252		2395	

*Miscellaneous specimens include swabs and pus of unspecified or unique origin, stools, milks, etc.

TABLE 5

TEST MADE IN RESPECT TO THE USE OF ANTIBIOTICS

Determination	No. Done
Penicillin sensitivity of a variety of organisms isolated from cases of infection:	
Quantitative readings	117
Qualitative plate method	1064
Penicillin blood level	2
Streptomycin sensitivity of <i>Mycobacterium tuberculosis</i> isolated from cases	42
Streptomycin blood level	45
Chloromycetin sensitivities	21
Chloromycetin levels	1
Terramycin sensitivities	8
Aureomycin sensitivities	70
Bacitracin sensitivities	4

TABLE 6

BACTERIOLOGICAL EXAMINATIONS FOR EVIDENCE OF TYPHOID FEVER, DYSENTERY AND RELATED INFECTIONS

Stool and urine cultures	794
Blood cultures	1,928
Bloods examined by agglutination test for typhoid and related fevers, undulant fever and tularaemia	1,896

Source	Details of Results					Total
	Salmonella Typhi	S. paratyphi B.	Other Salmonella	Shigella	Negative	
Stool cultures	19	11	16	29	645	720
Urine cultures	1	.....	.....	.....	70	71
Blood cultures	7	9	.....	.....	.....	16
Duodenal drainage .....	.....	.....	1	.....	3	4
Osteomyelitis	5	.....	.....	.....	.....	5
Total isolations	32	20	17	29	718	816
Number of cases	6	15	15	23	.....	59
Number of carriers	3	.....	.....	.....	.....	.....

Details of Salmonella Cases and Carriers

S. typhi-murium	5	S. montivideo	1
S. newport	4	S. potsdam	1
S. oranienburg	1	S. enteritidis	1
S. kentucky	1		
S. bredeney	1	Total cases	15

Cultures received from Animal Sources Supplied by Dr. E. E. Ballantyne, Provincial Veterinarian

Cultures from Poultry:	From Other Animals:
S. oranienburg	S. cholerae-suis
S. gallinarum	S. typhi-murium
S. thompson	S. paratyphi B.
S. typhi-murium	S. senftenberg
S. barielly	S. thompson
S. kentucky	
S. newington	Total
S. bredeney	
S. pullorum	
S. anatum	
S. newport	
S. minnesota	
Total	78

Shigella Isolations

Sh. sonnei	15
Sh. paradysenteriae Flexner W type	4
Sh. paradysenteriae Z type	3
Sh. paradysenteriae Boyd 88 type	1
Total	23

TABLE 7

INTESTINAL PARASITES

Number of specimens examined and found negative for parasites—160

Showing Cysts and Protozoa:		Worms or portions of worms:	
Entamoeba coli	16	Taenia saginata	4
Entamoeba histolytica	2	Ascaris lumbricoides	3
Endolimax nana	6		
Chilomastix mesnili	2		7
Giardia lamblia	3		
	<u>29</u>	Total	206
Showing Ova:			
Enterobius vermicularis	5		
Hookworm	2		
Trichiuris	2		
Taenia saginata	1		
	<u>10</u>		

TABLE 8

BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY SEROLOGICAL TESTS FOR THE DIAGNOSIS OF SYPHILIS DURING THE YEAR 1950

Bloods examined—Presumptive Kahn	68,127
Standard Kahn	6,748
Quantitative Kahn	1,639
Wassermann (Kolmer)	6,819
Cerebro-spinal fluids examined by Wassermann (Kolmer) test	2,414
Bloods and cerebro-spinal fluids unsuitable for examination (N.S.Q., A.C., Haem., Accidentally broken)	2,243
Bloods broken and leaked in transit	117
Bloods and cerebro-spinal fluids "Positive" to reaction	1,413
Bloods and cerebro-spinal fluids "Negative" to reaction	67,127
Bloods and cerebro-spinal fluids giving "Doubtful Please Repeat" reaction	631
Bloods giving "Please Repeat" reaction	1,243
Bloods giving "N.S.Q. Please Repeat"	207
Number of bloods and cerebro-spinal fluids examined in 1949	89,173
Number of bloods and cerebro-spinal fluids examined in 1950	69,697
Decrease in number of specimens examined	19,476
Decrease in per cent	21.84%

TABLE 9

BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY SEROLOGICAL TESTS FOR THE DIAGNOSIS OF SYPHILIS, BY THE MONTH, DURING THE YEAR 1950

	Presumptive Kahn Test	Standard Kahn Test	Quantitative Kahn Test	Blood Wasserm'n	C.S.F. Wasserm'n	Unsuitable (N.S.Q., A.C., Haem.)
January	4,898	549	105	569	231	519
February	5,160	692	174	705	211	120
March	5,539	716	168	717	229	142
April	5,555	598	127	597	228	77
May	6,512	594	120	594	219	126
June	7,213	513	93	523	228	164
July	5,792	540	120	535	165	171
August	5,965	639	174	650	204	208
September	5,382	484	143	487	201	200
October	5,841	485	161	486	181	118
November	5,546	536	157	548	164	200
December	4,724	402	97	408	153	198
Totals	68,127	6,748	1,639	6,819	2,414	2,243

TABLE 10
PREMARITAL BLOODS SUBMITTED FOR SEROLOGICAL TESTS FOR SYPHILIS
DURING THE YEAR 1950

	Negative	Positive	Doubtful Please Repeat	Please Repeat	N.S.Q. Please Repeat	Unsuit- able	Total
January	597	1	2	3	2	135	740
February	535	2	....	4	1	14	556
March	586	....	1	8	2	20	617
April	854	1	....	7	2	11	875
May	877	6	....	5	1	16	905
June	1,219	1	1	4	1	37	1,263
July	1,126	2	....	6	1	29	1,164
August	998	2	....	10	3	31	1,044
September	854	2	....	13	....	29	898
October	1,207	3	2	15	1	29	1,257
November	1,025	1	1	16	1	45	1,089
December	754	5	2	2	....	38	801
Totals	10,632	26	9	93	15	434	11,209

TABLE 11
SERA AND VACCINE DISTRIBUTED DURING THE YEAR 1950

	Total 1949	Total 1950
Smallpox Vaccine:		
1 point	3,474	2,431
10 points	6,497	3,513
Diphtheria Antitoxin, in syringe:		
1,000 units	838	197
5,000 units	143	3
20,000 units	468	154
10,000 units	53	92
Diphtheria Toxoid:		
1 person	7,545	1,181
3 c.c.	1,331	37
6 c.c.	1,951	309
Diphtheria Toxoid and Pertussis (combined)		
Old:		
1 person (3x2 c.c. ampoules)	149	....
Diphtheria Toxoid and Pertussis (combined)		
New:		
1 person (4x1 c.c. ampoules)	14,189	6,707
9 persons (6x6 c.c. ampoules)	4,021	1,541
Schick Test: 25 persons	812	258
Scarlet Fever Antitoxin:		
3,000 units (syringe)	467	206
9,000 units (vial)	157	64
9,000 units (syringe)	242	13
Scarlet Fever Toxin:		
Strength "A"—30 doses (large)	57	56
Strength "B"—30 doses (large)	180	107
Strength "C"—30 doses (large)	80	89
Strength "D"—30 doses (large)	107	100
Strength "E"—30 doses (large)	188	179
1 person	2,704	1,457
6 persons	1,691	667
Dick Test: 10 persons	547	222
Tetanus Toxoid: 1 person	150	91
Tetanus Antitoxin:		
1,500 units	878	396
5,000 units	18	4
10,000 units	141	22
20,000 units .....	....	2
Pertussis Vaccine, old:		
1 person (3x2 c.c. ampoules)	152	....
6 persons (6x6 c.c. ampoules)	43	....
Pertussis Vaccine, new:		
1 person (4x1 c.c. ampoules)	2,874	881
9 persons (6x6 c.c. ampoules)	278	96
Staphylococcus Toxoid: 2 c.c. vial	245	62
Staphylococcus Antitoxin:		
10,000 units	6	8
20,000 units	1	....
Gas Gangrene Antitoxin:		
4,000 units	232	137
10,000 units	105	22
Typhoid-Paratyphoid Vaccine:		
1 person	723	754
10 c.c.	832	1,563
Anti-Measles Serum: 5 c.c.	3,876	902

TABLE 11—Continued

	Total 1949	Total 1950
Immune Serum Globulin:		
2 c.c.	100	112
10 c.c.	25	.....
Diluted Diphtheria Toxoid:		
1 person	136	36
2½ c.c. (Reactors)	1	.....
Anti.H. Influenzae Serum: Type B (Serum-Rabbit)	2	.....
T.A.B.T. Vaccine: 3 c.c.	558	809
Rocky Mountain Spotted Fever Vaccine:		
1 c.c. ....	.....	.....
3 c.c.	12	1
Other Vaccines:		
Autogenous Vaccine, 25 c.c. bottle	24	25
Stock Vaccine, 25 c.c. bottle .....	.....	.....
Diphtheria Toxoid & Pertussis & Tetanus Vaccine:		
1 person .....	.....	315
9 persons .....	.....	144
Diphtheria Toxoid and Tetanus Toxoid:		
1 person .....	.....	3

TABLE 12
MYCOLOGICAL EXAMINATIONS

Type of material examined	Number of specimens	Number found positive for pathogenic fungi
Skin and nail scrapings	142	40
Sputum	74	15
Scalp hairs	48	29
Beard hairs	18	12
Vaginal swabs	28	9
Mouth and throat	12	4
Miscellaneous	34	5
Total	356	114

Fungi identified	Source	No. of specimens
Trichophyton mentagrophytes	skin and hairs	15
" faviforme	skin and hairs	15
" tonsurans	hairs	1
" rubrum	hairs	1
Microsporum audouini	skin and hairs	14
" canis	hairs	3
Epidermophyton floccosum	skin	1
Mosaic fungus	skin	10
Candida albicans	skin and nails, vagina, sputum and mouth	22
Goetrichum sp.	sputum	7
Molassezia furfur	skin	3
Actinomyces bovis	jaw abscess	1
Aspergillus fumigatus	pulmonary aspergillosis	1
Nocardia tenuis	hairs	1
Nocardia minutissima	skin	1
Other dermatophytes	skin and hairs	18

TABLE 13

COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE WERE MADE, 1950			
Sputum Examinations	836	\$ 1.00	\$ 836.00
Diphtheria and Haemolytic Streptococci	5,492	1.00	5,492.00
Typhoid Fever (Agglutination tests)	1,896	1.00	1,896.00
Milk	1,386	3.00	4,158.00
Water	4,127	10.00	41,270.00
Guinea pig inoculations	2,047	3.00	6,141.00
Miscellaneous Bacteriology	7,465	3.00	22,395.00
Blood cultures	680	3.00	2,040.00
Enterobacteria and Intestinal Parasites	2,928	3.00	8,784.00
Urinalysis	25	1.00	25.00
Medico-Legal (Blood, seminal, etc.)	7	5.00	35.00
Cerebro-Spinal Fluids for Wassermann Test	2,414	1.00	2,414.00
Bloods for the Quantitative Kahn Test	1,639	.....	.....
Bloods for Wassermann Test	6,819	1.00	6,819.00
Bloods for Standard Kahn Test	6,748	1.00	6,748.00
Bloods for Presumptive Kahn Test	68,127	1.00	68,127.00
Smears for the Gonococcus	8,763	1.00	8,763.00
Cultures for Gonococcus	1	1.00	1.00
Van Den Bergh Determination .....	.....	1.00	.....
Pathological Histological material	10,363	5.00	51,815.00
Blood Smear Examinations	88	2.00	176.00
Asheim-Zondek Tests	564	5.00	2,820.00
Comparative Series	2	3.00	6.00
Fluids for Cancer Cells	294	5.00	1,470.00
Bone Marrows	51	5.00	255.00
Cancer Cytology	66	2.00	132.00
Cerebro-Spinal Fluid Examinations (Colloidal Gold, Pandy)	3,331	2.00	6,662.00
Bacteriological Examinations (P.M.)	22	5.00	110.00
Agglutination Test:			
B. abortus Examinations	1,860	.50	930.00
P. tularensis Examinations	1,860	.50	930.00
B. melitensis	2	.50	1.00
Cattle Blood (Bang's Disease Agglutination Test)	146	.10	14.60
Autogenous Vaccine	25	5.00	125.00
Stock Vaccine .....	.....	3.50	.....
Antibiotic sensitivities, etc.	1,374	1.00	1,374.00
Mycological examinations	356	3.00	1,068.00
Total			<u>\$253,832.60</u>

Southern Branch Provincial Laboratory, Calgary.

This first annual report on the work conducted at the Southern Branch Provincial Laboratory, Calgary, is a summation of twelve monthly reports.

All specimens received by 1:00 p.m. Saturday, December 30th, which was the last working day of the month, are included in the December report.

As the Southern Branch commenced operations on January 3rd, 1950, we have almost completed a full calendar year. From January to March, 1950, there was a rapid increase in the volume of work, and for the succeeding nine months the work remained fairly steady with slight seasonal fluctuations. These variations appear to be related to the activities of a farming community (planting, harvesting, etc.). In spite of the dispatch of a concise and simple letter to announce our opening to all physicians and hospitals in the southern half of the Province, we still receive queries and requests which demonstrate that the letter was not read by many individuals.

This complete or partial ignorance of the Laboratory services offered in Calgary has considerably restricted our work, and this might be considered fortunate in that we have progressed smoothly through a difficult year without a major breakdown in any department.

It is probable that many more specimens will be received in 1951 as the knowledge of our existence slowly spreads to those who can benefit by the services offered.

Animal work is restricted at present by lack of cage space and some overcrowding of the present guinea pig population of about 285 pigs. New cages are on order and when available should enable a more rapid turnover of specimens for the isolation of Myco. tuberculosis in guinea pigs and the conducting of the greatly needed Friedman Pregnancy test in rabbits.

There have been only four inadvertent deaths amongst the pigs (pneumonia in all cases) which speaks well for the good design of the cages, the suitability of the building provided as an animal house and the care of the animal attendant (Mr. W. Anderson).

It is hoped that accommodation for two sheep will be provided in the near future so that a ready supply of sheep's blood will be available to replace the risky mailing of sheep's red blood cells from Edmonton.

An increase of the work in connection with the control of Tuberculosis must be anticipated in the future following the work of the Mobile X-ray teams in their general survey of the population.

The numbers of milks and waters submitted for bacteriological examination have shown slight steady increase.

It was found necessary to be more rigid in the control of the techniques used for the examination of milks after complaints had been received from various dairies to the effect that the results did not demonstrate the true condition of their products. With the co-operation of the sanitary authorities, iced milk samples now reach the Laboratory with a maximum delay of 30 minutes. The samples are then examined strictly according to the techniques prescribed in "Standard Methods for the Examination of Dairy Products," 9th Edition. The results of this more rapid delivery of the samples and their examination under more rigidly controlled conditions have been seen in the fall in the Official Plate Counts to more reasonable (although not yet satisfactory) levels.

The work of the Serology Department in connection with the diagnosis of syphilis has, from the onset, been one of our largest commitments, and we have been assured by many physicians that this service has been greatly appreciated.

Similarly, the histological examination of biopsy and autopsy tissues has been of assistance to many practitioners in the southern half of the Province.

There have been no epidemic outbreaks of communicable diseases during the year, so that the bacteriology staff has been occupied with routine investigations (urethral smears for gonococci, throat swabs for diphtheria bacilli, etc.).

The Clinical Pathology conducted for the Central Alberta Sanatorium is unlikely to increase to any great extent, as this work is naturally limited by the number of beds available for in-patients.

The technical equipment was very adequate from the outset, so that the only major additions have been one English centrifuge and one English tissue processing machine. Both are giving satisfactory service and, compared with their American counterparts, are considered superior from both engineering and design points of view.

Training facilities in histological technique were given to one technician from the Galt Hospital, Lethbridge.

Similar training in the serology of syphilis has been offered to the Holy Cross Hospital, Calgary, and one trainee technician from that hospital is at present working in the Serology Department.

TABLE 1

WORK PERFORMED IN THE PROVINCIAL LABORATORY, SOUTHERN BRANCH,
CALGARY, DURING THE YEAR 1950

Sputum Examinations	3,758
Diphtheria and Haemolytic Streptococci	368
Typhoid Fever (Agglutination Test)	632
Milk	518
Water	903
Guinea Pig Inoculations	522
Miscellaneous Bacteriology	442
Blood Cultures	95
Enterobacteria and Intestinal Parasites	88
Urinalyses	2,778
Medico-Legal (Blood, Seminal, etc)	
Blood Counts	1,581
Biochemistry Investigations	138
Cerebro-spinal fluids for the Wassermann Test	700
Bloods for the Quantitative Kahn Test	582
Bloods for the Wassermann Test	3,696
Bloods for the Standard Kahn Test	3,352
Bloods for the Presumptive Kahn Test	21,573
Smears for Gonococcus	3,919
Van Den Bergh Determinations	57
Pathological Histological material	2,038
Blood Smear Examination	65
Post Mortem Examinations	5
Histology from Post Mortems	32
Ascheim Zondek Examinations	
Fluids for Cancer Cells	46
Cerebro-spinal Fluid Examinations (Colloidal Gold, Pandy)	707
Bacteriological Examinations (P.M.)	1
B. abortus Examinations (Agglutination Test)	632
P. tularensis (Agglutination Test)	632
B. melitensis (Agglutination Test)	
Cattle Blood (Bang's Disease—Agglutination Test)	
Total	49,860

TABLE 2

DETAILS OF EXAMINATIONS OF MILK PERFORMED THROUGHOUT THE YEAR 1950

Number of milks examined bacteriologically	518
Number of milks examined for butterfat	7
Number of milks examined for B. coli	518
Number of milks tested by the Phosphatase Test	8
Number of ice creams examined	2
Number of rinse waters examined bacteriologically	

TABLE 3

DETAILS OF BACTERIOLOGICAL EXAMINATIONS OF WATER PERFORMED
THROUGHOUT THE YEAR 1950

Number of samples of water examined bacteriologically and found fit for human consumption	634
Number of samples of water examined bacteriologically and found unfit for human consumption	267
Number of samples of ice examined bacteriologically and found fit for human consumption	2
Number of samples of ice examined bacteriologically and found unfit for human consumption	

TABLE 4

LABORATORY WORK DONE IN RELATION TO THE CONTROL OF TUBERCULOSIS

Specimen	Examined by smear, animal inoculation and culture	Positive	% Positive	Negative	% Negative
Sputum and Gastric Washings	167	25	14.9	142	85.1
Urine	171	21	13.7	150	86.3
Pleural Fluids	77	11	14.2	66	85.8
C.S.F.	21	7	33.3	14	66.7
Joint Fluids	15	2	13.3	13	86.7
Abdominal Fluids	4	2	50.0	2	50.0
*Miscellaneous Specimens	67	16	23.5	51	76.5
Total	522	84		438	
Sputums examined by smear only	3753	935	25.0	2818	75.0
Miscellaneous examined by smear only	233	26	11.1	207	88.9
Grand Total	4508	1045		3463	

*Miscellaneous specimens include swabs and pus of unspecified or unique origin, stools, milks, etc.

TABLE 5
TESTS MADE IN RESPECT TO THE USE OF ANTIBIOTICS, PENICILLIN
AND STREPTOMYCIN

Determination	No. Done
Penicillin sensitivity of a variety of organisms isolated from cases of infection	
Penicillin Blood Level	
Streptomycin sensitivity of Mycobacterium tuberculosis isolated from cases	5
Streptomycin sensitivity of other bacteria	
Streptomycin Blood Level	
Streptomycin Urine Level	

TABLE 6
BACTERIOLOGICAL EXAMINATIONS FOR EVIDENCE OF TYPHOID FEVER,
DYSENTERY AND RELATED FEVERS

Stool and urine cultures	88
Blood cultures	1
Bloods examined by agglutination test for typhoid and related fevers, undulant fever and tularemia	632

Details of Results

Source	Salmonella Typhi	S. paratyphi B.	Other Salmonella	Shigella	Negative	Total
Stool cultures			3	3	62	74
Urine cultures				3	11	14
Blood cultures					1	1
Duodenal drainage						
Osteomyelitis						
Autopsy						
Total isolations			3	6		
Number of cases			3	3		
Details of Salmonella Cases:		Shigella Cases:				
S. typhi-murium	2	Sh. sonnei				2
S. newport	1	Sh. paradysenteriae Boyd 103				1
Total cases	3	Total cases				3

TABLE 6A
INTESTINAL PARASITES

Number of specimens examined and found negative for parasites	12
Ova identified—Ascaris lumbricoides	2
Insects identified—Larva of Colliphora	1
Gross worms or portions—Taenia solium 1, Dibothricephalus 1	2
Total	17

TABLE 7
BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY SEROLOGICAL TESTS
FOR THE DIAGNOSIS OF SYPHILIS DURING THE YEAR 1950

Bloods Examined—Presumptive Kahn	21,573
Standard Kahn	3,512
Quantitative Kahn	582
Wassermann (Kolmer)	3,696
Cerebro-spinal fluids examined by Wassermann (Kolmer) test	700
Bloods and cerebro-spinal fluids unsuitable for examination (N.S.Q., A.C., Haem., Accidentally broken)	390
Bloods broken and leaked in transit	36
Bloods and cerebro-spinal fluids "Positive" to reaction	498
Bloods and cerebro-spinal fluids "Negative" to reaction	21,841
Bloods and cerebro-spinal fluids giving "Doubtful Please Repeat" reaction	244
Bloods giving "Please Repeat" reaction	475
Bloods giving "Report As Is" reaction	45
Bloods giving "N.S.Q. Please Repeat" reaction	84

TABLE 8

BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY SEROLOGICAL TESTS FOR THE DIAGNOSIS OF SYPHILIS, BY THE MONTH, DURING THE YEAR 1950

Month	Presumptive Kahn Test	Standard Kahn Test	Quantitative Kahn Test	Blood Wasserm'n	C.S.F. Wasserm'n	Unsuitable (N.S.Q., A.C., Haem.)
January	898	136	6	146	33	51
February	1,377	296	16	314	59	27
March	1,751	402	39	401	77	22
April	1,682	311	18	315	59	23
May	1,900	363	77	387	63	28
June	2,119	330	64	358	57	25
July	1,856	219	52	246	52	14
August	2,143	284	69	305	70	15
September	1,995	303	55	326	56	17
October	2,116	295	67	303	66	54
November	2,098	348	68	363	55	70
December	1,638	225	60	232	51	44
Totals	21,573	3,512	582	3,696	700	390

TABLE 9

PREMARITAL BLOODS SUBMITTED FOR SEROLOGICAL TESTS FOR SYPHILIS DURING THE YEAR 1950

Month	Negative	Positive	Doubtful Please Repeat	Please Repeat	N.S.Q. Please Repeat	Report as is	Unsuitable	Total
January	175	....	....	1	1	1	9	187
February	242	....	....	3	1	....	2	248
March	373	1	....	2	1	....	4	381
April	437	1	....	10	....	....	4	452
May	512	1	2	5	2	....	3	525
June	786	....	2	7	....	....	6	801
July	594	3	....	4	....	....	5	606
August	740	2	3	4	....	1	6	756
September	643	....	....	3	....	....	5	651
October	837	2	....	2	....	1	13	855
November	686	....	....	2	....	2	19	709
December	436	1	....	1	....	....	9	447
Totals	6,461	11	7	44	5	5	85	6,618

TABLE 11

SERA AND VACCINE DISTRIBUTED DURING THE YEAR 1950

	Total 1950
Smallpox Vaccine:	
1 point	1,701
10 points	1,577
Diphtheria Antitoxin, in syringe:	
1,000 units	63
5,000 units	....
10,000 units	18
20,000 units	9
Diphtheria Toxoid:	
1 person	1,553
3 c.c.	76
6 c.c.	152
Diphtheria Toxoid and Pertussis Vaccine, combined:	
1 persons (4x1 c.c. ampoules)	2,891
9 persons (6x6 c.c. ampoules)	364
Schick Test: 25 persons	223
Scarlet Fever Antitoxin:	
3,000 units (syringe)	198
9,000 units (vial)	8
9,000 units (syringe)	240
Scarlet Fever Toxin:	
Strength "A"—30 doses (large)	19
Strength "B"—30 doses (large)	33
Strength "C"—30 doses (large)	15
Strength "D"—30 doses (large)	19
Strength "E"—30 doses (large)	16
1 person (5x1 c.c. vial)	1204
6 persons (6x5 c.c. vials)	331
Dick Test: 10 persons	285
Tetanus Toxoid: 1 person	98
Tetanus Antitoxin::	
1,500 units	501
10,000 units	20
Pertussis Vaccine:	
1 person (4x1 c.c. ampoules)	921
9 persons (6x6 c.c. ampoules)	16

TABLE 11—Continued

	Total 1950
Staphylococcus Toxoid: 2 c.c. vial	100
Staphylococcus Antitoxin, in vial:	
10,000 units	20
20,000 units .....	.....
Gas Gangrene Antitoxin:	
4,000 units	63
10,000 units	18
Typhoid-Paratyphoid Vaccine:	
1 person	307
10 c.c.	493
Anti-Measles Serum: 5 c.c.	105
T.A.B.T. Vaccine: 3 c.c.	22
Antivenin North American Snakebite Serum:	
1 combination pkg.	1
Diphtheria Toxoid, Pertussis Vaccine and Tetanus Toxoid:	
1 person (4x1 c.c. ampoules)	806
Immune Serum Globulin (Human): 2 c.c.	3
Other Vaccines:	
Autogenous Vaccine, 25 c.c. bottle	3

TABLE 12

AMOUNT OF AUTOGENOUS AND OTHER VACCINE PREPARED AND
DISTRIBUTED DURING THE YEAR 1950

	Total 1950
Autogenous Vaccine	3

TABLE 13

COMMERCIAL VALUE OF WORK IF MINIMUM CHARGE WERE MADE, 1950

Sputum Examinations	3,758	\$ 1.00	\$ 3,758.00
Diphtheria and Haemolytic Streptococci	368	1.00	368.00
Typhoid Fever (Agglutination Test)	632	1.00	632.00
Milk	518	3.00	1,554.00
Water	903	10.00	9,030.00
Guinea pig inoculations	522	3.00	1,566.00
Miscellaneous Bacteriology	442	3.00	1,326.00
Blood Cultures	95	3.00	285.00
Enterobacteria and Intestinal Parasites	88	3.00	264.00
Urinalyses	2,778	1.00	2,778.00
Medico-Legal (Blood, Seminal, etc.) .....	.....	.....	.....
Blood Counts	1,581	6.00	9,486.00
Biochemistry Investigations	138	4.00	552.00
Cerebro-spinal fluids for the Wassermann Test	700	1.00	700.00
Bloods for the Quantitative Kahn Test	582	.....	.....
Bloods for the Wassermann Test	3,696	1.00	3,696.00
Bloods for the Standard Kahn Test	3,352	1.00	3,352.00
Bloods for the Presumptive Kahn Test	21,573	1.00	21,573.00
Smears for Gonococcus	3,919	1.00	3,919.00
Van Den Bergh Determinations	57	1.00	57.00
Pathological Histological material	2,038	5.00	10,190.00
Blood Smear Examination	65	2.00	130.00
Post-mortem Examinations	5	100.00	500.00
Histology from Post-mortems	32	15.00	480.00
Ascheim Zondek Examinations .....	.....	5.00	.....
Fluids for Cancer Cells	46	5.00	230.00
Cerebro-spinal Fluid Examinations (Colloidal Gold, Pandy)	707	2.00	1,414.00
Bacteriological Examinations (P.M.)	1	5.00	5.00
B. abortus Examinations (Agglutination Test)	632	.50	316.00
P. tularensis (Agglutination Test)	632	.50	316.00
B. melitensis (Agglutination Test) .....	.....	.50	.....
Cattle Blood (Bang's Disease, Agglutination Test) .....	.....	.10	.....
Autogenous Vaccine	3	5.00	15.00
Total .....	.....	.....	\$ 78,492.00

Sanitary Engineering Division

J. A. BEVERIDGE, B.A.Sc., M.S.E., *Acting Director.*

More water and sewerage systems were installed throughout the Province during 1950 than ever before in its history. This unprecedented construction started after the Provincial Government made money available at 2% interest for self-liquidating projects, that is, projects which will earn sufficient money to repay the original capital expenditure plus interest within twenty years. Seventeen towns and villages ranging in population from 600 to 3,000 persons financed the installation of new water and sewerage systems. Another 17 municipalities borrowed money for major extensions to existing systems. As a result, at the close of 1950 Alberta is better served with sanitary facilities than any other province in Canada.

Rapid development of the oil and gas resources in the Province produced further industrial expansion and population growth. This activity, in turn, materially increased the quantity of industrial wastes and untreated sewage being discharged into the rivers and streams of the Province. To combat this pollution, a laboratory and engineering staff were obtained to conduct surveys of the major rivers. Their task is to establish standards of quality for these rivers and recommend the type and degree of waste treatment necessary to meet such standards. Many other disposal problems such as those caused by sewage effluent entering landlocked lakes or obnoxious odours arising from sugar beet wastes will also be investigated in the near future. Support for a pollution study was immediately forthcoming from the towns along rivers and from organizations such as the Fish and Game Association.

Engineering.

Municipal: A plan of extending our engineering services to the municipalities was initiated with gratifying response. Much time was spent studying and changing the design of new water and sewerage systems being installed in towns and villages. Proper design eliminates costly maintenance and operating expenses which small municipalities cannot afford.

Requests from town foremen, secretary-treasurers, and municipal councils for a short training course on the operation of these new utilities or town business increased to such a point that arrangements have been made to give an annual course each spring at the University of Alberta.

During the year the fluoridation of public water supplies to prevent dental caries was endorsed by the American Dental Association and many other national organizations of professional health workers. Since dental decay is one of the most widespread of all diseases and takes an enormous toll in terms of decayed teeth, toothaches, lost teeth and poor oral health, the sanitary engineering division took steps to investigate and gather data on the equipment and procedure required for the addition of fluorides. It is hoped that an experimental fluoridation unit will be installed in the near future.

Stream Pollution: Extensive tests on the physical, chemical and biological characteristics of the North Saskatchewan River were made during the latter months of this year. From the results obtained to date, it is apparent that the City of Edmonton will have to cease discharging raw and partially treated sewage into the river. An outbreak of typhoid fever along the North Saskatchewan River during the winter accented the need for stream sanitation.

Sixty-one certificates were issued by the Provincial Board of Health during 1950 covering waterworks, sewage works, and hospital construction. The designs were checked by the engineering staff of this Division.

Plumbing:

All plumbing inspection, other than that in the larger cities and towns, was performed by Provincial inspectors. The tremendous increase in plumbing construction between 1945 and 1950 is shown by the number of permits issued: 1945, 321; 1950, 1,613.

It is also evident that with more water and sewerage systems being installed this year than ever before, the work of plumbing inspection will materially increase during 1951 and continue at a high level for five or more years. The northern section of the Province, that is, the area north of Red Deer, is rapidly increasing in population and expanding industrially. This development has now increased to a point where more staff is required to give adequate service.

The following tables show that 8,144 fixtures were installed last year. Such plumbing is worth over 1½ million dollars. Our Division has protected this large public investment by assisting home owners to install their own systems correctly and by inspecting all work performed by registered plumbers. Another effect of our work is to lower the cost of maintaining this plumbing. But above all, there will be few plumbing fittings from which dangerous sewage effluent can leak.

The large number of permits issued for septic tanks and cess-pools indicate that modern plumbing on the farm is rapidly increasing. At each rural home, assistance is provided with the plumbing installation. Such assistance requires more time than just conducting inspection tests, and this is still another reason why the plumbing division has found work increasing to a point where additional staff is required.

It is particularly noticeable that during this year of extensive construction when no attempt whatsoever was made to make householders obtain permits, more inquiries were received from home owners and plumbers than ever before. This indicates that both the public and the plumbing trade feel our work is needed.

PLUMBING INSTALLATIONS

Premises	New Construction Total No. Fixtures	Reconstruction, Alter- ations & Extensions Total No. Fixtures
Dwellings and Apartment Houses	5,421	215
Hotels	634	293
Schools	301	68
Hospitals	182	94
Restaurants	196	17
Stores	179	34
Offices	104	27
Other Buildings	339	40
Total.....	7,356	788

Number of outside closets eliminated through installation of plumbing	921
Number of septic tanks installed	756
Number of cesspools	291

FIXTURES INSTALLED

Water Closets	2,243	Sinks	1,484
Baths	1,584	Special Fixtures	310
Laundry Tubs	202		
Wash Basins	2,321	Total	8,144

PERMITS

Applications Received	1,613
Permits Refused	
Permits Granted	1,613
Charges made for plumbing inspections	\$10,625.00

TABLE 1

Inspections Made	New Construction Total No. Fixtures	Reconstruction and Extensions	Permits Granted	Charges Made
Provincial	7,356	621	1,613	\$10,625.00
Edmonton	18,179	1,241	3,383	17,783.00
Calgary	10,918	1,000	3,350	13,770.10
Lethbridge	3,402	585	585	1,475.75
Medicine Hat	824	151	174	335.50
Red Deer	1,030	22	212	421.75
Drumheller	91	6	22	132.00
Hanna	21		21	
Banff	368	60	56	163.50
Jasper—not reported.				
Waterton	12	62	13	23.25
Total	42,201	2,686	9,429	\$44,729.85

TABLE 2

Location	W.C.	Lavatory Basin	Showers and Bath	Sinks	Laundry Tubs	Special Fixtures	Septic Tanks	Outside Toilets Eliminated
Provincial	2,243	2,321	1,584	1,484	202	310	756	921
Edmonton	5,480	5,410	3,354	3,580	296	1,300	6	41
Calgary	3,079	2,214	2,214	2,214	1,100	1,097		
Lethbridge	924	920	568	774	17	766	2	82
Medicine Hat	283	249	162	226	4	51	1	28
Red Deer	300	275	186	239	8	44	5	62
Drumheller	36	35	8	14		4		
Hanna	14	12	10	12		1		12
Banff	106	110	35	48	6	123	4	
Jasper—not reported.								
Waterton	21	21	9	12		11	9	3
Total	12,486	11,567	8,130	8,603	1,633	3,707	783	1,149

Sanitary Inspection.

During the year, the public requested more assistance from sanitary inspectors than from any other branch of the Division. Fortunately, during the latter months of 1949, the number of inspectors on the staff was increased from two to five. As a result, some 3,061 inspections were carried out as compared to 458 in the preceding year. The inspectors concentrated on improving conditions in establishments handling milk and food. Standards in many of these premises were found to be extremely low during the first inspections. The operators, however, appreciated and acted on the advice given them, and by the end of the year marked improvement had been made.

There was an urgent need for educating the employees of food establishments in sanitation. To meet this, our inspectors developed a general program of education to replace their routine inspections. Copies of all reports were forwarded to the local Boards of Health, so that they too could press for better restaurant and general sani-

tation. As usual, the inspectors also assisted the local boards with garbage disposal and other municipal problems.

A series of logging camp inspections were undertaken during the winter in conjunction with the Board of Industrial Relations. From a public health viewpoint, our camps are far below standard, and there is need for more inspection. One can visualize the size of this task after learning that some 800 camps operate in the Province each winter, and in most instances they are located in the more isolated regions.

Nine provisional and six final certificates were issued for new cemetery sites during the year. In addition, at the request of the Department of Lands and Forests, progress was made towards determining the exact location of cemeteries established in the early days of colonization. A total of 251 cemetery certificates were issued to protect these old cemeteries.

In general, a marked improvement was made in sanitation throughout the milk and food businesses in the towns, villages, and hamlets of the Province. Much of the credit for this change is due to the excellent co-operation given the sanitary inspectors by the Dairy Branch of the Department of Agriculture, the Licensing Office and Board of Industrial Relations of the Department of Industries and Labour, the Improvement District Inspectors, and the Canadian Restaurant Association.

SANITARY INSPECTIONS, 1950

Classes of Inspections	Complaint	Request	Routine	Follow-up	Total
1. Milk: Producers & Producer-Distributors	2	9	294	34	339
2. Milk: Milk Plants	.....	.....	67	19	86
3. Milk: Other than above	.....	.....	7	.....	7
4. Restaurants	5	32	1,373	251	1,661
5. Other Food Handling Establishments	3	18	66	3	90
6. Housing	4	8	2	.....	14
7. Industrial and Construction Camps	3	1	74	11	89
8. Hotels, Tourist Camps, Trailer Camps, Recreation Camps	1	21	222	7	251
9. Sewage Disposal: Private Systems	11	10	35	2	58
10. Sewage Disposal: Public Systems	2	3	.....	.....	5
11. Water Supplies: Private	4	93	75	11	183
12. Water Supplies: Public	4	15	17	2	38
13. Swimming Pools	.....	1	1	1	3
14. Cemetery Sites	.....	9	3	.....	12
15. Nuisance Grounds	3	20	35	1	59
16. Garbage Disposal	6	3	19	1	29
17. Town General Sanitation	.....	10	34	.....	44
18. Slaughter Houses	2	7	5	3	17
19. Stock Yards, Fur Farms, Piggeries, Livery Barns, etc.	5	3	3	1	12
20. Miscellaneous Inspections	11	29	17	7	64
Totals	66	292	2,349	354	3,061
Communicable Disease Investigations					10
Samples Submitted for Laboratory Examination:					
Water Bacteriological	173	Notices Issued			10
Water Chemical	52	Notices Complied with			4
Milk	125	Prosecutions			.....
Other Material	1				.....

Staff Changes.

Mr. D. R. Stanley, Provincial Sanitary Engineer, was granted leave of absence in September to take a two-year post-graduate course at Harvard University. He was replaced by Mr. J. A. Beveridge, M.S.E., Acting Provincial Sanitary Engineer, who joined the staff in July.

A stream sanitation programme commenced in July under the supervision of Mr. P. Bouthillier, a lecturer in Civil Engineering at the University of Alberta. Mr. W. A. Dexter, B.Sc., worked with

Mr. Bouthillier from July until September, at which time he obtained leave of absence to take post-graduate training for one term at the University of Toronto. Mr. H. Hogge, B.Sc., a chemical engineer, then joined the Division to continue work on the stream survey.

We wish to thank the Minister of Health and the Deputy Minister for the guidance and assistance they have given during the year. Further, we particularly appreciated the co-operation of the Canadian Restaurant Association, the National Association of Master Plumbers, the Alberta Fish and Game Association, the Imperial Oil Co. Ltd., and the British American Oil Company Ltd. All of these organizations provided useful and important assistance during the year.

Hospital and Medical Services Division

M. G. McCALLUM, M.D., D.P.H., *Director.*

The number of hospitals in the Province increased during 1950 by the opening of a new municipal hospital at Glendon. The Nordegg General Hospital was closed temporarily for part of the year.

The nursing situation showed improvement during the year, although there was still a shortage of approximately 200 nurses at the close of December. The nursing aide school in Calgary has trained 487 persons since it opened in January, 1946, to the end of December, 1950. There were 454 of these working in Alberta at the end of the year. The number of aides in training was 162. This increase in nursing aides has helped compensate for the shortage of nurses.

Approved Hospitals.

The approved hospitals in the Province as at December 31st are divided as follows:

	1950	1949
Catholic	31	31
Protestant	5	5
Municipal	50	49
Municipally operated	6	6
Industrial	3	3
Service Group	2	2
Lay Corporation	2	2
Provincial	1	1
	<hr/>	<hr/>
	100	99

The Isolation Hospitals in Edmonton and Calgary are not listed as separate from the city hospitals, and the hospital at Hythe is not listed as separate from Grande Prairie Municipal Hospital.

Statistics.

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

Table 1—Bed capacity, bed complement, patients under care during year, admissions, discharges, deaths, and stillbirths.

Table 2—Patient days, average stay in hospital, and occupancy.

Table 3—Staff.

Table 4—Operating expenditure.

Table 5—Operating revenue.

Table 6—Costs and earnings per patient day with percentage costs.

Table 7—Grants paid directly to hospitals.

Table 8—Hospitalization grant.

Table 9—Hospitalization of Alberta population by age and sex.

The information for hospitals in operation for a part of the year only is given separately at the end of each table. Not included are the hospitals at Fort Smith, N.W.T., and Lloydminster, Saskatchewan.

For convenient reference, the information in the above tables is herewith presented in summary form, together with corresponding entries for 1949 for comparative purposes.

HOSPITAL BEDS

	1950		1949	
	Capacity	Complement	Capacity	Complement
Beds and Cribs	4,992	5,982	4,684	5,617
Bassinets	945	1,107	910	1,079
	<u>5,937</u>	<u>7,089</u>	<u>5,594</u>	<u>6,696</u>
Beds per thousand population (excluding Bassinets)	5.6	6.7	5.4	6.4
Patients accommodated per bed per year .....	....	27.2*	....	28.6*

*Excluding newborn.

PATIENT DAYS

	1950	1949
Adults and children	1,468,312	1,436,927
Newborn	215,799	210,431
All patients	<u>1,684,111</u>	<u>1,647,358</u>

PATIENTS UNDER CARE DURING THE YEAR

	1950	1949
Adults and children	162,841	159,033
Average stay	8.8	9.2
New born	24,612	23,653
Average stay	8.9	9.1
Total	187,453	182,686
Average stay	8.8	9.2
Average in hospital daily	4,611	4,513
% of population in hospital daily .....	.52	.52
% of population admitted per year	20.5	20.5

STAFF

	1950	1949
Administration:		
Executive	108	118
Clerical	347	328
Professional:		
Salaried doctors	46	37
Internes	75	78
Technicians	177	150
Nurses:		
Graduate	1,104	1,033
Student	995	980
Probation	246	269
Affiliates	70	36
Nurses Aides	89	74
Dietitians:		
Graduate	23	22
Student	8	12
Orderlies and ward helpers	705	648
Other employees	1,814	1,795
Total Staff	<u>5,807</u>	<u>5,580</u>

BIRTHS

	1950	1949
Births (excluding Indian) in approved hospitals	23,875	23,039
Total stillbirths	329	388
Percentage of births in approved hospitals to total births in Province (excluding Indian)	97.9	97.2

NURSES IN TRAINING

	1950	1949
Number of schools	10	10
Number graduated	328	340

FINANCIAL*

	1950	1949
Total operating revenue	\$13,395,415.10	\$12,247,500.96
Total operating cost	13,266,924.74	11,924,949.73
Revenue per patient per day	7.87	8.14
Cost per patient per day	7.95	7.29
Salaries and wages	48.7%	48.0%
Supplies	35.2%	34.8%
Purchased services	3.0%	3.2%
Insurance	0.9%	0.9%
Depreciation	4.5%	4.2%
Repairs and replacements	3.6%	3.9%
Interest and exchange	2.5%	1.9%
Miscellaneous	1.6%	3.1%

PROVINCIAL GRANTS TO HOSPITALS AND LOCAL AUTHORITIES

	Days	Amount
Per Diem (70c) Grant	1,464,456	\$1,025,087.20
Maternity Grant	199,069	947,189.80
Pensioners Grant	132,456	673,095.60
*Hospitalization Grant to Local Authorities	113,441	203,334.25

*Came into effect June 1, 1950.

TABLE No. 1

Hospitals	Bed Capacity			Bed Complement			Patients Under Care During Year						Admissions		Discharges		Deaths		Stillbirths	
	Number			Number			M.	F.		M.	F.		M.	F.		Adults and Children	Newborn	Adults and Children		Newborn
	Beds	Bassinets	Total	Beds	Bassinets	Total		Adults and Children			Newborn			Total	Total					
							M.	F.	M.	F.	M.	F.								
Athabasca, Municipal	27	7	34	33	9	42	479	646	97	576	743	1,319	1,103	182	10	7	5			
Banff, Mineral Springs	42	4	46	62	6	68	408	434	29	39	437	910	794	65	11	1	4			
Barrhead, St. Joseph's	24	7	31	34	10	44	532	776	94	626	870	1,496	1,288	181	17	1	1			
Bassano, Municipal	26	6	32	24	6	30	286	406	46	332	449	781	677	87	18	1	1			
Beaverlodge, Municipal	9	6	15	12	6	18	159	292	55	214	342	556	444	101	11	4	2			
Bentley, Municipal	15	7	22	18	5	23	175	268	28	203	291	494	434	49	4	1	1			
Berwyn, Municipal	11	4	15	24	4	28	188	257	42	33	230	520	433	72	2	2	4			
Blairmore, Crow's Nest Pass, Mun.	72	10	82	84	10	94	706	1,099	104	141	810	2,050	1,776	241	32	2	2			
Bonnyville, St. Louis	28	5	33	40	9	49	456	742	97	108	553	1,403	1,180	201	22	6	2			
Brooks, Municipal	31	7	38	36	10	46	500	729	98	116	598	1,443	1,215	212	10	2	2			
Cadomin, General	11	3	14	11	3	14	55	87	21	76	105	181	140	38	2	2	24			
Calgary, General	301	60	361	320	60	380	3,976	6,928	1,015	4,991	7,885	12,876	10,659	1,934	408	38	2			
Calgary, Isolation	352	40	392	352	40	392	232	239	232	232	239	471	445	441	1	1	31			
Calgary, Holy Cross	50	28	78	60	18	78	3,733	6,235	944	4,677	7,132	11,809	9,771	1,808	153	25	7			
Calgary, Junior Red Cross	25	28	53	33	25	58	81	91	81	150	498	648	325	305	2	2	7			
Calgary, Salvation Army Grace	97	20	117	100	25	125	1,047	1,673	237	185	1,284	3,142	2,681	413	41	8	5			
Camrose, St. Mary's	12	4	16	14	4	18	209	216	35	22	244	482	424	57	1	1	4			
Canmore, Canmore	24	6	30	32	9	41	462	836	87	100	549	1,487	1,283	186	13	4	4			
Cardston, Municipal	20	4	24	18	2	20	94	116	12	7	106	229	207	19	2	1	1			
Carmanfay, Little Bow Municipal	25	8	33	28	8	36	333	506	33	44	366	916	821	76	12	2	1			
Castor, Our Lady of the Rosary	9	3	12	13	5	18	92	128	15	107	145	252	213	22	8	1	2			
Cereal, Municipal	42	6	48	45	6	51	446	691	66	53	512	744	1,116	115	17	5	2			
Claresholm, Municipal	15	3	18	21	6	27	94	193	33	29	127	222	349	62	4	1	1			
Cold Lake, John Neil	22	8	30	24	7	31	164	244	30	25	194	269	463	53	2	2	1			
Consort, Municipal	18	3	21	22	4	26	203	272	39	242	295	537	461	60	12	2	2			
Coronation, Municipal	16	2	18	22	6	28	186	251	27	20	213	484	426	45	11	1	2			
Daysland, Providence	14	7	21	15	1	16	97	177	7	10	104	187	291	17	3	1	2			
Desmarais, St. Martin's	25	7	32	27	8	35	261	421	53	64	314	799	666	113	16	1	2			
Didsbury, Municipal	25	7	32	27	8	35	261	421	53	64	314	799	666	113	16	1	2			

65	7	72	80	13	93	1,091	1,369	190	168	1,281	1,537	2,818	2,406	350	2,366	343	48	5	4
16	5	21	20	8	28	425	531	48	63	473	594	1,067	940	110	930	109	11	.....	3
14	8	22	77	.....	77	.....	131	65	68	65	199	264	129	128	123	125	.....	.....	1
212	25	237	391	25	416	3,597	5,046	500	484	4,097	5,330	9,627	8,470	959	8,281	951	175	18	11
.....	.....	.....	.....	.....	.....	199	183	.....	.....	382	262	.....	224	.....	.....	.....	20	.....	.....
234	64	298	245	62	307	3,658	6,610	1,010	1,010	4,668	7,620	12,288	10,094	1,984	9,963	1,954	121	29	15
.....
460	80	540	560	80	640	5,615	9,007	1,499	1,382	7,114	10,389	17,503	14,296	2,822	14,060	2,779	218	45	29
.....	.....	.....	.....	.....	.....	404	426	.....	.....	404	426	830	803	.....	772	.....	14	.....	.....
.....	.....	.....	.....	.....	.....	41	40	.....	.....	41	40	81	52	.....	37	.....	8	.....	.....
576	30	606	615	30	645	4,367	4,683	457	460	4,824	5,143	9,967	8,819	894	8,600	887	211	16	11
.....	.....	.....	.....	.....	.....	not av	ailable	.....	.....	not available	not available	1,877	1,764	.....	1,684	.....	77	.....	.....
.....	.....	.....	.....	.....	.....	not av	ailable	.....	.....	not available	not available	92	84	.....	85	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	not av	ailable	.....	.....	not available	not available	68	47	.....	45	.....	3	.....	.....
37	5	42	37	5	42	490	472	93	83	583	555	1,138	944	174	931	164	9	6	4
26	6	32	44	10	54	555	858	57	65	612	923	1,535	1,387	119	1,376	119	20	1	3
16	6	22	17	6	23	127	201	27	24	154	225	397	317	50	313	49	5	.....	.....
23	4	27	20	5	25	122	201	27	20	149	221	370	310	47	310	45	7	2	2
7	3	10	30	10	40	382	542	79	78	461	620	1,081	906	154	896	154	13	1	1
.....
28	6	34	29	7	36	185	243	28	29	213	272	485	419	56	416	54	8	3	.....
16	4	20	32	6	38	124	212	27	30	151	242	393	309	55	306	55	3	1	.....
15	5	20	26	6	32	356	471	40	24	396	495	891	816	62	810	60	9	3	.....
79	20	99	80	16	96	800	1,100	147	141	947	1,241	2,188	1,878	284	1,838	273	29	3	3
.....	.....	.....	.....	.....	.....	94	121	23	12	117	133	250	213	35	203	34	4	.....	.....
.....
35	9	44	35	9	44	300	473	73	78	373	551	924	754	151	735	149	22	1	5
10	6	16	27	8	35	222	328	44	30	266	358	624	536	72	534	69	6	.....	.....
41	12	53	65	13	78	1,107	1,370	157	156	1,264	1,526	2,790	2,441	309	2,398	295	31	1	.....
57	15	72	52	15	67	690	1,043	128	111	818	1,154	1,972	1,706	234	1,670	235	30	6	3
36	6	42	41	8	49	387	562	85	63	472	625	1,097	933	145	908	142	25	2	8
.....
10	4	14	9	2	11	148	200	12	15	160	215	375	345	27	337	27	5	.....	.....
15	4	19	15	2	17	254	214	39	30	293	244	537	462	69	450	68	10	.....	.....
27	6	33	30	8	38	337	572	78	59	415	631	1,046	896	134	876	133	14	.....	.....
50	16	66	54	12	66	611	1,069	139	131	750	1,200	1,950	1,648	264	1,608	265	39	2	5
23	8	31	32	8	40	410	589	91	78	501	667	1,168	985	164	964	162	14	4	3
.....
95	10	105	96	12	108	1,060	1,445	100	95	1,160	1,540	2,700	2,454	186	2,417	181	46	8	2
86	8	94	111	18	129	1,468	2,308	289	265	1,757	2,573	4,330	3,685	543	3,610	520	83	16	9
16	.....	.....	.....	.....	.....	63	42	.....	.....	63	42	105	94	.....	103	.....	.....	.....	.....
98	18	116	132	31	163	1,740	2,907	325	344	2,065	3,251	5,316	4,557	655	4,486	647	72	6	11
14	6	20	19	6	25	232	336	42	47	274	383	657	556	88	546	87	14	1	1
.....
29	4	33	32	8	40	521	865	117	110	638	975	1,613	1,362	225	1,353	212	13	10	7
8	.....	.....	.....	.....	.....	113	229	26	33	139	262	401	336	59	323	58	8	1	2
10	4	14	14	5	19	193	286	58	38	251	324	575	478	96	463	91	9	3	.....

TABLE No. 1—Continued

Hospitals	Bed Capacity			Bed Complement			Patients Under Care During Year						Admissions		Discharges		Deaths		Stillbirths	
	Number		Total	Number		Total	Adults and Children		Newborn		Total		Adults and Children		Newborn		Adults and Children			Newborn
	Beds	Bassinetts		Beds	Bassinetts		M.	F.	M.	F.	M.	F.	Total	M.	F.	M.	F.	Total		
Mannville, Municipal	15	5	20	22	5	27	263	343	47	42	310	385	695	599	88	88	4	4	5	
Mayerthorpe, Municipal	26	8	34	26	8	34	441	487	58	46	499	533	1,032	917	103	102	4	4	1	
Medicine Hat, General	118	10	128	150	35	185	1,761	2,647	336	345	2,097	2,992	5,089	4,327	669	649	111	16	6	
Medicine Hat, Isolation	11	11	22	11	11	22	2	4	2	2	4	4	6	5	6	6	6	1	1	1
Mundare, General	26	4	30	27	5	32	310	451	37	29	347	480	827	742	64	63	15	7	1	
Myrnam, Municipal	13	3	16	15	5	20	219	300	23	23	242	323	565	514	46	45	7	7	1	
Olds, Municipal	31	9	40	34	10	44	340	511	84	90	424	601	1,025	837	170	162	23	7	1	
Oyen, Municipal	17	5	22	22	5	27	158	228	26	20	184	248	432	374	44	46	1	1	1	
Peace River, Municipal	37	9	46	47	10	57	483	666	78	73	561	739	1,300	1,129	146	145	17	17	1	
Pincher Creek, St. Vincent's	64	6	70	60	12	72	499	677	68	68	567	745	1,312	1,156	132	132	22	22	2	
Ponoka, Municipal	26	10	36	28	9	37	427	743	103	101	530	844	1,374	1,148	198	197	20	4	2	
Provost, Municipal	13	5	18	22	8	30	264	422	60	43	324	465	789	674	100	99	8	2	1	
Radway, St. Joseph's	14	6	20	20	6	26	256	436	77	77	333	513	846	688	150	141	8	4	1	
Raymond, Municipal	18	5	23	18	7	25	165	319	63	38	228	357	585	477	99	95	4	4	1	
Red Deer, Municipal	47	11	58	70	19	89	1,057	1,731	230	201	1,287	1,932	3,219	2,751	419	2,683	48	7	1	
Rimbey, Municipal	19	8	27	22	8	30	321	519	59	55	380	574	954	827	107	825	112	4	1	
Rocky Mountain House, Municipal	22	6	28	23	8	31	428	481	64	58	492	539	1,031	895	121	874	18	2	1	
Smoky Lake, George McDougall	15	5	20	19	6	25	126	226	44	46	170	272	442	346	89	87	1	2	1	
Spirit River, Holy Cross	27	4	31	36	8	44	589	751	67	64	656	815	1,471	1,321	131	1,301	17	2	3	
Stettler, Municipal	56	8	64	56	12	68	761	1,141	114	117	875	1,258	2,133	1,861	227	214	34	5	2	
St. Paul, St. Theresa	42	5	47	66	24	90	727	1,178	133	135	860	1,313	2,173	1,886	264	1,851	256	6	2	
Taber, Municipal	37	8	45	43	12	55	470	768	139	154	609	922	1,531	1,213	285	1,198	23	6	7	
Three Hills, Municipal	25	10	35	25	12	37	252	501	47	69	299	570	869	745	113	729	12	3	3	
Tofield, Municipal	21	5	26	24	5	29	304	518	52	44	356	562	918	806	92	795	10	2	1	
Trochu, St. Mary's	29	6	35	28	6	34	78	195	19	20	97	215	312	266	38	264	5	38	1	
Turner Valley, Oilfields General	13	6	19	20	8	28	288	311	32	31	320	342	662	591	61	578	9	9	1	
Two Hills, Municipal	25	10	35	28	10	38	266	479	50	38	316	517	833	734	86	723	2	86	1	

Vegreville, General	71	14	85	80	16	96	884	1,364	129	91	1,013	1,455	2,468	2,211	216	2,181	216	37	2	1
Vermilion, Municipal	44	6	50	42	10	52	357	636	81	83	438	719	1,157	974	160	956	160	21	2	2
Viking, Municipal	16	4	20	23	7	30	248	330	41	37	289	367	656	565	74	557	74	11	3	...
Vilna, Our Lady's	14	3	17	18	4	22	158	275	42	53	200	328	528	427	92	414	92	12	2	2
Vulcan, Municipal	32	8	40	37	7	44	376	588	71	68	447	656	1,103	952	139	935	139	10	6	2
Wainwright, Municipal	48	14	62	51	10	61	588	719	85	65	673	784	1,457	1,287	147	1,257	147	23	7	2
Westlock, Immaculata	30	10	40	44	9	53	891	1,269	155	164	1,046	1,433	2,479	2,124	306	2,101	306	27	8	6
Wetaskiwin, Community	46	12	58	47	15	62	930	1,322	188	200	1,118	1,522	2,640	2,220	379	2,168	379	52	12	7
Willingdon, General	13	3	16	25	4	29	230	417	38	32	268	449	717	630	68	629	68	7	1	...
Total for hospitals operating full year	4,968	933	5,901	5,955	1,098	7,053	64,059	96,524	12,554	12,024	76,613	108,548	187,198	159,183	24,051	156,173	24,051	2,957	447	328
Hospitals in operation only part of the year:																				
Glendon (7 months)	10	7	17	13	6	19	69	72	7	9	76	81	157	141	16	134	16	1	...	...
Nordegg (6 months)	14	5	19	14	3	17	43	37	9	9	52	46	98	77	17	78	17	2	...	1
Grand Total	4,992	945	5,937	5,982	1,107	7,089	64,171	96,633	12,570	12,042	76,741	108,675	187,453	159,401	24,064	156,385	24,064	2,960	447	329
Less D.V.A., Orthopaedic, Polio, and T.B. Division Cases	383	...	383	626	...	626	...	...	...	...	...	...	2,672	2,343	...	2,195	...	109	...	...
	4,609	945	5,554	5,356	1,107	6,463	...	...	...	...	...	...	184,781	157,058	24,084	154,190	24,084	2,851	447	329

TABLE No. 2

Hospitals	PATIENT DAYS, 1950										Occu- pancy
	Patient Days During 1950					Patient Days of Patients Dis- charged or Deceased					
	Adults and Children		Newborn		Total	Adults and Children		Newborn		Total	
	Adults and Children	Newborn	Adults and Children	Newborn		Adults and Children	Newborn	Adults and Children	Newborn		
Athabasca, Municipal	5,775	1,540	7,315	5,788	1,577	7,365	5.2	8.3	5.7	58.6	
Banff, Mineral Springs	18,212	587	18,799	20,148	598	20,746	25.2	9.1	24.0	118.8	
Barrhead, St. Joseph's	8,007	1,359	9,366	8,122	1,372	9,494	6.3	7.3	6.4	91.4	
Bassano, Municipal	4,968	636	5,604	8,228	672	8,900	12.1	7.8	11.6	52.3	
Beaverlodge, Municipal	2,825	517	3,342	2,877	533	3,410	6.4	5.1	6.2	86.0	
Bentley, Municipal	2,736	448	3,184	2,680	451	3,131	6.2	9.0	6.5	50.0	
Berwyn, Municipal	3,849	705	4,554	3,722	729	4,451	8.5	10.0	8.7	95.9	
Blairmore, Crow's Nest Pass Municipal	14,435	1,661	16,096	13,885	1,651	15,536	7.8	6.8	7.7	54.9	
Bonnyville, St. Louis	8,020	1,750	9,770	8,046	1,751	9,797	6.8	8.7	7.0	78.5	
Brooks, Municipal	7,366	1,340	8,706	7,559	1,341	8,900	6.2	6.3	6.3	65.1	
Cadomin, General	937	444	1,381	907	446	1,353	6.4	11.4	7.5	23.3	
Calgary, General	99,811	17,709	117,520	109,936	18,184	128,120	10.3	9.4	10.1	98.3	
Calgary, Isolation	8,222		8,222	8,086		8,086	18.3		18.3		
Calgary, Holy Cross	91,284	1,6515	107,799	91,408	16,395	107,803	9.4	9.1	9.3	71.0	
Calgary, Junior Red Cross	20,089		20,089	19,091		19,091	159.1		159.1	110.1	
Calgary, Salvation Army Grace	3,593	3,428	7,021	3,316	3,402	6,718	10.1	11.0	10.5	39.4	
Camrose, St. Mary's	16,762	4,030	20,792	16,805	4,075	20,880	6.3	9.9	6.7	47.3	
Canmore, Canmore	2,541	345	2,886	2,511	345	2,856	6.0	6.1	6.0	58.0	
Cardston, Municipal	7,020	1,521	8,541	7,121	1,508	8,629	5.5	8.2	5.9	80.1	
Carmanagay, Little Bow Municipal	1,580	154	1,734	1,592	154	1,746	7.6	8.1	7.7	21.6	
Castor, Our Lady of the Rosary	5,233	613	5,846	5,171	606	5,777	6.3	8.2	6.4	57.3	
Cereal, Municipal	2,485	259	2,744	2,663	255	2,918	12.2	8.2	11.7	75.6	
Claresholm, Municipal	10,237	1,268	11,505	10,209	1,216	11,425	9.1	10.5	9.3	66.8	
Cold Lake, John Neil	1,789	530	2,319	1,785	526	2,311	6.3	8.8	6.8	32.7	
Consort, Municipal	4,670	492	5,162	4,235	517	4,752	10.7	9.4	10.5	58.2	
Coronation, Municipal	4,432	590	5,022	4,629	603	5,232	10.0	9.7	9.9	67.4	
Daysland, Providence	3,145	476	3,621	2,685	485	3,170	6.2	10.3	6.6	53.8	
Desmarais, St. Martin's	2,961	163	3,124	2,395	163	2,558	8.8	9.6	8.8	57.9	
Didsbury, Municipal	6,169	979	7,148	5,381	990	6,371	8.1	8.6	8.2	67.6	
Drumheller, Municipal	21,114	2,809	23,923	21,875	2,778	24,653	9.1	8.0	8.9	89.0	
Eckville, Municipal	5,583	870	6,453	5,658	859	6,517	6.0	7.7	6.2	95.6	

Edmonton, Beulah Home	1,780	2,219	3,999	1,723	2,214	3,937	14.1	17.7	15.9	34.8
Edmonton, General	79,064	8,408	87,472	78,136	8,218	86,354	9.2	8.5	9.2	166.4
(a) T.B. Division	49,712	16,215	49,712	40,247	16,204	40,247	164.9	164.9	164.9	89.0
Edmonton, Misericordia	76,034	26,148	92,249	76,529	16,204	92,733	6.6	8.2	7.7	92.3
Edmonton, Royal Alexandra	131,733	157,881	157,881	131,981	25,255	157,236	9.2	8.9	9.2	92.3
(a) Isolation	10,765	10,765	10,765	10,626	13.5	10,626	13.5	13.5	13.5	81.7
(b) T.B. Division	12,545	8,315	12,545	8,952	198.9	8,952	198.9	198.9	198.9	81.7
Edmonton, University of Alberta	112,799	8,315	121,114	111,874	8,437	120,311	12.7	9.3	12.4	81.7
(a) D.V.A.	47,462	4,618	47,462	Not available	Not available	Not available	199.0	199.0	199.0	81.7
(b) Polio	4,618	4,618	4,618	4,618	4,618	4,618	199.0	199.0	199.0	81.7
(c) T.B.	6,893	6,893	6,893	Not available	Not available	Not available	199.0	199.0	199.0	81.7
Edson, St. John's	7,122	1,769	8,891	7,007	1,748	8,755	7.5	10.3	7.9	52.7
Elk Point, Municipal	9,238	985	10,223	9,386	991	10,377	5.7	7.3	6.9	97.3
Elmora, Municipal	2,854	495	3,349	2,712	490	3,202	8.5	10.0	8.7	48.9
Empress, Municipal	4,471	497	4,968	4,869	497	5,366	15.2	10.6	14.7	53.2
Fairview, Municipal	5,427	1,188	6,615	5,530	1,192	6,722	6.1	7.7	6.3	212.4
Ft. McMurray, St. Gabriel's	4,590	591	5,181	4,443	593	5,036	10.5	10.4	10.5	44.9
Ft. Vermillion, St. Theresa	9,818	440	10,258	6,603	446	7,049	21.3	7.9	19.3	168.1
Galahad, St. Joseph's	4,160	588	4,748	4,113	587	4,700	5.0	9.3	5.3	76.0
Grande Prairie, Municipal	15,134	2,040	17,174	14,023	2,026	16,049	7.5	7.2	7.5	57.9
Hythe, Sub. of Grande Prairie	1,565	282	1,847	1,156	286	1,442	5.6	8.4	5.9	57.9
Hanna, Municipal	6,685	1,343	8,028	8,678	1,376	10,054	11.5	9.2	11.1	52.3
Hardisty, St. Anne's	4,558	765	5,323	4,560	745	5,305	8.4	10.1	8.7	124.9
High Prairie, Providence	17,438	2,427	19,865	17,605	2,389	19,994	7.8	7.9	7.3	116.5
High River, Municipal	12,397	1,930	14,327	12,246	1,970	14,216	7.2	8.3	7.3	59.6
Innisfail, Municipal	8,880	1,390	10,270	8,967	1,338	10,305	9.6	9.2	9.5	67.6
Islay, Municipal	2,855	301	3,156	2,794	292	3,086	8.2	10.8	8.4	78.2
Jasper, Seton	3,113	791	3,904	3,117	779	3,896	6.8	11.4	7.4	56.9
Killiam, General	6,098	1,422	7,520	5,991	1,415	7,406	6.7	10.5	7.2	61.9
Lacombe, Municipal	12,842	2,466	15,308	12,759	2,512	15,271	7.7	9.4	7.8	70.4
Lac la Biche, St. Catherine's	6,027	1,652	7,679	5,938	1,659	7,597	6.1	10.0	6.7	71.8
Lamont, Archer Memorial	16,429	1,575	18,004	16,437	1,584	18,021	6.7	8.3	6.8	47.4
Lethbridge, Galt	33,439	4,822	38,261	32,410	4,819	37,229	8.8	9.0	8.8	106.5
Lethbridge, Isolation	1,550	1,550	1,550	1,583	1,583	1,583	15.4	15.4	15.4	26.5
Lethbridge, St. Michael's General	37,942	5,747	43,689	37,638	5,783	43,421	8.2	8.9	8.3	106.1
Macleod, Municipal	4,399	911	5,310	4,449	891	5,346	7.9	10.2	8.3	86.1
McLennan, Sacred Heart	8,820	1,821	10,641	8,734	1,811	10,545	6.4	8.1	6.6	83.3
Magrath, Municipal	2,540	444	2,984	2,372	436	2,808	7.2	7.4	7.2	87.0
Manning, Battle River	2,547	767	3,314	2,520	757	3,277	5.3	8.4	5.8	69.8
Mannville, Municipal	4,214	824	5,038	4,145	824	4,969	6.9	9.6	7.3	77.0
Mayerthorpe, Municipal	5,351	1,053	6,404	5,384	1,055	6,439	5.9	10.2	6.3	56.4

TABLE No. 2—Continued

Hospitals	PATIENT DAYS, 1950										Occu- pancy
	Patient Days During 1950					Patient Days of Patients Dis- charged or Deceased					
	Adults and Children		Newborn		Total	Adults and Children		Newborn		Total	
	Adults and Children	Newborn	Adults and Children	Newborn		Adults and Children	Newborn				
Medicine Hat, General	34,635	6,097	40,732	33,383	6,052	39,435	7.7	9.1	7.9	80.4	
Medicine Hat, Isolation	54	.....	54	74	.....	74	12.3	.....	12.3	1.3
Mundare, General	5,508	599	6,107	5,634	593	6,227	7.5	9.4	7.6	58.0	
Myrnam, Municipal	3,214	388	3,602	3,194	388	3,582	6.2	8.4	6.4	67.7	
Olds, Municipal	7,513	1,598	9,111	7,612	1,524	9,136	9.1	9.0	9.1	66.4	
Oyen, Municipal	2,780	472	3,252	2,742	486	3,228	7.1	10.5	7.6	44.8	
Peace River, Municipal	10,156	1,459	11,615	10,428	1,451	11,879	9.2	10.0	9.3	75.2	
Pincher Creek, St. Vincent's	8,706	1,278	9,984	8,249	1,283	9,532	7.2	9.6	7.4	37.3	
Ponoka, Municipal	7,185	1,617	8,802	7,295	1,621	8,916	6.3	8.1	6.6	75.7	
Provost, Municipal	4,209	610	4,819	4,280	614	4,894	6.3	6.1	6.3	88.7	
Radway, St. Joseph's	3,926	1,598	5,524	3,841	1,554	5,395	5.6	7.9	6.5	76.8	
Raymond, Municipal	3,018	723	3,741	2,983	723	3,706	6.3	7.3	6.4	45.9	
Red Deer, Municipal	19,266	3,924	23,190	19,108	4,271	23,379	7.0	10.1	7.4	112.3	
Rimbey, Municipal	5,581	1,008	6,589	5,590	1,061	6,651	6.7	9.5	7.1	80.5	
Rocky Mountain House, Municipal	6,417	1,180	7,597	6,368	1,163	7,531	7.1	9.9	7.5	79.9	
Smoky Lake, George McDougall	2,165	835	3,000	2,223	836	3,059	6.4	9.4	7.0	39.5	
Spirit River, Holy Cross	8,640	1,273	9,913	8,468	1,256	9,724	6.4	9.9	6.7	87.7	
Stettler, Municipal	17,348	1,892	19,240	16,712	1,828	18,540	9.0	8.3	8.9	84.9	
St. Paul, St. Theresa	12,562	2,657	15,219	12,358	2,634	14,992	6.6	10.0	7.0	81.9	
Taber, Municipal	9,317	2,330	11,647	9,273	2,294	11,567	7.6	7.9	7.7	69.0	
Three Hills, Municipal	4,765	1,103	5,868	4,656	1,094	5,750	6.3	9.7	6.7	52.2	
Tofield, Municipal	5,367	714	6,081	5,342	717	6,059	6.6	7.5	6.7	70.0	
Trochu, St. Mary's	2,307	374	2,681	2,464	379	2,843	9.1	10.0	9.3	21.8	
Turner Valley, Oilfields General	5,630	590	6,220	5,656	576	6,232	9.6	9.6	9.6	118.7	
Two Hills, Municipal	4,617	680	5,297	4,622	683	5,305	6.4	7.9	6.5	50.6	
Vegreville, General	18,280	2,223	20,503	18,140	2,213	20,353	8.2	10.1	8.4	70.5	
Vermillion, Municipal	7,521	1,484	9,005	7,941	1,438	9,379	8.1	8.9	8.1	46.8	
Viking, Municipal	4,264	738	5,002	4,201	739	4,940	7.4	9.9	7.7	73.0	
Vilna, Our Lady's	2,636	996	3,632	2,509	989	3,498	5.8	10.6	6.7	51.6	
Vulcan, Municipal	6,244	1,101	7,345	6,083	1,117	7,200	6.4	8.1	6.6	53.5	

Wainwright, Municipal	11,470	1,339	12,809	11,161	1,289	12,450	8.7	8.9	8.7	65.5
Westlock, Immaculata	12,539	2,867	15,406	12,510	2,936	15,446	5.9	9.3	6.3	114.5
Wetaskiwin, Community	12,826	2,641	15,467	12,743	2,592	15,335	5.7	6.8	5.9	76.4
Willingdon, General	4,555	782	5,337	4,585	788	5,373	7.2	11.2	7.6	96.0
Total	1,466,979	215,539	1,682,518	1,403,797	214,989	1,618,786	8.8	8.9	8.8	80.9
Hospitals in Operation for only part of the year:										
Glendon, Municipal (7 months)	715	134	849	691	125	816	5.1	8.9	5.5	33.4
Nordegg, General (6 months)	618	126	744	678	126	804	8.5	7.0	8.2	24.4
Grand Total	1,468,312	215,799	1,684,111	*1,405,166	215,240	*1,620,406	*8.8	8.9	*8.8	80.8
Less D.V.A., Orthopaedic, Polio and T.B. Division cases	141,319		141,319	*72,908		*72,908				
	1,326,993	215,799	1,542,792	1,332,258	215,240	1,547,498	8.5	8.9	8.5	79.1

*Does not include D.V.A. and T.B. Division of University Hospital (not available).

TABLE No. 3—STAFF

Hospital	Administ'n		Professional			Nurses					Dietitians		Others		Total	Medical Staff	No. of Doctors	Training School	Affiliation with other institutions	Graduated during the year
	Executive	Clerical	Salared Doctors	Internes	Technicians	Graduate	Student	Probationers	Affiliates	Nurses Aide	Graduate	Student	Orderlies and Ward Helpers	All Other Employees						
Athabasca, Municipal	1		2												19	Yes	2	No	No	
Banff, Mineral Springs	1		5		4	15							14	29	69	Yes	6	No	No	
Barrhead, St. Joseph's	1		2			3							13	9	28	No		No	No	
Bassano, Municipal			1			6							3	6	16	No		No	No	
Beaverlodge, Municipal	1					4							2	5	12	No		No	No	
Bentley, Municipal			1			5							1	2	9	No		No	No	
Berwyn, Municipal	1					3							2	3	9	No		No	No	
Blairmore, Crows Nest Pass Municipal	1		2		1	10							12	20	46	No		No	No	
Bonnyville, St. Louis						3							9	9	21	No		No	No	
Brooks, Municipal	2					11							7	6	26	No		No	No	
Cadomin, General	1		1			1								1	5	No		No	No	
Calgary, General	3		32	1	16	63	141	32	4				10	134	441	Yes	164	Yes	Yes	58
Calgary, Holy Cross	4		33	2	13	68	153	35	2				19	134	467	Yes	158	Yes	Yes	49
Calgary, Junior Red Cross	1		1		3	16							6	11	40	Yes	17	No	Yes	
Calgary, Salvation Army Grace	1		1			4	3							5	14	Yes	10	No	No	
Camrose, St. Mary's	1		6		4	15							14	15	55	Yes	10	No	No	
Cannore, Cannore	1		1			4								3	12	Yes	3	No	No	
Cardston, Municipal	1		1			8								8	18	No		No	No	
Carmangay, Little Bow Municipal	4		1			4								4	14	No		No	No	
Castor, Our Lady of the Rosary	1		1		2	4								12	20	No		No	No	
Cereal, Municipal	1					2							5	1	9	No		No	No	
Clareholm, Municipal	1		1			9							3	8	24	Yes	3	No	No	
Cold Lake, John Neil	1		1			3								7	12	No		No	No	
Consort, Municipal	1		1			5							2	6	14	Yes	2	No	No	
Coronation, Municipal	1					4							4	5	14	No		No	No	
Daysland, Providence	1		1		2	4							2	6	16	No		No	No	
Desmarais, St. Martin's						1							2		3	No		No	No	
Disbury, Municipal	1		1		1	6							5	7	21	No		No	No	
Drumheller, Municipal	2		3		3	20							2	28	78	Yes	10	No	No	
Eckville, Municipal	1		1			5						1	4	5	17	No		No	No	

Edmonton, Beulah Home	1	1	3	9	19	2	118	30	6	47	3	13	No	No	161	38
Edmonton, General	4	30	4	15	10	58	122	27	2	26	1	445	Yes	Yes	101	34
Edmonton, Misericordia	4	12	4	20	29	125	164	34	7	74	3	395	Yes	Yes	187	55
Edmonton, Royal Alexandra	2	52	4	27	30	84	130	22	8	94	6	719	Yes	Yes	83	44
Edmonton, University of Alberta	5	62	15	27	30	84	130	22	8	94	6	730	Yes	Yes	83	44
Edson, St. John's	2	2	.....	.....	.....	5	.....	.....	.....	3	.....	9	No	No	.....	.....
Elk Point, Municipal	2	2	.....	.....	.....	5	.....	.....	.....	7	.....	6	No	No	.....	.....
Elora, Municipal	1	1	.....	.....	.....	4	.....	.....	.....	1	.....	5	No	No	.....	.....
Empress, Municipal	1	1	.....	.....	.....	3	.....	.....	.....	5	.....	5	No	No	.....	.....
Fairview, Municipal	1	1	.....	.....	.....	6	.....	.....	.....	7	.....	1	No	No	.....	.....
Ft. McMurray, St. Gabriel's	2	1	.....	.....	.....	1	.....	.....	.....	2	.....	9	No	No	.....	.....
Ft. Vermilion, St. Theresa	1	1	.....	.....	.....	1	.....	5	.....	4	.....	3	No	No	.....	.....
Galahad, St. Joseph's	1	1	.....	.....	.....	3	.....	.....	.....	3	.....	5	No	No	.....	.....
Glendon, Municipal	1	1	.....	.....	.....	1	.....	2	.....	5	.....	3	No	No	.....	.....
Grande Prairie, Municipal	1	2	.....	.....	.....	17	.....	.....	.....	7	.....	13	Yes	Yes	5	.....
Hythe, Sub. of Grande Prairie	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3	No	No	.....	.....
Hanna, Municipal	1	1	.....	.....	.....	10	.....	.....	9	15	.....	2	Yes	Yes	3	.....
Hardisty, St. Anne's	1	1	.....	.....	.....	5	.....	.....	.....	5	.....	3	No	No	.....	.....
High Prairie, Providence	1	3	.....	.....	.....	8	.....	.....	.....	17	.....	21	No	No	.....	.....
High River, Municipal	1	1	.....	.....	.....	18	.....	.....	.....	14	.....	34	No	No	.....	.....
Innisfail, Municipal	1	1	.....	.....	.....	9	.....	.....	.....	.....	.....	16	Yes	Yes	5	.....
Islay, Municipal	1	1	.....	.....	.....	3	.....	.....	.....	.....	.....	4	Yes	Yes	2	.....
Jasper, Seton	1	1	.....	.....	.....	4	.....	.....	.....	2	.....	4	No	No	.....	.....
Killam, General	1	1	.....	.....	.....	5	.....	.....	.....	3	.....	6	No	No	.....	.....
Lacombe, Municipal	1	1	.....	.....	.....	15	.....	.....	.....	7	.....	18	No	No	.....	.....
Lac la Biche, St. Catherine's	1	1	.....	.....	.....	3	.....	.....	.....	4	.....	8	No	No	.....	.....
Lamont, Archer Memorial	1	6	.....	.....	.....	8	36	16	.....	.....	.....	39	Yes	Yes	5	14
Lethbridge, Galt	4	6	1	.....	4	16	53	24	.....	16	.....	42	Yes	Yes	39	14
Lethbridge, Isolation	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	No	No	.....	.....
Lethbridge, St. Michael's General	4	10	2	1	6	39	.....	.....	.....	38	.....	41	Yes	Yes	40	.....
McLennan, Sacred Heart	.....	.....	.....	.....	.....	5	.....	.....	.....	6	.....	11	No	No	.....	.....
Magrath, Municipal	1	1	.....	.....	.....	5	.....	.....	.....	4	.....	4	No	No	.....	.....
Manning, Battle River	.....	.....	.....	.....	.....	3	.....	.....	.....	3	.....	5	No	No	.....	.....
Mannville, Municipal	.....	.....	.....	.....	.....	5	.....	.....	.....	4	.....	3	No	No	.....	.....
Mayerthorpe, Municipal	1	1	.....	.....	.....	1	.....	.....	.....	6	.....	8	No	No	.....	.....
Medicine Hat, General	2	8	.....	.....	2	26	45	12	.....	27	.....	51	Yes	Yes	14	12
Mundare, General	1	1	.....	.....	.....	3	.....	.....	.....	3	.....	7	No	No	.....	.....
Myrnam, Municipal	1	1	1	.....	.....	3	.....	.....	.....	4	.....	4	Yes	Yes	3	.....
Olds, Municipal	1	1	.....	.....	.....	9	.....	.....	.....	.....	.....	9	No	No	.....	.....
Oyen, Municipal	1	1	.....	.....	.....	2	.....	.....	.....	1	.....	5	No	No	.....	.....
Peace River, Municipal	1	1	.....	.....	.....	10	.....	.....	.....	4	.....	11	No	No	.....	.....

TABLE No. 3—Continued

Hospital	Administ'n		Professional			Nurses				Dietitians		Others		Total	Medical Staff	No. of Doctors	Training School	Affiliation with other Institutions	Graduated during the year	
	Executive	Clerical	Salaried	Internes	Technicians	Graduate	Student	Probationers	Affiliates	Nurses Aide	Graduate	Student	Orderlies and Ward Helpers							All Other Employees
Pincher Creek, St. Vincent's	1	1				5							9	10	Yes	4	No	No	.....
Ponoka, Municipal	1				1	8				3			4	11	Yes	8	No	No	.....
Provost, Municipal						7							3	6	No		No	No	.....
Radway, St. Joseph's	1	1				3							2	7	Yes	2	No	No	.....
Raymond, Municipal	1					4							2	5	No		No	No	.....
Red Deer, Municipal	2	3	1		2	24							13	21	Yes	15	No	No	.....
Rimbey, Municipal	1	1				5				3			4	4	No		No	No	.....
Rocky Mountain House, Municipal	1	1				3				4			5	5	Yes	5	No	No	.....
Smoky Lake, George McDougall	1	1				3							2	5	No		No	No	.....
Spirit River, Holy Cross		1				6	1						12	6	No		No	No	.....
Stettler, Municipal	3	1			3	15				15			2	21	Yes	8	No	No	.....
St. Paul, St. Theresa	3	3			1	5				14				14	No		No	No	.....
Taber, Municipal	3	1			1	13				10				9	Yes	4	No	No	.....
Three Hills, Municipal	1					6				2			3	6	No		No	No	.....
Tofield, Municipal						6							3	5	No		No	No	.....
Trochu, St. Mary's	1	1				2				3			2	5	No		No	No	.....
Turner Valley, Oilfields General		1				5							4	6	No		No	No	.....
Two Hills, Municipal	1	1			1	4							3	8	No		No	No	.....
Vegreville, General	3	3			3	10	29	14					5	17	Yes	6	Yes	Yes	10	
Vermilion, Municipal	1	1				7							5	8	No		No	No	.....
Viking, Municipal	1	1				4				4				6	No		No	No	.....
Vilna, Our Lady's	1	1				4								4	No		No	No	.....
Vulcan, Municipal	1	1			1	6							4	11	No		No	No	.....
Wainwright, Municipal	1	1			2	11							2	18	No		No	No	.....
Westlock, Immaculata	1	3				12							12	15	No		No	No	.....
Wetaskiwin, Community	1	1			1	9				1			2	12	Yes	4	No	No	.....
Willington, General	1	1				4							2	4	No		No	No	.....
Total	108	346	45	75	173	1107	995	246	68	89	23	8	700	1810	5793	328

Hospitals in Operation for part of the year:

	1	1	1	1	1	1	2	2	3	5	8	23	89	246	705	1814	5807	No No	No No	No No	328	
Glendon, Municipal (7 months)	108	347	46	75	173	1108	995	246	70	89	23	8	705	1814	5807	.....	.....	.....	.....	.....	.....	328
Nordegg, General (7 months)																						
Grand Total	108	347	46	75	173	1108	995	246	70	89	23	8	705	1814	5807	.....	.....	.....	.....	.....	.....	328

Not Reporting: Macleod, Municipal; Medicine Hat, Isolation.

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 4—OPERATING EXPENDITURES

Hospitals	Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	Total Expenditure
Athabasca, Municipal	\$ 23,750.81	\$ 17,526.72	\$ 2,647.52	\$ 560.18	\$ 3,102.25	\$ 476.79	\$ 1,767.09	\$ 2,605.83	\$ 52,437.19
Banff, Mineral Springs	84,663.09	59,200.24	4,667.55	1,830.96	3,286.34	1,575.71	155.87	2,147.65	157,527.41
Barrhead, St. Joseph's	28,919.65	25,928.90	3,194.87	298.76	1,309.00	2,239.38	47.35	301.18	62,239.09
Bassano, Municipal	18,234.51	13,271.26	4,082.09	214.22	2,287.29	3,806.06	564.21	271.97	42,731.61
Beaverlodge, Municipal	12,029.00	11,142.96	1,258.71	166.19	1,850.00	634.96	223.79	236.20	27,541.81
Bentley, Municipal	11,642.09	11,777.70	1,322.34	336.40	1,953.77	464.83	2,307.22	269.44	30,073.79
Berwyn, Municipal	11,498.65	7,395.35	1,612.38	303.40	1,000.00	716.88	546.28	623.98	23,696.92
Blairmore, Crow's Nest Pass Municipal	65,171.94	47,963.70	3,422.74	3,034.00	17,183.12	7,653.45	10,171.31	.....	143,912.81
Bonnyville, St. Louis	26,513.45	16,147.81	2,082.35	261.92	.....	6,888.07	2,701.06	453.00	53,111.98
Brooks, Municipal	37,007.67	24,108.62	2,777.62	395.88	3,820.00	.....	.....	530.40	78,229.32
Calgary, General	555,839.48	357,026.02	18,767.18	4,950.59	80,510.12	32,056.63	10,474.16	27,415.87	1,006,529.93
Calgary, Holy Cross	439,191.35	287,438.95	18,504.71	9,048.20	.....	37,044.76	12,662.88	27,637.74	912,038.71
Calgary, Junior Red Cross	73,188.84	31,249.67	4,484.19	507.02	.....	777.23	.....	1,513.48	111,720.43
Calgary, Salvation Army Grace	18,223.33	10,943.08	2,505.29	116.72	569.00	1,248.06	.....	1,623.03	35,228.51
Camrose, St. Mary's	84,678.91	47,795.56	7,048.35	942.52	20,426.45	1,617.63	15,453.75	789.94	178,753.11
Canmore, Canmore	14,210.56	9,242.03	1,618.24	.....	301.13	.....	52.41	895.72	26,320.09
Cardston, Municipal	28,642.30	27,630.57	3,256.50	392.93	2,302.63	3,209.27	335.54	369.56	66,139.30
Carngangay, Little Bow Municipal	11,174.47	6,505.03	1,125.13	350.82	.....	636.81	20.11	877.90	20,690.27
Castor, Our Lady of the Rosary	12,074.00	22,594.97	1,712.34	53.33	.....	1,709.14	.....	148.69	38,292.47
Cereal, Municipal	10,136.90	8,441.77	1,679.16	109.33	1,977.53	279.60	69.33	491.20	23,184.82
Clareholm, Municipal	34,248.65	26,118.47	3,065.73	364.49	3,440.59	2,685.86	2,164.21	80.20	72,168.20
Cold Lake, John Neil	10,147.74	4,667.79	529.12	50.00	461.26	1,266.09	3.63	211.60	17,337.23
Consort, Municipal	16,814.36	10,716.48	1,472.67	422.00	7,100.00	1,596.88	1,852.55	110.35	40,085.29
Coronation, Municipal	15,397.93	10,813.62	1,446.90	194.78	2,147.48	2,903.66	25.28	542.75	33,472.40
Daysland, Providence	6,369.60	10,527.25	1,564.56	225.00	3,552.32	1,424.73	9.91	161.82	23,835.19
Desmarais, St. Martin's	3,750.00	8,477.26	1,066.65	46.15	360.00	245.00	.....	101.95	14,047.01
Didsbury, Municipal	27,212.55	18,251.40	1,744.40	425.64	6,712.07	3,521.91	3,734.20	518.00	62,120.17
Drumheller, Municipal	94,942.23	73,279.16	8,407.35	1,551.19	5,712.75	9,653.33	38.49	4,026.62	197,611.12
Eckville, Municipal	17,587.40	16,289.26	2,720.58	493.18	4,305.70	1,368.18	2,103.76	481.70	45,349.76
Edmonton, Beulah Home	11,778.55	12,628.24	694.96	82.60	.....	3,464.77	174.53	1,232.13	30,055.78
Edmonton, General	499,914.09	308,397.15	15,581.65	13,041.60	84,159.34	24,394.58	4,375.18	15,182.87	965,046.46
Edmonton, Misericordia	288,087.16	272,170.76	18,949.51	5,481.66	50,046.83	12,779.60	19,229.94	4,467.90	671,213.36
Edmonton, Royal Alexandra	861,182.93	523,920.72	29,344.38	44,046.43	21,900.15	37,928.90	29,539.77	25,743.45	1,573,606.73
Edmonton, University of Alberta	998,494.30	639,267.30	29,947.26	4,680.20	.....	71,931.63	90,659.86	26,459.62	1,861,440.17

Edson, St. John's	17,397.23	4,605.62	4,360.12	44.81	406.04	53,184.47
Elk Point, Municipal	20,596.36	4,670.99	2,189.90	85.16	500.00	50,250.57
Elnora, Municipal	8,605.39	1,220.61	3,275.70	2,271.54	1,774.40	30,058.66
Empress, Municipal	13,762.57	931.72	2,941.63	.....	25.00	33,333.98
Fairview, Municipal	15,279.68	2,444.16	700.35	1.55	632.70	30,147.70
Ft. McMurray, St. Gabriel's	13,624.42	1,512.33	587.69	2,982.72	1,111.26	41,322.65
Fort Vermilion, St. Theresa	21,105.82	868.00	1,993.05	3,576.10	134.79	43,840.20
Galahad, St. Joseph's	9,001.71	989.99	1,028.21	856.93	179.50	27,726.72
Grande Prairie, Municipal	41,526.02	4,314.10	11,883.98	373.20	10,985.03	117,307.92
Hanna, Municipal	23,297.80	2,810.72	3,124.78	452.24	672.16	70,161.66
Hardisty, St. Anne's	14,096.25	1,233.56	1,316.35	1.93	301.69	34,699.11
High Prairie, Providence	36,196.00	3,861.21	1,567.64	1,456.75	1,405.89	94,203.40
High River, Municipal	31,010.60	4,663.94	2,107.64	210.00	.....	90,384.02
Innisfall, Municipal	25,053.60	2,863.15	3,051.02	111.11	849.00	61,471.86
Islay, Municipal	10,603.81	1,172.73	963.64	7.42	1,885.82	22,664.94
Jasper, Seton	13,198.60	1,000.20	2,299.76	2,500.00	250.70	33,022.69
Killam, General	20,249.77	1,396.68	3,087.03	2,405.20	355.02	48,432.77
Lacombe, Municipal	52,147.47	4,718.29	1,608.55	4,698.31	416.40	117,892.81
Lac la Biche, St. Catherine's	25,954.00	12,730.99	2,641.80	1.00	590.53	46,373.23
Lamont, Archer Memorial	73,859.69	8,836.14	3,432.64	100.07	4,579.65	156,518.05
Lethbridge, Galt	112,317.68	129,013.01	9,400.58	293.79	1,953.26	263,881.17
Lethbridge, Isolation	5,159.69	507.20	1,952.25	.....	122.99	10,475.73
Lethbridge, St. Michael's General	170,998.87	8,264.39	6,409.19	8,735.46	2,329.08	333,440.98
Macleod, Municipal	24,679.72	1,358.87	2,190.53	477.92	305.00	58,405.91
McLennan, Sacred Heart	26,888.12	1,808.18	5,137.75	300.00	3,121.02	67,028.43
Magrath, Municipal	16,026.54	1,565.91	558.56	89.13	692.60	31,042.76
Manning, Battle River	9,724.81	1,345.04	1,045.44	.....	418.97	26,599.82
Mannville, Municipal	16,482.68	2,337.73	2,019.92	3.93	3,167.96	38,490.07
Mayerthorpe, Municipal	18,509.49	2,859.32	1,095.70	4,490.88	337.84	55,530.19
Medicine Hat, General	152,655.34	15,078.24	5,517.99	1,731.53	91.90	369,415.71
Mundare, General	11,145.95	813.21	3,148.09	1,345.31	4,388.07	34,493.67
Myrnam, Municipal	20,817.20	1,775.70	2,348.63	.....	621.40	39,333.95
Olds, Municipal	31,498.20	3,070.01	3,654.52	4,331.24	445.62	79,228.15
Oyen, Municipal	11,596.92	1,430.88	1,744.26	718.49	130.00	28,104.41
Peace River, Municipal	37,513.80	5,186.78	2,586.31	3,121.10	916.40	89,075.74
Pincher Creek, St. Vincent's	20,601.20	1,555.79	10,774.62	6,800.25	.....	60,962.61
Ponoka, Municipal	31,761.96	1,798.62	3,649.98	4,080.09	560.85	70,058.51
Provost, Municipal	20,985.35	2,541.34	1,846.29	.....	217.42	43,703.26
Radway, St. Joseph's	13,221.80	1,528.17	180.88	14.35	239.40	27,472.26
Raymond, Municipal	14,134.82	1,478.97	341.97	1,642.17	153.21	31,585.28

TABLE No. 4—OPERATING EXPENDITURES—Continued

Hospitals	Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	Total Expenditure
Red Deer, Municipal	83,774.88	55,447.94	10,179.68	1,089.93	9,300.51	4,275.51	6,187.81	1,633.20	171,889.46
Rimbey, Municipal	24,036.12	17,963.50	2,719.91	498.98	8,926.32	1,095.34	5,542.41	135.70	60,918.28
Rocky Mountain House, Municipal	21,570.09	16,949.59	3,627.19	377.81	1,700.30	556.91	1,151.70	38.50	45,972.09
Smoky Lake, George McDougall	11,803.36	6,943.87	1,601.54	.....	3,149.91	440.35	36.09	231.49	24,206.61
Spirit River, Holy Cross	30,226.00	10,443.14	2,028.61	111.70	2,300.00	2,421.63	1,462.10	4,862.45	62,855.63
Stettler, Municipal	65,896.99	57,887.33	2,990.86	1,098.44	7,991.06	2,242.68	5,646.10	1,113.05	144,866.51
St. Paul, St. Theresa	43,197.15	28,275.12	3,001.18	308.28	4,335.35	11,597.23	1,523.43	748.92	92,986.66
Taber, Municipal	37,111.05	23,371.24	1,987.84	166.30	5,515.24	971.71	2,808.18	.....	71,931.56
Three Hills, Municipal	26,044.60	16,902.81	3,927.33	637.38	9,774.47	717.08	3,851.15	568.20	62,423.02
Tofield, Municipal	18,302.49	15,737.93	1,502.26	374.32	7,611.01	2,863.86	4,660.76	133.60	51,186.23
Trochu, St. Mary's	16,988.00	8,174.78	1,150.96	203.31	1,876.35	1,888.09	.....	100.02	30,381.66
Turner Valley, Oilfields General	18,320.16	18,975.17	1,297.32	154.45	805.91	1,177.11	89.43	1,665.33	42,484.88
Two Hills, Municipal	22,908.85	16,694.46	2,759.02	453.47	7,124.86	1,045.45	4,616.81	1,583.00	57,185.92
Vegreville, General	47,373.63	57,618.06	7,257.48	329.70	10,564.54	6,220.14	105.42	782.10	130,251.16
Vermilion, Municipal	25,282.64	17,737.12	3,247.87	690.00	4,178.26	3,414.59	523.05	143.65	55,217.18
Viking, Municipal	19,969.57	11,871.64	1,629.44	354.50	813.86	1,406.40	122.97	914.99	37,083.37
Vilna, Our Lady's	12,604.12	8,280.69	149.14	414.55	1,479.18	1,377.67	17.58	625.11	24,948.04
Vulcan, Municipal	25,688.81	17,863.98	3,224.17	311.12	5,236.50	1,412.80	2,546.61	.....	56,283.99
Wainwright, Municipal	41,410.22	36,207.63	3,289.46	1,333.30	16,109.92	4,806.88	7,990.88	480.16	111,628.45
Westlock, Immaculata	41,663.48	30,111.92	4,070.14	138.80	2,311.23	35,342.61	8,270.90	491.96	122,401.04
Wetaskiwin, Community	39,695.37	28,490.73	4,798.80	843.94	7,020.91	2,955.77	19.32	746.05	84,570.89
Willingdon, General	16,031.80	10,288.91	762.02	156.97	2,136.14	2,102.01	12.57	5,335.30	36,825.72
Total	\$6,456,736.20	\$4,662,889.84	\$ 390,495.45	\$ 121,215.94	\$ 593,419.83	\$ 476,169.50	\$ 328,960.87	\$ 218,125.18	\$13,248,012.81
Hospitals in Operation for part of the year:									
Glendon, Municipal (7 months)	6,261.65	4,360.00	1,367.85	194.00	.....	.....	2,542.98	4,185.45	18,911.93
Total	\$6,462,997.85	\$4,667,249.84	\$ 391,863.30	\$121,409.94	\$ 593,419.83	\$ 476,169.50	\$ 331,503.85	\$ 222,310.63	\$13,266,924.74

Hospitals not Reporting: Cadomin, General; Medicine Hat, Isolation; Nordegg, General.

TABLE No 5—OPERATING REVENUE—Continued

Hospitals	Day Rate Services	Special Services	Gross Earnings	Deductions	Net Earnings	Grants	Out-Patient Earnings	Other Revenue	Total Revenue
Edson, St. John's	36,276.74	14,904.63	51,181.37	6,066.49	45,114.88	5,987.80		105.77	51,208.45
Elk Point, Municipal	42,044.50	6,570.65	48,615.15	24,080.80	24,534.35	30,910.70		1,231.66	56,676.71
Elnora, Municipal	12,470.75	2,882.20	15,352.95	5,691.85	9,661.10	3,057.55		17,588.02	30,306.67
Empress, Municipal	22,595.50	5,685.14	28,280.64	8,198.20	20,082.44	10,200.70		270.20	30,553.34
Fairview, Municipal	30,647.10	9,178.05	39,825.15	21,273.85	18,551.30	29,018.65	1,739.43	1,199.00	50,508.38
Ft. McMurray, St. Gabriel's	20,175.36	3,221.92	23,397.28	2,783.56	20,613.72	1,999.40		3,075.54	25,688.66
Fort Vermilion, St. Theresa	44,687.40	8,817.60	53,505.00	9,727.58	43,777.42	1,446.90	100.00		45,324.32
Galahad, St. Joseph's	18,299.70	7,752.83	26,052.53	3,381.96	22,670.57	3,314.00		2,107.00	28,091.57
Grande Prairie, Municipal	68,880.40	27,000.32	95,880.72	45,281.83	50,598.89	61,856.76		604.86	113,160.51
Hanna, Municipal	30,526.00	11,808.50	42,334.50	17,291.17	25,043.33	39,692.56		2,223.26	66,959.15
Hardisty, St. Anne's	19,879.05	6,499.61	26,378.66	4,213.33	22,165.33	4,025.00		752.08	26,942.41
High Prairie, Providence	91,903.25	30,184.02	122,087.27	22,452.74	99,634.53	11,169.20	5,954.91	2,766.68	119,525.32
High River, Municipal	57,613.10	14,113.92	71,727.02	34,477.04	37,249.98	56,617.00		4,740.00	98,606.98
Innisfail, Municipal	10,067.69	6,422.39	16,490.08	16,490.08	16,490.08	53,040.85		1,525.22	71,056.15
Islay, Municipal	11,107.35	2,753.85	13,861.20	10,939.15	2,922.05	19,831.60	273.00	307.49	23,334.14
Jasper, Seton	15,232.94	6,277.96	21,510.90	3,000.76	18,510.14	5,511.38		7,789.39	33,948.71
Killam, General	28,211.96	11,887.36	40,099.32	7,101.67	32,997.65	5,248.80		2,018.05	40,264.50
Lacombe, Municipal	60,151.85	14,945.35	75,097.20	28,723.32	46,373.88	66,072.51	911.16	2,883.00	116,240.55
Lac la Biche, St. Catherine's	24,751.50	9,777.85	34,529.35	3,379.25	31,150.10	6,179.80	1,702.10	50.00	39,082.00
Lamont, Archer Memorial	93,324.00	30,021.78	123,345.78	7,702.37	115,643.41	11,655.38		13,141.15	140,439.94
Lethbridge, Galt	184,172.70	72,682.66	256,855.36	34,680.37	222,174.99	36,652.77	1,780.85	4,265.48	264,874.09
Lethbridge, Isolation		Not available			6,768.75	1,088.50			7,857.25
Lethbridge, St. Michael's General	209,138.40	136,355.70	345,494.10	21,261.59	324,232.51	29,212.40		3,152.24	356,597.15
Macleod, Municipal	38,452.30	5,504.35	43,956.65	8,549.25	35,407.40	28,402.36			63,809.76
McLennan, Sacred Heart	36,437.62	10,713.22	47,150.84	13,237.54	33,913.30	7,359.80	536.00	20,140.58	61,949.68
Magrath, Municipal	11,641.69	4,177.00	15,818.69	6,394.10	9,424.59	22,203.82	808.01	395.36	32,831.78
Manning, Battle River	12,684.30	5,801.70	18,486.00	2,973.38	15,512.62	2,907.60		10,423.75	28,843.97
Mannville, Municipal	21,607.30	3,297.26	24,904.56	12,386.99	12,517.57	24,659.48	505.90	1,221.00	38,903.95
Mayerthorpe, Municipal	29,499.00	9,770.55	39,269.55	16,458.37	22,811.18	36,410.06	1,662.06		60,883.30
Medicine Hat, General	190,158.70	60,639.57	250,798.27	8,449.13	242,349.14	115,542.69		4,206.14	362,097.97
Mundare, General	24,518.60	4,172.53	28,691.13	4,116.34	24,574.79	3,454.50		5,641.22	34,423.88
Myrnam, Municipal	14,597.90	5,922.23	20,520.13	7,811.70	12,708.43	31,149.50		422.00	44,279.93
Olds, Municipal	38,722.85	10,156.64	48,879.49	19,081.40	29,798.09	38,961.95	707.48	1,015.00	70,482.52
Oyen, Municipal	13,304.83	2,341.65	15,646.48	6,170.40	9,476.08	24,972.94		912.26	35,361.28
Peace River, Municipal	51,815.30	19,181.47	70,996.77	30,515.52	40,481.25	53,252.53		1,405.70	95,139.48

Pincher Creek, St. Vincent's	35,920.20	9,920.34	45,840.54	5,092.67	40,747.87	13,673.65	1,863.95	14,040.00	68,461.52
Ponoka, Municipal	34,446.50	14,003.90	48,450.40	22,731.77	25,718.63	41,532.25	2,059.58	2,059.58	71,174.41
Provost, Municipal	21,724.50	11,594.17	33,318.67	14,143.67	19,175.00	32,322.55	.....	.....	51,497.55
Radway, St. Joseph's	19,486.25	6,557.89	26,044.14	4,966.20	21,077.94	3,759.70	2,108.17	714.75	27,660.56
Raymond, Municipal	14,043.00	5,948.56	19,991.56	11,103.50	8,888.06	25,033.67	450.02	.....	34,371.75
Red Deer, Municipal	107,011.50	36,016.50	143,028.00	49,571.58	93,456.42	73,950.24	2,291.82	11,757.32	181,455.80
Rimby, Municipal	26,233.25	8,218.31	34,451.56	14,154.03	20,297.53	33,945.70	1,666.88	988.00	56,898.11
Rocky Mountain House, Municipal	32,931.50	7,812.69	40,744.19	17,826.79	22,917.40	28,400.50	.....	570.00	51,887.90
Smoky Lake, George McDougall	9,973.10	4,889.16	14,862.26	978.13	13,884.13	5,867.40	.....	902.67	20,654.20
Spirit River, Holy Cross	35,797.05	13,540.33	49,337.38	10,558.36	38,779.02	15,651.00	.....	4,915.00	59,345.02
Stettler, Municipal	82,941.10	31,380.50	114,321.60	58,442.41	55,879.19	81,787.46	2,394.03	210.71	140,271.39
St. Paul, St. Theresa	59,157.50	18,844.58	78,002.08	14,920.86	63,081.22	17,653.81	.....	.....	80,735.03
Taber, Municipal	47,218.20	15,776.85	62,995.05	18,349.53	44,645.52	39,608.11	2,974.01	2,974.01	87,227.64
Three Hills, Municipal	23,236.75	8,568.85	31,805.60	8,988.21	22,817.39	35,535.36	4,118.06	415.00	62,885.81
Tofield, Municipal	27,481.53	9,790.57	37,272.10	19,967.43	17,304.67	35,586.85	.....	365.92	53,257.44
Trochu, St. Mary's	11,736.95	3,452.80	15,189.75	1,798.22	13,391.53	1,964.20	1,170.16	12,782.32	29,308.21
Turner Valley, Oilfields General	24,016.75	19,624.92	43,641.67	6,044.00	37,597.67	4,928.20	.....	.....	42,525.87
Two Hills, Municipal	21,758.90	7,135.00	28,893.90	12,541.16	16,352.74	45,147.35	1,231.85	572.00	63,303.94
Vegreville, General	102,841.60	44,348.80	147,190.40	32,682.46	114,507.94	13,880.90	4,440.25	.....	132,829.09
Vermilion, Municipal	34,308.50	7,407.00	41,715.50	20,255.15	21,460.35	28,516.60	.....	1,834.25	51,811.20
Viking, Municipal	20,065.50	5,279.90	25,345.40	14,451.78	10,893.62	26,937.05	545.05	722.00	39,097.72
Vilna, Our Lady's	11,441.00	4,376.98	15,817.98	2,986.56	12,831.42	2,496.90	1,143.35	1,599.93	18,071.60
Vulcan, Municipal	33,468.90	10,451.60	43,920.50	2,928.65	18,991.85	46,762.55	247.50	345.64	66,347.54
Wainwright, Municipal	53,234.85	21,894.52	75,129.37	26,526.94	50,602.43	57,588.32	4,281.66	.....	112,472.41
Westlock, Immaculata	58,237.50	22,542.93	80,780.43	7,533.43	73,247.00	11,846.65	1,625.63	17,634.92	104,354.20
Wetaskiwin, Community	65,744.49	23,600.04	89,344.53	10,969.61	78,374.92	9,522.80	187.35	74.87	88,159.94
Willingdon, General	20,782.00	6,093.67	26,875.67	3,188.53	23,687.14	2,489.80	1,165.35	14,147.80	41,490.09
Total	\$8,068,990.63	\$3,446,307.23	\$11,534,808.96	\$2,233,653.82	\$9,359,594.87	\$3,367,654.78	\$ 247,091.36	\$ 404,093.44	\$13,378,434.45
Hospitals in Operation for part of the year:									
Glendon, Municipal (7 months)	3,202.10	709.46	3,911.56	1,464.96	2,446.60	14,141.68	235.53	156.84	16,980.65
Grand Total	\$8,072,192.73	\$3,447,016.69	\$11,538,720.52	\$2,235,118.78	\$9,362,041.47	\$3,381,796.46	\$ 247,326.89	\$ 404,250.28	\$13,395,415.10

TABLE No. 6

Hospitals	Operating Cost Per Patient Per Day	Percentage of Cost								Revenue per Patient per day
		Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	
Athabasca, Municipal	\$ 7.17	45.3	33.4	5.0	1.1	5.9	0.9	3.4	5.0	6.98
Banff, Mineral Springs	8.38	53.7	37.6	2.9	1.2	2.1	1.0	0.1	1.4	8.24
Barrhead, St. Joseph's	6.65	46.4	41.7	3.1	0.5	2.1	3.6	0.1	0.5	6.12
Bassano, Municipal	7.63	42.7	31.1	9.6	0.5	5.3	8.9	1.3	0.6	9.05
Beaverlodge, Municipal	8.24	43.7	40.4	4.6	0.6	6.7	2.3	0.8	0.9	8.83
Bentley, Municipal	9.45	38.7	39.2	4.4	1.1	6.5	1.5	7.7	0.9	9.53
Berwyn, Municipal	5.20	48.5	31.2	6.8	1.3	4.2	3.0	2.3	2.7	6.88
Blairmore, Crow's Nest Pass, Mun.	8.94	45.3	33.3	2.4	...	11.9	...	7.1	...	9.64
Bonnyville, St. Louis	5.43	49.9	30.4	3.9	0.5	...	14.4	...	0.9	4.13
Brooks, Municipal	8.99	47.3	30.8	3.5	0.5	4.9	8.8	3.5	0.7	9.16
Calgary, General	8.00	55.2	35.5	1.9	0.5	...	3.2	1.0	2.7	7.42
Calgary, Holy Cross	8.46	48.2	31.5	2.0	1.0	8.8	4.1	1.4	3.0	8.29
Calgary, Junior Red Cross	5.56	65.5	28.0	4.0	0.4	...	0.7	...	1.4	5.56
Calgary, Salvation Army Grace	5.02	51.7	31.1	7.1	0.3	1.6	3.6	...	4.6	5.00
Camrose, St. Mary's	8.60	47.4	26.7	4.0	0.5	11.4	0.9	8.7	0.4	6.99
Canmore, Canmore	9.12	54.0	35.1	6.2	...	1.1	...	0.2	3.4	15.75
Cardston, Municipal	7.74	43.3	41.8	4.9	0.6	3.5	4.8	0.5	0.6	8.20
Carmanagay, Little Bow Municipal	11.93	54.0	31.5	5.4	1.7	...	3.1	0.1	4.2	11.86
Castor, Our Lady of the Rosary	6.55	31.5	59.0	4.5	0.1	...	4.5	...	0.4	5.27
Cereal, Municipal	8.45	43.7	36.4	7.3	0.5	8.5	1.2	0.3	2.1	9.27
Claresholm, Municipal	6.27	47.5	36.2	4.2	0.5	4.8	3.7	3.0	0.1	6.85
Cold Lake, John Neil	7.48	58.5	26.9	3.1	0.3	2.7	7.3	0.0	1.2	3.89
Consort, Municipal	7.77	42.0	26.7	2.7	1.0	17.7	4.0	4.6	0.3	7.87
Coronation, Municipal	6.67	46.0	32.3	4.3	0.6	6.4	8.7	0.1	1.6	7.95
Daysland, Providence	6.58	26.7	44.2	6.6	0.9	14.9	6.0	0.0	0.7	5.87
Desmarais, St. Martin's	4.50	26.7	60.4	7.6	0.3	2.6	1.7	...	0.7	4.09
Didsbury, Municipal	8.69	43.8	29.4	2.8	0.7	10.8	5.7	6.0	0.8	9.76
Drumheller, Municipal	8.26	48.0	37.1	4.3	0.8	2.9	4.9	0.0	2.0	9.38
Eckville, Municipal	7.03	38.8	35.9	6.0	1.1	9.5	3.0	4.6	1.1	8.34
Edmonton, Beulah Home	7.52	39.2	42.0	2.3	0.3	...	11.5	0.6	4.1	7.59
Edmonton, General	7.03	51.8	32.0	1.6	1.3	8.7	2.5	0.5	1.6	6.90
Edmonton, Misericordia	7.28	42.9	40.6	2.8	0.8	7.4	1.9	2.9	0.7	8.46
Edmonton, Royal Alexandra	8.68	54.7	33.3	1.9	2.8	1.4	2.4	1.9	1.6	8.68
Edmonton, University of Alberta	10.34	53.6	34.3	1.6	0.3	...	3.9	4.9	1.4	10.56

Edson, St. John's	5.98	44.3	32.7	4.7	0.5	8.7	8.2	0.1	0.8	5.76
Elk Point, Municipal	4.92	43.6	41.0	9.3	0.6	.....	4.3	0.2	1.0	5.54
Einora, Municipal	8.98	40.7	28.6	4.0	2.3	.....	10.9	7.6	5.9	9.05
Empress, Municipal	6.75	44.8	41.0	2.8	2.5	.....	8.8	0.1	0.1	6.15
Fairview, Municipal	5.92	44.4	39.0	5.7	1.6	5.9	1.8	0.0	1.6	7.64
Ft. McMurray, St. Gabriel's	7.98	43.7	33.0	3.7	0.1	8.2	1.4	7.2	2.7	4.96
Fort Vermilion, St. Theresa	4.27	24.7	48.1	2.0	.....	12.2	4.5	8.2	0.3	4.42
Galahad, St. Joseph's	5.84	50.7	32.5	3.6	1.0	4.8	3.7	3.1	0.6	5.92
Grande Prairie, Municipal	6.17	39.7	35.4	3.7	1.1	10.1	0.3	0.3	9.4	5.95
Hanna, Municipal	8.74	53.6	33.2	4.0	0.5	3.2	3.9	0.6	1.0	8.34
Hardisty, St. Anne's	6.52	45.7	40.6	3.6	0.1	5.3	3.8	0.0	0.9	5.06
High Prairie, Providence	4.74	47.0	38.4	4.1	0.6	5.2	1.7	1.5	1.5	6.02
High River, Municipal	6.31	52.3	34.3	5.2	0.7	5.0	2.3	0.2	.....	6.88
Innisfail, Municipal	5.99	43.5	40.7	4.6	0.6	4.0	5.0	0.2	1.4	6.92
Islay, Municipal	7.18	46.8	30.7	5.2	0.8	4.0	4.2	0.0	8.3	7.39
Jasper, Seton	8.46	40.0	36.9	3.0	1.6	3.2	7.0	7.6	0.7	8.70
Killam, General	6.44	41.8	35.9	2.9	0.5	6.8	6.4	5.0	0.7	5.35
Lacombe, Municipal	7.70	44.2	35.3	4.0	1.3	9.5	1.4	4.0	0.3	7.59
Lac la Biche, St. Catherine's	6.12	55.3	27.1	4.8	1.9	4.1	5.6	0.0	1.2	5.09
Lassont, Archer Memorial	8.69	47.2	42.0	5.6	0.0	.....	2.2	0.1	2.9	7.80
Lethbridge, Galt	6.90	42.6	48.9	3.2	0.3	0.6	3.6	0.1	0.7	6.92
Lethbridge, Isolation	6.76	59.3	25.9	4.8	0.2	.....	18.6	2.6	1.2	5.07
Lethbridge, St. Michael's General	7.63	51.3	37.0	2.5	0.4	3.6	1.9	2.6	0.7	8.16
Macleod, Municipal	11.00	42.2	44.5	2.3	0.8	5.1	3.8	0.8	0.5	12.02
McLennan, Sacred Heart	6.30	40.1	35.9	2.7	1.1	7.4	7.7	0.4	4.7	5.82
Magrath, Municipal	10.40	51.6	34.6	5.1	0.4	4.0	1.8	0.3	2.2	11.00
Manning, Battle River	8.03	36.6	40.8	5.1	0.3	11.7	3.9	0.0	1.6	8.70
Mannville, Municipal	7.64	42.8	33.3	6.1	3.3	4.0	5.3	0.0	8.2	7.72
Mayerthorpe, Municipal	8.67	33.3	39.3	5.2	1.0	10.5	2.0	8.1	0.6	9.51
Medicine Hat, General	9.07	41.3	50.7	4.1	0.6	1.3	1.5	0.5	0.0	8.89
Mundare, General	5.65	32.3	33.8	2.4	0.2	5.6	9.1	3.9	12.7	5.64
Myrnam, Municipal	11.09	52.1	33.5	4.4	0.5	5.9	2.0	5.5	1.6	12.29
Olds, Municipal	8.70	39.7	33.1	3.9	0.7	11.9	4.6	5.5	0.6	7.74
Oyen, Municipal	8.64	41.3	32.7	5.1	0.6	6.2	11.1	2.5	0.5	10.87
Peace River, Municipal	7.67	42.1	33.0	5.8	0.5	11.2	2.9	3.5	1.0	8.19
Pincher Creek, St. Vincent's	6.11	33.8	31.2	2.6	1.3	2.3	17.7	11.1	.....	6.86
Ponoka, Municipal	7.96	45.3	26.5	2.6	1.0	12.8	5.2	5.8	0.8	8.09
Provost, Municipal	9.07	48.0	37.3	5.8	0.6	3.6	4.2	0.0	0.5	10.69
Radway, St. Joseph's	4.97	48.1	40.9	5.6	0.1	3.7	0.7	0.0	0.9	5.01
Raymond, Municipal	8.44	44.8	38.0	4.7	0.5	5.2	1.1	5.2	0.5	9.19

TABLE No. 6—Continued

Hospitals	Operating Cost Per Patient Per Day	Percentage of Cost								Revenue per Patient per day
		Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	
Red Deer, Municipal	7.41	48.7	32.3	5.9	0.6	5.4	2.5	3.6	1.0	7.82
Rimbey, Municipal	9.25	39.5	29.5	4.5	0.8	14.6	1.8	9.1	0.2	8.64
Rocky Mountain House, Municipal	6.05	46.9	36.9	7.9	0.8	3.7	1.2	2.5	0.1	6.83
Smoky Lake, George McDougall	8.07	48.8	28.7	6.6	.....	13.0	1.8	0.1	1.0	6.88
Spirit River, Holy Cross	6.34	48.1	30.9	3.2	0.2	3.7	3.9	2.3	7.7	5.99
Stettler, Municipal	7.53	45.5	40.0	2.1	0.7	5.5	1.5	3.9	0.8	7.29
St. Paul, St. Theresa	6.11	46.5	30.4	3.2	0.3	4.7	12.5	1.6	0.8	5.30
Taber, Municipal	6.18	51.6	32.5	2.8	0.2	7.7	1.3	3.9	.....	7.49
Three Hills, Municipal	10.64	41.7	27.1	6.3	1.0	15.7	1.1	6.2	0.9	10.72
Tofield, Municipal	8.42	35.8	30.7	2.9	0.7	14.9	5.6	9.1	0.3	8.76
Trochu, St. Mary's	11.33	55.9	26.9	3.8	0.7	6.2	6.2	0.0	0.3	10.93
Turner Valley, Oilfields General	6.83	43.1	44.7	3.0	0.4	1.9	2.8	0.2	3.9	6.84
Two Hills, Municipal	10.80	40.1	29.2	4.8	0.8	12.4	1.8	8.1	2.8	11.95
Vegreville, General	6.35	36.4	44.2	5.6	0.2	8.1	4.8	0.1	0.6	6.46
Vermillion, Municipal	6.13	45.8	32.1	5.9	1.2	7.6	6.2	0.9	0.3	5.75
Viking, Municipal	7.41	53.8	32.0	4.4	1.0	2.2	3.8	0.3	2.5	7.82
Vilna, Our Lady's	6.87	50.5	33.2	0.6	1.7	5.9	5.5	0.1	2.5	4.98
Vulcan, Municipal	7.66	45.7	31.7	5.7	0.6	9.3	2.5	4.5	.....	9.03
Wainwright, Municipal	8.71	37.1	32.4	3.0	1.2	14.4	4.3	7.2	0.4	8.78
Westlock, Immaculata	7.95	34.0	24.6	3.3	0.1	1.9	28.9	6.8	0.4	6.77
Wetaskiwin, Community	5.47	46.9	33.7	5.7	1.0	8.3	3.5	0.0	0.9	5.70
Willington, General	6.90	43.5	28.0	2.1	0.4	5.8	5.7	0.0	14.5	7.77
Total	7.95	48.7	35.2	3.0	0.9	4.5	3.6	2.5	1.6	7.87
Hospitals in operation for only part of the year: Glendon, Municipal (7 months)	22.27	33.1	23.1	7.2	1.0	.....	.....	13.5	22.1	20.00

Not Reporting: Cadomin, General; Medicine Hat, Isolation; Nordegg, General.

TABLE No. 7—GRANTS PAID DIRECTLY TO HOSPITALS

Hospitals	70c Grant		Maternity Grant		Pension Grant		Total Amount	
	Grant Days	Non-Grant Days	Amount	Grant Days	Amount	Grant Days		Amount
Athabasca, Municipal	7,170	145	\$ 5,019.00	1,518	\$ 5,692.50	667	\$ 2,934.80	\$ 13,646.30
Banff, Mineral Springs	12,422	6,377	8,695.40	389	1,711.60	370	1,720.50	12,127.50
Barrhead, St. Joseph's	9,321	45	6,524.70	1,417	5,738.85	1,049	4,615.60	16,879.15
Bassano, Municipal	5,381	223	3,766.70	660	2,673.00	529	2,327.60	8,767.30
Beaverlodge, Municipal	3,317	25	2,321.90	567	2,126.25	249	1,095.60	5,543.75
Bentley, Municipal	3,077	107	2,153.90	446	1,806.30	96	384.00	4,344.20
Berwyn, Municipal	4,531	23	3,171.70	692	2,595.00	445	1,958.00	7,724.70
Blairmore, Crow's Nest Pass, Municipal	15,808	288	11,065.60	1,566	6,890.40	1,409	6,551.85	24,507.85
Bonnyville, St. Louis	8,897	873	6,227.90	1,727	6,994.35	1,528	6,723.20	19,945.45
Brooks, Municipal	8,342	364	5,839.40	1,372	5,909.40	127	558.80	12,307.60
Cadomin, General	1,342	39	939.40	448	1,814.40	.....	.....	2,753.80
Calgary, General	110,198	7,322	77,138.60	15,580	85,690.00	9,694	54,286.40	217,115.00
Calgary, Isolation	8,151	71	5,705.70	.....	.....	.....	.....	5,705.70
Calgary, Holy Cross	101,001	6,798	70,700.70	13,666	75,163.00	6,575	36,820.00	182,683.70
Calgary, Junior Red Cross	6,820	13,269	4,774.00	.....	.....	.....	.....	4,774.00
Calgary, Salvation Army Grace	6,082	939	4,257.40	2,548	11,211.20	.....	.....	15,468.60
Camrose, St. Mary's	20,170	622	14,119.00	3,765	17,537.25	1,693	8,412.45	40,068.70
Canmore, Canmore	2,878	8	2,014.60	288	1,080.00	142	624.80	3,719.40
Cardston, Municipal	8,462	79	5,923.40	1,520	6,156.00	506	2,226.40	14,305.80
Carmangay, Little Bow Municipal	1,726	8	1,208.20	148	555.00	115	506.00	2,269.20
Castor, Our Lady of the Rosary	5,793	53	4,055.10	661	2,908.40	454	1,997.60	8,961.10
Cereal, Municipal	2,624	120	1,836.80	230	862.50	443	1,772.00	4,471.30
Claresholm, Municipal	11,294	211	7,905.80	1,104	4,780.95	1,019	4,661.35	17,348.10
Cold Lake, John Nell	1,547	772	1,082.90	436	1,635.00	195	780.00	3,497.90
Consort, Municipal	4,494	668	3,145.80	494	2,000.70	648	2,851.20	7,997.70
Coronation, Municipal	4,978	44	3,484.60	614	2,302.50	359	1,436.00	7,223.10
Daysland, Providence	3,303	318	2,312.10	469	1,899.45	496	2,182.40	6,393.95
Desmarais, St. Martin's	703	2,421	492.10	73	273.75	32	140.80	906.65
Didsbury, Municipal	6,531	617	4,571.70	976	4,294.40	306	1,422.90	10,289.00
Drumheller, Municipal	23,829	94	16,680.30	2,659	12,630.25	1,515	7,650.75	36,961.30
Eckville, Municipal	6,391	62	4,441.70	838	3,687.20	310	1,364.00	9,492.90

TABLE No. 7—Continued

Hospitals	70c Grant			Maternity Grant		Pension Grant		Total Amount
	Grant Days	Non-Grant Days	Amount	Grant Days	Amount	Grant Days	Amount	
Edmonton, Beulah Home	3,403	596	2,382.10	1,276	5,167.80	.....	64,596.00	7,549.90
Edmonton, General	80,435	7,037	56,304.50	7,584	41,712.00	.....	35,364.00	162,612.50
Edmonton, Misericordia	90,708	1,541	63,495.60	14,666	80,663.00	.....	.....	179,522.60
Edmonton, Royal Alexandra*	157,770	10,876	110,439.00	22,490	123,695.00	.....	.....	325,996.40
Edmonton, University*	115,331	5,783	80,731.70	7,180	39,490.00	.....	.....	182,952.90
Edson, St. John's	8,559	332	5,991.30	1,835	8,074.00	.....	.....	15,427.75
Elk Point, Municipal	9,931	292	6,951.70	964	3,615.00	.....	.....	17,113.90
Elmora, Municipal	3,349	.....	2,344.30	516	2,089.80	.....	.....	6,686.90
Empress, Municipal	3,552	1,416	2,486.40	476	1,915.50	.....	.....	5,343.50
Fairview, Municipal	6,569	46	4,598.30	1,178	4,417.50	.....	.....	10,683.40
Fort McMurray, St. Gabriel's	2,890	2,291	2,023.00	305	1,235.25	.....	.....	3,550.25
Fort Smith, General, N.W.T.	720	Not applicable	504.00	66	247.50	.....	.....	751.50
Fort Vermillion, St. Theresa	2,067	8,191	1,446.90	331	1,241.25	.....	.....	4,000.15
Galahad, St. Joseph's	4,741	7	3,318.70	636	2,575.80	.....	.....	7,183.70
Glendon, Municipal	845	4	591.50	131	530.55	.....	.....	1,821.65
Grande Prairie, Municipal	16,188	986	11,331.60	2,092	8,472.60	.....	.....	23,891.55
Grande Prairie, Hythe, Sub Hospital	1,659	188	1,161.30	202	757.50	.....	.....	2,786.80
Hanna, Municipal	7,922	106	5,545.40	1,355	5,962.00	.....	.....	14,111.40
Hardisty, St. Anne's	5,278	45	3,694.60	763	3,090.15	.....	.....	8,817.55
High Prairie, Providence	15,918	3,947	11,142.60	1,982	8,027.10	.....	.....	24,759.00
High River, Municipal	14,222	105	9,955.40	2,010	8,140.50	.....	.....	21,848.45
Innisfail, Municipal	9,560	710	6,692.00	1,210	5,324.00	.....	.....	16,373.05
Islay, Municipal	3,121	35	2,184.70	257	963.75	.....	.....	4,186.85
Jasper, Seton	3,158	746	2,210.60	622	2,519.10	.....	.....	5,094.90
Killiam, General	7,487	33	5,240.90	1,363	5,520.15	.....	.....	13,430.65
Lacombe, Municipal	15,248	60	10,673.60	2,475	10,890.00	.....	.....	27,943.40
Lac La Biche, St. Catherine's	7,379	300	5,165.30	1,597	6,467.85	.....	.....	14,391.95
Lamont, Archer Memorial	15,090	2,914	10,563.00	1,665	7,908.75	.....	.....	29,652.45
Lethbridge, Galt	35,003	3,258	24,502.10	4,380	20,805.00	.....	.....	61,931.70
Lethbridge, Isolation	1,555	.....	1,088.50	.....	.....	.....	.....	1,088.50
Lethbridge, St. Michael's General	41,724	1,965	29,206.80	5,584	26,524.00	.....	.....	69,370.85

Lloydminster, Municipal	11,461	Not applicable	8,022.70	1,329	5,382.45	1,076	5,003.40	18,408.55
Macleod, Municipal	5,231	79	3,661.70	738	2,988.90	472	2,076.80	8,727.40
McLennan, Sacred Heart	10,361	280	7,252.70	1,646	6,666.30	523	2,301.20	16,220.20
Magrath, Municipal	2,966	18	2,076.20	458	1,717.50	132	528.00	4,321.70
Manning, Battle River	3,277	37	2,293.90	750	3,037.50	152	608.00	5,339.40
Mannville, Municipal	4,990	48	3,493.00	838	3,393.90	365	1,606.00	8,492.90
Mayerthorpe, Municipal	6,535	51	4,447.10	949	3,843.45	406	1,887.90	10,178.45
Medicine Hat, General	36,613	4,119	25,629.10	5,386	25,583.50	4,827	24,376.35	75,588.95
Medicine Hat, Isolation	54		37.80					37.80
Mundare, General	5,902	205	4,131.40	595	2,409.75	1,617	7,114.80	13,655.95
Myrnam, Municipal	3,550	52	2,485.00	419	1,571.25	656	2,886.40	6,942.65
Nordeg, General	734	10	513.80	142	532.50	43	189.20	1,235.50
Olds, Municipal	9,009	102	6,306.30	1,513	6,657.20	719	3,343.35	16,306.85
Oyen, Municipal	3,197	55	2,237.90	420	1,701.00	395	1,836.75	5,775.65
Peace River, Municipal	11,303	312	7,912.10	1,449	5,868.45	552	2,428.80	16,209.35
Pincher Creek, St. Vincent's	9,334	650	6,533.80	1,299	5,260.95	427	1,878.80	13,673.55
Ponoka, Municipal	8,663	139	6,064.10	1,590	6,996.00	421	1,957.65	15,017.75
Provost, Municipal	4,790	29	3,353.00	661	2,677.05	458	2,015.20	8,045.25
Radway, St. Joseph's	5,372	152	3,760.40	1,431	5,366.25	528	2,323.20	11,449.85
Raymond, Municipal	3,373	168	2,501.10	736	2,980.80	304	1,337.60	6,819.50
Red Deer, Municipal	22,508	682	15,755.60	3,496	16,606.00	2,039	10,196.35	42,557.95
Rimby, Municipal	6,535	54	4,374.50	999	4,395.60	381	1,771.65	10,741.75
Rocky Mountain House, Municipal	7,330	267	5,131.00	1,034	4,187.70	788	3,467.20	12,785.90
Smoky Lake, George McDougall	2,882	118	2,017.40	791	3,203.55	312	1,372.80	6,593.75
Spirit River, Holy Cross	9,742	171	6,819.40	1,338	5,418.90	775	3,410.00	15,648.30
Stettler, Municipal	19,181	59	13,426.70	1,716	7,423.35	1,926	8,955.90	29,805.95
St. Paul, St. Theresa	13,699	1,520	9,589.30	2,492	10,092.60	1,257	5,530.80	25,212.70
Taber, Municipal	11,646	1	8,152.20	2,225	9,011.25	823	3,621.20	20,784.65
Three Hills, Municipal	5,636	232	3,945.20	1,004	4,417.60	248	1,153.20	9,516.00
Tofield, Municipal	6,076	5	4,253.20	717	3,154.80	891	4,143.15	11,551.15
Trochu, St. Mary's	2,628	53	1,839.60	358	1,449.90	283	1,245.20	4,534.70
Turner Valley, Oilfield's General	5,990	230	4,193.00	575	2,328.75	405	1,620.00	8,141.75
Two Hills, Municipal	5,239	58	3,667.30	694	3,053.60	674	3,134.10	9,855.00
Vegreville, General	19,836	667	13,885.20	1,772	7,796.80	3,285	15,275.25	36,957.25
Vermillion, Municipal	8,966	39	6,276.20	1,465	6,446.00	715	3,146.00	15,868.20
Viking, Municipal	4,839	163	3,387.30	724	2,715.00	397	1,746.80	7,849.10
Vilna, Our Lady's	2,774	858	1,941.80	759	3,073.95	309	1,236.00	6,251.75
Vulcan, Municipal	7,283	62	5,098.10	1,173	4,750.65	219	963.60	10,812.35
Wainwright, Municipal	12,709	100	8,896.30	1,328	5,843.20	2,014	9,365.10	24,104.60
Westlock, Immaculata	15,328	78	10,729.60	2,817	11,408.85	1,201	5,284.40	27,422.85

Table No. 7—Continued

Hospitals	70c Grant			Maternity Grant		Pension Grant		Total Amount
	Grant Days	Non-Grant Days	Amount	Grant Days	Amount	Grant Days	Amount	
Wetaskiwin, Community	13,616	1,851	9,531.20	2,386	10,498.40	1,428	6,640.20	26,669.80
Willingdon, General	5,315	22	3,720.50	693	2,806.65	1,536	6,758.40	13,285.55
Total for Approved Hospitals	1,464,456	110,611	\$1,025,087.20	196,967	\$ 941,379.80	132,338	\$ 672,607.95	\$2,639,074.95
PRIVATE HOSPITALS::								
Coaldale				585	1,755.00			1,755.00
Luscar				97	291.00			291.00
Macklin (Sask.), St. Joseph's						99	430.65	430.65
Mountain Park						19	57.00	57.00
Sexsmith, Maternity				924	2,772.00			2,772.00
Swalwell, Linden Nursing Home				496	992.00			992.00
Total for Private Hospitas		Not applicable		2,102	\$ 5,810.00	118	\$ 487.65	\$ 6,297.65
Total for all Hospitals	1,464,456		\$1,025,087.20	199,069	\$ 947,189.80	132,456	\$ 673,095.60	\$2,645,372.60

*Excluding days for T.B. Division, D.V.A. and Polio cases.

TABLE No. 8—HOSPITALIZATION GRANT TO LOCAL AUTHORITIES

Local Authority	Over 3 Years of Age		Under 3 Months		3 Months to 1 Year		1 Year to 3 Years		Totals	
	Days	Amount	Days	Amount	Days	Amount	Days	Amount	Total Days	Total Amount
		\$		\$		\$		\$		\$
Athabasca Municipal Hospital District.....	1,135	1,986.25	11	5.50	20	15.00	6	7.50	1,172	2,014.25
Bassano Municipal Hospital District.....	1,230	2,152.50	2	1.00	9	6.75	23	28.75	1,264	2,189.00
Beaverlodge Municipal Hospital District.....	674	1,179.50	8	4.00	18	13.50	5	6.25	687	1,189.75
Bentley Municipal Hospital District.....	761	1,255.65	11	5.50	18	13.50	18	22.50	808	1,297.15
Berwyn Municipal Hospital District.....	642	1,123.50	9	4.50	5	3.75	6	7.50	662	1,139.25
Brooks Municipal Hospital District.....	1,727	3,002.25	26	13.00	49	36.75	33	41.25	1,835	3,113.25
City of Calgary.....	5,990	13,477.50	102	51.00	106	79.50	133	166.25	6,331	13,774.25
Cardston Municipal Hospital District.....	2,347	4,107.25	41	20.50	64	48.00	83	103.75	2,535	4,279.50
Castor Municipal Hospital District.....	1,231	2,092.70	4	2.00	3	2.25	29	36.25	1,267	2,133.20
Cereal Municipal Hospital District.....	354	584.10	.....	.....	1	.75	.....	.....	355	584.85
Claresholm Municipal Hospital District.....	2,314	4,396.60	7	3.50	7	5.25	15	18.75	2,343	4,424.10
Consort Municipal Hospital District.....	1,144	2,002.00	.....	.....	18	13.50	4	5.00	1,166	2,020.50
Coronation Municipal Hospital District.....	1,171	1,932.15	8	4.00	4	3.00	49	61.25	1,232	2,000.40
Daysland Municipal Hospital District.....	517	904.75	5	2.50	5	3.75	6	7.50	533	918.50
Crow's Nest Pass Municipal Hospital Dist.....	2,842	5,399.80	4	2.00	2	1.50	37	46.25	2,885	5,449.55
Didsbury Municipal Hospital District.....	1,435	2,726.50	8	4.00	12	9.00	5	6.25	1,460	2,745.75
Drumheller Municipal Hospital District.....	5,447	10,894.00	102	51.00	138	103.50	129	161.25	5,816	11,209.75
Eckville Municipal Hospital District.....	1,555	2,721.25	37	18.50	49	36.75	89	111.25	1,730	2,887.75
Elk Point Municipal Hospital District.....	1,840	3,220.00	65	32.50	53	39.75	130	162.50	2,088	3,454.75
Elnora Municipal Hospital District.....	507	887.25	.....	.....	.....	.....	26	32.50	533	919.75
Empress Municipal Hospital District.....	847	1,482.25	.....	.....	10	7.50	14	17.50	871	1,507.25
Fairview Municipal Hospital District.....	1,410	2,467.50	36	18.00	46	34.50	65	81.25	1,557	2,601.25
Municipal District of Flagstaff.....	3,219	4,828.50	137	68.50	115	86.25	144	180.00	3,615	5,163.25
Glendon Municipal Hospital District.....	543	950.25	24	12.00	38	28.50	10	12.50	615	1,003.25
Grande Prairie Municipal Hospital Dist.....	4,341	8,201.65	77	38.50	68	51.00	117	146.25	4,603	8,437.40
Hanna Municipal Hospital District.....	1,451	2,756.90	7	3.50	6	4.50	48	60.00	1,512	2,824.90
High River Municipal Hospital District.....	2,672	5,076.80	59	29.50	6	4.50	43	53.75	2,780	5,164.55
Hughenden Municipal Hospital District.....	315	558.15	15	7.50	.....	.....	4	5.00	334	570.65
Innisfail Municipal Hospital District.....	2,263	4,299.70	70	35.00	28	21.00	52	65.00	2,413	4,420.70
Irma Municipal Hospital District.....	614	1,152.20	.....	.....	.....	.....	24	30.00	638	1,182.20

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 8—Continued

Local Authority	Over 3 Years of Age		Under 3 Months		3 Months to 1 Year		1 Year to 3 Years		Totals	
	Days	Amount	Days	Amount	Days	Amount	Days	Amount	Total Days	Total Amount
Islay Municipal District	881	1,559.25	50	25.00	22	16.50	42	52.50	1,005	\$ 1,653.25
Village of Killam	219	416.10	3	1.50	4	3.00	25	31.25	226	420.60
Municipal Affairs, Department of	390	682.50	7	3.50	29	21.75	40	50.00	451	739.00
Lacombe Municipal Hospital District	2,862	5,437.80	79	39.50	25	18.75	80	100.00	3,006	5,546.05
Municipal District of Leduc	707	1,546.00	20	10.00	27	20.25			834	1,676.25
Little Bow Municipal Hospital District	344	602.00					3	3.75	347	605.75
Lloydminster Municipal Hospital District	2,712	5,152.80	22	11.00	72	54.00	32	40.00	2,838	5,257.80
Macleod Municipal Hospital District	772	1,351.00			5	3.75	18	22.50	795	1,377.25
Magrath Municipal Hospital District	554	914.10	48	24.00	58	43.50	41	51.25	701	1,032.85
Mannville Municipal Hospital District	1,095	1,916.25	89	44.50	8	6.00	9	11.25	1,201	1,978.00
Mayerthorpe Municipal Hospital District	1,290	2,451.00	18	9.00	10	7.50	72	90.00	1,390	2,557.50
Municipal District of Minburn	326	612.35	75	37.50	6	4.50	28	35.00	435	689.35
Myrnam Municipal Hospital District	927	1,622.25	55	27.50	4	3.00	17	21.25	1,003	1,674.00
Olds Municipal Hospital District	1,924	3,655.60	37	18.50	8	6.00	127	158.75	2,096	3,838.85
Oyen Municipal Hospital District	649	1,233.10	14	7.00	16	12.00	49	61.25	728	1,313.35
Peace River Municipal Hospital District	2,197	3,844.75	10	5.00	68	51.00	198	247.50	2,473	4,148.25
Municipal District of Pembina	774	1,712.50							774	1,712.50
Ponoka Municipal Hospital District	1,877	3,566.30	64	32.00	29	21.75	72	90.00	2,042	3,710.05
Municipal District of Provost	171	299.25							171	299.25
Provost Municipal Hospital District	978	1,711.50	12	6.00	12	9.00	41	51.25	1,043	1,777.75
Raymond Municipal Hospital District	616	1,078.00			5	3.75	10	12.50	631	1,094.25
Red Deer Municipal Hospital District	3,280	6,560.00	210	105.00	50	37.50	95	118.75	3,635	6,821.25
Rimbey Municipal Hospital District	1,443	2,741.70	13	6.50	25	18.75	31	38.75	1,512	2,805.70
Rocky Mtn. House Municipal Hosp. Dist.	1,452	2,541.00	26	13.00	16	12.00	58	72.50	1,552	2,638.50
Village of Sedgewick	74	140.60	4	2.00					78	142.60
Stettler Municipal Hospital District	4,804	9,127.60	125	62.50	7	5.25	67	83.75	5,003	9,279.10
St. Paul Municipal Hospital District	2,746	4,805.50	213	106.50	181	135.75	235	293.75	3,375	5,341.50
Village of Strome	41	77.90	5	2.50	6	4.50	7	8.75	59	93.65
Taber Municipal Hospital District	1,637	2,864.75	54	27.00	20	15.00	97	121.25	1,808	3,028.00
Three Hills Municipal Hospital District	1,062	2,017.80	9	4.50	7	5.25	28	35.00	1,106	2,062.55
Tofield Municipal Hospital District	1,034	1,964.60	9	4.50	17	12.75	2	2.50	1,062	1,984.35
Trochu Municipal Hospital District	716	1,253.00	25	12.50	25	18.75	26	37.50	792	1,316.75
Two Hills Municipal Hospital District	1,347	2,559.30	71	35.50	27	20.25	52	65.00	1,497	2,680.05
Vegreville Municipal Hospital District	3,059	5,812.10	96	48.00	99	74.25	278	347.50	3,532	6,281.85

Vermilion Municipal Hospital District.....	1,888	3,304.00	5	2.50	7	5.25	5	6.25	1,905	3,318.00
Viking Municipal Hospital District.....	1,157	2,024.75	60	30.00	51	38.25	44	55.00	1,312	2,148.00
Vulcan Municipal Hospital District.....	1,833	3,207.75	8	4.00	18	13.50	37	46.25	1,896	3,271.50
Wainwright Municipal Hospital District.....	2,552	4,848.80	65	32.50	33	24.75	30	37.50	2,680	4,943.55
Municipal District of Wetaskiwin.....	762	1,415.80	23	11.50	.....	.....	22	27.50	807	1,454.80
Total	105,700	\$ 196,470.75	2,499	\$ 1,249.50	1,877	\$ 1,407.75	5,365	\$ 4,206.25	113,441	\$203,334.25

TABLE No. 9—HOSPITALIZATION OF ALBERTA POPULATION, BY AGE AND SEX, 1950

Age Group	Males			Females			Total		
	*Total Population	†Hospitalized	% of each Age Group Hospitalized	*Total Population	†Hospitalized	% of each Age Group Hospitalized	*Total Population	†Hospitalized	% Hospitalized in each Age Group
0-4.....	53,900	9,000	17	53,600	6,900	13	107,500	15,900	15
5-9.....	44,900	6,200	14	43,300	5,700	13	88,200	11,900	13
10-19.....	76,900	7,700	10	73,200	10,500	14	150,100	18,200	12
20-29.....	71,800	8,400	12	68,600	29,400	43	140,400	37,800	27
30-39.....	66,500	6,700	10	63,600	18,100	28	130,100	24,800	19
40-44.....	29,300	3,200	11	24,900	4,900	20	54,200	8,100	15
45-49.....	25,500	3,200	13	21,800	3,900	18	47,300	7,100	15
50-54.....	22,600	3,000	13	18,600	3,400	18	41,200	6,400	16
55-59.....	21,700	2,900	13	16,100	2,800	17	37,800	5,700	15
60-64.....	19,700	3,400	17	13,900	2,800	20	33,600	6,200	18
65-69.....	15,500	3,300	21	11,200	2,500	22	26,700	5,800	22
70-74.....	10,800	3,000	28	7,900	2,400	30	18,700	5,400	29
75 and over.....	10,600	3,900	37	8,600	3,000	35	19,200	6,900	36
Not stated.....	.....	100	.....	.....	100	.....	.....	200	.....
Total	469,700	64,000	15	425,300	96,400	23	895,000	160,400	18

*Population estimates for 1950 obtained from the Dominion Bureau of Statistics.

†Excludes D.V.A. and T.B. Division cases. Newborn also excluded.

Division of Tuberculosis Control

DR. G. R. DAVISON, *Director and General Medical Superintendent.*

The programme of the Tuberculosis Division of treatment and control has, through the years, changed from the emphasis being placed on treatment alone to one of concentration of our efforts on prevention—the public health aspect. Case finding schemes of various kinds have been initiated to search out the infectious cases as well as those of early disease. The programme has evolved from the phase of examination of contacts, suspects and ex-sanatorium patients through the establishment of stationary clinics, travelling diagnostician services, and mass X-ray surveys of the apparently well population.

The Tuberculosis Division and the voluntary health organization, the Alberta Tuberculosis Association, were joined in 1946 by the Health Services of the Indian Affairs Branch of the Department of National Health and Welfare, with the result that Tuberculosis services are available to all sections of our population. The Federal Tuberculosis Control Grants, commenced in 1949, have been of the greatest assistance in rounding out the programme.

During the years a marked decrease in the mortality rates has occurred. This decrease is due to the preventive methods instituted as well as to the general decline that has been going on for many years. Some of this fall is also the result of the development of the antimicrobials—Streptomycin and Para amino salicylic acid. These drugs have been of the greatest assistance in saving many lives.

Optimism pervades our thinking, and the phrase “eradication of Tuberculosis” is frequently heard. The facts, however, do not warrant this optimism. More cases of Tuberculosis are under treatment in Canada than ever before. Waiting lists for Sanatorium beds are increasing. The incidence of disease is advancing. In Alberta this is in part due to our growing population. Some of these new residents come from countries with marked environmental hazards. Congestion in living quarters resulting from the housing shortage, particularly in urban centres, is no doubt of serious import. The susceptibility of the human host and adaptability of the Tubercle bacillus may also be factors. To obtain the proper perspective it behooves us to think in terms of the increasing number of cases of Tuberculosis living rather than in the decrease in the number of people who have died. In this way our campaign of prevention and control can be properly geared.

The work of the Division in 1950 expanded, as more of the projects implemented by the Federal Tuberculosis Control grant were put into effect.

On October 31st Dr. A. H. Baker, General Medical Superintendent and Director of the Tuberculosis Division, retired after thirty years' service. The Division developed under his guidance and has attained an eminent place in the Tuberculosis Field. A farewell party arranged by ex-patients, was held at the Central Alberta Sanatorium and

attended by ex-patients, patients, friends and staff. Presentation of a well equipped automobile was made to Dr. Baker as a token of the high esteem in which he was held by everyone.

Dr. Baker's retirement necessitated some staff changes. Dr. G. R. Davison was named as his successor; Dr. L. M. Mullen was appointed Medical Superintendent of the Central Alberta Sanatorium, and Dr. H. H. Stephens as Medical Superintendent of the Edmonton Sanatoria.

New Construction.

The Aberhart Memorial Sanatorium in Edmonton is under construction, and should be available for occupancy late in 1951. This building is of modern design and adapted to the climate of the north temperate zone. All services other than laundry are housed under one roof. The main building faces south, and 90% of the patients' rooms have a southern exposure. In the planning, everything was done to ensure the comfort of the patients. The Nurses' Home and laundry facilities are also being erected.

The addition to the Administration Building at Central Alberta Sanatorium was started in the autumn. This extension will house on the main floor a second X-ray machine and another operating room. It permits more space for the Out-Patient Clinic and doctors' offices. Room for eighteen more surgical beds is provided on the second floor.

Diagnostic Services.

Clinics with ever increasing numbers attending were held throughout the year, 9,601 examinations being carried out. X-ray films submitted by physicians and hospitals for interpretation numbered 9,414. As all accessible areas of the Province had been surveyed at least once, the Mobile Units only operated for part of the year with 72,963 people availing themselves of the service.

By these various procedures, some form of diagnostic service has been extended to 141,024 residents of this Province, an increase of 17,024 over 1949. Of this number, 926 new cases of Tuberculosis were discovered, an increase of 45 over 1949.

CLASSIFICATION OF 926 NEW CASES OF TUBERCULOSIS (EXCLUDING INDIANS)

Active pulmonary Tuberculosis	427
Inactive pulmonary Tuberculosis	403
Active non-pulmonary Tuberculosis	85
Inactive non-pulmonary Tuberculosis	11

ALBERTA INDIAN SURVEYS AND TREATMENT SERVICES

Conducted by Dr. W. L. Falconer, Charles Camsell Indian Hospital, Edmonton, Alberta
(Department of National Health and Welfare)

1. New cases of Tuberculosis discovered in Alberta in 1950 as a result of surveys	427
2. No. of Alberta Indians treated in the Charles Camsell Indian Hospital during the calendar year 1950 for Tuberculosis	352
3. No. of Alberta non-Indians (including D.V.A. Patients) treated in the Charles Indian Hospital during the calendar year 1950 for Tuberculosis	54
4. Total No. of Alberta Indians X-rayed at Surveys during 1950	8,677
All Residential Schools were surveyed following commencement of school term and children and staff X-rayed. Schools total	2,326
5. Total No. of Alberta Indians X-rayed as Out-Patients (re-checks, etc.) at the Charles Camsell Hospital during 1950	543
6. Total No. of X-ray films on Alberta Indian Out-Patients sent in for interpretation during 1950	898
7. Total No. of Indians in Alberta X-rayed at surveys in 1950	2,187
8. Total No. of Non-Indians in Alberta (including D.V.A.) X-rayed (re-checks, etc.) as Out-Patients at Charles Camsell Indian Hospital during 1950	1,257
9. No. of B.C.G. Vaccinations given during calendar year of 1950	210

Re: Item No. 3: This number (54) includes 7 patients who were treated in the Charles Camsell Indian Hospital at the expense of the Tuberculosis Division—3 Charles Camsell Hospital staff members; 3 non-treaty Indians classed as non-Indian; 1 half-breed child of one of the above noted Indians.

In comparing the Department of Indian Affairs report with last year's, it is noteworthy that the number of new cases has decreased by 121.

Treatment Services.

Sanatorium treatment was provided for 1,384 residents of the Province in 1950. Of this number, 1,032 were treated in Provincial Sanatoria and 352 in the Charles Camsell Indian Hospital. The number under treatment did not change appreciably from 1949, as institutions were filled to capacity at all times. The average length of stay in hospital was twenty days less, but the waiting lists were larger than for many years.

Thirty-nine out patients were given pneumothorax treatments at various points in the Province by their attending physicians. Our sincere thanks is extended to the medical men concerned for their co-operation and assistance. Patients in residence were given 5,203 treatments.

After several years use, the antimicrobials have now definitely proven their worth, both as an adjunct to medical care and in cases receiving radical surgery.

Training of Nurses.

The courses in tuberculosis nursing, given to affiliates from training schools throughout the Province, are being carried on very successfully. Everything is being done to make their stay at the Central Alberta Sanatorium as interesting and enjoyable as possible.

Nurses aides from the Provincial School also take part of their training at the Sanatorium.

Many who have taken the courses have returned as members of the Sanatorium staff after graduation from their respective schools.

Educational Programme.

School work, from elementary subjects to Grade XII and commercial classes, are carried on in the Sanatoria under well qualified teachers.

Occupational Therapy also forms an important adjunct to treatment. It is considered as education rather than a time-passing activity. In many cases, handicrafts lead to satisfactory rehabilitation.

The Rehabilitation Branch of the Alberta Tuberculosis Association continues to function at a high level. The close liaison between the rehabilitation officers of the Association and teaching staff has done much to assist many ex-patients to attain economic security in employment that will safeguard their health.

Acknowledgments.

We wish to sincerely compliment the Indian Health Services Branch of the Department of National Health and Welfare for the extensive Tuberculosis programme that they are carrying on. Since the inception of this work, there has been a marked decrease in the mortality rate among Indians.

Grateful acknowledgment is made of the assistance rendered by the Alberta Tuberculosis Association through their many projects, some of which were mentioned above.

The Department of Veterans Affairs is also to be commended for the benefits extended to tuberculous veterans.

Staff.

The shortage of nursing personnel has been much less acute. The Sanatorium, therefore, is operating to capacity.

The complement of medical staff is not filled.

Since the completion of the quarters for women in 1949, adequate auxiliary staff has been quite well maintained with fewer changes in personnel.

Administration.

These figures refer to the fiscal year ending March 31, 1951, whereas those in the balance of this report are for the calendar year 1950.

Gross operating cost—Central Alberta Sanatorium	\$ 558,756.53
Revenue	124,094.89
Net cost—Central Alberta Sanatorium	434,661.64
Gross cost per patient day	5.98
Net cost per patient day	4.65
Hospital cost—Edmonton and elsewhere	424,703.08
Revenue	17,078.90
Net cost—Edmonton and elsewhere	407,624.18
Cost of Clinic Service:	
Treatment—Out-Patient Pneumothorax	\$ 5,539.50
Mobile X-Ray Units	20,711.71
Other Diagnostic Services	18,833.46
	<u>45,084.67</u>
	\$1,028,544.28

Cost of projects under the Federal Tuberculosis Control Grant are not included in the above figures.

Patient Days:

<i>Pulmonary Tuberculosis:</i>	
Central Alberta Sanatorium	86,688
Edmonton General Hospital	46,986
Royal Alexandra Hospital	12,892
University Hospital	7,608
Other Hospitals	1,909
Reciprocal Agreements	3,233
	<u>159,316</u>
<i>Non-Pulmonary Tuberculosis:</i>	
Central Alberta Sanatorium	6,685
Other Hospitals	9,646
	<u>16,331</u>
Total Patient Days	175,647

The total number of meals served was 449,231 and the food cost per meal \$.3021.

Recommendations.

1. The building programme of Sanatorium beds should be extended.
2. For the Central Alberta Sanatorium:
 - (a) Increase in laundry facilities.
 - (b) Construction of quarters for male staff.
 - (c) Enlargement of Nurses' Home.
 - (d) Replacement of greenhouse.
 - (e) Erection of houses for medical staff.

DIAGNOSTIC CLINIC REPORT

Place	No. of Sessions	New Cases Tuberculosis		Number New Exams.	Number Review Exams.	Total
		Pul.	Non-Pul.			
STATIONARY CLINICS:						
Calgary	50	3	.....	167	232	399
Camrose	5	.....	.....	24	90	114
Central Alberta Sanatorium	100	35	2	1421	2102	3523
Drumheller	12	3	.....	103	158	261
Edmonton	103	179	7	2814	1149	3963
Lethbridge	9	6	.....	228	296	524
Medicine Hat	10	1	.....	26	144	170
Red Deer	6	5	.....	122	191	313
Vegreville	5	2	.....	38	65	103
Eckville	8	2	.....	141	90	231
Total	308	236	9	5084	4517	9601

In addition to these 245 newly discovered cases of active tuberculosis, there were also discovered 402 cases of inactive tuberculosis.

TUBERCULIN TESTING AND X-RAY SURVEYS

(Conducted by Public Health Nurses, Teachers, Business Firms, Hospitals, etc.)

	Number Tested	Number X-Rayed
Faculty of Education, Calgary	210	19
Blood Transfusion Service, Calgary .....	.....	14
Student Nurse Aides	580	388
Workmen's Compensation Board, Calgary .....	.....	13
General Petroleums Ltd., Calgary	27	8†
Medicine Hat Seal Survey .....	.....	15
Calgary Motor Products, Calgary	49	17†
Edmonton (Miscellaneous)	97	26
*Banff-Mineral Springs Hospital	785	142
Barrhead-St. Joseph's Hospital	73	132
Beaverlodge, Municipal Hospital	818	105
Blairmore, Crow's Nest Pass Mun. Hospital	50	484
Calgary, Holy Cross Hospital .....	.....	2883
Camrose, St. Mary's Hospital	28	961
Cardston, Municipal Hospital	1,159	416
Castor, Our Lady of the Rosary Hospital	1,150	57
Cold Lake, John Neil Hospital	193	12
Consort, Municipal Hospital	108	12
Daysland, Providence Hospital	50	7
Didsbury, Municipal Hospital	332	16
Drumheller, Municipal Hospital	3,097	1,335
Eckville, Municipal Hospital	635	39
Edmonton, Royal Alexandra Hospital .....	.....	10,134
Edmonton, General Hospital	350	717
Elnora, Municipal Hospital	75	10
Fairview, Community Hospital	673	80
Galahad, St. Joseph's Hospital	502	15
Glendon, Municipal Hospital	43	1
Hanna, Municipal Hospital	420	123
Hardisty, St. Anne's Hospital	720	13
High River, Municipal Hospital	1,823	127
Hythe, Municipal Hospital	94	6
Innisfail, Municipal Hospital .....	.....	53
Islay, Municipal Hospital	434	34
Jasper, Seton Hospital	261	17
Killam, General Hospital	593	49
Lac La Biche, St. Catherine's Hospital	1,008	119
Lacombe, Municipal Hospital	472	649
Lamont—Archer Memorial Hospital .....	.....	2,610
Lethbridge, St. Michael's Hospital	60	6,088
Lethbridge, Galt Hospital	124	136
Lloydminster, Municipal Hospital .....	.....	1,238
Magrath, Municipal Hospital	118	.....
Manning, Battle River Hospital	278	27
Medicine Hat, General Hospital .....	.....	1,210
Mundare, General Hospital	153	10
Olds, Municipal Hospital	1	100
Oyen, Municipal Hospital	68	4
Peace River, Municipal Hospital	222	247
Ponoka, Municipal Hospital	649	90
Provost, Municipal Hospital	533	31
Raymond, Municipal Hospital	85	2
Red Deer, Municipal Hospital	1,611	1,885
Tofield, Municipal Hospital	66	9
Taber, Municipal Hospital	247	33
Three Hills, Municipal Hospital	155	18
Trochu, St. Mary's Hospital	144	44
Vegreville, General Hospital	1,239	1,279

	Number Tested	Number X-Rayed
Vermilion, Municipal Hospital	395	35
Viking Municipal Hospital	489	50
Wainwright, Municipal Hospital	1,309	102
Westlock, Immaculata Hospital	1,750	95
Wetaskiwin, Community Hospital	1,024	41
	<u>27,629</u>	<u>34,632</u>

†Counted in Clinic X-ray number.

*All points listed after this signal refer to persons patch tested and/or X-rayed upon admission to hospital. This service is under the sponsorship of the Alberta Tuberculosis Association.

N.B.—Total number of persons receiving service through surveys is 45,799, i.e., number tuberculin tested plus those X-rayed without having been previously tuberculin tested as shown in table above.

MOBILE UNIT SURVEYS

	No. X-rayed		No. X-rayed
Ashmont	343	Heinsburg	412
Ardmore	709	Killam	925
Barons	1,485	Lougheed	396
Big Valley	774	La Corey	421
Bawlf	1,185	Lafond	268
Brierville	323	Mallaig	1,307
Bonnyville	1,638	Macleod	1,822
Cardston	2,174	Mossleigh	822
Czar	301	New Norway	876
Champion	907	Oliver Mental Institute	1,064
Camrose	3,982	Picture Butte	1,321
Bethany Home	34	Provost	1,972
Rosehaven	271	Redwater	1,171
Calmar	1,256	Riverside Hutterite Colony	184
Calgary	24,962	Rockyford	824
Donalda	619	Strome	745
Daysland	1,098	Sedgewick	811
Elk Point	1,124	Smoky Lake	1,785
Edmonton (University)	1,559	Spedden	516
Ferintosh	821	St. Paul	2,179
Frog Lake	136	Thorsby	1,818
Grand Centre	505	Vilna	1,503
Glendon	988	Waskateneau	705
Glenwood	558		
Hughenden	629		
Hardisty	735		
			<u>72,963</u>

SUMMARY

Number X-rayed	72,963	Further examination requested	812
Probable tuberculosis active	40	Non-tuberculous chest conditions	765
(6 previously discovered)		Pleurisy active	4
Probable tuberculosis inactive	933	Pleurisy inactive	451
(252 previously discovered)		No disease	69,120

SUMMARY—CLINICS AND SURVEYS

	No. Sessions	Total	No. Exams.
Stationary Clinics	308		9,601
Surveys (all types)	63		45,799
Mobile Unit	47		72,963
Indians, Whites and Half-breeds (work done by Department National Health and Wel- fare			12,664
	<u>418</u>		<u>141,027</u>

SOURCES OF DISCOVERY OF NEW CASES OF TUBERCULOSIS

(Indians excluded)

	1949	%	1950	%
Clinics	622	70.5	647	69.8
Referred for admission by family physicians	226	25.6	220	23.8
Surveys				
Referred by D.V.A.	5	.8	11	1.2
Staff, Central Alberta Sanatorium	3	.3		
Provincial Laboratory	6	.7	25	2.6
Hospital admission films			3	.3
Other sources	19	2.1	20	2.2
	<u>881</u>		<u>926</u>	

CLASSIFICATION OF 830 NEW CASES OF ACTIVE AND INACTIVE PULMONARY
TUBERCULOSIS (Indians not included)

Minimal	377
Moderately advanced	201
Far advanced	85
Primary	88
Tuberculous pleurisy with effusion	79
	<hr/>
	830
	<hr/>
No. of non-residents diagnosed as having tuberculous	11
No. of known contacts of newly discovered cases of tuberculosis	1,827
No. of known contacts examined	1,414—77.3%

TUBERCULIN MAILING LIST, 1950

Clinics and Health Units	12
Hospitals	9
Miscellaneous	14

In addition to the above the following were sent in response to requests:

Dilution No. 4	6
Dilution No. 3	125
Dilution No. 2	31
Dilution No. 1	1

INSTITUTIONAL REPORTS

	Central Alberta Sanatorium	Edmonton General Hospital	University of Alberta Hospital	Royal Alexandra Hospital	Others
Patients under treatment January 1, 1950.....	253	120	21	20	10
Patients admitted during 1950	247	204	8	29	111
Patients transferred in	34	57	42	23	5
Total treated	<hr/> 534	<hr/> 381	<hr/> 71	<hr/> 81	<hr/> 126
Discharged and died	279	178	19	35	58
Patients transferred out	8	65	31	10	47
Total discharged	<hr/> 287	<hr/> 243	<hr/> 50	<hr/> 45	<hr/> 105
Patients under treatment Dec. 31, 1950.....	247	138	21	36	21
Patient days, 1950 (calendar year)	<hr/> 93,315	<hr/> 51,236	<hr/> 13,026	<hr/> 10,476	<hr/> 1,846
No. patients under treatment Jan. 1, 1950					433
No. of admissions 1950					599
Total treated					<hr/> 1032

DIAGNOSIS OF 599 PATIENT ADMISSIONS

	Central Alberta Sanatoria	Edmonton Sanatoria	Others
Non-tuberculous	20	4	...
For diagnosis	17	16	2
Pleural Effusion	9	16	5
Tuberculosis, Inactive	4	...	...
Primary tuberculosis	12	13	5
Non-Pulmonary Tuberculosis	31	21	61
Pulmonary tuberculosis active:			
Minimal	41	40	3
Moderately advanced	57	78	17
Far advanced	55	48	16
Miliary	1	3	2
Silico tuberculosis .....	...	2	...
	<hr/> 247	<hr/> 241	<hr/> 111
Number with positive sputum on admission	92	74	25
Number with negative sputum on admission, positive later	2	6	...
Number persistently negative	153	161	86
	<hr/> 247	<hr/> 241	<hr/> 111
Of the above 599 admissions, re-admissions were	62	69	10

Of the above 599 admissions, 7 were admitted and re-admitted during 1950, i.e., 592 persons were admitted during 1950.

INSTITUTIONS SECTION

In addition to the above there were 3,231 patient days in other provinces under reciprocal agreement. Number of patients, 17.

Total institutional patient days including 3,231 paid for in other provinces under reciprocal agreement, 173,130.

Number of institutional patient days provided for non-residents under reciprocal agreement, 1,384. Number of patients, 7.

OPERATING ROOM REPORTS

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	Total
THORACOPLASTY:				
Number stages	116			116
Number of cases	62			62
Number of revisions	2			2
Pneumolysis, closed	15	45		60
Aspiration, pleural	311	38	13	362
Aspiration, other	61	5	1	67
Aspiration pus and irrigation	107			107
Aspiration, air	2			2
Instillation oil and gomonal	14			14
Bronchoscopic examination	5	6	5	16
Vital capacity	55	12		67
Thoracoscopy	14			14
Intracavity pressure and drainage	4			4
Rib section and pack drainage	4			4
Lobectomy	1			1
Phrenic crush		3		3
Resuturing of incision	1			1
Implantation cortate pellets	1			1
Nephrectomy	3			3
Appendectomy	1			1
Laparotomy	1			1
Excision ischio rectal abscess	2			2
Excision miscellaneous (moles, tumor, toe-nails, etc.)	10	1		11
Pelvic examination	15	6		21
Protoscopic examination	6	7		13
Spinal punctures	151	194		345
Gastric lavages	27			27
Drainage and pack groin abscess	1			1
Submucous resection			1	1
Abdominal paracentesis		3		3
Biopsy cervical node		1		1
	992	321	20	1233

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	Total
Summary of Pneumothorax Cases:				
Under treatment Jan. 1, 1950	129	105	10	244
New cases started 1950	33	73	12	118
No. cases under treatment an admission	21	12		33
	183	190	22	395
Number cases discontinued	66	64	6	136
Number transferred out of Alberta	6	1		7
Number transferred to other sections of Division	21	6	4	31
	93	71	10	274
Under treatment Dec. 31, 1950	90	119	12	221
Unsuccessfully attempted	11	22		33
Refills:				
Resident	2220	2568	415	5203
Out patient	1958	2086	20	4064
Total	4178	4,654	435	9267

In addition to the above 590 pneumothorax refills were given to 39 ex-Sanatorium patients at the following points: Beaverlodge, Drumheller, Elk Point, High Prairie, Lacombe, Vermilion, Lethbridge, Medicine Hat, Ponoka, Provost, Red Deer, Wainwright.

Summary Pneumo-Peritoneum Cases:

Under treatment Jan. 1, 1950	3	16	....	19
New cases started during 1950	15	11	....	26
Cases transferred in (1 from Charles Cam- sell)	6	....	....	6
.....	24	27	....	51
Number discontinued	7	10	....	17
Transferred to other sections of the Division .....	....	5	....	5
.....	7	15	....	22
Under treatment Dec. 31, 1950	17	12	....	29
Number of refills	482	672	....	1154

X-RAY DEPARTMENT REPORT

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University of Alberta Hospital	Total
RADIOGRAPHS MADE:					
Thorax	6,232	4,647	218	47	11,144
Spine	89	37	2	2	130
Pelvis	29	16	....	....	45
Knee	7	10	3	....	20
Skull	5	....	....	....	5
Sinuses	2	....	1	....	3
Teeth	46	7	....	....	53
Shoulder	11	....	1	1	13
Hand	10	3	....	....	13
Wrist	5	....	....	....	5
Elbow	5	4	....	....	9
Sacro-iliac	15	....	....	....	15
Ankles	15	6	....	1	22
Feet	8	2	....	....	10
Hips	6	1	....	....	7
Ribs	3	....	1	....	4
Jaw	1	....	....	....	1
Mastoids	1	....	....	....	1
Heels .....	....	....	....	2	2
Bronchogram	4	4	....	....	8
Abdomen	7	....	3	1	11
Gall Bladder	3	....	....	....	3
Stomach	5	....	....	....	5
Gastro-intestinal tract	11	....	....	....	11
Colon	4	....	....	....	4
Intravenous pyelogram	15	6	....	....	21
Retrograde pyelogram	4	....	....	....	4
Kidneys, ureters, bladder	4	....	....	....	4
.....	6,547	4,743	229	54	11,573
FLUOROSCOPIC EXAMINATIONS:					
Thorax	5,543	5,621	557	....	11,721
Gastro Intestinal Tract	11	22	2	....	35
Colon	4	....	....	....	4
Stomach	5	....	....	....	5
.....	5,563	5,643	559	....	11,765
Films referred for Interpretation	4,794	4,620	....	....	9,414
Basal Metabolism Rate	10	....	....	....	10
Cardiogram	17	....	....	....	17

LABORATORY REPORTS

N.B.—The Laboratory work for the Central Alberta Sanatorium is done by the Southern Branch of the Provincial Laboratory, and no report is available.

	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
SPUTUM EXAMINATIONS:				
Positive	509	197	26	732
Negative	1,239	359	162	1,760
URINE EXAMINATIONS:	1,202	1,447	180	2,829
BLOOD EXAMINATIONS:				
Blood Counts	1,206	51	31	1,288
Sedimentations	843	195	71	1,109
Blood Sugar	70	....	16	86
MISCELLANEOUS:				
Pleural fluid	38	....	....	38
Spinal fluid	201	26	....	227
Pericardial	1	....	....	1
Gastric analysis	4	1	....	5
Gastric lavage	75	....	....	75
Culture	26	....	....	26
Guinea pig inoculation	126	4	9	139
Other	720	16	4	740
	6,260	2,296	499	9,055

	Central Alberta Sanatorium	Edmonton General Hospital	Royal Alexandra Hospital	University Hospital	Total
WASSERMAN REPORTS:					
Positive	8	7	....	5	20
Negative	260	189	29	7	485
	268	196	29	12	505

HELIO THERAPY REPORT

Number patients treated	13	69	3	....	85
Number of treatments	667	648	39	....	1,354

DENTAL REPORT

Number of patients	485	117	48	....	650
Number of treatments	201	344	133	....	678
Number prophylactic treatments	169	10	9	....	179
Number of fillings	502	169	62	....	231
Number of extractions	245	159	54	....	458
Number new dentures and repairs	59	6	8	....	73

CLASSIFICATION OF 569 DISCHARGED PATIENTS:

	On Admission. No.	Residence		On Discharge				
		31 days or less	Over 31 days	AA.	Q.	I.	U.	D.
1. For diagnosis	56	39	17	....	....	....	....	....
2. Primary Tuberculosis	23	2	21	....	3	19	1	....
3. Reinfection type pulmonary tuberculosis clinical::								
Minimal	83	9	74	2	21	56	4	....
Moderately advanced	78	9	69	3	13	53	3	6
Far advanced	10	2	8	....	1	6	1	2
4. Reinfection type pulmonary tuberculosis bacillary:								
Minimal	10	1	9	....	1	8	1	....
Moderately advanced	75	2	73	....	21	46	2	6
Far advanced	103	18	85	18	42	6	37	....
Miliary	3	1	2	....	....	....	....	3
5. Tuberculous pleurisy	28	2	26	....	2	25	....	1
6. Non-pulmonary tuberculosis	100	19	81	....	3	79	11	7
Total active tuberculosis	513	65	448	5	83	334	29	62
Total number treated .....	....	....	465	2	81	312	11	42
Total number untreated .....	....	104	....	3	2	17	21	22
Grand Total	569	104	465	5	83	329	32	64

Explanation of abbreviations and terms used: The standard classification is that of the National Tuberculosis Association: "Minimal", "Moderately advanced", and "Far advanced" refer to the anatomical extent of disease; "AA" Apparently arrested, "Q" Quiescent, "I" Improved, "U" Unimproved, and "D" Died.

NOTE: Only those in residence over 31 days are classed as "Treated".

CLASSIFICATION ON ADMISSION OF 569 DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Edmonton Sanatoria	Others	Total
For diagnosis	29	27	....	56
Primary tuberculosis	10	13	....	23
Pulmonary Tuberculosis, active	200	152	10	362
Tuberculosis pleurisy	8	20	....	28
Non-pulmonary tuberculosis	32	20	48	100
	279	2,32	58	569

DIAGNOSIS ON DISCHARGE OF 56 PATIENTS ADMITTED FOR DIAGNOSIS:

	Central Alberta Sanatorium	Edmonton Sanatoria
Tuberculosis inactive	1	9
Non-tuberculous pneumonia	1	6
Non-tuberculous spontaneous pneumo- thorax	1	....
Non-tuberculous branchial asthma	1	....
Non-tuberculous bronchiectasis .....	....	1
Non-tuberculous pneumonitis	3	1
Non-tuberculous debility (pneumonic)	2	....
Non-tuberculous pulmonary fibrosis	5	....
Non-tuberculous pulmonary fibrosis with sepsis	5	2
Non-tuberculous pulmonary fibrosis asthma, bronchitis with bronchiectasis and atopic dermatitis	1	....
Non-tuberculous respiratory infection .....	....	1
Non-tuberculous pleuritis .....	....	1
Bronchogenic carcinoma	3	1
Myocardial disease	1	....
Inflammation areola tissue left axilla and right inguinal region etiology	1	....
Sarcoidosis .....	....	1
Non-tuberculous spondylitis	1	....
History pelvic tuberculosis (operated)	1	....
Hodgkins disease .....	....	1
Undiagnosed	2	2
No disease .....	....	1
	29	27

CLASSIFICATION ON DISCHARGE OF 448 TREATED CASES OF ACTIVE TUBERCULOSIS AND TUBERCULOUS PLEURISY:

On Admission:	Number	On Discharge		
		Improved	Unimproved	Died
Minimal	83	82	1	....
Moderately Advanced	143	133	3	7
Far Advanced	92	65	....	27
Primary	21	21	....	....
Miliary	2	....	....	2
Non-Pulmonary Tuberculosis	81	67	7	7
Tuberculosis Pleurisy	26	25	....	1
	448	393	11	44

*SEX:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Male	129	159	288
Female	150	131	281
	279	290	569

*SOCIAL STATUS:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Single	118	151	269
Married	144	123	267
Divorced	5	....	....
Widowed	8	11	19
Separated	4	5	9
	279	290	569

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
*OCCUPATIONS—WOMEN:			
At Home	8	11	19
Bakery worker	1	1	2
Bookkeeper	1	.....	1
Cashier	1	1	2
Clerk (Sales)	3	5	8
Clerk (Bank)	2	.....	2
Clerk (Office)	1	1	2
Cook	1	1	2
Child	5	3	8
Doctor	1	.....	1
Domestic	2	8	10
Gospel worker .....	.....	1	1
Hairdresser	1	1	2
Housewife	77	58	135
Laboratory technician	1	.....	1
Laundry worker	1	.....	1
Nurse	11	3	14
Nursing aide	1	.....	1
Nurse (practical)	1	.....	1
Stenographer	9	4	13
Student	16	21	37
Seamstress	1	1	2
Teacher .....	.....	2	2
Waitress	2	3	5
Ward Aide	2	6	8
X-ray technician (student)	1	.....	1
	<u>150</u>	<u>131</u>	<u>281</u>

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
MEN:			
Army	1	.....	1
Accountant	2	.....	2
Attendant .....	.....	2	2
At home .....	.....	1	1
Boiler foreman	1	.....	1
Bush worker	1	.....	1
Bank manager .....	.....	1	1
Bookkeeper	1	.....	1
Barrister	1	.....	1
Barber	1	1	2
Butcher	1	.....	1
Bus driver	1	.....	1
Car man C.P.R.	1	.....	1
Cattle dealer	1	.....	1
Clerk (office)	3	6	9
Clerk (store)	4	.....	4
Cook	1	4	5
Carpenter	5	6	11
Construction foreman	1	.....	1
Caretaker	1	.....	1
Child	9	10	19
Coffee shop proprietor	1	.....	1
Contractor	1	.....	1
Driver (underground)	1	.....	1
Doormaker	1	.....	1
Draftsman	1	.....	1
Decorator	1	.....	1
Dry cleaner	1	.....	1
Edger man (sawmill)	1	.....	1
Electrician	1	1	2
Engineer	1	.....	1
Farmer	21	39	60
Fireman .....	.....	1	1
Farm implement dealer	1	.....	1
Field supervisor (retired)	1	.....	1
Florist .....	.....	1	1
Furniture dealer	1	.....	1
Grain buyer	1	.....	1
Grader man	1	.....	1
Gardener	1	1	2
Hotel manager	1	.....	1
Labourer, mine (above ground)	2	.....	2
Labourer	7	16	23
Lumberman (sawmill) .....	.....	1	1
Logger	1	.....	1
Loundryman .....	.....	1	1
Mechanic	5	4	9
Merchant	1	.....	1
Mechanical engineer	1	.....	1
Machinist	1	.....	1
Milk salesman	1	.....	1
Miner .....	.....	2	2
Manager (general store)	2	.....	2
Orderly (medical)	1	.....	1
Officer (Uemployment Ins. Com.)	1	.....	1
Oilwell worker .....	.....	2	2
Plasterer	2	.....	2
Printer	1	.....	1
Physician	2	.....	2
Plumber .....	.....	1	1
Photographer .....	.....	1	1
Root house man	1	.....	1
Real estate agent	1	1	2
Rancher	1	.....	1
Retired .....	.....	12	12
Race horse owner .....	.....	1	1
Radio man .....	.....	1	1
Section man	1	.....	1
Student	9	27	36
Ski instructor	1	.....	1
Salesman	1	7	8
Seedsman .....	.....	1	1
Timekeeper	1	.....	1
Taxi driver	1	.....	1
Taxi dispatcher .....	.....	1	1
Truck driver	3	2	5
Trapper .....	.....	2	2
Trainman .....	.....	1	1
Utility man (packing plant)	1	.....	1
Waiter (beer)	2	.....	2
Waiter	1	.....	1
Watchman	2	.....	2
Watchmaker	1	.....	1
X-ray technician .....	.....	1	1
	<u>129</u>	<u>159</u>	<u>288</u>

*RESIDENCE OF DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
CITIES:			
Calgary	74	1	75
Drumheller	18	...	18
Edmonton	14	120	134
Lethbridge	9	...	9
Medicine Hat	7	...	7
Red Deer	8	...	8
Wetaskiwin .....	...	3	3
	<u>130</u>	<u>124</u>	<u>254</u>
TOWNS:			
Athabasca .....	...	2	2
Banff	3	...	3
Camrose	3	1	4
Cardston	1	...	1
Claresholm	2	...	2
Edson	1	...	1
Fairview	1	...	1
Grand Prairie	1	3	4
Hanna	1	...	1
High Prairie	1	1	2
Lac La Biche .....	...	3	3
Lacombe	3	...	3
Leduc .....	...	2	2
Lavoy .....	...	1	1
Macleod	1	...	1
Magrath	2	...	2
Olds	1	...	1
Peace River .....	...	1	1
Pincher Creek	5	...	5
Ponoka	4	1	5
Raymond	1	...	1
Rocky Mountain House	2	...	2
St. Albert .....	...	4	4
St. Paul	1	2	3
Stettler	1	...	1
Strathmore	1	...	1
Taber	3	...	3
Tofield .....	...	2	2
Vegreville	3	...	3
Vermilion	1	1	2
Wainwright .....	...	3	3
	<u>43</u>	<u>27</u>	<u>70</u>
VILLAGES:			
Andrew .....	...	1	1
Beaverlodge .....	...	1	1
Berwyn .....	...	1	1
Black Diamond	2	...	2
Bonnyville	2	...	2
Bowden	2	...	2
Bowness	2	...	2
Burdett	1	...	1
Carmangay	1	...	1
Eckville	4	...	4
Elk Point .....	...	2	2
Falher .....	...	1	1
Grimshaw .....	...	1	1
Hythe .....	...	1	1
Hay Lakes .....	...	1	1
Holden .....	...	1	1
Kinuso .....	...	1	1
Lamont	1	...	1
Manville .....	...	1	1
Mundare	1	2	3
Onoway .....	...	1	1
Redwater .....	...	3	3
Sedgewick .....	...	1	1
Viking	2	...	2
Warner	1	...	1
Waskatenau .....	...	1	1
Wembley .....	...	1	1
	<u>19</u>	<u>21</u>	<u>40</u>

ENLARGED MUNICIPAL DISTRICTS:

No.	Central Alberta Sanatorium	Edmonton Sanatoria	Total
4	1	.....	1
9	1	.....	1
25	1	.....	1
26	1	.....	1
29	2	.....	2
30	1	.....	1
32	3	.....	3
34	1	.....	1
40	1	.....	1
43	3	.....	3
44	1	.....	1
45	2	.....	2
48	3	.....	3
49	3	.....	3
52	1	1	2
54	2	1	3
55	5	.....	5
57	2	.....	2
62	3	.....	3
63	3	1	4
64	6	.....	6
71	2	3	5
73	.....	3	3
75	.....	1	1
76	.....	2	2
81	1	.....	1
82	1	1	2
84	.....	1	1
86	1	3	4
87	.....	1	1
88	.....	1	1
89	1	7	8
90	.....	5	5
91	.....	3	3
93	.....	6	6
94	.....	3	3
103	1	.....	1
105	.....	2	2
106	.....	1	1
135	.....	1	1
	<u>53</u>	<u>47</u>	<u>100</u>

LOCAL IMPROVEMENT DISTRICTS:

No.			
1	1	.....	1
3	1	.....	1
10	1	.....	1
23	1	.....	1
28	2	.....	2
42	4	1	5
46	3	.....	3
50	.....	1	1
65	1	.....	1
69	2	.....	2
76	1	.....	1
80	.....	2	2
85	.....	1	1
95	1	2	3
101	1	2	3
102	.....	8	8
104	1	2	3
105	.....	2	2
106	.....	1	1
107	.....	1	1
108	.....	1	1
121	.....	1	1
122	.....	1	1
124	1	10	11
125	1	11	12
127	.....	3	3
128	.....	1	1
129	.....	2	2
130	.....	1	1
132	.....	2	2
135	.....	3	3
138	1	1	2
139	1	.....	1
143	.....	9	9
146	1	.....	1
147	1	2	3
	<u>26</u>	<u>71</u>	<u>97</u>
Special Areas	2	.....	2
Non-residents	6	.....	6

SUMMARY:	Central Alberta Sanatorium	Edmonton Sanatoria	Total
Cities	130	124	254
Towns	43	27	70
Villages	19	21	40
Enlarged Municipal Districts	53	47	100
Local Improvement Districts	26	71	97
Special Areas Board	2	....	2
Non-residents	6	....	6
	<u>279</u>	<u>290</u>	<u>569</u>

*AGE ON ADMISSION:

From 1 to 9 years	17	21	38
From 10 to 14 years	6	17	23
From 15 to 19 years	32	44	76
From 20 to 29 years	87	80	167
From 30 to 39 years	63	45	108
From 40 to 49 years	28	39	67
From 50 to 59 years	28	23	51
From 60 to 69 years	15	7	22
70 years and over	3	14	17
	<u>279</u>	<u>290</u>	<u>569</u>

*NATIVITY:

Alberta	145	185	330
Canada (other Provinces)	55	43	98
Austria	1	3	4
Czechoslovakia	3	....	3
China	3	1	4
Denmark	3	....	3
England	18	6	24
Estonia	1	....	1
Finland	1	....	1
Greece	1	....	1
Hungary	2	....	2
Ireland	1	3	4
Latvia	1	2	3
Norway	2	2	4
Poland	7	14	21
Russia	5	1	6
Roumania	1	2	3
Scotland	6	8	14
Turkey	1	....	1
Ukraine	2	....	2
United States of America	19	6	25
Yugoslavia	1	....	1
Switzerland .....	....	1	1
Sweden .....	....	4	4
Australia .....	....	1	1
Belgium .....	....	1	1
Malta .....	....	1	1
Isle of Man .....	....	1	1
Italy .....	....	2	2
France .....	....	1	1
Holland .....	....	1	1
Wales .....	....	1	1
	<u>279</u>	<u>290</u>	<u>569</u>

*RESIDENCE IN ALBERTA:

Born in Alberta	136	180	316
1 year or less	10	8	18
1 to 5 years	28	25	53
6 to 9 years	7	2	9
10 to 14 years	10	6	16
15 to 19 years	15	8	23
20 to 30 years	33	23	56
30 years or more	40	38	78
	<u>279</u>	<u>290</u>	<u>569</u>

	Central Alberta Sanatorium	Edmonton Sanatoria	Total
*RACIAL ORIGIN:			
Austrian	4	1	5
Belgian	2	.....	2
Chinese	4	1	5
Czechoslovakian	5	1	6
Danish	7	1	8
Dutch	9	4	13
English	52	46	98
Esthonian	3	.....	3
Finnish	6	.....	6
French	11	16	27
German	21	11	32
Greek	2	.....	2
Hungarian	2	.....	2
Icelandic	1	1	2
Irish	32	23	55
Italian .....	.....	2	2
Japanese	2	1	3
Jewish	2	.....	2
Latvian	1	2	3
Metis	13	71	84
Manx .....	.....	1	1
Norwegian	12	9	21
Polish	6	22	28
Roumanian	2	1	3
Russian	5	1	6
Swedish	7	8	15
Scottish	44	31	75
Ukrainian	13	25	38
Welsh	7	2	9
Unknown	4	9	13
	<u>279</u>	<u>290</u>	<u>569</u>

*Tables include figures for discharges from General Section of Hospitals.

LENGTH OF STAY IN SANATORIUM OF 569 DISCHARGED PATIENTS

DEATHS:

Number in Sanatorium under 31 days.....	7	15	22
Number of patient days	74	115	189
Average number patient days	10.5	7.3	8.6
Number in Sanatorium 31 or more days...	21	21	42
Number of patient days	12,599	7,788	20,387
Average number patient days	599.5	370.9	485.4

DISCHARGES:

Number in Sanatorium under 31 days.....	30	52	82
Number of patient days	496	594	1,090
Average number patient days	16.5	11.4	13.3
Number in Sanatorium 31 days or more...	221	202	443
Number of patient days	77,317	41,721	119,038
Average number patient days	349.8	206.5	268.7
Total number deaths and discharges	279	290	569
Total patient days	90,486	50,218	140,704
Average number patient days	324.3	173.2	247.3

No. non-pulmonary admissions(individual)	27	20	11
No. non-pulmonary patient days (calendar)	4,936	9,668	244
Average patient days, non-pulmonary.....	112.2	230.2	154.1
	(44 pts.)	(42 pts.)	(11 pts.)

DONATIONS AND ENTERTAINMENT

CENTRAL ALBERTA SANATORIUM

ENTERTAINMENT—Hillhurst United Y.P.S., Concert; Al-San Club, Calgary, Entertainment; CFCN, Calgary, Entertainment; Canadian Red Cross, Christmas Concert and weekly showing 16 mm. films; St. Stephen's Church A.Y.P.A., Carols; Elks' Concert Party, Concert; Weekly Shows; Valentine Party; Hallowe'en Party; Cribbage Tournament; Billiard Tournament.

DONATIONS—Kinettes, Cash \$75.00 for Occupational Therapy, Canary; Ladies' Auxiliary Canadian Legion, Vulcan, Cash; J. W. Hughes, Kelowna, Tulips and Flowers, Dr. Baker's Farewell; Alberta Division Red Cross, Pyjamas; Hurson's Bay Co., Calgary, Decorations, Dr. Baker's Farewell and Christmas; A. M. Terrill Ltd. Calgary, Flowers, Dr. Baker's Farewell; Drumheller Mail, Subscriptions; Simmons Ltd., Candy; Campbell Floral Co., Calgary, Flowers; McGaven's Ltd., Calgary, Christmas Cakes; Palace Bakery, Calgary, Christmas Cake; Bowness Taxi, Christmas Cake; Canadian Red Cross, Gifts; Masonic Lodge, Candy and Gifts; Children's Hospital Aid, Calgary, Records; Salvation Army, Calgary, Gifts; Oddfellows Lodge, Calgary, Gifts and Santa Claus; Nursing Mission, Lethbridge, Gifts; Ladies' Auxiliary, Canadian Legion, Turner Valley, Gifts; Evening Auxiliary, Hillhurst United Church, Gifts; Diocesan Board, Women's Auxiliary of Anglican Church, Calgary, Gifts; Ladies' Auxiliary, Alberta Provincial Command, Canadian Legion, Gifts; Mrs. A. Buchner, Calgary, Flowers; Eaton's' Legion Christmas Tree, Gifts; Bowness Catholic Women's League, Gifts; St. John's Catholic Women's League, Gifts; Ste. Famille Church, Calgary, Gifts. City of Edmonton, Anniversary Cake.

GIFTS, DONATIONS AND ENTERTAINMENT

ROYAL ALEXANDRA HOSPITAL

Salvation Army, Gifts of Fruit, Candy, etc., Carol Singing Christmas Eve; Choral Club of Royal Alexandra Hospital, Music and Carols at intervals during winter season; Central Christian Church, Travelogue with pictures and music; Beulah Tabernacle Choir, Music and Pictures; Women's Auxiliary of the Royal Alexandra Hospital, Gifts of Candy and Soap, Christmas Party; Donation of Life Magazine from the Ukrainian Church Ladies' Aid Society.

EDMONTON GENERAL HOSPITAL

BASKETS OF FRUITS, NUTS, AND CANDIES:

1. No. 202 Jack Wong and No. 202A George Mah, The Chinese Ladies' United Church Club, Mrs. Lee Toy, Dec. 20, 1950.
2. No. 241 Walter Hunka, No. 238 Thomas Bamford, and No. 218 Clark Barrett, Central United Church W.M.A., Mrs. W. B. Yule (President), 9366 Cameron Ave., Edmonton (also one other lady), Dec. 20, 1950.
3. No. 234 D. Collier and No. 233 F. Baton, Eastwood United Church W.M.S., Mrs. Hackett, Dec. 21, 1950.
4. No. 256 J. Gray and No. 262 H. White, Metropolitan United Church W.M.S., Mrs. Taylor and Mrs. Sommerville, Dec. 21, 1950.
5. No. 200 L. Wilcox, No. 208 M. Way, and No. 220 A. Brassnett, Metropolitan United Church W.M.S., Mrs. Leech (President, Mrs. A. G. Andrews).
6. No. 235 J. Rash, No. 242 F. Ahlgren, No. 243 George Steffler, No. 247 Edwin Anderson, and No. 248 P. Hartlage, St. Peter's Bethlehem and Grace Lutheran Churches, Mrs. Harold Brown, 11151 70th Street, Mrs. Harry Patterson, 11315 70th Street, Dec. 21, 1950.
7. No. 260 M. Theroux and No. 261 J. Mason, Buchanan United W.M.S., Mrs. Derbyshire and daughter, Dec. 21, 1950.

OTHER CHRISTMAS GIFTS:

1. Year's subscription to Maclean's Magazine for Men's Ward Sanatorium, Fort Edmonton Chapter I.O.D.E.
2. A subscription to Reader's Digest for Men's Ward Sanatorium, Fort Edmonton Chapter I.O.D.E.
3. Women's Auxiliary of General Hospital, Mrs. Wm. Schlader, 10728 125th Street, Edmonton (Chairman of the Recreation Committee for Children): 2 Christmas films for all patients, clothing and fruits, nuts and candies for five needy children, a Santa Claus, and a lunch for all patients, Dec. 18, 1950.
4. Lady Bessborough Chapter I.O.D.E.: Mrs. W. H. Begg, 10952 125 Street, Edmonton, 3 Jap oranges, 1 box candy and 1 package of cigarettes for each of 15 veterans, 1 crokinole board for all patients, Dec. 20, 1950.
5. Ukrainian Catholic Ladies' Goodwill Club: Mrs. Zarsky (President), 11401 86th St., Edmonton, 2 cases of oranges for all tuberculosis patients, Dec. 21, 1950.
6. Lutheran Youth Federation of Edmonton: Mr. Alfred Querengesser (President), 11107 132nd Street, Edmonton, a group of approximately 40 to 50 carol singers, Dec. 20, 1950.
7. St. Mary's High School: Miss Audrey Cyr, Director, 12950 124th Street, Edmonton, carol singing, Dec. 21, 1950.
8. Ken Fenton: Jap oranges, candy and nuts, Dec. 24, 1950.
9. Parcels of fruit, etc., to all veterans from Ladies' Auxiliary Canadian Legion, Provincial Command, Dec. 24, 1950.
10. Christmas gifts, cash, and candies from Legion, Dec. 24, 1950.
11. Carol singers from the Augustana Lutheran Church, Dec. 25, 1950.
12. Women's Auxiliary of General Hospital: Various films for all patients, December 20, 1950.
13. Two potted flowers from Rene Flowers, Jan. 3, 1951.
14. Flowers from the funeral of Mr. William Rice, Jan. 6, 1951.

Division of Mental Health

RANDALL R. MACLEAN, M.D., *Director.*

Separate reports are submitted for each branch of the Division, namely:

- Eugenics Board.
- Provincial Guidance Clinics.
- Provincial Mental Hospital, Ponoka.
- Provincial Mental Institute, Edmonton.
- Provincial Auxiliary Mental Hospital, Claresholm.
- Provincial Auxiliary Mental Hospital, Raymond.
- Provincial Training School for Defectives, Red Deer.

The total patient population in the various institutions in this Division on January 1st, 1950, was 3,171 (males 1,943, females 1,228). This represented a gain of 198 patients (males 100, females 98). The Provincial Mental Hospital, Ponoka, serving as the chief admission hospital, admitted 647 patients (male 314, female 333) during the year. This was 60 more admissions than the previous year. The Provincial Mental Institute, Edmonton, admitted 297 patients (males 176, females 121) during the year. This was 37 more than the previous year. The Provincial Mental Hospital, Ponoka, and the Provincial Mental Institute, Edmonton, gave extensive service treatment to all cases requiring this. The Provincial Training School, Red Deer, increased its admission rate as a result of its increased accommodation. During the year, 101 children were admitted (male 56, females 45). This was 61 more than the previous year. With improvement in the accommodation for the children, and with increased activity in the training programme, there was an improvement in the discharge rate, 19 children being allowed to leave the School as compared with 10 during the previous year.

During the year, 153 patients were involved in transfers to and from the various institutions. Twenty-nine patients were discharged from the Provincial Mental Hospital, Ponoka, and the Provincial Mental Institute, Edmonton—14 and 13 respectively—and immediately accepted at Rosehaven in Camrose.

Work continued during 1950 on the new Psychiatric Ward of the University of Alberta Hospital, Edmonton, in the hope of opening it during 1951. Work was commenced on the Psychiatric Ward of the Calgary General Hospital.

During the year there was a considerable amount of new building construction in connection with a number of the institutions. A new dormitory for girls was opened at the Provincial Training School, Red Deer. Work continued on the alterations of the kitchen and staff dining halls at the same institution. The new power house was practically completed here also, as well as a new root cellar and new stores' accommodation. Work continued on the new Tuberculosis wing at the Provincial Mental Institute, Edmonton. A new section of the corridor system was erected and, certain alterations were made to the kitchen.

The services of the Provincial Guidance Clinics were somewhat expanded. In addition to the points visited in previous years, two visits were paid to the Peace River area. The clinic staffs continued to participate in public education activities, including lectures, talks to community groups, radio work, and group discussions and institutes. The new case load was materially increased during the year.

Nine meetings of the Eugenics Board were held; five of these at the Provincial Mental Hospital at Ponoka and four at the Provincial Training School, Red Deer. A total of 98 cases was presented for the Board's consideration. Sixty-seven operations (male 21, female 46) were performed during the year. The total number of cases operated upon to December 31st, 1950, was 1,242 (male 496, female 746). The operations were performed at the Provincial Mental Hospital, Ponoka, by duly appointed honorary surgeons, assisted by the medical staff of the said hospital.

TABULATED SUMMARY—INSTITUTIONS: MOVEMENT OF PATIENTS

Hospital	Patients in Hosp. Jan. 1, 1950			Admissions			Discharges			Deaths			Patients in Hosp. Dec. 31, 1950		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
	Ponoka	839	555	1394	314	333	647	219	276	495	41	15	56	891	597	1488
Oliver	945	328	1273	176	121	297	140	108	248	41	15	56	950	335	1285
Red Deer	159	134	293	56	45	101	6	13	19	7	3	10	202	163	365
Claresholm	98	98		9	9		7	7		2	2		98	98	
Raymond	113	113		27	27		6	6		1	1		133	133	
Total	1943	1228	3171	546	535	1081	365	410	775	89	36	125	2043	1326	3369

NOTE: Admissions in this table include "Transfers In"; Discharges in this table include "Transfers Out".

PROVINCIAL MENTAL HOSPITAL, PONOKA

Patient Population Changes.

The number of patients in residence on January 1st, 1950 was 1,394, of whom 839 were male and 555 female. On December 31st, 1950, there were in residence 1,488 patients, of whom 891 were male and 597 female. There was an overall increase of 94 in the patient population.

Admission of Patients.

Exclusive of transfers from other mental institutions, 607 patients were admitted. This was an increase of 55 over 1949. Of these, 307 were male and 300 female. There were 131 patients admitted voluntarily, 134 admitted by medical certificate, 332 by Warrant of the Attorney General, and 10 under "The Mental Defectives Act"; 40 patients were transferred to this hospital from other Provincial mental institutions. The number of those admitted with senile disorders was relatively unchanged, but there was a further decided reduction of those with disorders due to Syphilis. In 1950, the latter amounted to only slightly more than 2% of admissions. For some years there has been a steady decrease in the number of syphilitic patients admitted to this hospital. The proportions in the other diagnostic categories were essentially the same as in the previous year.

Separation of Patients.

The number of separations was 551, including 61 who were transferred to other Provincial mental institutions. There were 434 discharged, and 56 patients died.

Accidents and Elopements.

There were in all 12 patients who suffered from fractured bones, the number being equally divided among the sexes. There were no other serious accidents.

There were no suicidal deaths, but many patients were prevented by the staff from ending their lives in this manner.

There were 27 elopements, most of whom were returned within a short time by the hospital staff or the local branch of the R.C.M.P.

General Health.

There were no epidemics during the year, and the general health of the patients was good. Continual vigilance was maintained to keep those with Tuberculosis isolated from the others.

Clinical Work.

An active treatment programme was maintained. Augmented laboratory equipment was made available. Diagnostic facilities in general were satisfactory. Every effort was made by the medical officer to maintain the physical health of patients and to correct abnormalities.

Psychotherapy in its various aspects was made available to as many patients as possible. Whenever indicated, the shock therapies, both electro and insulin, were utilized. Malarial therapy was used to a lesser extent.

Occupational Therapy.

The facilities for this form of treatment were much improved. A newly constructed building, especially designed for this Department, was opened. Additional equipment was purchased and installed. It was possible to offer patients instruction in a wide variety of crafts, and therapeutic results were gratifying. The Library and Canteen continued to operate to the advantage of patients.

Recreational Therapy and Physical Training.

An active programme was maintained throughout the year. During the winter months, regular physical training classes were held for men. Music appreciation classes were conducted for men and women. Group activities on the wards and skating parties on the hospital rink were arranged frequently. There was much interest by patients in curling, of which there was a heavy schedule. Dances were held every second week. The hospital staff and a number of interested visiting groups gave most valuable assistance in entertainment.

Beauty Parlour.

A visit to the Beauty Parlour has now become accepted practice for all women patients. Not only is this much appreciated by the women, but it is also stimulating therapy. Nearly 8,000 procedures were carried out during the year. Selected patients regularly assisted the operators.

Religious Services.

As in previous years, services were conducted each Sunday by visiting clergymen of the major denominations. The services were always well attended. Many patients also were seen individually by the visiting clergy, usually at the request of the patient or relatives.

Social Service.

This Department fully proved its value during the year. The Social Worker's services were utilized for many patients in the hospital, and particularly with a view to re-establishment in the community. Many discharged patients were visited, and it is of interest to note that almost invariably these visits were welcomed and appreciated. Many relatives were interviewed at the hospital. The Social Worker was called on frequently for duties ordinarily carried out by a Psychologist.

Dental Services.

The Dental Office carried on with efficiency. The staff consisted of a full-time dentist and a nurse assistant. All patients were referred regularly for examination, and whenever necessary treatment was carried out. Following is a list of the services rendered to patients during the year:

	Ponoka	Claresholm	Raymond	Total
No. of patient appointments	2,101	60	78	2,239
Operations are divided as follows::				
No. of examinations	1,596	60	76	.....
No. of teeth filled	372	15	10	.....
No. of extractions	347	16	7	.....
No. of prophylaxis	416	18	34	.....
No. of peridental treatments	353	11	11	.....
No. of sundry operations (X-rays, denture impressions and adjustments)....	226	.....	7	.....
No. of new dentures	31	.....	2	.....
No. of dentures repaired	45	.....	2	.....
No. of gold inlays	1	.....	.....	.....
No. of bridge repairs	3	.....	.....	.....
Totals	3,390	120	149	3,659

X-Ray Services.

The recently installed X-ray plant proved very satisfactory, under the direction of a nurse technician. There has been a steadily increasing demand from the medical staff for X-ray examinations. The number of procedures in 1950 exceeded by approximately 500 those done in the previous year. All chest X-ray plates were referred to the Central Alberta Sanatorium, Calgary. Their valuable interpretations were highly appreciated by the medical staff of this hospital. Following is a detailed list of the procedures carried out during the year:

Item	No.	Item	No.
Chest	2620	Ankle	21
Dorsal Spine	535	Foot	18
Lumbar Spine	25	Toe	2
Cervical Spine	9	Flat Plate of Abdomen	54
Skull	57	Symphysis Pubis	1
Skull (stereo)	1	Intravenous Pyelogram	3
Rib	24	Gall Bladder Region	10
Shoulder	18	Gall Bladder	3
Arm	8	Barium (Stomach)	10
Elbow	10	Barium Enema	7
Wrist	22	Esophagus	4
Hand	20	Abdomen (pregnancy)	2
Finger	12	Sacro-iliac	2
Jaw	2	Mastoid	6
Pelvis	11	Dental	7
Hip	30	Zygomatic Arch	1
Femur	7	Bladder	1
Hip (for Bismuth)	40	Flurescopic examinations	18
Knee	27		
Heel	4	Total	3,657
Leg	5		

Laboratory Services.

The Laboratory continued to function efficiently. The needs of the hospital for the usual laboratory examinations were adequately met. The position of Pathologist remained unfilled, no applicants

being available. In so far as possible, the regular medical staff provided technical advice and assistance. Following is a list of procedures carried out during the year:

Urinalyses	2,809
Blood Counts	1,416
Blood Chemistry	527
Sputa	968
Cerebrospinal fluids	596
Smears:	
Vaginal, Throat	58
Differential Counts and Malarie	172
Basal Metabolism estimations	38
Miscellaneous, Cardiographs, etc.	61
Post-mortem examinations	18
Total	6,663
Specimens to the Provincial Laboratory:	
Wassermann, Blood Chemistry, Cultures, etc.	1,492
The Canadian Red Cross Blood Donor Service:	
Blood received (for 14 patients)	25,000 c.c.
Blood returned	3,000 c.c.

Nurses' Training School.

The teaching programme, with minor modifications, was maintained as in recent years. The staff consisted of three instructors, fully qualified in general and psychiatric nursing, as well as in teaching. Instruction was given to 19 student nurses and 34 student attendants from this hospital. Ten registered nurses completed the eight month graduate course in psychiatric nursing. Twenty-two nursing students in public health spent two weeks here in a planned programme of instruction and observation. The Archer Memorial Hospital of Lamont and the Galt Hospital of Lethbridge each sent 12 students as undergraduate affiliates, for eight week periods. This arrangement has proved highly satisfactory. The training of students at this hospital from the School of Nursing Aides in Calgary was discontinued in June, 1950, because of a change in plans by the latter school. It is hoped that at some future time the facilities of the School of Nursing of this hospital will again be utilized by the School of Nursing Aides.

Appropriate instruction was extended to ward aides and other members of the staff, the better to enable them to give service to the patients.

Medical Library.

A considerable number of volumes were added. Journals were bound and placed in the shelves. The Library continued to serve efficiently as a reference source to the staff.

Visitors.

During the year the hospital had a number of distinguished visitors. On various occasions the hospital was honoured by Dr. W. W. Cross, the Minister of Health, and Dr. M. R. Bow, the Deputy Minister of Health. Their interest was highly appreciated, as well as their advice and direction. It was pleasing to receive informal calls from individual members of the Provincial Legislature.

Dr. Randall R. MacLean, Director of The Division of Mental Health, maintained his headquarters here. He frequently inspected the hospital, and his advice was sought on many occasions. His sympathetic understanding and wise counsel were greatly valued, and lessened many of the problems of administration.

The visiting Board, comprised of members of the Eugenics Board, made its annual inspection of the hospital. This was searching, and inquiry was made regarding all aspects of the care of

patients. A very desirable feature of the inspection was the opportunity made available by the Board for the discussion of problems, with the senior members of the medical staff.

Throughout the year, a great number of relatives and friends visited patients in the hospital. Visiting hours were maintained daily without exception.

Eugenics Board.

Five meetings were held by the Board at this hospital during the year. There were 67 patients presented to the Board here, of whom 26 were male and 41 female. Sixty-five eugenical operations were carried out, of which 21 were on males and 44 on females. A number of those so treated surgically were referred from the Provincial Training School at Red Deer, Alberta.

Surgical Services.

Minor surgery was carried out by the regular medical staff. Major surgical procedures were undertaken by Dr. J. W. Richardson and Dr. J. Ross Vant. The latter was most helpful in many consultations.

Maintenance Department.

The buildings were maintained in a proper state of repair. Much redecorating was done. Various changes were carried out in the main kitchen to promote efficiency. A regular programme of insect pest control was maintained with excellent results.

Fire Protection.

The equipment was maintained and regularly inspected. Frequent fire drills were held on the wards, and with the equipment. The members of the Volunteer Fire Department demonstrated commendable zeal.

Business Office.

This department continued to function satisfactorily as in previous years.

Farm.

There has been a steady improvement in the quality of the dairy herd. The proportion of registered stock was increased. Pork and poultry produces were supplied to the hospital in adequate amounts. Due to unfavourable weather conditions, the grain yield was below normal, but the potato crop was fair.

Gardens.

The season was dry, but there was an adequate supply of vegetables for immediate use and storage.

Cannery.

Over 23,000 cans of food were processed. Much of the food canned was raised on the hospital grounds.

Dietary Department.

The Dietitian maintained supervision over the preparation of food and the dining facilities. A great many special diets were provided to patients. Whenever possible, improvements were made in the quality and preparation of foods.

Housekeeping Department.

The Housekeeper carefully supervised maintenance, repair and replacement of furnishings and supplies. A careful inventory was maintained in all departments. There was close liaison between the Housekeeper and the maintenance department in all redecorating operations through the hospital.

Laundry.

The new Laundry functioned with reasonable efficiency, but minor difficulties were encountered in the operation of the recently installed machinery. These problems were, however, gradually eliminated during the year, and in general, the new installation proved much more satisfactory than the former plant. Work continued in the preparation of the new ironing and pressing room.

Linen Room.

This department functioned efficiently as in previous years. Preparation was made for transfer of the linen room to quarters made available in the former mangle room of the Laundry.

Tailor Shop.

It was necessary that this department operate at full capacity to fill the requirements of the male patients, and to supply uniforms for attendants. Some difficulty was encountered in obtaining materials. This department is exceptionally well equipped with power machinery.

Sewing Room.

It was with difficulty that this department met the needs of the hospital for women's clothing and uniforms for the female staff. The number of articles manufactured was in excess of 23,000. A change from two to one-piece dresses was made in the uniforms worn by the domestic staff. This entailed increased work during the year for the sewing room, but should minimize requirements in the future.

Print Shop.

This department continued to meet the needs of the hospital in the printing of nearly all forms used. From time to time, orders were filled for other branches of the Department of Public Health.

Department of the Chief Engineer.

The Chief Engineer and his staff co-operated to the fullest extent with the personnel of the Department of Public Health in providing appropriate facilities to the hospital, and at all times were prepared to offer technical advice. The hospital was well heated, and there was an adequate supply of light and water.

Conclusion.

The treatment and care of patients was maintained at a level in keeping with departmental policy. Wherever possible, methods of therapy were improved, and the staff kept abreast of new developments in the field of psychiatry. The morale of the staff was good, and this was reflected in the sustained effort to promote the welfare of patients. Those responsible for the administration of this hospital were very grateful for the co-operation of the staff and the helpful interest shown by the authorities of the Department of Public Health.

TABLE 1

MOVEMENT OF PATIENT POPULATION DURING 1950

	Male	Female	Total	Male	Female	Total
In residence as of December 31st, 1950				839	555	1394
On leave or otherwise absent				12	6	18
Admissions:						
First Admissions:						
(a) Voluntary	40	43	83			
(b) Certificates	32	58	90			
(c) Warrant	145	91	236			
(d) M.D. Act	4	2	6			
Total first admissions				221	194	415
Re-Admissions:						
(a) Voluntary	13	35	48			
(b) Certificates	16	28	44			
(c) Warrant	49	47	96			
(d) M.D. Act	1	3	4			
Total re-admissions				79	113	192
Transfers in				14	26	40
Total Admissions				314	333	647
				1165	894	2059
Separations:						
Discharges:						
As recovered	64	65	129			
As improved	56	89	145			
As unchanged	53	26	79			
Without psychoses	34	47	81			
Total discharges				207	227	234
Deaths				41	15	56
Transfers out				12	49	61
Total separations				260	291	551
On books as of December 31st, 1950				905	603	1508
In residence as of December 31st, 1950				891	597	1488
On leave or otherwise absent				14	6	20

TABLE No. 2
RESIDENT PATIENT POPULATION BY PSYCHOSES, DECEMBER 31, 1950

Psychoses		Male	Female	Total
01	Psychoses with syphilitic meningoencephalitis (general paresis)	51	10	61
02	Psychoses with other forms of syphilis of the central nervous system:			
021	Meningo-vascular type (cerebrals)	4	...	4
022	With intracranial gumma	1	...	1
023	Other types (Taboparesis)	6	3	9
03	Psychoses with epidemic encephalitis	2	3	5
04	Psychoses with other infectious diseases:			
044	With other infectious disease	2	...	2
05	Alcoholic psychoses:			
051	Pathological intoxication	1	...	1
052	Delirium tremens	3	...	3
053	Korsakow's psychoses	3	...	3
054	Acute hallucinosis	9	1	10
055	Other types	1	...	1
06	Psychoses due to drugs or other exogenous poisons	1	...	1
064	Due to other drugs (specify)	1	...	1
07	Traumatic psychoses:			
071	Traumatic delirium	1	...	1
072	Post-traumatic personality disorders	1	...	1
073	Post-traumatic mental deterioration	2	...	2
074	Other types (specify)	1	...	1
08	Psychoses with cerebral arteriosclerosis	37	13	50
09	Psychoses with other disturbances of circulation:			
091	With cerebral embolism	2	1	3
093	Other types (specify)	2	...	2
10	Psychoses with convulsive disorders:			
101	Epileptic deterioration	11	8	19
102	Epileptic clouded states	7	3	10
103	Epileptic, other types	4	5	9
11	Senile psychoses:			
111	Simple deterioration	11	19	30
114	Depressed and agitated	1	1	2
115	Paranoid types	5	3	8
12	Involuntional melancholia:			
121	Melancholia	11	12	23
122	Paranoid types	1	2	3
13	Psychoses due to other metabolic, etc., diseases:			
131	With diseases of the endocrine glands	1	...	1
133	Alzheimer's disease	...	1	1
135	With other somatic diseases (specify)	2	...	2
15	Psychoses associated with organic changes:			
151	With multiple sclerosis	4	...	4
152	With paralysis agitans	2	...	2
153	With Huntington's chorea	4	1	5
154	With other brain or nervous diseases	1	1	2
16	Psychoneuroses:			
161	Hysteria	...	2	2
163	Neurasthenia	...	2	2
164	Hypochondriasis	2	...	2
165	Reactive depressions	...	4	4
166	Anxiety state	...	1	1
167	Mixed psychoneurosis	...	1	1
17	Manic-depressive psychoses:			
171	Manic type	30	32	62
172	Depressive type	8	21	29
173	Circular type	1	5	6
177	Other types	...	6	6
18	Dementia Praecox (Schizophrenia):			
181	Simple type	8	15	23
182	Hebephrenic type	22	15	37
183	Catatonic type	250	196	446
184	Paranoid type	155	79	234
185	Other types	1	2	3
19	Paranoia and paranoid conditions:			
191	Paranoia	19	1	20
192	Paranoid conditions	48	43	91
20	Psychoses with psychopathic personality	2	...	2
21	Psychoses with mental deficiency	68	36	104
22	Undiagnosed psychoses	5	11	16
23	Without psychoses	6	1	7
231	Epilepsy	5	4	9
2311	Epilepsy only	...	1	1
2312	Epilepsy with mental deficiency	2	4	6
232	Alcoholism	...	2	2
233	Drug addiction	...	5	5
234	Mental deficiency:			
2341	Idiot	...	1	1
2342	Imbecile	4	1	1
2343	Moron	2	1	3
2344	Unspecified	51	15	66
235	Disorders of personality due to epidemic encephalitis	2	2	4
236	Psychopathic personality	1	1	2
2361	With pathological sexuality	1	...	1
242	Neurosyphilis	1	...	1
24	Primary behaviour disorders:			
241	Simple adult maladjustment	1	...	1
Totals		891	597	1488

TABLE No. 3
PSYCHOSES OF ADMISSIONS, RE-ADMISSIONS AND TRANSFERS IN

	Psychoses	Male	Female	Total
01	Psychoses with syphilitic meningoencephalitis (general paresis)....	4	....	4
02	Psychoses with other forms of syphilis of the central nervous system:	3	....	3
	021 Meningo-vascular type (cerebrals).....	2	....	2
	023 Other types (Taboparesis).....	1	....	1
03	Psychoses with epidemic encephalitis.....	1	....	1
04	Psychoses with other infectious diseases: :			
	044 With other infectious diseases.....	1	....	1
05	Alcoholic psychoses:			
	051 Pathological intoxication.....	1	....	1
	052 Delirium tremens.....	7	....	7
	053 Korsakow's psychosis.....	3	5	8
	054 Acute hallucinosis.....	2	....	2
	055 Other types.....	1	....	1
06	Psychoses due to drugs or other exogenous poisons.....	1	....	1
07	Traumatic psychoses:			
	071 Traumatic delirium.....	2	....	2
	072 Post-traumatic personality disorders.....	1	....	1
	074 Other types (specify).....	26	14	40
08	Psychoses with cerebral arteriosclerosis.....	1	....	1
09	Psychoses with other disturbances of circulation:			
	091 With cerebral embolism.....	1	....	1
	092 With cardio-renal disease.....	3	....	3
	093 Other types (specify).....	2	1	3
10	Psychoses with convulsive disorders:			
	101 Epileptic deterioration.....	5	1	6
	102 Epileptic clouded states.....	1	1	2
	103 Other epileptic types.....	13	14	27
11	Senile psychoses:			
	111 Simple deterioration.....	1	2	3
	114 Depressed and agitated.....	4	1	5
	115 Paranoid types.....	4	9	13
12	Involitional psychoses:			
	121 Melancholia.....	1	1	2
	122 Paranoid types.....	1	1	2
	123 Other types (specify).....	2	6	8
13	Psychoses due to other metabolic, etc., diseases:			
	135 With other somatic diseases (specify).....	1	....	1
14	Psychoses due to new growth:			
	141 With intracranial neoplasms.....	94	56	150
15	Psychoses associated with organic changes:			
	153 With Huntington's Chorea.....	....	1	1
	154 With other brain or nervous diseases.....	3	....	3
16	Psychoneuroses.....	1	6	7
	161 Hysteria.....	1	2	3
	162 Psychasthenia or compulsive states.....	1	....	1
	163 Neurasthenia.....	2	4	6
	164 Hypochondriasis.....	8	11	19
	165 Reactive depression.....	5	2	7
	166 Anxiety state.....	2	1	3
	167 Mixed psychoneurosis.....	14	19	33
17	Manic-depressive psychoses:			
	171 Manic type.....	7	16	23
	172 Depressive type.....	3	8	11
	173 Circular type.....	1	2	3
	174 Mixed type.....	6	....	6
	177 Other types.....	1	2	3
18	Dementia praecox (Schizophrenia):			
	181 Simple type.....	....	1	1
	182 Hebephrenic type.....	56	80	136
	183 Catatonic type.....	9	12	21
	184 Paranoid type.....	....	3	3
	185 Other types.....	19	22	41
19	Paranoia and paranoid conditions:			
	192 Paranoid conditions.....	....	....	....
20	Psychoses with psychopathic personality.....	8	3	11
21	Psychoses with mental deficiency.....	13	10	23
22	Undiagnosed psychoses.....	22	13	35
23	Without psychoses.....	....	1	1
	231 Epilepsy:			
	2312 Epilepsy with mental deficiency.....	6	4	10
	232 Alcoholism.....	1	1	2
	233 Drug addiction.....	9	17	26
	234 Mental deficiency:			
	2342 Imbecile.....	9	22	31
	2343 Moron.....	4	7	11
	2344 Unspecified.....	1	1	2
	236 Psychopathic personality:			
	2362 With pathological emotionality.....	1	....	1
	241 Tabes Dorsalis.....	1	....	1
	242 Neurosyphilis.....	3	....	3
24	Primary behaviour disorders:			
	241 Simple adult maladjustment.....	3	1	4
	241 Simple adult maladjustment.....	3	5	8
	Totals.....	314	333	647

TABLE No. 6—Continued

	Reg.		Imp.		Unimp.		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	T.
16. Psychoneuroses:									
161 Hysteria	1	1	4		1		1	6	7
162 Psychasthenia or compulsive states			3		1		1	3	4
163 Neurasthenia					1		1		1
164 Hypochondriasis			2	4			2	4	6
165 Reactive depression		1	4	6	2		6	7	13
166 Anxiety state	1		5	2			6	2	8
167 Mixed psychoneurosis			2				2		2
17 Manic-depressive psychoses:									
171 Manic type	9	10	2	10	1		12	20	32
172 Depressive type	6	6	1	6	1		7	13	20
173 Circular type		2	1	1			1	3	4
174 Mixed type		2						2	4
177 Other types			2		1		3		3
18. Dementia praecox (Schizophrenia):									
181 Simple type									
183 Catatonic type	19	21	19	28	12	8	50	57	107
184 Paranoid type	1	1	2	3	9	1	12	5	17
185 Other types		1	1		1		1	2	3
19. Paranoia and paraoid conditions:									
192 Paranoid conditions		1	1	5	5	5	6	11	17
20. Psychoses with psychopathic personality	1						1		1
21. Psychoses with mental deficiency		2	1		1		2	2	4
22. Undiagnosed psychoses	6	4	2	2	3	1	11	7	18
23. Without psychoses					16	12	16	12	28
231 Epilepsy:									
2311 Epilepsy only					1		1		1
232 Alcoholism					7	3	7	3	10
233 Drug addiction					1		1		1
234 Mental deficiency::									
2342 Imbecile					2	13	2	13	15
2343 Moron						8		8	8
2344 Unspecified						2		2	2
235 Disorders of personality due to epidemic encephalitis									
236 Psychopathic personality					2		2		2
2362 With pathological emotionality					1		1		1
241 Tabes dorsalis					1		1		1
242 Neurosyphilis					3	1	3	1	4
24. Primary behaviour disorders:									
241 Simple adult maladjustment			1		2	5	2	6	8
Totals	64	65	56	89	87	73	207	227	434

TABLE No. 7
DISCHARGES DURING 1949—SHOWING DURATION OF RESIDENCE

	Under 1 month		Under 4 months		Under 8 months		Under 1 year		Under 2 years		Under 3 years		Over 3 years		Total				
	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.	M.	F. T.			
Psychoses	36	33	69	94	124	218	76	36	40	27	10	12	22	8	3	11	207	227	434
01. With syphilitic meningo-encephalitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3
02. With other forms of syphilis of the central nervous system	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3
03. With epidemic encephalitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
04. With other infectious diseases	3	3	5	4	9	1	1	1	1	1	1	1	1	1	1	1	9	4	13
05. Alcoholic psychoses	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	4	4	4
06. Due to drugs or other poisons	1	1	5	4	9	1	1	1	1	1	1	1	1	1	1	1	7	9	16
07. Traumatic psychoses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
08. With cerebral arteriosclerosis	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	6	7	16
09. With other disturbances of circulation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	4
10. With convulsive disorders	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11. Senile psychoses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12. Involutional psychoses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13. Due to other metabolic diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14. Due to new growth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15. Associated with organic change	7	2	9	16	25	3	3	6	1	1	1	1	1	1	1	1	19	22	41
16. Psychoneuroses	1	3	4	13	22	35	6	7	13	3	2	5	1	1	1	1	23	38	61
17. Manic-depressive psychoses	5	2	7	18	35	53	15	18	33	4	4	8	7	1	8	63	64	127	
18. Schizophrenia	1	1	2	3	7	10	1	2	3	1	1	2	6	1	17	6	11	17	
19. Paranoid conditions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
20. With psychopathic personality	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	2	2	4
21. Psychoses with mental deficiency	2	2	5	6	11	2	1	3	1	1	1	1	1	1	1	1	11	7	18
22. Undiagnosed psychoses	11	22	33	17	15	32	3	2	5	1	1	1	1	1	1	1	32	41	73
23. Without psychoses	1	1	2	2	5	7	1	1	1	1	1	1	1	1	1	1	2	6	8
24. Primary Behaviour Disorders	1	1	2	2	5	7	1	1	1	1	1	1	1	1	1	1	2	6	8
Total	36	33	69	94	124	218	76	36	40	27	10	12	22	8	3	11	207	227	434

TABLE No. 8
RECORD OF DEATHS DURING 1950

Sex.	Age.	Time in Hospital			Cause of Death
		Years.	Months.	Days.	
M	68	5	9	19	Pulmonary Embolism, infected left leg. General Paresis of the Insane.
M	73	....	3	....	Senility with Senile Psychosis.
M	53	....	8	17	Coronary Occlusion, Cardiac Infarction.
M	58	....	....	19	Chronic Nephritis, Arteriosclerosis.
M	49	14	8	23	Auricular Fibrillation, Myocardial Fibrosis.
M	49	4	....	6	Acute Right Heart Failure, Myocarditis.
M	62	12	4	4	Infection of legs, Fracture of right femur.
M	50	....	....	27	Acute Exhaustion, Manic Delirium.
M	60	6	2	14	Bilateral Pulmonary Tuberculosis.
M	83	25	9	3	Coronary Occlusion, Coronary Sclerosis.
M	38	11	8	1	Status Epilepticus.
M	73	....	....	12	Senility with Senile Dementia.
M	85	....	5	20	Senility with Senile Dementia.
M	70	12	3	12	Bronchopneumonia, Senility, Epilepsy.
M	62	22	4	17	Bronchopneumonia, Secondary Cancer of both lungs, Generalized Carcinomatosis.
M	63	5	1	5	Coronary Occlusion, Air Embolism.
M	80	....	....	21	Cerebral Hemorrhage, Generalized Arteriosclerosis.
M	58	13	....	4	Myocarditis, Myocardial Fibrosis.
M	62	4	10	16	Renal Failure, Hydronephrosis, Carcinoma, Secondary Carcinoma of right lung.
M	69	....	....	5	Uremia, Chronic Nephritis, Arteriosclerosis.
M	50	....	1	9	Cerebral Thrombosis, Cerebro Vascular Accidents (two).
M	64	....	....	5	Cerebral Hemorrhage, Arteriosclerosis.
M	77	1	....	15	Arteriosclerosis with Psychosis.
M	59	....	....	9	Myocarditis, Arteriosclerosis.
M	58	12	....	22	Meningitis, Pneumococcus, Psychosis.
M	16	2	....	26	Pulmonary Tuberculosis, Mental Deficiency.
M	70	12	5	1	Tabes Dorsalis, Syphilis.
M	72	31	....	11	Pulmonary Tuberculosis.
M	69	11	11	13	Generalized Arteriosclerosis.
M	59	2	7	22	Cerebrovascular Accident with mitral stenosis.
M	79	....	....	8	Auricular Fibrillation, Arteriosclerosis.
M	75	1	8	9	Generalized Arteriosclerosis, Senility.
M	67	....	....	22	Chronic Myocarditis, Myocardial Degeneration.
M	58	2	10	28	Chronic Myocarditis, Myocardial Degeneration.
M	75	....	....	5	Hypertensive heart disease with arteriolar nephrosis.
M	68	11	....	6	Pulmonary hemorrhage, Actinomycosis.
M	65	35	9	23	Mesenteric Infarction, Arteriosclerosis.
M	66	13	5	13	General Paresis, Arteriosclerosis.
M	82	....	....	7	Chronic Myocarditis, Myocardial failure.
M	29	8	6	7	Spontaneous subarachnoid Memorrhage.
M	52	....	....	7	Cerebral Hemorrhage.
F	63	1	....	23	Infarction of lower lobes, Lungs, Embolii.
F	27	10	6	27	Status Epilepticus, Mental Deficiency.
F	67	....	....	21	Auricular Fibrillation, Psychosis.
F	86	....	....	10	Chronic Myocarditis, Myocardial Degeneration.
F	86	38	9	7	Pulmonary Tuberculosis, Senility.
F	68	9	8	13	Pulmonary Tuberculosis, Psychosis.
F	63	....	....	3	Auricular Fibrillation, Myocarditis.
F	74	....	....	12	Auricular Fibrillation, Senility.
F	64	27	10	8	Disease of Coronary Arteries and Angina Pectorus.
F	59	1	4	2	General Paresis of the Insane.
F	68	1	1	18	Chronic Myocarditis, Diabetes Mellitus.
F	72	4	9	27	Acute Dilatation of Stomach, Operation, Cholecystectomy.
F	69	32	5	27	Bronchopneumonia, Fracture of right femur.
F	83	....	....	27	Bronchopneumonia, Generalized Arteriosclerosis.
F	59	....	....	13	Bronchopneumonia, Diabetes Mellitus.

Totals: Male 41, Female 15—56.

TABLE No. 9
DEATHS BY PSYCHOSES, 1950

Psychoses		Male	Female	Total
01	Psychoses with syphilitic meningoencephalitis	3	1	4
05	Alcoholic psychoses	1	.....	1
07	Traumatic psychoses	1	.....	1
08	Psychoses with cerebral arteriosclerosis	9	2	11
09	Psychoses with other disturbances of circulation	3	.....	3
10	Psychoses with convulsive disorders	1	.....	1
11	Senile psychoses	4	2	6
12	Involuntional psychoses	2	1	3
13	Psychoses due to other metabolic diseases	1	3	4
17	Manic-depressive psychoses:			
171	Manic type .....	.....	1	1
172	Depressive type	1	1	2
18	Dementia Praecox (Schizophrenia):			
183	Catatonic type	3	3	6
184	Paranoid type	4	.....	4
185	Other types	1	.....	1
19	Paranoid conditions	4	.....	4
23	Without psychoses:			
231	Epilepsy	1	.....	1
234	Mental deficiency	1	1	2
241	Tabes dorsalis	1	.....	1
	Totals	41	15	56

PROVINCIAL MENTAL INSTITUTE, EDMONTON

Patient Population Changes.

On December 31, 1950, there were in residence 950 male patients and 335 female patients, making a total of 1,285. On leave or otherwise absent were 44, making a total patient population of 1,329. This is a loss of four during the year. During the year there was a total of 297 admissions under the Mental Diseases and Mental Defectives Acts. In addition, a total of 126 cases were remanded by police authorities for examination. Four juveniles were admitted through the Department of Child Welfare. There were five transfers. This gave an admission total of 432 for the year.

During the year there were 243 discharges and five transfers out. There were 56 deaths. These were practically all in the old age group, and deaths were due to chronic degenerative diseases.

General Health.

This has been good. There were no epidemics. Routine chest examinations were made on all admissions, and an annual check was done on all other patients. The mobile clinic X-rayed approximately 900 cases for us. T.A.B. injections were given to all patients.

There was one accidental death.

Treatment of Patients.

Electric shock treatments were given to 258 patients. Insulin treatments were given to a total of 114 patients. Each new patient was given whatever type of therapy was required. Hydrotherapy was in constant use. Combined electric shock and insulin treatment was given where indicated. In addition to the treatments given to new patients, a large number of treatments were given to the more chronic cases.

Occupational Therapy.

This department continued very active. The average daily attendance in the department was 75 to 80. Special attention was paid to patients undergoing electric shock and insulin treatment.

Recreational Activities.

This work has expanded in scope during the year. A full-time schedule involving all wards was maintained. Various athletic activities were carried out constantly, and during the evenings shows, dances and social evenings were provided. The recreational staff of the D.V.A. visited weekly throughout the year, and, in addition, provided one dance per month during the winter. Tickets were obtained for most of the major athletic events in town. The work of this department on the whole expanded remarkably during the year.

Library.

More books were added. The library has been consistently popular with the patients and staff.

Beauty Parlour.

This has been operated on a half-time basis. It is hoped to expand it to a full-time service shortly.

Religious Services.

Services were held throughout the year. The United and Anglican Churches provided services on alternate Sundays. The Roman Catholic services were held on week days at regular intervals. The Rev. M. Appelt of the Lutheran Church visited frequently throughout the year.

X-Ray Department.

This department continued to be very busy. A total of 1,624 examinations were made. This is an increase of approximately 20% over the work of the previous year. In addition the department supervised or carried out diathermy treatments.

Laboratory.

A total of 3,765 examinations were carried out by this department. Tuberculin tests were carried out on all new staff and B.C.G. vaccine given where indicated.

Surgical Service.

There was very little major work done in this department during the year. Several cases were referred to the University Hospital for major surgery. A large amount of minor surgical and fracture work was done by our own staff.

Dental Department.

This department remained very active throughout the year. A total of 2,510 examinations were made. Dental work was completed on a total of 895 patients. All types of dental work were done. By the end of the year most of the patients in residence had the necessary dental work completed. Liaison with the School of Dentistry has continued, and clinics were held here for the dental students.

Training School.

A total of 11 men and four women graduated in psychiatric nursing, completing the three-year course. All members are required to take the course or leave the service by the end of the year.

Department of Building Maintenance.

The maintenance work in general has been well kept up except for painting. It has been difficult to get enough qualified painters

to keep this work up to date. The installation of a new sewage system was completed, and work has been started on major alterations to the kitchen. Construction of the new T.B. dormitory has continued at a satisfactory rate.

Fire Protection.

Fire practices were held at regular intervals, and all new staff were given instruction in steps to be taken in case of fire. Inspections were carried out by the Fire Inspector's Branch.

Farm.

During the year we rebuilt our dairy herd. At the present time it consists almost entirely of registered stock. The rate of increase is quite satisfactory. The question of pasturage and food remains difficult because of the limited amount of land.

Garden.

Production of vegetables, in spite of severe damage by hail, was quite good. Flowers and plants were provided in their usual profusion until damaged by hail.

Laundry.

This department remained very busy. Some alterations were made in the building to increase the efficiency of the laundry. These alterations are being continued.

Tailor Shop.

This has also remained very busy. It is expected that we will be able to increase its facilities shortly.

Shoe Shop.

This department continued at its usual high level of efficiency.

Sewing Room.

The sewing room remained very busy with repairs to patients' clothing and the supplying of female staff uniforms.

Dietary Department.

Mrs. McLeod remained in charge of the department throughout the year. The department worked at its usual high level of efficiency.

Police Court.

The work we were required to do for the police lessened somewhat this year because of the appointment of a city psychiatrist on a part-time basis. However, consultations were provided to the City and R.C.M.P. courts and also to the Provincial Gaol at Fort Saskatchewan.

Business Office.

The business office continued to be very busy. We have been able to overcome the chronic shortage of staff in this office.

Medical Records.

The work of this department has increased markedly each year. We have been able to add more stenographic help. The most serious handicap at present is lack of space.

Staff.

The staff situation on the male side has remained quite good. We have been able to maintain our establishment although there

has been a somewhat increased tendency on the part of some of the new members to leave the service. The situation on the female side is considerably better. All new staff are required to take a three-year training course unless already qualified.

Several members of the medical staff left, Drs. Fraser, Davis, and Gish all going to the United States. We were fortunately able to replace them immediately.

D.V.A.

The D.V.A. recreational department has continued to assist us. Their services have been especially useful during the winter months.

Visitors.

The hospital was visited at frequent intervals throughout the year by Dr. Cross and Dr. MacLean. We have also been visited by a considerable number of groups and representatives of organizations interested in the work of the hospital. The visiting board inspected the hospital in the fall.

TABLE No. 1
MOVEMENT OF PATIENT POPULATION DURING 1950

	Male	Female	Total	Male	Female	Total
In residence December 31, 1949				945	328	1273
On leave or otherwise absent				41	22	63
Admissions:						
First Admissions:						
(a) Voluntary	27	10	37			
(b) Certificate	46	51	97			
(c) Warrant	40	7	47			
(d) Mental Defectives Act	8	1	9			
	—	—	—	121	69	190
Re-Admissions:						
(a) Voluntary	23	28	51			
(b) Certificate	12	10	22			
(c) Warrant	20	8	28			
(d) Mental Defectives Act	—	1	1			
	—	—	—	55	47	102
Transfers	—	5	5	—	5	5
				1162	471	1633
Total Admissions	176	121	297			
Separations:						
Discharges:						
(a) As Recovered	17	11	28			
(b) As Improved	88	75	163			
(c) As Unimproved	32	20	52			
	—	—	—			
Total Discharges	137	106	243			
Transfers	3	2	5			
Deaths	41	15	56			
	—	—	—			
Total Separations	181	123	304	181	123	304
In hospital December 31, 1950				950	335	1285
On leave or otherwise absent				31	13	44
Total on books December 31, 1950				981	348	1329

TABLE No. 2
PSYCHOSES OF THE PATIENT POPULATION, DECEMBER 31, 1950

	Male	Female	Total
01 Psychoses with syphilitic meningoencephalitis (general paresis)	35	6	41
02 Psychoses with other forms of syphilis of the central nervous system::			
021 Meningo-vascular type (cerebral syphilis)	2	.....	2
023 Other types (taboparesis)	3	.....	3
03 Psychoses with epidemic encephalitis	2	1	3
05 Alcoholic psychoses:			
053 Korsakow's psychoses	1	.....	1
054 Acute hallucinosis	3	.....	3
055 Other types (chronic hallucinosis)	3	1	4
07 Traumatic psychoses:			
073 Post-traumatic mental deterioration	4	.....	4
08 Psychoses with cerebral arteriosclerosis	22	5	27
09 Psychoses with other disturbances of circulation:			
091 With cerebral embolism	1	.....	1
10 Psychoses with convulsive disorders (epilepsy)		3	3
101 Epileptic deterioration	4	3	7
102 Epileptic clouded states	21	5	26
103 Other epileptic types	2	2	4
11 Senile psychoses	1	.....	1
111 Simple deterioration	13	8	21
112 Presbyophrenic type		1	1
114 Depressed and agitated types	1	1	2
115 Paranoid types	10	3	13
12 Involutional psychoses:			
121 Melancholia	2	4	6
122 Paranoid types		1	1
13 Psychoses due to other metabolic, etc., diseases:			
135 With other somatic diseases	1	.....	1
14 Psychoses due to new growth:			
141 With intracranial neoplasms		1	1
15 Psychoses associated with organic changes of the nervous system:			
151 With multiple sclerosis	1	.....	1
154 With other brain or nervous diseases	2	.....	2
16 Psychoneuroses: :			
161 Hysteria (anxiety hysteria, conversion hysteria and sub-groups)	1	.....	1
162 Psychasthenia or compulsive states (and sub-groups)		1	1
164 Hypochondriasis	2	.....	2
165 Reactive depression (simple situational reaction, others)		1	1
166 Anxiety state		1	1
167 Mixed psychoneurosis	1	.....	1
17 Manic-depressive psychoses:			
171 Manic type	13	16	29
172 Depressive type	19	10	29
173 Circular type		1	1
174 Mixed type		2	2
177 Other types	1	.....	1
18 Dementia Praecox (schizophrenia)	4	3	7
181 Simple type	8	1	9
182 Hebefrenic type	58	8	66
183 Catatonic type	283	112	395
184 Paranoid type	195	41	236
185 Other types	7	2	9
19 Paranoia and paranoid conditions	41	8	42
191 Paranoia	3	8	11
192 Paranoid conditions	2	.....	2
20 Psychoses with psychopathic personality	59	29	88
21 Psychoses with mental deficiency	7	3	10
22 Undiagnosed psychoses	4	.....	4
23 Without psychoses:			
231a Epilepsy only	1	3	4
231b Epilepsy with mental deficiency	19	5	24
232 Alcoholism	2	2	4
233 Drug addiction		1	1
234a Mental deficiency—Idiot	22	14	36
234b Mental deficiency—Imbecile	59	31	90
234c Mental deficiency—Moron	24	3	27
234d Mental deficiency—Unspecified	2	1	3
235 Disorders of personality due to epidemic encephalitis	2	1	3
236 Psychopathic personality:			
2361 With pathological sexuality	1	.....	1
2362 With pathological emotionality	1	.....	1
24 Primary behaviour disorders:			
241 Simple adult maladjustment	3	2	5
2422 Conduct disturbance	2	.....	2
2423 Neurotic traits	1	.....	1
Totals	981	348	1329

TABLE No. 3
PSYCHOSES BY ADMISSION, 1950

	Male	Female	Total
01 Psychoses with syphilitic meningoencephalitis (general paresis)	.....	1	1
04 Psychoses with other infectious diseases: :			
044 With other infectious disease	1	.....	1
05 Alcoholic psychoses:			
055 Other types	2	.....	2
06 Psychoses due to drugs or other exogenous poisons:			
064 Due to other drugs	.....	1	1
08 Psychoses with cerebral arteriosclerosis	11	4	15
10 Psychoses with convulsive disorders (epilepsy):			
101 Epileptic deterioration	.....	1	1
102 Epileptic clouded states	.....	1	1
103 Other epileptic types	2	2	4
11 Senile psychoses:			
111 Simple deterioration	12	8	20
114 Depressed and agitated types	1	.....	1
115 Paranoid types	1	3	4
12 Involuntal psychoses	.....	1	1
121 Melancholia	2	4	6
13 Psychoses due to other metabolic, etc., diseases:			
135 With other somatic diseases	2	1	3
16 Psychoneuroses:			
161 Hysteria (anxiety hysteria, conversion hysteria)	1	.....	1
162 Psychasthenia or compulsive states	.....	1	1
163 Neurasthenia	.....	2	2
164 Hypochondriasis	1	1	2
165 Reactive depression	3	3	6
166 Anxiety state	1	.....	1
167 Mixed psychoneurosis	1	.....	1
17 Manic-depressive psychoses:			
171 Manic type	3	3	6
172 Depressive type	6	5	11
173 Circular type	.....	1	1
174 Mixed type	.....	1	1
18 Dementia Praecox (schizophrenia)	10	9	19
181 Simple type	4	.....	4
182 Hebephrenic type	.....	1	1
183 Catatonic type	31	31	62
184 Paranoid type	6	5	11
19 Paranoia and paranoid conditions: :			
192 Paranoid conditions	3	1	4
20 Psychoses with psychopathic personality	1	.....	1
21 Psychoses with mental deficiency	3	2	5
22 Undiagnosed psychoses	5	.....	5
23 Without psychoses	7	1	8
231 Epilepsy:			
231a Epilepsy only	4	3	7
231b Epilepsy with mental deficiency	2	2	4
232 Alcoholism	23	4	27
233 Drug Addiction	.....	9	9
234 Mental Deficiency:			
234a Idiot	4	.....	4
234b Imbecile	2	1	3
234c Moron	4	3	7
234d Unspecified	3	.....	3
235 Disorders of personality due to epidemic encephalitis	1	.....	1
236 Psychopathic personality	3	.....	3
2361 With pathological sexuality	2	.....	2
2362 With pathological emotionality	.....	1	1
2363 With asocial or amoral trends	.....	1	1
2364 Mixed types	1	.....	1
24 Primary behaviour disorders:			
241 Simple Adult Maladjustment	4	3	7
242 Primary behaviour disorders in children	2	.....	2
2422 Conduct disturbance	1	.....	1
Totals	176	121	297

TABLE No. 4
NATIVITIES OF PATIENTS ADMITTED DURING 1950

	Male	Female	Total		Male	Female	Total
Australia	1	.....	1	Norway	3	.....	3
Austria	2	.....	2	Poland	7	2	9
Belgium	2	.....	2	Russia	1	2	3
Canada	112	93	205	Scotland	9	2	11
Czechoslovakia	1	1	2	Sweden	3	.....	3
China	1	.....	1	Switzerland	1	.....	1
Denmark	3	.....	3	Ukraine	1	4	5
England	13	6	19	United States	6	2	8
Germany	.....	2	2	Unknown	5	1	6
Gibraltar	1	.....	1	Yugoslavia	1	.....	1
Holland	1	1	2				
Ireland	3	4	7	Totals	176	121	297
Jamaica	.....	1	1				

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 5

AGE OF PATIENTS ADMITTED DURING 1950

Ages	First Admissions			Re-Admissions			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 15 years	2	...	2	...	...	...	2	2	2
15 to 19 years	10	4	14	...	...	...	10	4	14
20 to 24 years	11	12	23	7	7	14	18	19	37
25 to 29 years	13	6	19	10	7	17	23	13	36
30 to 34 years	12	17	29	8	8	16	20	25	45
35 to 39 years	10	5	15	7	10	17	17	15	32
40 to 44 years	13	6	19	2	7	9	15	13	28
45 to 49 years	11	3	14	7	3	10	18	6	24
50 to 54 years	11	3	14	1	1	2	12	4	16
55 to 59 years	4	3	7	2	1	3	6	4	10
60 to 64 years	6	2	8	5	1	6	11	3	14
65 to 69 years	4	3	7	3	2	5	7	5	12
70 and over	14	10	24	3	...	3	17	10	27
Totals	121	74	195	55	47	102	176	121	297

TABLE No. 6

DISCHARGES, CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSES AND CONDITION OF DISCHARGE, FOR THE YEAR 1950

Psychoses	Recovered	Improved	Unimproved	Total
01 Psychoses with syphilitic meningo- cephalitis (general paresis)		1 1		1 1
04 Psychoses with other infectious diseases: 44 With other infectious disease	1 1			1 1
045 Post-infectious psychoses		1 1		1 1
05 Alcoholic Psychoses: 054 Acute hallucinosis	1 1	1 1		2 2
055 Other types	1 1			1 1
06 Psychoses due to drugs or other exo- genous poisons: 064 Due to other drugs		1 1		1 1
08 Psychoses with cerebral arteriosclerosis		3 1 4	2 1 3	5 2 7
10 Psychosis with convulsive disorders (epilepsy)			1 1	1 1
101 Epileptic deterioration		1 1		1 1
102 Epileptic clouded states		1 1		1 1
103 Other epileptic types			2 1 3	2 1 3
11 Senile Psychoses: 111 Simple deterioration			1 1	1 1
112 Presbyophrenic type		1 1		1 1
114 Depressed and agitated types		1 1		1 1
115 Paranoid types	2 1 3	4 4	2 2	2 7 9
12 Involutional Psychoses: 121 Melancholia		1 1		1 1
13 Psychoses due to other metabolic, etc., diseases: 135 With other somatic diseases		1 1		1 1
16 Psychoneuroses: 161 Hysteria		1 1		1 1
162 Psychasthenia or compulsive states		2 2		2 2
163 Neurasthenia		2 2	1 1	3 3
164 Hypochondriasis	1 1	4 3 7	1 1	6 3 9
165 Reactive depression	1 1 2		1 1	2 1 3
166 Anxiety state			1 1	1 1
167 Mixed psychoneurosis	2 2	2 3 5		4 3 7
17 Manic-depressive psychoses: 171 Manic type	2 2	3 2 5	1 1	4 4 8
172 Depressive type		1 1		1 1
173 Circular type	1 1			1 1
174 Mixed type	2 2	3 8 11		5 8 13
18 Dementia praecox (schizophrenia)		3 3		3 3
181 Simple type	3 4 7	24 25 49	5 1 6	32 30 62
183 Catatonic type	1 1	4 3 7	1 2 3	6 5 11
184 Paranoid type		2 1 3		2 1 3
185 Other types		1 1 2		1 1 2
19 Paranoid and paranoid conditions: 192 Paranoid conditions		1 1		1 1
20 Psychoses with psychopathic personality	2 2	2 1 3		2 3 5
21 Psychoses with mental deficiency		1 1		1 1
22 Undiagnosed psychoses			3 1 4	3 1 4
23 Without psychoses		3 2 5		3 2 5
231a Epilepsy only		2 2		2 2
231b Epilepsy with mental deficiency	2 2	14 1 15	8 2 10	24 3 27
232 Alcoholism		8 8	2 2	10 10
233 Drug addiction			2 2	2 2
234b Mental deficiency—Imbecile		3 3	1 2 3	4 2 6
234c Mental deficiency—Moron		2 2	1 1	3 3
235 Disorders of personality due to epi- demic encephalitis		1 1		1 1
234d Mental deficiency—Unspecified		1 1	2 2	3 3
236 Psychopathic personality			1 1	1 1
2361 With pathological sexuality		1 1		1 1
2362 With pathological emotionality			1 1	1 1
2363 With asocial or amoral trends			1 1	1 1
2364 Mixed types		1 1 2		1 1 2
24 Primary behaviour disorders: 241 Simple adult maladjustment			1 1	1 1
242 Primary behaviour disorders in chil- dren: 2422 Conduct disturbance		2 2		2 2
Totals	17 11 28	88 15 163	32 20 52	137 106 243

TABLE 7
DISCHARGES DURING 1950—SHOWING DURATION OF RESIDENCE

	Under 3 months		Under 6 months		Under 9 months		Under 12 months		Under 18 months		Under 2 years		Over 2 years		Total		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
01 Psychoses with syphilitic meningo-encephalitis (general paresis)	1	1														1	1
04 Psychoses with other infectious diseases	2		1	1				1								2	2
05 Alcoholic psychoses																3	3
06 Psychoses due to drugs or other exogenous poisons	1	1	2	2													1
08 Psychoses with cerebral arteriosclerosis	1	2	3	2				2								5	2
10 Psychoses with convulsive disorders (epilepsy)	1	2	3													1	2
11 Senile psychoses	3	1	4	1					1	1						3	3
12 Involuntional psychoses	2	4	6	2	1	1										2	7
13 Psychoses due to other metabolic, etc., disease	1															1	1
16 Psychoneuroses	7	6	13	4	6											10	10
17 Manic-depressive psychoses	5	4	9	1	3	4		1								8	9
18 Dementia praecox (schizophrenia)	24	16	40	10	16	26	2	1	3	4	4	8	1	1	2	47	44
19 Paranoia and paranoid conditions							1	1	2							1	1
20 Psychoses with psychopathic personality																1	1
21 Psychoses with mental deficiency	1	2	3	1	1	2										2	3
22 Undiagnosed psychoses	37	19	56	3	2	5	1	1	1	1	1					46	22
23 Without psychoses	1	1	2				1	1								4	1
24 Primary behaviour disorders																4	5
Totals	87	59	146	20	29	49	6	4	10	2	2	4	2	3	5	137	106
													11	5	16		243

TABLE 8
RECORD OF DEATHS, 1950

Register No.	Sex.	Age.	Time in Hospital			Cause of Death
			Years.	Months.	Days.	
80	M	68	37	7	3	Splenic leukemia.
168	M	76	36	....	1	Pulmonary tuberculosis.
281	M	65	29	5	13	Carcinoma of bowel.
304	M	71	25	2	1	Myocardial degeneration.
396	M	89	30	7	12	Cerebral haemorrhage.
415	M	61	26	8	26	Chronic myocarditis.
460	M	56	19	8	14	Pulmonary tuberculosis.
515	M	75	23	9	10	Chronic myocarditis.
696	M	76	12	5	10	Chronic myocarditis.
733	M	42	2	....	7	Pulmonary tuberculosis.
743	M	42	2	....	7	Myocardial degeneration.
743	M	68	15	4	16	Carcinoma of pancreas.
765	M	66	24	8	8	Myocardial degeneration.
791	M	62	26	9	....	General paresis of the insane.
877	M	34	20	5	20	Rupture of the left atrium.
894	M	51	14	5	15	Ruptured myocardium.
938	M	47	14	11	15	Cerebral haemorrhage.
1016	M	65	12	4	21	Myocardial degeneration.
1247	M	77	8	1	23	Lobar pneumonia.
1423	F	67	8	2	15	Acute rheumatic pericarditis.
1510	M	56	1	4	7	Fatty degeneration of the heart.
1552	M	52	13	....	8	Myocardial failure.
1572	F	42	....	9	15	Myocardial degeneration.
1612	F	69	7	10	26	Cerebral haemorrhage.
1730	M	76	6	11	22	Cerebral haemorrhage.
1735	M	62	6	1	25	Chronic myocarditis.
1819	M	26	7	2	6	Pulmonary tuberculosis.
1919	M	61	10	8	19	Asphyxia.
1920	M	22	6	10	22	Status epilepticus.
2033	F	70	5	4	....	Pneumonia.
2063	M	61	3	8	14	Chronic myocarditis.
2125	F	66	3	11	21	Rupture of right atrium.
2315	F	18	....	7	20	Paraldehyde poisoning.
2349	F	66	28	7	3	Septic bronchopneumonia.
2415	M	55	1	10	12	Hypostatic pneumonia.
2440	M	63	....	....	5	Myocardial degeneration.
2537	M	79	1	1	27	Rupture of right atrium.
2545	M	79	....	7	13	Toxaemia.
2631	M	76	....	6	28	Carcinoma of head of pancreas.
2644	F	84	....	1	11	Myocardial degeneration.
2647	M	76	....	....	30	Chronic myocarditis.
2655	F	76	....	....	27	Hypostatic pneumonia.
2679	M	18	....	....	8	Chronic myocarditis.
2686	F	75	....	1	17	Acute cardiac dilatation.
2702	M	34	....	5	4	Acute endocarditis.
2712	M	19	....	....	2	Acute millary tuberculosis.
2732	M	68	....	....	1	Acute circulatory collapse and acute pulmonary oedema.
2739	F	79	....	7	11	Coronary occlusion.
2741	F	69	....	....	11	Cerebral haemorrhage.
2748	F	74	....	....	28	Cerebral thrombosis.
2756	F	22	....	2	....	Pulmonary tuberculosis.
2763	M	59	....	....	5	Chronic passive congestion of lungs.
2770	M	88	....	2	2	Myocardial degeneration.
2808	F	79	....	3	....	Chronic myocarditis.
2832	M	74	....	....	6	Myocardial degeneration.
2840	M	68	....	....	5	Myocardial degeneration.
2841	M	53	....	....	2	Exhaustion.
Total, 56						

TABLE 9
DEATHS DURING 1950 BY PSYCHOSES

	Male	Female	Total
01 Psychoses with syphilitic meningoencephalitis (general paresis)	3	....	3
08 Psychoses with cerebral arteriosclerosis	8	3	11
10 Psychoses with convulsive disorders (epilepsy)	1	1	2
11 Senile psychoses	4	5	9
13 Psychoses due to other metabolic, etc., diseases	1	1	2
15 Psychoses associated with organic changes of the nervous system	1	1	2
17 Manic-depressive psychoses	3	....	3
18 Dementia praecox (schizophrenia)	10	2	12
19 Paranoia and paranoid conditions	1	1	2
21 Psychoses with mental deficiency	1	1	2
22 Undiagnosed psychoses	2	....	2
23 Without psychosis	6	....	6
Totals	41	15	56

TABLE 10
NUMBER OF OFFICERS AND EMPLOYEES ACCORDING TO CATEGORIES

	Male	Female	Total
Medical Superintendent	1	.....	1
Medical Officers	4	1	5
Dentist	1	.....	1
Business Superintendent	1	.....	1
Clerical and Stenographic Staff	3	6	9
Laboratory Technicians	1	.....	1
X-Ray Technicians	1	.....	1
Occupational Therapists	1	3	4
Industrial Therapy Instructors	2	2	4
Recreational Therapists	2	.....	2
Social Workers	1	.....	1
Nurses (Registered) .....	.....	11	11
Nurses (mental graduates)	50	19	69
Attendants and Ward Aides (non-student)	34	22	56
Attendants and Ward Aides (1st year students)	26	11	37
Attendants and Ward Aides (2nd year students)	12	13	25
Attendants and Ward Aides (3rd year students)	8	4	12
Dietitian .....	.....	1	1
Kitchen Help	15	.....	15
Laundry Help	2	5	7
Domestic Help .....	.....	10	10
Garden and Farm Help	14	.....	14
Engineers and Mechanical Help	40	.....	40
Other maintenance help	3	.....	3
Total	222	108	330

PROVINCIAL AUXILIARY MENTAL HOSPITAL, RAYMOND

Movement of Patients.

On January 1, 1950, there were 113 patients in residence. There was one death during the year. There were 19 patients received from the Provincial Mental Hospital, Ponoka, and one from the Auxiliary Mental Hospital at Claresholm. There were four first admissions on medical certificates and one first admission by warrant. There was one re-admission on medical certificate and one re-admission by warrant. One patient was transferred to the Auxiliary Mental Hospital at Claresholm and three were transferred to the Provincial Mental Hospital at Ponoka. There were two discharges. Thus leaving in residence December 31, 1950, 133 patients.

Accidents and Elopements.

There were no accidents to patients during the year. There was one elopement.

General Health.

One patient was transferred to the Provincial Mental Hospital at Ponoka with suspected active tuberculosis of the lungs. One patient was transferred to the Provincial Mental Hospital at Ponoka after X-rays showed an obstruction of the esophagus. There was one death. The general health of the patients has remained very satisfactory, with a few colds in October and November. All patients and staff were inoculated against Typhoid Fever in April.

Dentistry.

In July, the Dentist of the Provincial Mental Hospital, Ponoka, spent a week at this hospital doing the necessary work on patients' teeth. Some received new dentures and some dentures were re-lined. Every patient with teeth received attention, and their teeth were cleaned and polished. Emergency extractions are done by the local dentists.

Occupational Therapy.

All patients are encouraged to do some light tasks and are given what responsibility they can assume. Tasks on the wards and dormitories give employment to approximately 80 patients. Others work in the laundry, kitchen, nurses' home and annex. One collects the eggs and another works in the root cellar. The Occupational Parlor is for needlework of all kinds, knitting, sewing, etc. Many patients read there and follow the radio programmes. In the summer time, three work in the garden and many help pick peas, beans, etc., in season. Several patients keep the lawns free from garbage.

Library.

The Library is situated in the Occupational Parlour, and one patient is responsible for listing new and loaned books. One new book is purchased each month, and this year several new volumes were added through the Dominion Government's Grant. Several books for the nursing and medical staff were also added to the medical library. Several patients receive regular monthly magazines and friends from town bring quantities of back numbers. These are a good source of entertainment for the low grade mental defectives, who enjoy looking at the colored pictures, and many patients make Valentines, Xmas cards and Easter cards with cut-outs from them.

Religious Services.

United Church services are held once each month. The minister, Rev. J. Ward, from Magrath, comes to the hospital for the service, and one of the patients plays the piano for the hymns. The Catholic priest also visits once each month. These clergymen also attend patients' funerals.

Recreation and Entertainment.

During the summer months all patients are taken out on the lawns every afternoon. Some play games and others lie and sleep. Supper is often served on the lawns, and this is always enjoyed.

Twice monthly approximately 60 patients are escorted to town to a picture show. This stimulates them to dress up in their best clothing, and many hours are spent on hair do's.

On special days—Valentine's Day, Easter, Hallowe'en, etc., the wards are suitably decorated and a dance and lunch given. These dances are well attended and enjoyed.

Last July, the annual spirits day and picnic was again a huge success. Games and sports events were well entered into, and prizes for each event were furnished. Fresh fruit, ice cream cones, candy and punch are served all afternoon, and supper on the lawn also.

This year the Women's Music Club again gave a splendid concert with choir numbers, skits, solos and piano solos. They brought Santa with oranges, ice cream, fancy cakes and candy. The Rotary Club brought a bag of treats for each patient, an orange, chocolate bar, and bag of peanuts. The Occupational Therapy Department has a special party for all workers, and patients provide the concert themselves. They receive a small gift off the Xmas tree and a fancy lunch. The department also provides a gift for each, which is fancy wrapped and placed under the Christmas tree on the ward

on Xmas Eve and is given out Xmas morning. They also receive a stocking of treats from the hospital.

There is a piano on the ward and also one in the new annex for patients who wish to play. Radios are placed on the ward, the Occupational Therapy Parlour and in the annex.

Visitors.

The hospital has been visited periodically by Dr. R. R. MacLean, Director, Division of Mental Health. The Eugenics Board, acting as a board of inspection, visited the hospital in October. The hospital has been visited by fire inspectors and several members of the Department of Public Works, maintenance department, boiler inspector, electrical inspectors, etc. The vegetable garden was inspected by Dominion Government representative of Health, and instructions were given as to the disposal of garbage. The cows were tested for Tuberculosis and Bangs disease.

Gardens and Grounds.

More curbing and roadwork was done on the grounds last year, and the lawns were prepared for seeding.

The vegetable gardens yielded abundantly, and enough vegetables were raised for the winter months. Two severe hailstorms did damage to peas, beans, corn, pumpkin and tomatoes, so very little was canned this year.

New Buildings.

The new annex was completed and opened in January, and houses 18 patients. It is comfortably decorated and much appreciated by them. The doors are not locked, and patients go out on parole as they please. None has attempted to run away.

Conclusion.

The general health of the patients has remained very good, and the hospital capacity has been maintained throughout the year.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1950

	Male	Female	Total	Male	Female	Total
In residence January 1, 1949	113	113
Admissions:						
(a) Voluntary						
(b) Certificates		4	4			
(c) Warrant		1	1			
(d) Order						
(e) Transfers		20	20			
	—	—	—	25	25
				138	138
Re-Admissions:						
(a) Voluntary						
(b) Certificates		2	2			
(c) Warrant						
(d) Order						
(e) Transfers						
	—	—	—	2	2
				140	140
Discharges :						
(a) As recovered						
(b) As improved		2	2			
(c) As unimproved						
(d) Transferred to other hospitals		4	4			
(e) Eloped						
(f) Deported						
(g) As without Psychoses						
(h) Deaths		1	1			
	—	—	—	7	7
				133	133
In Residence December 31, 1950						

TABLE 2
SHOWING THE PSYCHOSES OF PATIENTS IN RESIDENCE IN 1950

Patient Psychoses		Female	
300	Schizophrenic disorders:		
300.0	Simple type		
300.1	Hebephrenic type	9	9
300.2	Catatonic type	25	25
300.3	Paranoid type	26	26
301	Manic-depressive reactions:		
301.0	Manic and circular	2	2
301.1	Depressive	2	2
303	Paranoia and paranoid states:		
	Paranoia and paranoid conditions	9	9
	Paraphrenia	4	4
304	Senile psychoses:		
	Simple deterioration	3	3
	Paranoid reactions	3	3
306	Psychoses with cerebral arteriosclerosis	3	3
308	Psychosis of other demonstrable etiology:		
308.1	Psychosis with epilepsy	3	3
309	Other and unspecified psychoses:		
309.1	Psychoses with psychopathic personality		
309.2	Psychoses with mental deficiency	12	12
325	Mental deficiency:		
325.0	Idiocy		
325.1	Imbecility	24	24
325.2	Moron	2	2
325.4	Mongolism	2	2
325.5	Mental deficiency with epilepsy	2	2
026	Syphilis of central nervous system:		
026.1	Psychoses with cerebral syphilis	1	1
083	Late effects of acute infectious encephalitis:		
083.1	Postencephalitic personality and character disorders	1	1
	Total	133	133

TABLE 3
RECORD OF DEATHS DURING THE YEAR 1950

Register No.	Sex	Age	Time in Hospital			Cause of Death
			Years	Months	Days	
5224	F	80	18	9	4	Acute bronchopneumonia due to chronic bronchiectasis and hypertension.

PROVINCIAL AUXILIARY MENTAL HOSPITAL, CLARESHOLM

Movement of Patients.

There were 98 patients in residence on January 1, 1950. On December 31, 1950, there were 98 patients. During the year there were seven patients transferred from the Provincial Mental Hospital, Ponoka, to this hospital, and one patient from the Provincial Auxiliary Mental Hospital, Raymond. One patient was admitted by certificate.

General Health.

The general health of the patients was good throughout the year.

Weather permitting, all ambulatory patients were taken out on walking parties or on the lawn. Many patients enjoyed parole privileges, and spent three or four hours a day out on the grounds during the summer.

Occupation Department.

This department continued to do excellent work. A very successful sale of work was held in December.

During the summer months a group of 15 or 20 patients worked in the garden and grounds under the supervision of a ward aide. The patients enjoyed this work very much.

Recreational Activities.

Parties during the year and the annual sports day were held for the patients.

The United Church choir and the Nazarene Church choir presented musical programmes at Christmas and Easter.

Picture shows were held twice a month for the patients.

Books were added to the library for the patients, and several people donated magazines.

Beauty Parlour.

The beauty parlour is used regularly for weekly shampoos and finger waves.

Religious Services.

Local clergymen conducted services each Sunday for the patients.

Dentistry.

Dr. Palmer from the Provincial Mental Hospital, Ponoka, visited this hospital and examined all the patients and gave the necessary care. Emergency dental work was done by the local dentist.

Fire Protection.

Regular fire practices were held. The fire fighting equipment was carefully checked. A tubular fire escape has been put up on the north side of the hospital.

Buildings.

Repairs and redecorating were carried out by the maintenance staff. The buildings have been kept in good repair.

Gardens and Grounds.

The flower gardens and lawns were well kept during the summer. There were sufficient vegetables grown to supply the hospital throughout the year.

Visitors.

Dr. R. R. MacLean, Director, Division of Mental Health, visited the hospital.

The Eugenics Board, acting as a Visiting Board, visited and inspected the hospital in October.

Relatives and friends of the patients visited the hospital regularly.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1950

	Male	Female	Total	Male	Female	Total
In residence January 1, 1950				98		98
Admissions:						
(a) Voluntary						
(b) Certificates		1	1			
(c) Warrant						
(d) Order						
(e) Transfers		8	8			
				9		9
Discharged during the year:				107		107
(a) As recovered		1	1			
(b) As improved						
(c) As unimproved		1	1			
(d) As without psychoses						
(e) Transferred to other hospitals		5	5			
(f) Eloped						
(g) Deported to other countries						
(h) Deaths		2	2			
				9		9
				98		98

TABLE 2
SHOWING THE PSYCHOSES OF PATIENTS IN RESIDENCE IN 1950

03 Psychoses with epidemic encephalitis.....	2
08 Psychoses with cerebral arteriosclerosis.....	3
12 Involutional Psychoses:	
121 Melancholia	2
16 Psychoneuroses:	
163 Neurasthenia	1
17 Manic-depressive psychoses:	
171 Manic type	1
177 Other types, defective basis	1
18 Dementia praecox (Schizophrenia):	
181 Simple type	3
182 Hebephrenic type	3
183 Catatonic type	26
184 Paranoid type	24
185 Other types, undetermined	1
19 Paranoia and paranoid conditions:	
192 Paranoid conditions	9
21 Psychoses with mental deficiency	8
23 Without psychoses:	
231 Epilepsy:	
2312 Epilepsy with mental def.....	2
2342 Imbecile	5
2343 Moron	1
2344 Unspecified	6
Total.....	98

TABLE 3
RECORD OF DEATHS DURING 1950

Register No.	Sex	Age	Time in Hospital			Cause of Death
			Years	Months	Days	
3042	F	72	25	6	22	Hepatitis following carcinoma of gall bladder.
14717B	F	68	....	10	....	Hypertensive sclerotic heart failure due to hypertensive sclerosis.

PROVINCIAL TRAINING SCHOOL, RED DEER

In Residence, Admissions, Paroles and Deaths.

There was a great increase of population during the past year. A total of 101 patients were admitted, of which there were 56 male patients and 45 female patients.

Of these admissions, 84 were first admissions, 13 were re-admissions, and four were transfers from the Provincial Mental Institute.

Eighteen patients were paroled and one was transferred.

There were 10 deaths (7 male and 3 female). Details of these groups are given on Tables 1, 3, 4, 5, 6 and 7.

The list of patients awaiting admission was reduced from 507 last year to a new low of 361. It is contemplated that with the erection of two middle-grade wards, the coming year will see still further diminution of the current waiting list.

Applications for Admission.

During 1950, 61 applications were received for admission. The majority of admission requests were for children requiring permanent institutionalization, imbeciles and bed patients. During the past years the tendency has been for an increasing percentage of admissions to be of prognostically hopeless types.

Eugenic Board Visits: Sterilization, Operations, etc.

The Eugenics Board visited the School on four occasions. A total of 33 trainees were seen by them, one having been presented at the Provincial Mental Hospital. All cases presented were passed for eugenic operations. In conformity with the Board's instructions, 19 salpingectomys and 11 vasectomies were carried out. Two sterilization operations were carried out which remained as a backlog from the previous year.

Health of Staff and Patients.

There has been little to report on the general health of both staff and patients. There were two fractures sustained by patients, one a fracture of radius and other a Pott's fracture. Both occurred during play, and have healed satisfactorily.

The health of the staff has shown little significant variation from last year, and there was little time lost due to ill-health.

It has been the practice during the year to Tuberculin test and X-ray chests of all new members joining the staff, and a complete survey was carried out by the Red Deer Full-time Health Unit on all extant members of the staff. There was no tuberculosis activity detected.

The year's dental work (a half-day per week) is tabulated below:

Mouths examined	415	Prophylaxis	124
Extractions	417	Corrections of bite	25
Fillings	177	Cases of Vincent's Infection de-	
Scalings	111	tected and successfully treated.	16

Training Programme for Nursing Personnel.

The training of nurses and attendants continues as last year. Due to the larger number of applications for employment at the School, we have been able to select people with a grade 11 or 12 education. It has also been possible, via psychometric examinations prior to employment, to select personnel who will be most capable of absorbing the high standard of training courses now being presented.

Emphasis is placed on treatment, comprehension, and management of the mentally retarded child. Intensification has also been made of mental hygiene classes, since it is felt that the understanding of one's own attitude towards life is essential before one may attempt to solve the problems of the trainees.

Training Programme for Trainees.

The type of training given may be divided into five main categories: Academic Training, Sense Training, Occupational Therapy, Vocational Training, and Recreational Training.

Academic Training: During the year there was an increase in the number of trainees who could benefit by attending School; therefore, another classroom was opened. The School department is now composed of four classrooms—pre-primary, primary, elementary and junior. The material covered corresponds roughly to that which is dealt with in the first five grades of elementary school, although greater emphasis is placed on the development of skills and habits.

A tentative course of studies which was drawn up during the summer and introduced into the classroom in September provided the teachers with a definite curriculum to follow throughout the grades. After a year's trial the course of studies will be reviewed and revised and amended where needed.

The teachers on several occasions took their classes on tours of Red Deer, visiting stores and local plants and factories.

Regular periodic meetings were held between the Director of Education and the teaching staff, in which school problems were discussed.

Sense Training: Four sense training classes were held daily. During the spring and summer, one of these classes was devoted to older trainees who have some specific sense defect. In September, due to an increase in the number of younger trainees who would benefit by attending sense training, handling of these older trainees was taken over by the occupational therapy section, and all four sense training classes were devoted to younger children.

Occupational Therapy: Instruction was given the trainees in (a) various types of handicraft, such as weaving, bead work, rug and mat making, and in (b) dressmaking, sewing, embroidery, and fancy work, and general care and repair of clothing. The weight of instruction was on those skills listed under (b).

In December arrangements were made to secure the services of a certified Occupational Therapist. She will commence duty early in January, 1951. The occupational therapy section will be completely reorganized, and greater emphasis placed on handicrafts and on the training of spastics and other chronic patients.

Vocational Training: All trainees who are of mid-grade imbecile status and above received regular training along various lines which will enable them—

- (a) if they are of dischargeable calibre, to adjust more easily and efficiently when placed out to work in the community;
- (b) if they are of non-dischargeable calibre, to be kept employed for at least part of each day in a manner beneficial to themselves and the School.

The girls received actual training in the following departments—laundry, sewing room, dining room, kitchen and domestic. Special cooking classes were carried on for some time, but had to be discontinued due to the pressure of work in the kitchen. These classes will recommence early in the coming year in the new high-grade girls' ward, which is now ready for occupancy.

The boys received training as gardener's and carpenter's helpers, in general janitor and handyman work, and in general farm work.

The appointment of a full-time Farm Instructor increased the efficiency of the farm training, and resulted in an increased number of trainee placements.

Recreational Training: Two full-time Recreational Therapists were added to the staff of the Training Department, and much new equipment was received through the Federal Health Grant. The recreational section operated twelve hours daily, from 8:30 a.m. to 8:30 p.m. All trainees who would benefit by or enjoy either organized or free recreational activities were enrolled in at least one recreational period each day. In addition to daily recreational classes the trainees had weekly movies, monthly dances, and a number of special functions such as parties, hikes, picnics, trips to the lakes, weiner roast, sleigh rides and skating parties. Two mornings weekly during the summer months the trainees had the use of the Red Deer swimming pool. All middle and high-grade trainees were taken to the Red Deer Exhibition in August. Competitions were held in softball, badminton and volleyball between staff and trainee teams.

Psychotherapy.

The Psychotherapeutic interviews, instituted last year to help those trainees who had presented behaviour and discipline problems, were continued. The addition of a trained Social Worker to the staff enabled the extension of this service to include most middle and high-grade trainees who were not making favourable progress and/or who presented minor behavioural problems. This programme has resulted in noticeable improvement in the behaviour and general adjustment of the trainees involved.

An attempt was made to introduce a Group Therapy programme and several interviews were held with groups of older boys and girls.

Social Work Services.

Social work services at the Provincial Training School commenced on 3rd July, 1950, with the appointment of a professionally trained Social Worker.

Since inception of this service the Social Worker has placed 12 trainees (9 girls and 3 boys) into permanent homes. Twenty-eight temporary job placements, ranging from 3 days to 2 months, were found for 13 trainees. These trainees are prospective placements. The job experiences will be invaluable to their future permanent placement and adjustment.

The Social Worker visited homes where placements were made regularly to aid with the adjustment of the trainee to the new environment. In addition to this, the Social Worker has visited and supervised six trainees who were placed out prior to July, 1950.

A total of 85 visits were made in the latter part of 1950 to homes where placements were made to help trainees to become self-respecting and self-supporting members of society.

Some trainees adjust favourably to the new environment, but many require unlimited supervision both socially and in regard to their work experiences. One of the outstanding factors that hinder the trainee's adjustment is the failure of the home to recognize the trainee's self, his achievements and work. In too many homes the relationship between the employer and trainee is on the employer-employee basis. Such a relationship does not meet the trainee's need for security and recognition.

The Social Worker recognizes that there needs to be greater care in the selection of homes. Emphasis must be placed on the needs of each trainee in relation to the atmosphere of the home and the personality of the employer. This can now be accomplished by personal contact and visits.

New Construction.

This consisted of a new ward for higher grade girls, a store house and a root cellar. A new power house was also commenced, but will not see completion until the spring or early summer of 1951.

It was also possible to build a calf shed from a derelict house on the School grounds, which will enable us to raise a selected dairy herd, which had to be sold in previous years due to lack of space for them.

Farm and Garden Produce.

There were personnel changes made in the farm this summer, and the overall increase in produce and efficiency associated with this change on the farm has been apparent.

Using artificial insemination, we have cleared up the contagious vaginitis which was widespread through our herd. A total of 17 calves was produced, 7 heifers, and 10 bulls. The progeny, without exception, were of excellent type, and until we are able to build up a thoroughbred herd, will furnish good replacement material for our present herd.

Laundry and Sewing Room.

We are now reaching a level in population where, in the not too distant future, further accommodation will have to be provided for both these departments. Additional staff has already been provided, and the number employed seems adequate for our present needs.

Kitchen and Dining Room.

The kitchen was renovated during the year. It is now a bright, airy department.

New meat cooking ovens have been installed, which included two compound unit gas stoves. It is hoped to be able to replace the present coal burning oven this coming year.

The diet both for trainees and staff has kept at a nutritious and highly palatable level. It is not improbable that this has largely contributed to the overall health of the population at the school.

Acknowledgement.

It would not be fitting to end this report without expressing thanks for the co-operation which has been given by the members

of the staff at the school, and their devoted efforts during the year to the well-being of the trainees.

We would like to express our thanks to the Minister of Health for his sympathetic consideration of our requirements, and to the Director of the Division of Mental Health, who has never failed to regard our problems as though intimately linked with his own, in enabling us to pursue and solve them successfully.

TABLE 1
MOVEMENT OF FEEBLE-MINDED POPULATION

	Male	Female	Total
Defectives on books of Institution as at January 1st, 1950: In Provincial Training School, Red Deer, Alberta.	159	134	293
ADMISSIONS:	Male	Female	Total
1. First admissions, voluntary	47	37	84
2. Re-admissions	6	7	13
3. Transfers from P.M.I., Edmonton.....	3	1	4
Total number of admissions.....	56	45	101
Total number of Defectives on books during 1950....	215	179	394
OUTGOING:			
1. Parole	5	13	18
2. Transfers, P.M.H., Ponoka.....	1	.....	1
3. Deaths	7	3	10
Total number outgoing	13	16	29
Defectives on books of the institution at Dec. 31st, 1950	202	163	365

TABLE 2
AGE OF RESIDENT POPULATION CLASSIFIED WITH REFERENCE TO
MENTAL STATUS

Age Group	Idiot			Imbecile			Moron			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
5-9	6	6	12	24	10	34	5	5	10	35	21	56
10-14	11	13	24	29	15	44	17	11	28	57	39	96
15-19	12	4	16	19	11	30	15	15	30	46	30	76
20-24	9	5	14	14	12	26	1	4	5	24	21	45
25-29	6	5	11	13	6	19	2	3	5	21	14	35
30-34	4	8	12	6	6	12	1	2	3	11	16	27
35-39	2	3	5	3	6	9	1	1	2	6	10	16
40-44 .....	.....	3	3	2	3	5	.....	.....	.....	2	6	8
45-49 .....	.....	2	2	1	2	3	.....	.....	.....	1	4	5
50-54 .....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1
Totals	50	49	99	112	71	183	42	41	83	204	161	365

TABLE 3
MENTAL STATUS OF FIRST 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.
Idioa	8	5	13	2	.....	2	.....	.....	.....	10	5	15
Imbecile	24	18	42	1	1	2	.....	.....	.....	25	19	44
Moron	15	14	29	3	6	9	3	1	4	21	21	42
Totals.....	47	37	84	6	7	13	3	1	4	56	45	101

TABLE 4
NATIVITY OF INCOMING PATIENTS

	First Admissions			Re-admissions			Transfers			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
British Columbia	2	.....	2	.....	.....	.....	.....	.....	.....	2	.....	2
Alberta	43	44	77	6	7	13	2	1	3	51	42	93
Saskatchewan	1	2	3	.....	.....	.....	.....	.....	.....	1	2	3
U.S.A. ....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	1
Unknown	1	1	2	.....	.....	.....	.....	.....	.....	1	2	3
Totals.....	47	37	84	6	7	13	3	1	4	56	45	101

TABLE 5
AGE GROUP OF ADMISSIONS, RE-ADMISSIONS OR TRANSFERS

	First Admissions			Re-admissions			Transfers			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
5-9	21	10	31							21	10	31
10-14	16	13	29	3		3		1	1	19	14	33
15-19	8	9	17	2	4	6		3		13	13	26
20-24		4	4		2	2					6	6
25-29	1		1	1		1				2		2
30-34	1	1	2		1	1				1	2	3
Totals	47	37	84	6	7	13		3	1	4	56	101

TABLE 6
OUTGOING PATIENTS CLASSIFIED WITH REFERENCE TO MENTAL STATUS
CHRONOLOGICAL AGE, YEARS IN RESIDENCE

DISCHARGES:

Age Group	Idiot			Imbecile			Moron			Condition on discharge	Years in residence
	M.	F.	T.	M.	F.	T.	M.	F.	T.		
10-14							1	1		Unimproved	2/4
15-19				1	1					Unimproved	1 month
							1	1		Unimproved	1/4
							1			Improved	2/9
							1	1		Improved	6/0
							1	1		Improved	4/9
							1	1		Improved	11 months
							1			Improved	1/5
							1	1		Improved	6/5
							1	1		Improved	1/0
							1	1		Improved	5/2
20-24						1	1		Improved	5/3	
						1	1		Improved	6% months	
						1	1		Improved	12/7	
30-34	1	1							Improved	22/10	
				1	1				Improved	9/2	
35-39				1	1				Improved	13/3	
				1	1				Improved	18/5	

TRANSFERS:

40-44						1	1		Indications of senility	20/4
Totals				1	3	4	5	10	15	110/6

TABLE 7
DEATHS CLASSIFIED WITH REFERENCE TO CAUSE OF DEATH, AGE GROUP,
MENTAL STATUS, YEARS IN RESIDENCE

Cause of Death	Age Group	Idiot			Imbecile			Years in residence
		M.	F.	T.	M.	F.	T.	
Bronchopneumonia	10-14	4	1	5	2	1	3	144/5
Suffocation from epileptic seizure	15-19	1		1				7/10
Pulmonary T.B. with laryngeal involvement	20-24	1		1			1	12/1
Asphyxia	25-29						1	15/7
Hypostatic pneumonia					1	1		7/5
Hypostatic pneumonia					1	1		20/1
Schilders disease	30-34	1		1				13/6
Bronchopneumonia	35-39	1		1				21/9
Coronary thrombosis	40-44				1	1		16/7
Bronchopneumonia	45-49			1	1			27/1
Totals		4	1	5	2	1	3	2/6

TABLE 8
STAFF—DECEMBER 31st, 1950

	Male	Female	Total
MEDICAL SUPERINTENDENT	1	.....	1
Medical Secretary .....	.....	1	1
Stenographer .....	.....	1	1
Teachers:			
Grade (Normal Graduate) .....	.....	1	1
Sense Training .....	.....	1	1
Occupational Therapist .....	.....	1	1
Gym Instructress .....	.....	1	1
BUSINESS SUPERINTENDENT	1	.....	1
Clerk/Storekeeper .....	.....	1	1
Steno-Clerk .....	.....	2	2
Clerk/Storekeeper	1	.....	1
Assistant Clerk/Storekeeper	1	.....	1
Kitchen Staff .....	.....	7	7
Dining Room Staff .....	.....	7	7
Laundry Staff .....	.....	6	6
Sewing Room Staff .....	.....	5	5
Gardener	1	.....	1
Farmer and Farm Help	3	.....	3
Dairyman	1	.....	1
MATRON, S.R.N. Eng. .....	.....	1	1
Assistant Matron, Acting only, M.D.G. ....	.....	1	1
Day Supervisor, M.D.G. ....	.....	1	1
Surgery Nurse, R.N.	1	.....	1
Night Supervisors, M.D.G. ....	.....	2	2
Attendants and Ward Aides:			
Approved	5	3	8
Student	21	38	59
General Maids .....	.....	5	5
Extra Assistance	3	.....	3
SHORTAGES:			
Medical Officer	1	.....	1
Matron .....	.....	7	7
Ward Aide	6	.....	6
PUBLIC WORKS:			
Boiler Room Staff	6	.....	6
Maintenance Staff	1	.....	1
Night Watchman	1	.....	1
EMPLOYED UNDER DOMINION HEALTH PROGRAMME:			
Educational Psychologist	1	.....	1
Social Worker	1	.....	1
Farm Instructor	1	.....	1
Teachers, Grade (Graduates) .....	.....	3	3
Recreational Therapist .....	.....	1	1
Dentist (part time)	1	.....	1
Secretary (part time) .....	.....	1	1
Total number of Employees	57	97	154

Guidance Clinics

The Provincial Guidance Clinics maintained a full load of work during 1950 in the established clinics. Some 146 more new cases were seen in 1950 than in 1949, and there was an increase in the number of cases previously seen who came in for further consultations or treatment. The Peace River-Grande Prairie districts were visited twice during the year, and 142 new cases were examined plus 23 cases previously seen who came in for re-examination. In general, the established pattern of clinics throughout the Province was continued.

During the year a plan was adopted whereby the Province was divided into three zones and twenty areas for administrative purposes. The Northern Zone, made up of eleven areas, extends roughly from an east-west line just south of Wetaskiwin north through the Peace River district. The Southern Zone, made up of six areas, extends roughly from an east-west line just north of Olds to the southern boundary of the Province. The Central Zone, made up of three areas, lies between the Northern and Southern Zones. Each area has from three to nine focal or key points designated at which clinics may be held as required and as staff permits. On an average clinics are held regularly in two centres in each area. With the exception of Edmonton and Calgary, each of which is considered as one area, each area contains approximately 20,000 to 50,000 population. The headquarters of the Northern Zone is in Edmonton, that of the Southern Zone in Calgary, while the Central Zone is served from the Provincial Mental Hospital and the Provincial Training School.

The third annual Clinic Staff Conference was held on the 30th of November and the 1st of December at the Provincial Mental Hospital, Ponoka, under the Director. The medical superintendents of the mental institutions, and other staff members associated with the work of the clinics were present also. Papers were given and discussions held on a number of phases of clinic and related institutional work.

The clinic staff members continued to take part in group and community educational work in the Mental Health field. This included addresses to parent and parent-teacher groups, local discussion groups, and assistance with radio programmes.

It may be noted that of the 1,629 new cases seen, 1,471 were 18 years and under, and 63.3% of the total new cases were under 15 years old. This is considered significant in that the preventive aspect of clinic work is stressed throughout.

Further details of the clinic activities in the different zones and areas are contained in the statistical tables and explanatory comments which are given below.

Edmonton and District Guidance Clinics (Northern Zone)

During 1950 there was considerable expansion of clinic work in general, although services to Camrose, Lamont, Stony Plain, Two Hills and Westlock were terminated in March, 1950. Throughout

the year the staff was increased by a Social Worker and a stenographer-receptionist.

There were 788 new cases examined, and the total work load for the zone was 5,341, which represents an increase of almost 20% in the amount of treatment done. Of the new cases approximately 15% were referred by private medical practitioners, 14% by friends or self-referred, 57% by school authorities or health units, and 14% by community agencies other than the schools and health units, such as the Department of Child Welfare and Children's Aid Department.

City of Edmonton—The clinic gives about one-third of its time to Edmonton and the district immediately surrounding it. The service to this district has been improved by the staff increases. New cases examined in Edmonton numbered 371, an increase of 37 over 1949, and the work load was 3,596 including 884 treatment periods.

Barrhead-Westlock—Forty-eight new cases were examined at these points with the total work load 195, although no clinics were held at Westlock after March.

Stony Plain—Although clinics were discontinued in March, 10 new cases had been seen, with a total work load of 33.

Wetaskiwin-Camrose—At these points 57 new cases were examined, and the total work load was 220. There were no clinics at Camrose after March.

Holden-Wainwright—At these two points 41 new cases were seen, and the total work load was 195. The case load was cut down in this area because of very inclement weather at the times of scheduled clinics in the first part of the year.

Vegreville-Vermilion—Forty-seven new cases visited the clinics at these points, and the total work load was 181.

Peace River-Grande Prairie—On the two trips through these areas, on each of which a series of clinics were held, 142 new cases were seen, and the total work load was 623. Trips through these areas are made normally in the spring and fall.

Athabasca-Lac La Biche—These points were visited twice and 47 new cases examined. The total work load was 130.

Smoky Lake-St. Paul-Bonnyville—Two trips were made to these points during the year, except that only one clinic was held at Smoky Lake because of transportation difficulties. Forty-one new cases were seen, and the total work load was 109.

In addition to the above new cases seen at the designated points, there were 217 cases seen previously who were in for re-examination throughout the zone, which, in effect, brings the patient or case load to 905 cases.

Ponoka and Red Deer District Guidance Clinics (Central Zone).

This Zone is serviced from the Provincial Mental Hospital and the Provincial Training School, Red Deer, no full-time clinic having yet been established there. However, the Medical Superintendent, Provincial Training School, and his staff hold regular clinics in the health unit offices each Wednesday and Thursday afternoon. Clinics were held at Rocky Mountain House also.

The clinics held at Ponoka, Rimbey, and Stettler are serviced by the Provincial Mental Hospital staff with help from the Edmonton Clinic staff.

Red Deer-Rocky Mountain House—At these two clinic centres 126 new cases were examined, with a total work load of 589. This last figure includes a number of treatment periods at the Red Deer Clinic.

Ponoka-Rimbey-Stettler—Sixty-six new cases were seen at these clinics, with a work load of 168.

Calgary and District Guidance Clinics (Southern Zone).

The Guidance Clinic with headquarters in Calgary was under the direct charge of Dr. G. D. Carson during 1950.

A total of 649 new cases were examined during the year as compared with 580 new cases in 1949. This brings the total new cases seen in the Calgary district during the years of clinic services to 5,004. In addition to the 649 new cases noted above, 142 cases seen previously were in for further treatment or advice. The total work load for 1950 was 3,725, which includes 519 psychological examinations. Approximately 32% of the new cases examined in 1950 were referred by private physicians, 30% by school authorities, and 26% by community agencies other than schools.

Further details regarding the different clinic centres are given below.

City of Calgary—Calgary is the headquarters for the Southern Zone. About 50% of the clinic time is available for the City of Calgary and the surrounding district, although this has to include a certain amount of administrative work for the whole Zone. In 1950 there were 286 new cases examined in Calgary, and 77 cases previously seen were in for further examination, consultation or therapy. The total work load was 2,226, which includes a number of play and psychotherapy periods. The staff at the Calgary headquarters is less than that in Edmonton, and this is reflected in a smaller work load.

Lethbridge—At Lethbridge during 1950 there were 105 new cases, and a number of cases previously seen were in for further examination or consultation. More than half of the new cases seen were in the school age group. The total work load was 489.

Medicine Hat-Brooks—There were 142 new cases examined at these two points during the year, and the total work load was 562. Between 20 and 30 cases previously seen returned for further study and advice.

Pincher Creek-Crow's Nest Pass—In this district, 37 new cases visited the clinic, and the total work load was 93. A high proportion of these cases were medical-psychiatric referrals.

Didsbury—At this centre, 31 new cases were examined, and 7 were in for re-examination. The total work load was 124.

Drumheller—Fifteen new cases were seen at Drumheller, and 4 were back for further interviews. The total work load was 74.

The Provincial Guidance Clinics appreciate the continued co-operation of the various agencies with which they have been working. Among the latter are the Children's Aid Departments, the Child Welfare Department, the Health Units and their staffs, the Public Health and District Nurses, the School authorities, including superintendents and teachers, physicians in private practice, and various other health and welfare departments. The clinics also appreciate the use of the quarters of many of these agencies, and the offices of physicians in private practice.

TABLE 1
SUMMARY OF NEW CASES EXTMINED, TREATMENT PERIODS, INTERVIEWS,
AND PSYCHOLOGICAL EXAMINATIONS

Location	New Cases			Total Work Load				Total Work Load	Total New Cases Since 1929
	M.	F.	T.	Pat.	Col.	Gen.	P.E.		
Edmonton and District	483	305	788	1362	2049	1062	868	5341	.....
Calgary and District	375	274	649	1560	1480	166	519	3725	.....
Ponoka and Red Deer District.	106	86	192	382	253	3	119	757	.....
Totals	964	665	1629	3304	3782	1231	1506	9823	10560

NOTES:

Edmonton and District includes all of the area served from Wetaskiwin north. It includes Clinics held in the Peace River-Grande Prairie area, and at such points as Athabasca, Barrhead, Bonnyville, Holden, Lac La Biche, Smoky Lake, St. Paul, Vegreville, Vermilion, Wainwright and Wetaskiwin.

Calgary and District includes the area served from Didsbury south. It includes Clinics held at such points as Claresholm, Crow's Nest Pass towns, Brooks, Didsbury, Drumheller, High River, Lethbridge, Medicine Hat, and Pincher Creek.

Ponoka and Red Deer District includes the area from Didsbury on the south to Wetaskiwin on the north. It includes Clinics at such points as Castor, Ponoka, Stettler, Rimbey, Rocky Mountain House, and Lacombe.

Pat.—Patient contacts including treatment periods.

Col.—Contacts with a patient's parents, or relatives, or others closely interested.

Gen.—General contacts regarding Clinic activities and work, including those with other Agencies and Community Services.

P.E.—Psychological tests and examinations.

Total New Cases since 1929—Clinic services were started in 1929. Due to re-arrangement of territory accurate figures by Districts are not available.

TABLE 2
AGE AND SEX CLASSIFICATION OF NEW CLINIC CASES, 1950

Age Group	Edmonton and District			Calgary and District			Ponoka & Red Deer District			Total			Percentages		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
0-4	30	15	45	31	22	53	6	2	8	67	39	106	4.1	2.4	6.5
5-9	172	82	264	132	59	191	25	11	36	329	162	491	20.2	10.0	30.2
10-14	170	84	254	88	51	139	24	16	40	282	151	433	17.3	9.3	26.6
15-19	78	68	146	38	27	65	21	25	46	137	120	257	8.4	7.4	15.8
20-24	10	17	27	19	28	47	8	6	14	37	51	88	2.3	3.1	5.4
25-29	3	9	12	13	26	39	3	10	13	19	45	64	1.2	2.8	4.0
30-34	8	10	18	11	16	27	1	5	6	20	31	51	1.2	1.9	3.1
35-39	5	5	10	12	17	29	3	1	4	20	23	43	1.2	1.4	2.6
40-44	3	1	4	1	7	14	5	2	7	15	10	25	0.9	0.6	1.5
45-49	3	2	5	11	3	14	2	2	4	16	7	23	1.0	0.4	1.4
50 and over	1	2	4	13	18	31	8	4	12	22	24	46	1.4	1.5	2.9
Unknown .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.0	0.1	0.1
Totals.....	483	305	788	375	274	649	106	86	192	964	665	1629	59.2	40.9	100.1

M—Male; F—Female; T—Total.

TABLE 3a
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—PRE-SCHOOL GROUP, 1950
(0 to 5 YEARS, 11 MONTHS)

Nature of Case	Edmonton and District			and District Calgary			Deer District Ponoka & Red			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Educational Problem with Ade- quate Intellect	4	2	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Intellectual Inadequacy	16	15	31	5	5	10	.....	1	1	.....	8	17
Emotional Disorders	11	5	16	7	5	12	4	2	6	27	22	49
Thinking Disorders .....	.....	.....	.....	14	9	23	1	.....	1	26	14	40
Speech Disorders	7	3	10	7	8	15	1	.....	1	15	11	26
Faulty Feeding Habits	2	.....	2	.....	.....	.....	.....	.....	.....	2	.....	2
Sleep Disturbances	1	1	2	.....	4	4	.....	.....	.....	1	5	6
Anti-Social Trends .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sexual Difficulties	2	1	3	1	1	2	.....	.....	.....	3	2	5
Attack Disorders	2	.....	2	2	2	4	2	.....	2	6	2	8
Psychoneuroses .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Psychoses .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Non-Psychotic .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Undiagnosed .....	.....	.....	.....	4	1	5	.....	.....	.....	4	1	5
Totals.....	45	27	72	40	35	75	8	3	11	93	65	158

M—Male; F—Female; T—Total.

TABLE 3b

DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—SCHOOL AGE GROUP, 1950
(6 YEARS TO 18 YEARS 11 MONTHS)

Nature of Case	Edmonton and District			Calgary and District			Ponoka & Red Deer District			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Educational Problems with Ade- quate Intellect	138	54	192	71	36	107	14	19	33	223	109	332
Intellectual Inadequacy	103	69	172	43	23	66	18	16	34	164	108	272
Emotional Disorders	68	45	113	42	21	63	12	11	23	122	77	199
Thinking Disorders	8	6	14	18	6	24	.....	.....	.....	26	12	38
Speech Disorders	18	10	28	9	1	10	6	.....	6	33	11	44
Faulty Feeding Habits .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sleep Disturbances .....	.....	.....	.....	2	.....	2	.....	.....	.....	2	.....	2
Anti-Social Trends	45	17	62	41	14	55	9	1	10	95	32	127
Sexual Difficulties	6	6	12	2	5	7	.....	1	1	8	12	20
Attack Disorders	4	5	9	5	4	9	1	1	2	10	10	20
Psychoneuroses	2	4	6	.....	4	4	.....	1	1	2	9	11
Psychoses	1	2	3	4	1	5	.....	.....	.....	5	3	8
NNon-Psychotic	2	7	9	3	1	4	1	.....	1	6	8	14
Undiagnosed .....	.....	1	1	5	7	12	4	1	5	9	9	18
Totals	395	226	621	245	123	368	65	51	116	705	400	1105

M—Male; F—Female; T—Total.

TABLE 3c

DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—ADULT GROUP, 1950
(19 YEARS AND OVER)

Nature of Case	Edmonton and District			Calgary and District			Ponoka & Red Deer District			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Educational Problems with Ade- quate Intellect	13	3	16	2	4	6	3	.....	3	18	7	25
Intellectual Inadequacy	13	9	22	10	8	18	5	3	8	28	20	48
Emotional Disorders	2	2	4	4	14	18	1	8	9	7	24	31
Thinking Disorders	3	10	13	6	5	11	1	.....	1	10	15	25
Speech Disorders	1	.....	1	1	.....	1	.....	.....	.....	2	.....	2
Faulty Feeding Habits .....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1
Sleep Disturbances .....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	1
Anti-Social Trends .....	.....	.....	.....	3	.....	3	1	.....	1	4	.....	4
Sexual Difficulties .....	.....	1	1	3	3	6	2	6	8	5	10	15
Attack Disorders .....	.....	1	1	4	.....	4	1	1	2	5	2	7
Psychoneuroses	5	10	15	17	50	67	6	8	14	28	68	96
Psychoses	5	12	17	23	24	47	12	6	18	40	42	82
Non-Psychotic	1	3	4	11	3	14	1	.....	1	13	6	19
Undiagnosed .....	.....	1	1	5	4	9	.....	.....	.....	5	5	10
Totals: Table 3c	43	52	95	90	116	206	33	32	65	166	200	366
Table 3b	395	226	621	245	123	368	65	51	116	705	400	1105
Table 3a	45	27	72	40	35	75	8	3	11	93	65	158
Grand Totals	483	305	788	375	274	649	106	86	192	964	665	1629

M—Male; F—Female; T—Total.

TABLE 4

SOURCES REFERRING NEW CASES TO CLINICS, 1950

Sources	Edmonton and District			Calgary and District			Ponoka & Red Deer District			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
From Mental Hospitals (1)	7	3	10	4	1	5	1	1	2	12	5	17
From General Hospitals .....	.....	1	1	.....	5	5	.....	.....	.....	.....	6	6
From Private Doctors	57	49	106	92	115	207	39	42	81	188	206	394
From Factory Doctors .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From Courts	7	.....	7	11	.....	11	.....	1	1	18	1	19
From Schools	299	143	442	145	48	193	35	27	62	479	218	697
From Community Agencies (2) ..	48	56	104	90	79	169	16	7	23	154	142	296
Attended Voluntarily	63	52	115	14	10	24	1	.....	1	78	62	140
From all other sources	2	1	3	19	16	35	14	8	22	35	25	60
Totals	483	305	788	375	274	649	106	86	192	964	665	1629

NOTES: (1) Includes referrals from all Mental Institutions.

(2) Includes referrals from Health Units, Child Welfare and Children's Aid.

M—Male; F—Female; T—Total.

TABLE 5

MAJOR RECOMMENDATIONS (DISPOSALS) MADE IN REGARD TO NEW CLINIC CASES, 1950

Disposal	Edmonton and District			Calgary and District			Ponoka & Red Deer District			Totals		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
To Mental Hospital (1)	26	31	57	40	34	74	15	13	28	81	78	159
To Psychiatric Hospitals or Psychiatric Wards in General Hospitals	1	1	2	1	3	4	.....	1	1	2	5	7
To Convalescent or Nursing Homes (2)	22	14	36	4	4	8	.....	.....	.....	26	18	44
Reported to Hospital Consultant or Private Doctor	21	24	45	52	66	118	2	4	6	75	94	169
Reported to Community Agencies	237	130	367	61	47	108	6	3	9	304	180	484
Advice to Parents or Relatives	167	98	265	151	70	221	47	21	68	365	189	554
Other Methods	9	7	16	66	50	116	36	44	80	111	101	212
Totals	483	305	788	375	274	649	106	86	192	964	665	1629

NOTES: (1) Includes recommendations for admission to the Provincial Training School, Red Deer.

(2) Includes recommendations for Foster Home placement, and Special Class placement.

M—Male; F—Female; T—Total.

TABLE 6

SUMMARY OF NUMBER OF MENTAL DEFECTIVES EXAMINED BY YEARS, 1950

Year	I.Q.: 0 to 25 Probably Idiots		I.Q.: 26 to 50 Probably Imbeciles		I.Q.: 51 to 75 Probably Morons		I.Q. Unknown but Mental Deficiency Indicated		Totals			Percentage of New Cases	Cumulative Totals
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.		
Number of Mental Defectives examined to 1941 (based in part on estimates)												32.3%	1325
1941	3	2	23	16	43	25	13	8	82	51	133	38.7%	1458
1942	6	8	18	15	34	16	3	2	61	41	102	32.9%	1560
1943	6	12	17	11	15	14	3	7	41	44	85	40.1%	1645
1944	6	5	16	19	26	30	10	7	58	61	119	44.6%	1764
1945	6	6	15	11	32	24	4	5	57	46	103	40.7%	1867
1946	2	2	16	13	40	43	9	9	67	67	134	40.6%	2001
1947	3	1	28	14	77	48	19	14	127	77	204	41.9%	2205
1948	6	8	34	33	86	47	24	12	150	100	250	21.9%	2455
1949	3	4	27	29	54	63	9	7	93	103	196	13.2%	2651
1950	13	20	44	40	148	80	2	.....	207	140	347	21.4%	2998

M—Male; F—Female; T—Total.

The Eugenics Board

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

The Eugenics Board for the Province of Alberta held nine meetings during the year of 1950. Five meetings were held at the Provincial Mental Hospital, Ponoka, and four were held at the Provincial Training School, Red Deer. The dates of the meetings held during 1950 are as follows:

- 20 January, 1950—The Provincial Mental Hospital, Ponoka.
- 20 January, 1950—The Provincial Training School, Red Deer.
- 21 April, 1950—The Provincial Mental Hospital, Ponoka.
- 21 April, 1950—The Provincial Training School, Red Deer.
- 14 July, 1950—The Provincial Mental Hospital, Ponoka.
- 14 July, 1950—The Provincial Training School, Red Deer.
- 15 September, 1950—The Provincial Mental Hospital, Ponoka.
- 15 September, 1950—The Provincial Training School, Red Deer.
- 16 November, 1950—The Provincial Mental Hospital, Ponoka.

Cases Presented.

The Board considered 97 cases, 37 of which were male and 60 female. The majority of these were passed subject to the consent of the patient or parent or guardians, or to both patient and parent or guardian.

Of the 97 cases passed by the Board during the year, 46 had been first examined at a Provincial Guidance Clinic, although some of these had been institutionalized before presentation. This group of 46 cases was made up of 10 males and 36 females.

Operations.

Operations were performed on 67 cases during the year, 21 being male and 46 female. All of these operations but one were performed at the Provincial Mental Hospital, Ponoka. The exception was performed at the Calgary General Hospital at the request of the patient's mother, who assumed the responsibility of hospital expenses.

Of the 67 cases operated upon during the year, 61 had been presented and passed in 1950; 3 had been presented and passed in 1949; 1 had been presented and passed in 1948; and 1 had been presented and passed in 1947.

The surgical operations mentioned above were performed by the surgical consultants, Dr. J. W. Richardson of Calgary, or Dr. J. Ross Vant of Edmonton.

Board Member Changes.

In January, 1950, Dr. R. K. Thomson was, on the recommendation of the Senate of the University of Alberta, appointed to the Eugenics Board to fill the vacancy caused by the death of Dr. E. L. Pope.

Appreciation.

The Eugenics Board wishes to express its appreciation and thanks to the Director, Division of Mental Health, to the Medical

Superintendents and their respective staffs, and the Guidance Clinics for their co-operation in connection with the work of the Board.

Tables.

A tabular summary of the work of the Eugenics Board to December 31st, 1950, is appended.

CASES PRESENTED AND PASSED

(To December 31, 1950)

	Yearly Totals			Cumulative Totals		
	Male	Female	Totals	Male	Female	Totals
1929-1933	87	201	288	87	201	288
1934-1938	557	438	995	644	639	1283
1939-1943	339	299	638	983	938	1921
1944	56	73	129	1039	1011	2050
1945	54	64	118	1093	1075	2168
1946	52	53	105	1145	1128	2273
1947	38	53	91	1183	1181	2364
1948	37	68	105	1220	1240	2469
1949	52	57	109	1272	1306	2578
1950	37	60	97	1309	1366	2675

OPERATIONS ONLY

(To December 31, 1950)

	Yearly Totals			Cumulative Totals		
	Male	Female	Totals	Male	Female	Totals
1929-1933	48	158	206	48	158	206
1934-1938	198	240	438	246	398	644
1939-1943	13	27	40	381	576	957
1944	18	29	47	399	605	1004
1945	24	31	55	423	636	1059
1946	122	151	273	368	549	917
1947	16	15	31	439	651	1090
1948	16	22	38	455	673	1128
1949	20	27	47	475	700	1175
1950	21	46	67	496	746	1242



Superintendents and their respective staffs, and the Guidance
Committee for their co-operation in connection with the work of the
Board.

Tables

A detailed account of the work of the Board is given in the
Annual Report for 1922, as appended.

TABLE I.—MORTALITY AND MORBIDITY

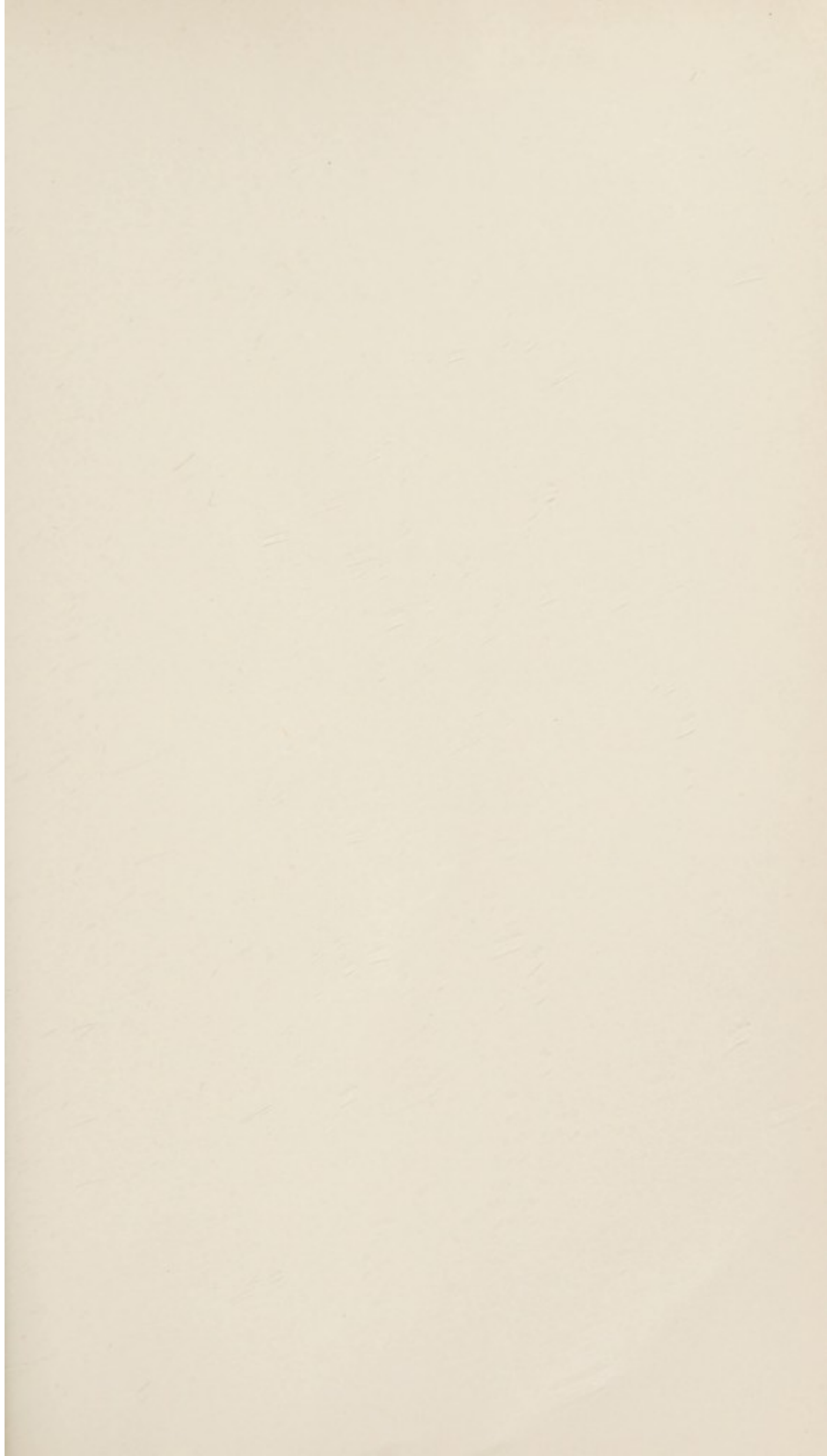
for the year 1922

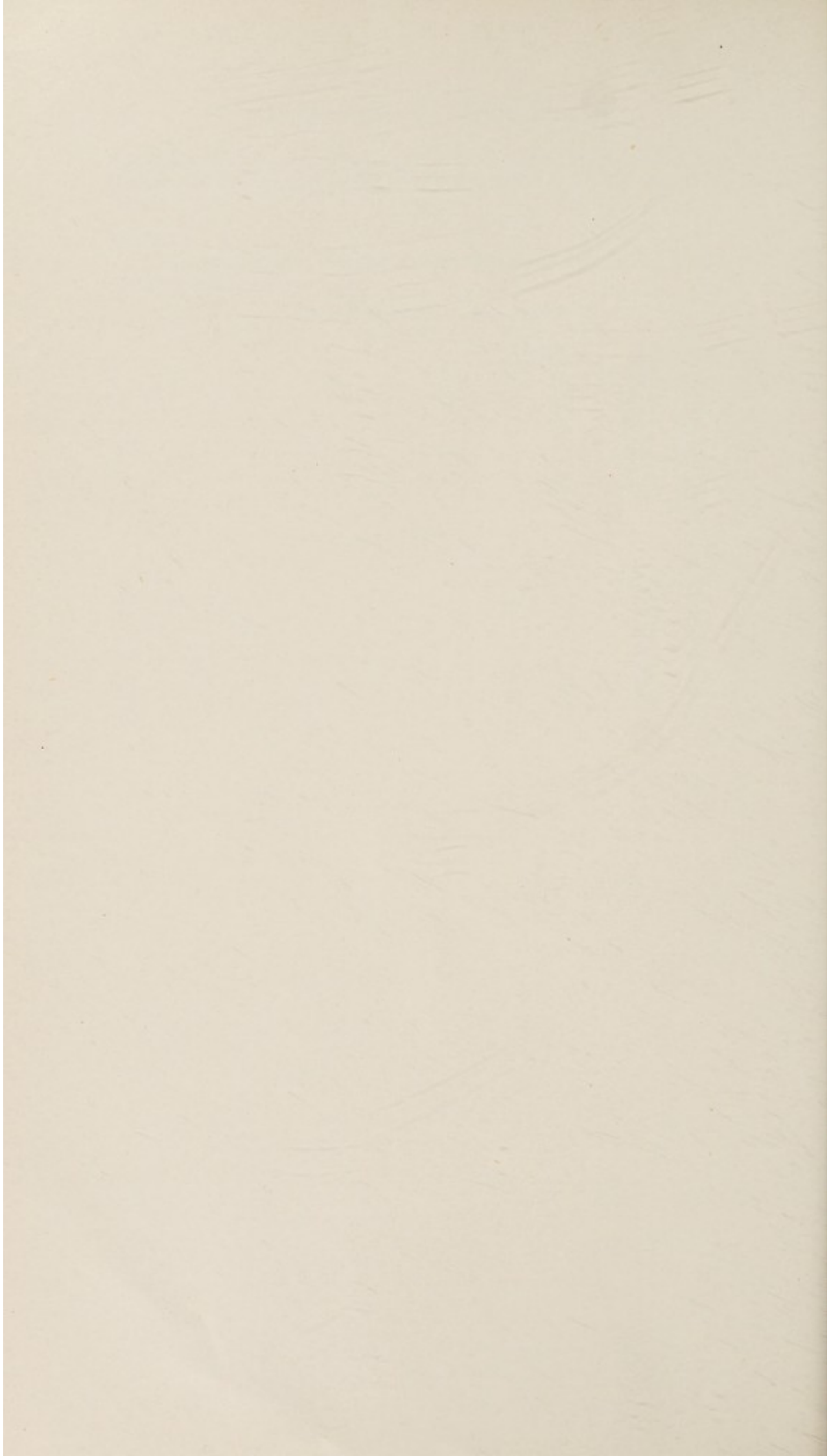
DISEASE	Mortality		Morbidity	
	No.	Rate	No.	Rate
Smallpox	1	0.0001	1	0.0001
Diphtheria	15	0.0005	15	0.0005
Typhoid	10	0.0003	10	0.0003
Scarlet fever	12	0.0004	12	0.0004
Measles	100	0.003	100	0.003
Whooping cough	150	0.005	150	0.005
Polio	1	0.0001	1	0.0001
Infantile paralysis	1	0.0001	1	0.0001
Cholera	0	0	0	0
Typhus	0	0	0	0
Scarlet fever	12	0.0004	12	0.0004
Measles	100	0.003	100	0.003
Whooping cough	150	0.005	150	0.005
Polio	1	0.0001	1	0.0001
Infantile paralysis	1	0.0001	1	0.0001
Cholera	0	0	0	0
Typhus	0	0	0	0

TABLE II.—MORTALITY AND MORBIDITY

for the year 1921

DISEASE	Mortality		Morbidity	
	No.	Rate	No.	Rate
Smallpox	1	0.0001	1	0.0001
Diphtheria	15	0.0005	15	0.0005
Typhoid	10	0.0003	10	0.0003
Scarlet fever	12	0.0004	12	0.0004
Measles	100	0.003	100	0.003
Whooping cough	150	0.005	150	0.005
Polio	1	0.0001	1	0.0001
Infantile paralysis	1	0.0001	1	0.0001
Cholera	0	0	0	0
Typhus	0	0	0	0
Scarlet fever	12	0.0004	12	0.0004
Measles	100	0.003	100	0.003
Whooping cough	150	0.005	150	0.005
Polio	1	0.0001	1	0.0001
Infantile paralysis	1	0.0001	1	0.0001
Cholera	0	0	0	0
Typhus	0	0	0	0







ANNUAL REPORT

OF THE

Vital Statistics Branch

OF THE

DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF ALBERTA

1925

Vital Statistics Division

Annual Report for the Year 1924

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Vital Statistics Division

(ARTHUR PACKFORD, *Deputy Registrar General*)

The 1950 Report of the Vital Statistics Division of the Department of Public Health is the 46th Report published since the establishment of the Province, and shows that the birth and marriage rates are the same as that of the previous year; and that there is a decrease in the death rate. There was a considerable decrease in the death rates from the communicable diseases, maternal and infantile mortality. The death rates from heart diseases and accidents were slightly less than the preceding year and the cancer rate shows a small increase.

POPULATION

The population of the Province for 1950 has been estimated by the Dominion Bureau of Statistics as 895,000, an increase of 24,000. All rates in the report are, therefore, based on that figure.

BIRTHS

There were 25,625 children born to residents of the Province during the year. The rate being 28.7 per 1,000 population; 690 more births than in the previous year. Indian births numbered 1,221. Of the total births, 13,138 were males and 12,487 were females. The ratio being 1,052 males to each 1,000 females. Multiple births comprised 309 twin births and 3 cases of triplets. There were 1,185 illegitimate births registered during the year; 39 less than the previous year; the rate being 4.6 per cent of all live births.

There were 11,108 children born to residents of cities and towns of 1,000 population and over, and 14,517 to rural residents.

The number of births to residents of the four large cities were as follows: Edmonton, 4,745; Calgary, 3,135; Lethbridge, 647; and Medicine Hat, 385. The total number of births in these cities were: Edmonton, 6,854; Calgary, 4,060; Lethbridge, 1,200; and Medicine Hat, 666.

For purposes of comparison the following are the birth rates for Canada, the Provinces and certain other countries for 1950:

BIRTH RATES

Canada	26.8	Australia	23.3
Newfoundland	35.5	New Zealand	24.6
Prince Edward Island	30.1	Belgium	16.3
Nova Scotia	26.2	Denmark	18.6
New Brunswick	31.4	Finland	24.1
Quebec	29.9	France	20.4
Ontario	24.1	Italy	19.2
Manitoba	24.1	Netherlands	22.7
Saskatchewan	24.8	Austria	15.1
Alberta	28.7	Norway	19.3
British Columbia	23.8	Portugal	23.8
England and Wales	15.8	Spain	19.8
Scotland	17.9	Sweden	16.4
Eire	21.0	Switzerland	18.2
United States	11.2	South Africa	25.7

MARRIAGES

Marriages in 1950 numbered 9,294, being 257 more than in the preceding year and 601 more than the average of the 5 preceding years. The rate per 1,000 population was the same as the previous

year, being 10.4; 113 of the bridegrooms were 18 years of age or under, and 206 of the brides were 16 years of age or under; 2,288 of the brides were 17 to 19 years of age and 4,006 were 20 to 24 years of age; 178 bridegrooms and 81 brides were 60 years of age and over; 11 grooms and 4 brides were over 75. Of the bridegrooms, 90.5 were bachelors, 4.1 were widowers, and 5.4 were divorced; and of the brides, 89.9 were spinsters, 5.3 were widows, and 4.8 were divorcees.

The following are the marriage rates for Canada, the Provinces and certain other countries for 1950:

MARRIAGE RATES

Canada	9.0	Australia	9.2
Newfoundland	7.1	New Zealand	9.2
Prince Edward Island	6.4	Belgium	8.3
Nova Scotia	7.7	Denmark	9.1
New Brunswick	8.4	Finland	8.5
Quebec	8.6	France	7.9
Ontario	9.7	Italy	7.5
Manitoba	9.0	Netherlands	8.2
Saskatchewan	7.9	Austria	9.1
Alberta	10.4	Norway	8.3
British Columbia	9.8	Portugal	7.6
England and Wales	8.1	Spain	7.4
Scotland	7.8	Sweden	7.7
Eire	5.4	Switzerland	8.0
United States	11.2		

DIVORCES

There were 550 final Divorce Decrees granted during the year. This is 44 less than the previous year and 186 less than the average for the preceding 5 years. Of the divorces, 249 were granted to husbands and 311 to wives. In addition to the divorces, 6 Decrees of Nullity were also granted.

DEATHS

The deaths of 6,856 residents of the Province were registered during the year; of these 342 were Indians. Male deaths numbered 4,182 and female deaths numbered 2,667. There were 227 less deaths than the previous year, but 123 more than the average number of deaths for the preceding 5 years. The death rate was 7.7 per 1,000 population; the rate for 1949 being 8.2. The number of deaths of residents of the four large cities were as follows: Edmonton, 1,183; Calgary, 1,154; Lethbridge, 173; and Medicine Hat, 131. The actual number of deaths which occurred in these cities were: Edmonton, 1,642; Calgary, 1,305; Lethbridge, 242; and Medicine Hat, 168.

The deaths are classified this year for the first time according to the sixth revision of the International List of Causes of Death. This manual is revised and brought up to date every ten years and the sixth revision was adopted in 1948, and put into use in 1950. It is now known as the Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, and due to the changes made in the lists of categories and inclusions, strict comparisons with figures for preceding years is possible only in certain causes.

Diseases of the heart, which has long been the chief cause of death, were responsible for approximately the same number of deaths as the previous year, the number being 2,046 and the rate 228.6 per 100,000 population. In 1949 the number was 2,033 and the rate 233.4.

Deaths from all forms of cancer, including Hodgkins Disease, Leukemia and Aleukemia, numbered 997, the rate being 110.4. The number and the rate the previous being 957 and 109.9.

Tuberculosis deaths numbered 171, of which 80 were Indians. Deaths from tuberculosis of the respiratory system numbered 135; of these 63 were Indians. The death rate for all forms of tuberculosis was 19.3 and for tuberculosis of the respiratory system 15.3. The previous year's rates were 24.2 and 17.9 respectively.

Pneumonia deaths numbered 273, this number being 103 less than the previous year, and there were 27 deaths from influenza, 14 less than the preceding year.

There were 8 deaths from poliomyelitis, one less than in 1949.

Violent deaths from all causes numbered 655; of these 82 were suicides, an increase of 2, and 12 were homicides, 3 less than the previous year. Motor vehicles accidents accounted for 159 deaths, a decrease of 5; and other transport accidents caused 41 deaths, comprising 7 street car, 8 water transport, 21 railway, and 5 aircraft accidents. In addition, there were 5 deaths due to aircraft accident which were not included in above figures, as the wreck was not found and the deaths registered until the tables were compiled. Accidents in mines and quarries accounted for 25 deaths, agriculture accidents 28, and forestry 17. Accidental drowning caused 35 deaths, conflagration 39 deaths, and injury by firearms 20.

DEATH RATES

Canada	8.9	Australia	9.6
Newfoundland	8.6	New Zealand	9.3
Prince Edward Island	9.5	Belgium	12.2
Nova Scotia	9.2	Denmark	9.2
New Brunswick	9.4	Finland	10.3
Quebec	8.4	France	12.6
Ontario	9.7	Italy	9.7
Manitoba	8.3	Netherlands	7.5
Saskatchewan	7.1	Austria	12.1
Alberta	7.7	Norway	8.9
British Columbia	10.2	Portugal	11.9
England and Wales	11.6	Spain	10.6
Scotland	12.4	Sweden	10.0
Eire	12.6	Switzerland	10.1
United States	9.6	South Africa	9.1

MATERNAL MORTALITY

There was again a decrease in the number of deaths due to puerperal causes, the number of maternal deaths this year being 19, as compared with 25 the preceding year, the rate being 0.7 per 1,000 live births, the lowest maternal death rate in the history of the Province.

MATERNAL DEATH RATES PER 1,000 LIVE BIRTHS

Canada	1.1	Alberta	0.7
Newfoundland	1.4	British Columbia	1.0
Prince Edward Island	1.0	Eire	1.2
Nova Scotia	1.2	Italy	1.3
New Brunswick	0.9	Northern Ireland	1.1
Quebec	1.5	Portugal	1.7
Ontario	0.9	Scotland	1.1
Manitoba	0.7	United States	0.7
Saskatchewan	1.0		

INFANT DEATHS

There were 831 deaths of children under one year of age, 8 more than in the preceding year; 470 of this number were males and 361 were females. Of these children, 250 were under one day old and 518 were under the age of one month. The infantile death rate was 32 per 1,000 live births, the rate for the preceding year being 33.

INFANT MORTALITY RATES PER 1,000 LIVE BIRTHS

Canada	41	Australia	25
Newfoundland	58	Scotland	39
Prince Edward Island	37	Eire	45
Nova Scotia	40	United States	29
New Brunswick	57	Austria	64
Quebec	51	Finland	43
Ontario	34	France	47
Manitoba	35	Italy	64
Saskatchewan	32	Netherlands	25
Alberta	32	Portugal	94
British Columbia	30	Spain	64
England and Wales	30		

Still births numbered 372. This was 29 less than the previous year, the rate being 14.5 per 1,000 live births.

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.

The Province is divided into 17 census divisions. These divisions are further subdivided into organized municipal areas. These municipal areas, which were each originally within the boundaries of a single census division, have been reorganized by the Provincial authorities into larger units, and now, in many cases, part of the new municipality or improvement district is in one census division and part in another.

The following table shows the census divisions divided into municipalities, improvement districts, cities, towns and villages, with the 1946 and 1941 division population figures. The table is arranged to show the population of each of the former municipal districts, improvement districts or parts of districts included in the new units. Each new unit in the table is in blackface type. The former area or areas which make up the new units are listed directly beneath.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNI-
CIPALITIES FOR CENSUS YEARS, 1941 AND 1946

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
ALBERTA	803,330	796,169	Division No. 1—Continued:		
Rural	448,934	489,583	Division No. 2	60,982	58,563
Urban	354,396	306,586	Rural	29,651	29,725
Division No. 1	31,256	29,595	5. Sugar City	5,116	4,749
Rural	15,027	16,408	7. I.D.	376	432
1. I.D.	806	947	8. I.D. (pt.)	179	202
1. I.D.	43	57	37. Sugar City	2,844	2,391
2. I.D.	104	148	38. I.D.	1,305	1,282
3. I.D.	167	169	67. I.D. (pt.)	412	442
31. I.D.	52	62	6. Cochrane	3,735	4,233
32. I.D.	440	511	8. I.D. (pt.)	945	1,106
2. Burlington	1,275	1,440	9. I.D.	1,311	1,538
33. Flowery Plains	409	487	10. Cochrane	1,479	1,589
34. Burlington	866	953	8. I.D.	41	2
3. I.D.	2,242	2,505	39. Kerr (pt.)		2
4. I.D.	391	521	40. Castle River (pt.)	41	
5. I.D.	994	1,067	9. Pincher Creek	3,135	3,363
6. I.D.	503	541	39. Kerr (pt.)	1,422	1,532
35. I.D.	354	376	40. Castle River (pt.)	605	614
4. Warner	1,940	1,871	70. Livingston	1,108	1,217
36. Warner	1,940	1,871	10. I.D.	4,153	4,149
11. I.D.	3,774	4,756	71. I.D.	4,153	4,149
61. I.D.	565	740	15. I.D. (pt.)	7,171	6,693
62. I.D.	534	615	67. I.D. (pt.)	4,530	4,267
63. I.D.	514	609	16. Bright	2,264	2,427
91. I.D.	917	1,164	68. I.D. (pt.)	2,641	2,426
92. I.D.	705	890	39. Kerr		68
93. I.D.	539	738	68. I.D. (pt.)	374	423
12. Forty Mile	784	959	69. Bright	1,187	1,153
64. Forty Mile	784	959	99. Argyle (pt.)	454	476
13. Bow Island	465	535	100. I.D. (pt.)	249	307
94. Bow Island	465	535	26. Argyle (pt.)	1,248	1,516
14. Eureka	1,120	1,098	99. Argyle (pt.)	1,009	1,238
65. Eureka	1,120	1,098	100. I.D. (pt.)	239	278
15. I.D. (pt.)	2,621	2,297	27. I.D. (pt.)	95	162
66. I.D.	2,621	2,297	101. I.D.	95	162
Urban	16,229	13,187	Waterton Lakes Nat. Park	210	269
Cities:			Indian Reserves	2,483	2,162
Medicine Hat	12,859	10,571	Urban	31,331	28,838
Towns:			Cities:		
Bow Island	432	291	Lethbridge	16,522	14,612
Irvine	261	240	Towns:		
Taber	1,760	1,331	Blairmore	1,767	1,731
Villages:			Cardston	2,334	1,864
Burdett	110	123	Claresholm	1,306	1,265
Milk River	437	335	Coleman	1,809	1,870
Warner	370	296	Granum	238	238

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
Division No. 2—Continued:			Division No. 4—Continued:		
Towns—Continued:			Rural—Continued:		
Macleod	1,649	1,912	192. I.D.	39	6
Magrath	1,295	1,207	193. I.D.	1	2
Pincher Creek	1,148	994	Bow West Area (pt.)	719	927
Raymond	2,116	2,089	96. I.D. (pt.)	176	245
Villages:			127. I.D. (pt.)	478	595
Coaldale	413	290	157. Marquis (pt.)	65	87
Cowley	94	125	Urban	9,270	7,068
Frank	194	204	Towns:		
Stirling	446	437	High River	1,674	1,430
Division No. 3	14,749	15,518	Nanton	873	718
Rural	10,963	12,151	Okotoks	694	591
21. I.D.	1,927	2,404	Stavely	299	273
121. Many Islands (pt.)			Vulcan	786	732
I.D.	1,927	2,404	Villages:		
122. Jubilee I.D. (pt.)			Arrowwood	206	251
I.D.	614	633	Barons	270	233
22. I.D.	631	637	Black Diamond	1,380	890
125. I.D. (pt.)	17	4	Blackie	222	223
125. I.D. (pt.)	1,104	1,180	Carmangay	229	229
23. I.D.	1,308	1,359	Caley	140	133
127. I.D. (pt.)	204	179	Champion	279	320
28. I.D. (pt.)	5,480	5,475	Milo	108	129
123. Bow Slope (pt.)	5,480	5,475	Lomond	138	129
34. Acadia (pt.)	12	9	Nobleford	126	111
241. Acadia (pt.)	12	9	Picture Butte	689	.....
Army Experimental Range		317	Turner Valley	1,157	676
121. Many Islands		12	Division No. 5	16,719	18,926
122. Jubilee I.D. (pt.)		305	Rural	13,409	15,560
Berry Creek-Sullivan Lake			34. Acadia (pt.)	670	739
Area (pt.)	661	752	241. Acadia (pt.)	670	739
122. Jubilee I.D. (pt.)	661	752	42. I.D. (pt.)	2,761	2,428
Bow West Area (pt.)	944	1,198	276. I.D. (pt.)	2,761	2,428
96. I.D. (pt.)	398	536	47. Starland	2,627	3,214
127. I.D. (pt.)	546	662	277. Michichi	879	1,118
Urban	3,786	3,367	306. Lambton (pt.)	688	848
Towns:			307. Starland	1,060	1,248
Bassano	590	582	Berry Creek-Sullivan Lake		
Brooks	1,091	888	Area (pt.)	3,684	4,658
Redcliffe	1,289	1,111	214. I.D. (pt.)	963	1,251
Villages:			305. I.D. (pt.)	2,383	2,986
Duchess	207	149	306. Lambton (pt.)	338	421
Empress	417	341	Sounding Creek-Neutral		
Enchant	76	76	Hills Area (pt.)	3,667	4,521
Jenner	27	27	214. I.D. (pt.)	114	185
Tilley	192	193	242. I.D.	2,087	2,506
Division No. 4	28,402	29,383	273. I.D.	474	553
Rural	19,132	22,315	331. I.D. (pt.)	992	1,277
25. Barons	19,132	22,315	Urban	3,310	3,366
97. I.D.	2,757	2,939	Towns:		
98. Little Bow	1,234	1,363	Hanna	1,756	1,622
127. I.D. (pt.)	40	71	Villages:		
26. Argyle (pt.)	1,776	1,994	Cereal	111	142
129. Clear Lake	1,544	1,728	Chinook	130	142
130. I.D. (pt.)	232	266	Craigmyle	140	186
27. I.D. (pt.)	155	107	Delia	231	315
130. I.D. (pt.)	59	39	Morrin	177	216
131. I.D.	96	68	Munson	93	139
Rural:			Oyen	339	326
29. Vulcan	2,201	2,726	Rumsey	98	90
127. I.D. (pt.)	26	72	Youngstown	235	188
128. Harmony	621	845	Division No. 6	157,556	146,990
157. Marquis	380	442	Rural	45,914	46,679
158. Royal	1,174	1,367	28. I.D. (pt.)	663	668
30. Blackie	2,171	2,433	123. Bow Slope I.D.		
157. Marquis (pt.)	641	857	(pt.)	663	668
189. Dinton	1,530	1,576	32. Turner Valley (pt.)	63	84
31. Highwood	3,497	3,552	222. I.D. (pt.)	63	84
159. Riley	1,686	1,721	39. I.D.	458	555
190. Sheep Creek	1,811	1,831	217. I.D.	458	555
32. Turner Valley (pt.)	4,540	6,175	40. Bow Valley	2,578	2,907
160. I.D.	1,461	2,422	218. Blackfoot	1,244	1,451
161. I.D. (pt.)	18	47	219. Bow Valley	1,334	1,456
191. Stockland	3,061	3,706	41. I.D.	686	893
33. I.D.	42	28			
161. I.D. (pt.)	2	20			

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
Division No. 6—Continued:			Division No. 7—Continued:		
Rural—Continued:			Rural—Continued:		
247. I.D.	686	893	421. Ribstone	1,229	1,416
42. I.D. (pt.)	3,840	4,061	422. Gilt Edge	1,322	1,489
276. I.D. (pt.)	2,840	4,061	423. Battle River	1,086	1,399
43. Serviceberry	2,832	3,013	62. Flagstaff	6,461	7,804
248. Grasswold	1,332	1,400	364. Flagstaff	998	1,530
249. Keoma	1,500	1,613	394. Asquith	835	1,043
44. Conrich	4,892	4,273	395. Wheatland	1,465	1,692
220. Shepard	2,841	2,134	424. Kinsella	993	1,105
250. Beddington	2,051	2,139	425. Sterling	1,688	1,873
45. Springbank	5,008	3,241	455. Iron Creek (pt.)	482	561
221. Springbank	5,008	3,241	73. Beaver (pt.)	1,347	1,518
46. I.D.	3,711	3,598	455. Iron Creek (pt.)	1,347	1,518
222. I.D. (pt.)	286	405	Berry Creek-Sullivan Lake		
223. I.D.	1,693	1,546	Area (pt.)	126	147
251. I.D.	1,365	1,314	305. I.D. (pt.)	126	147
252. I.D.	361	333	Sounding Creek-Neutral		
254. I.D.	6	.....	Hills Area (pt.)	2,555	3,012
224, 253. I.D.	.....	.....	331. I.D. (pt.)	2,555	3,012
48. Kneehill	7,151	8,097	Buffalo National Park	17	4
278. Carbon	1,207	1,580			
279. Norquay	1,982	2,184	Urban	7,915	7,169
308. Ghost Pine	1,786	2,023	Towns:		
309. Stauffer	2,176	2,310	Castor	647	625
49. Mountain View	8,883	9,800	Coronation	633	581
280. Rosebud	2,141	2,233	Hardisty	494	457
281. Beaver Dam	2,080	2,327	Wainwright	1,261	980
310. Mountain View	2,231	2,580	Villages:		
311. Westerdale	2,431	2,660	Alliance	243	233
50. I.D.	899	1,085	Cadogan	.....	99
282. I.D.	899	1,085	Chauvin	383	343
283, 284. I.D.	.....	.....	Consort	325	265
51. Banff National Park	2,244	2,545	Czar	121	139
Banff (not)	2,081	2,187	Edgerton	273	258
Indian Reserves	2,006	1,859	Forestburg	243	231
			Galahad	166	145
Urban	111,642	100,311	Hughenden	168	164
Cities:			Irma	345	273
Calgary	100,044	88,904	Killam	430	347
Drumheller	2,659	2,748	Lougheed	171	195
Towns:			Monitor	.....	82
Didsbury	980	892	Provost	645	518
Gleichen	477	435	Sedgewick	417	320
Olds	1,521	1,337	Strome	233	233
Strathmore	603	560	Veteran	191	190
Three Hills	952	706	Viking	526	491
Villages:					
Acme	282	285	Division No. 8	64,789	67,630
Airdrie	198	191	Rural	44,097	49,293
Beiseker	272	240	54. Stettler	6,093	7,167
Carbon	369	409	336. Success	1,236	1,389
Carstairs	385	371	337. Vimy	686	947
Cluny	151	138	366. Dublin	1,071	1,257
Cochrane	405	298	367. Waverly	1,790	1,893
Crossfield	433	409	396. Haig (pt.)	811	1,012
Forest Lawn	646	899	397. Lakeside (pt.)	499	669
Hussar	130	116	55. Red Deer (pt.)	6,681	7,792
Irricana	150	172	338. Hays	2,411	2,702
Langdon	.....	95	339. Pine Lake	2,011	2,726
Rockyford	226	201	340. Arthur	2,259	2,364
Rosebud	.....	99	63. Camrose	11,456	12,449
Standard	244	212	396. Haig (pt.)	413	542
Swalwell	.....	114	397. Lakeside (pt.)	922	1,004
Trochu	515	480	426. Melrose	2,760	2,955
			427. Evergreen	2,469	2,730
Division No. 7	29,928	33,285	456. Parkland (pt.)	2,197	2,317
Rural	22,013	22,116	457. Lloyd George	2,695	2,901
52. Provost	4,020	4,716	64. Lacombe (pt.)	6,020	6,583
362. Hillcrest	936	986	398. Lamerton	2,169	2,479
363. Stocks (pt.)	489	617	399. Crown	3,851	4,104
391. Sifton	1,454	1,688	66. Ponoka (pt.)	5,625	6,235
392. Vale (pt.)	310	384	428. Waterglen	1,277	1,486
393. Huamha	831	1,041	429. Fertile Valley	4,348	4,749
53. Paintearth	3,503	4,160	73. Beaver (pt.)	398	562
334. Coronation	1,494	1,840	456. Parkland (pt.)	398	562
363. Stocks (pt.)	286	318	74. Wetaskiwin (pt.)	6,496	7,263
365. Progress	1,723	2,002	458. Montgomery	3,185	3,486
61. Wainwright (pt.)	3,984	4,755	459. Bigstone (pt.)	3,311	3,777
392. Vale (pt.)	347	451	Indian Reserves	1,328	1,242

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
Division No. 8—Continued:			Division No. 9—Continued:		
Urban	20,692	18,337	Rural—Continued:		
Cities:			80. Jasper National Park	1,588	1,622
Red Deer	4,042	2,924	Jasper (not)	1,419	1,335
Wetaskiwin	2,645	2,318	Urban	4,150	3,187
Towns:			Towns:		
Camrose	2,967	2,598	Rocky Mountain	1,017	800
Daysland	464	438	Sylvan Lake	971	805
Innisfail	1,272	1,223	Villages:		
Lacombe	1,808	1,603	Bentley	362	279
Ponoka	1,468	1,306	Bowden	273	234
Stettler	1,499	1,295	Eckville	195	135
Villages:			North Red Deer	698	524
Alix	428	360	Rimbey	634	410
Bashaw	511	494	Division No. 10	51,881	58,807
Bawlf	231	227	Rural	42,510	49,982
Big Valley	209	291	61. Wainwright (pt.)	333	425
Bittern Lake	38	50	451. Merton (pt.)	259	303
Blackfalds	119	113	452. Grizzly Bear (pt.)	74	122
Botha	112	111	71. Vermilion River (pt.)	10,572	11,869
Clive	227	224	451. Merton (pt.)	1,164	1,379
Delburne	379	308	452. Grizzly Bear (pt.)	973	1,246
Donalda	220	206	481. Wellington	1,566	1,794
Edberg	163	152	482. Vermilion Valley	1,819	1,872
Elnora	201	195	511. Streamstown	2,235	2,420
Erskine	172	172	512. Ethelwyn	2,815	3,158
Ferintosh	186	169	72. Minburn	6,218	7,052
Gadsby	120	141	453. Buffalo Coulee	1,130	1,370
Gull Lake	39	21	454. Lakeview	1,242	1,358
Halkirk	121	118	483. Melberta	1,716	1,894
Millet	348	325	484. Birch Lake	2,130	2,430
Mirror	562	570	73. Beaver (pt.)	3,173	3,683
New Norway	179	169	485. Patricia (pt.)	1,080	1,261
Ohaton	53	53	486. Beaver Lake (pt.)	2,093	2,422
Penhold	134	183	81. Eagle	11,787	14,483
Division No. 9	31,160	32,232	485. Patricia (pt.)	771	848
Rural	27,010	29,045	513. Ukraina	2,549	3,179
55. Red Deer (pt.)	5,006	5,735	514. Sobor	2,664	3,279
341. Poplar Grove	2,762	3,113	515. Norma	2,502	3,027
371. Golden West	2,244	2,622	545. Eagle	3,301	4,150
56. Waterloo	1,482	1,402	82. Lamont	10,427	12,470
312. Waterloo	1,482	1,402	486. Beaver Lake (pt.)	585	672
57. Raven	2,168	2,254	516. The Pines	2,966	3,547
342. Raven	2,168	2,254	546. Wostok	3,812	4,653
58. I.D.	116	94	547. Leslie	3,064	3,598
313, 314. I.D.	11	12	Urban	9,371	8,825
316. I.D.	4	4	Towns:		
344. I.D.	99	72	Lloydminster (pt.)	698	572
374, 375. I.D.	6	6	Vegreville	1,563	1,696
315, 345, 346. I.D.	.....	.....	Vermilion	1,630	1,408
64. Lacombe (pt.)	2,634	2,670	Villages:		
400. Lorne	2,634	2,670	Andrew	369	326
65. I.D.	3,865	4,307	Bruderheim	232	237
343. I.D.	781	833	Chipman	194	240
401. Lochearn	2,716	3,037	Derwent	207	171
403. I.D.	368	437	Hairy Hill	235	.....
66. Ponoka (pt.)	1,685	1,800	Holden	382	361
430. Blindman	1,685	1,800	Innisfree	258	253
67. Last West	1,482	1,898	Islay	.....	132
431. Last West	1,482	1,898	Kitscoty	240	234
68. I.D.	136	135	Lamont	468	438
432. I.D.	136	135	Lavoy	127	178
69. I.D.	1,979	1,234	Manville	472	396
376. I.D.	1,263	768	Minburn	198	129
433. I.D.	178	114	Mundare	727	756
434. I.D.	350	240	Myrnam	308	216
435. I.D.	67	8	Ranfurly	.....	129
436. I.D. (Pt.)	2	.....	Ryley	338	323
463. I.D.	119	102	Two Hills	289	210
464, 465. I.D.	.....	2	Willingdon	436	420
347, 348, 377, 437 (pt.)	.....	.....	Division No. 11	168,331	149,193
76. I.D. (pt.)	3,187	3,877	Rural	48,548	49,400
460. Columbia	1,760	1,951	73. Beaver (pt.)	2,629	2,997
461. I.D.	1,046	1,486	487. Cornhill	2,629	2,997
462. I.D.	381	440	74. Wetaskiwin (pt.)	9	39
79. I.D. (pt.)	1,682	2,017	459. Bigstone (pt.)	9	39
436. I.D. (pt.)	2	3			
466. I.D. (pt.)	1,680	2,014			
437 (pt.), 468. I.D.	.....	.....	

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
Division No. 11—Continued:			Division No. 12—Continued:		
Rural—Continued:			Rural—Continued:		
75. Leduc	11,629	12,741	529, 530, 561, 587. I.D.		
488. Black Mud	3,798	4,239	108. I.D. (pt.)	131	106
489. Liberty	4,394	4,883	612. I.D. (pt.)	131	106
490. Pioneer	3,437	3,619	109. I.D. (pt.)	1,189	1,209
76. I.D. (pt.)	1,385	1,479	583. I.D.	830	889
491. I.D.	1,385	1,479	612. I.D.	319	277
83. Strathcona	6,383	6,725	615. I.D.	40	43
517. Clover Bar	2,515	2,740	616. I.D.		
518. Strathcona	3,868	3,985	110. I.D. (pt.)	45	33
84. Stony Plain	11,816	10,061	589. I.D. (pt.)		
519. Spruce Grove	6,923	4,824	590. I.D. (pt.)	45	33
520. Inga	2,693	3,013	111. I.D. (pt.)		
521. Tomahawk	1,960	2,198	591. I.D. (pt.)		
551. Morthen (pt.)	240	26	Urban	1,874	1,934
90. Sturgeon (pt.)	5,429	5,115	Towns:		
548. Sturgeon	5,429	5,115	Edson	1,571	1,499
91. Morinville (pt.)	3,248	3,542	Villages:		
549. Ray	3,248	3,542	Entwistle		218
93. Lac Ste. Anne (pt.)	5,109	5,654	Mayerthorpe	303	217
550. Woodford	2,590	3,045	Division No. 13	30,352	33,172
551. Morthen (pt.)	2,519	2,609	Rural	27,775	30,805
Elk Island National Park	51	50	71. Vermilion River (pt.)	441	587
Indian Reserves	860	997	541. I.D. (pt.)	441	587
Urban	119,783	99,793	85. I.D.	360	512
Cities:			541. I.D. (pt.)	132	153
Edmonton	113,116	93,817	571. I.D.	228	359
Towns:			86. St. Paul	9,234	10,122
Beverly	1,171	981	542. Lincoln	1,079	1,221
Fort Saskatchewan	921	903	543. Laurier	2,792	3,066
Leduc	920	871	544. Champlain	1,964	2,213
Morinville	735	580	573. St. Vincent (pt.)	1,241	1,351
St. Albert	804	697	574. St. Lina	1,267	1,347
Stony Plain	720	566	605. Ashmont (pt.)	891	924
Tofield	608	551	87. Bonnyville	1,737	1,867
Villages:			572. Bonnyville	1,737	1,867
Alberta Beach	101	59	88. St. Vincent	1,628	1,965
Hay Lakes	199	154	573. St. Vincent (pt.)	1,628	1,965
Kapasawin			89. Smoky Lake (pt.)	4,103	4,837
Onoway	175	156	575. Vilna	3,087	3,590
Sangudo	236	173	605. Ashmont (pt.)	872	1,069
Seba Beach	77	84	635. I.D. (pt.)	144	178
Wabamun		201	101. I.D.	5,719	6,259
Division No. 12	16,718	17,431	601. I.D.	1,363	1,466
Rural	14,844	15,497	602. I.D.	1,817	1,949
77. I.D.	1,645	2,004	603. I.D.	1,175	1,311
522. I.D.	1,645	2,004	604. I.D. (pt.)	288	313
78. I.D.	2,016	2,487	631. I.D.	953	1,007
493. I.D.	71	34	632. I.D.	11	18
495, 524. I.D.	24	35	633. I.D.	92	131
523. I.D.	83	99	634. I.D. (pt.)	20	64
553. I.D.	1,065	1,318	102. I.D. (pt.)	2,577	2,745
554. I.D.	773	1,001	604. I.D. (pt.)	312	408
494. I.D.			634. I.D. (pt.)	140	216
79. I.D. (pt.)	2,558	1,862	635. I.D. (pt.)	919	1,013
466. I.D. (pt.)	2,555	1,803	664. I.D. (pt.)	32	4
498. I.D.	3	59	666. I.D.	832	751
93. Lac Ste. Anne (pt.)	2,148	2,484	695. I.D.	342	353
582. Kitchener	2,103	2,458	121. I.D. (pt.)	13	52
612. I.D. (pt.)	45	26	661, 662. I.D.		35
94. Pembina	2,710	2,667	663. I.D.	1	11
552. Pembina	2,710	2,667	664. I.D. (pt.)		35
95. I.D.	2,236	2,560	Indian Reserves	1,963	1,859
525. I.D.	52	43	Urban	2,577	2,367
526. I.D.	72	225	Towns:		
527. I.D.	356	344	St. Paul	1,187	1,018
555. I.D.	860	930	Villages:		
556. I.D.	387	291	Bellis		128
584. I.D.	472	690	Bonnyville	730	603
585. I.D.	37	37	Elk Point	338	307
586. I.D.			Vilna	322	311
96. I.D.	166	85	Division No. 14	44,546	47,899
528. I.D.	111	30	Rural	40,075	44,526
557. I.D.	25		89. Smoky Lake (pt.)	8,167	9,884
558. I.D.	30	44	576. Smoky Lake	3,294	3,974
559, 560. I.D.		4			
588. I.D.		7			

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1946	1941		1946	1941
Division No. 14—Continued:			Division No. 15—Continued:		
Rural—Continued:			Rural—Continued:		
577. Unity	3,924	4,798	675, 676, 677, 678, 679, I.D.		1
606. I.D. (pt.)	21	46	620, 621 (pt.), 647, 648, 674. I.D.		
607. I.D. (pt.)	928	1,066	111. I.D. (pt.)	211	267
90. Sturgeon (pt.)	2,619	3,166	622. I.D. (pt.)		12
578. Opal	2,619	3,166	623, 650, 651. I.D.		35
91. Morinville (pt.)	2,563	2,838	681. I.D.		44
579. Hazelwood (pt.)	2,563	2,838	709. I.D.	99	93
92. Westlock	9,705	10,469	710. I.D.	112	83
579. Hazelwood (pt.)	673	653	591 (pt.), 621 (pt.), 624, 649, 680, 711. I.D.		
580. Lockerbie (pt.)	1,903	2,309	123. I.D.		15
608. Tawatinaw	2,123	2,256	700, 702. I.D.		15
609. Pibroch	2,341	2,476	672, 673, 701, 703. I.D.		
610. Shoal Creek	2,665	2,775	124. I.D.	2,731	2,545
93. Lac Ste. Anne (pt.)	2,487	3,006	730. I.D.	88	158
580. Lockerbie (pt.)	514	723	731. I.D.	691	698
581. Pershing	1,973	2,283	732. I.D.	866	758
102. I.D. (pt.)	3,392	3,557	733. I.D.	1,086	931
606. I.D. (pt.)	25	28	125. I.D.	2,713	3,044
607. I.D. (pt.)	997	1,123	705. I.D.	28	28
636. I.D. (pt.)	484	505	734. I.D.	116	93
665. I.D.	1,508	1,412	735. I.D.	200	248
726. I.D.	378	489	864. I.D.	1,312	1,087
103. Cartier	1,423	1,397	765. I.D.	856	1,384
637. Cartier	1,423	1,397	794. I.D.	201	204
104. I.D.	1,909	2,112	704. I.D.		
636. I.D. (pt.)	159	171	126. I.D.	1,719	1,687
667. I.D.	1,750	1,941	706. I.D.	422	416
105. Nelson	1,733	1,808	707. I.D.	274	203
638. Nelson	1,733	1,808	708. I.D.	41	93
106. Grosmont	835	863	736. I.D.	149	135
668. Grosmont (pt.)	835	863	737. I.D.	206	92
107. I.D.	2,925	3,166	738. I.D.	608	730
639. I.D.	805	903	767. I.D. (pt.)	19	18
640. I.D.	976	1,029	130. I.D.	3,571	4,327
668. Grosmont (pt.)	27		766. I.D.	725	601
669. I.D.	501	695	767. I.D. (pt.)	81	96
698. I.D.	122	63	795. I.D.	286	873
699. I.D.	494	476	796. I.D.	2,479	2,757
108. I.D. (pt.)	978	1,088	131. I.D. (pt.)	1,624	1,829
611. I.D.	978	1,088	825. I.D.	274	275
122. I.D.	1,339	1,172	826. I.D.	903	974
696. I.D.	243	281	855. I.D.	447	580
697. I.D.	563	588	824, 854. I.D.		
727. I.D.	173	57	Indian Reserves	938	1,154
728. I.D.	33	79			
729. I.D.	327	167	Urban	2,742	1,464
Urban	4,471	3,373	Towns:		
Towns:			Peace River	997	873
Athabasca	747	578	Villages:		
Villages:			Fahler	279	244
Barrhead	739	399	Grouard		347
Clyde	150	160	High Prairie	643	
Lac La Biche	642	517	McLennan	823	
Legal	445	462			
Radway	179		Division No. 16	28,733	30,349
Smoky Lake	457	430	Rural	23,480	26,349
Waskatenau	258	237	111. I.D. (pt.)	1	18
Westlock	854	590	741. I.D. (pt.)		12
Division No. 15	17,097	17,484	742. I.D. (pt.)	1	6
Rural	14,355	16,020	127. Grande Prairie	9,505	10,687
108. I.D. (pt.)	638	917	739. Grande Prairie	1,962	2,307
641. I.D.	605	875	740. Bear Lake	2,575	2,622
670. I.D.	31	42	741. I.D. (pt.)	1,382	1,632
671. I.D.	2		742. I.D. (pt.)	387	462
109. I.D. (pt.)	134	160	769. I.D. (pt.)	78	79
613. I.D.	96	149	770. I.D. (pt.)	352	418
614. I.D.	1	3	771. I.D.	1,682	1,946
642. I.D.	37	8	772. I.D.	1,087	1,221
643. I.D.			132. I.D.	2,279	2,248
110. I.D. (pt.)	76	75	769. I.D. (pt.)	600	652
589. I.D. (pt.)	2		797. I.D.	964	884
590. I.D. (pt.)	53	64	827. I.D.	154	166
617, 644, 645. I.D.	4		828. I.D.	561	546
618, 619, 646. I.D.	2	3			
622. I.D.	15	7			

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1946—Continued

Divisions and Subdivisions	Total		Divisions and Subdivisions	Total	
	1946	1941		1946	1941
Division No. 16—Continued:			Division No. 17—Continued:		
133. Spirit River	1,404	1,828	Rural—Continued:		
829. Spirit River	1,404	1,828	129. I.D.	378	335
134. I.D.	2,560	2,728	760, 820, 848-850. I.D.	22	6
770. I.D. (pt.)	602	644	761, 762. I.D.	243	193
800. I.D.	358	393	763, 793. I.D.	52	75
801. I.D.	76	93	852, 853. I.D.	61	61
830. I.D.	980	1,022	880, 881. I.D.	.....	.....
831. I.D.	523	538	791, 792, 821-823, 851. I.D.	136	51
860. I.D.	.....	10	882. I.D.	127	42
861. I.D.	21	28	915. I.D.	9	9
135. Peace	1,791	2,003	137. I.D.	112	45
857. Peace	1,791	2,003	878, 879, 910. I.D.	112	45
136. Fairview	2,074	2,326	877,908. I.D.	2,033	1,970
858. Fairview	2,074	2,326	138. I.D. (pt.)	1,657	1,571
138. I.D. (pt.)	1,641	1,844	946. I.D.	55	85
886. I.D.	451	516	947. I.D.	129	132
887. I.D.	578	666	977. I.D.	192	182
916. I.D.	290	268	978. I.D.	2,555	2,316
917. I.D.	322	394	782. I.D.	35	32
139. I.D.	2,110	2,506	843. I.D.	2,520	2,284
859. I.D.	884	824	781, 783, 784. I.D.	.....	.....
888. I.D.	411	564	144. I.D.	89	37
889. I.D.	446	681	907. I.D.	24	.....
890. I.D.	45	62	1092. I.D.	65	37
891. I.D.	182	164	909, 938, 940, 969-971, 1000-1002, 1029-1031, 1059, 1119. I.D.	58	90
919. I.D.	55	80	145. I.D.	16	47
920. I.D.	87	131	945, 975. I.D.	42	43
918, 921. I.D.	.....	.....	1005. I.D.	.....	.....
Indian Reserves	115	161	911-914, 941-944, 972-974, 976, 1003, 1004, 1032-1036. I.D.	379	278
Urban	5,253	4,000	1037, 1038. I.D.	382	279
Towns:	.....	.....	1006, 1016. I.D.	3	1
Grande Prairie	2,267	1,724	948-951, 979-982, 1007-1011, 1017-1020, 1039-1042, 1067-1071, 1096-1098. I.D.	1,339	1,378
Villages:	.....	.....	1065. I.D.	323	385
Beaverlodge	443	331	1094. I.D.	612	559
Berwyn	308	206	1124. I.D.	314	322
Clairmont	.....	102	1125. I.D.	90	112
Fairview	487	432	1066, 1123. I.D.	12	12
Grimshaw	287	169	1122. I.D.	12	12
Hythe	288	247	1129-1134, 1147-1152, 1179-1184, 1209-1214, 1238-1243. I.D.	52	67
Rycroft	272	.....	1138-1140. I.D.	52	67
Sexsmith	302	325	1099-1101, 1135-1137, 1153-1158, 1185-1190, 1215-1220, 1244-1249. I.D.	.....	.....
Spirit River	362	276	Wood Buffalo National Park (pt.)	24	42
Wembley	237	188	Indian Reserves	2,361	2,507
Division No. 17	10,131	9,712			
Rural	10,131	9,712			
102. I.D. (pt.)	.....	3			
694. I.D. (pt.)	.....	3			
121. I.D. (pt.)	219	224			
693. I.D.	16	.....		
694. I.D. (pt.)	48	26			
723. I.D.	109	139			
725, 756, 786. I.D.	17	47			
752, 753. I.D.	29	12			
691, 692, 721, 722, 724, 751, 754, 755, 785. I.D.	.....	.....	
128. I.D.	381	356			
757, 758, 759, 787, 790. I.D.	6	1			
817, 818, 847. I.D.	40	.....		
819. I.D.	335	355			

TABLE 1.—GENERAL SUMMARY OF BIRTHS, DEATHS AND MARRIAGES IN ALBERTA BY DIVISIONS, INCLUDING CITIES, TOWNS AND VILLAGES OF 1,000 POPULATION AND OVER, BY PLACE OF RESIDENCE, 1950

Divisions, Cities, Towns and Villages	Births (Exclusive of Still- births)			DEATHS						Stillbirths		Marrages		
	Total	All Ages		Under 1 year		1-4 years		Neo-natal deaths (under 1 month)		M.	F.			
		M.	F.	M.	F.	M.	F.	M.	F.					
													Total	M.
TOTAL FOR THE PROVINCE	25625	13138	12487	6856	4189	2667	470	361	72	57	307	211	372	9294
Division No. 1	957	465	492	262	153	109	15	11	2	3	11	8	14	397
Division No. 2	2062	1048	1014	513	323	190	41	20	4	3	30	13	30	794
Division No. 3	474	249	225	110	73	37	9	5	2	2	5	3	8	75
Division No. 4	837	434	403	208	133	75	18	6	2	5	14	4	20	180
Division No. 5	376	301	175	114	67	47	5	5	2	2	2	2	9	100
Division No. 6	4770	2415	2355	1630	1000	630	71	70	15	8	52	42	75	2273
Division No. 7	791	448	343	243	148	95	20	10	4	2	15	8	5	220
Division No. 8	1998	1042	956	550	320	230	35	28	2	2	21	14	33	668
Division No. 9	775	417	358	220	143	77	12	7	2	8	8	5	11	142
Division No. 10	1206	641	565	310	175	135	12	15	3	3	9	9	18	430
Division No. 11	6430	3266	3164	1564	956	608	110	82	12	9	72	46	75	2987
Division No. 12	483	256	227	113	72	41	8	11	1	1	7	8	8	94
Division No. 13	948	459	489	233	143	90	28	15	9	5	13	5	14	159
Division No. 14	1359	697	662	306	191	115	32	20	4	4	20	17	23	312
Division No. 15	838	425	413	160	102	58	24	26	4	2	11	11	11	153
Division No. 16	1003	519	484	237	149	88	18	16	4	4	12	13	16	248
Division No. 17	318	156	162	83	41	42	12	14	5	4	5	3	2	62
CITIES:														
Calgary	3135	1603	1532	1154	694	460	45	46	9	2	34	28	47	1841
Drumheller	89	46	43	38	26	12	3	2	1	1	1	1	1	71
Edmonton	4745	2411	2334	1183	720	463	76	61	10	4	52	39	60	2630
Lethbridge	647	330	317	173	112	61	14	4	3	1	11	4	12	429
Medicine Hat	385	186	199	131	68	63	2	8	2	2	2	6	5	284
Red Deer	232	120	112	64	33	31	7	4	2	2	6	2	3	156
Wetaskiwin	95	45	50	45	27	18	3	1	1	1	3	1	2	86
TOWNS:														
Beverly	42	23	19	8	5	3	1	1	1	1	1	1	1	5
Blairmore	59	28	31	15	11	4	1	1	1	1	1	1	1	28
Brooks	59	28	31	16	13	3	1	1	1	1	1	1	1	25
Camrose	90	52	38	41	28	13	4	4	1	1	3	3	2	83
Cardston	72	27	45	17	8	9	1	1	1	1	1	1	3	105
Clareholm	31	16	15	13	6	7	1	1	1	1	1	1	1	10
Coleman	77	34	43	18	13	5	1	1	1	1	1	1	2	35
Edson	75	36	39	12	11	1	1	1	1	1	1	1	2	38
Grande Prairie	120	59	61	23	14	9	4	3	3	3	3	2	3	85
Hanna	64	26	38	18	11	7	1	1	1	1	1	1	4	44
High River	43	22	23	26	15	11	1	1	1	1	1	1	1	32
Innisfail	45	22	23	14	7	7	1	1	1	1	1	1	1	30
Lacombe	74	41	33	39	27	12	3	1	1	1	1	1	3	67

Macleod	62	28	34	14	5	9	1	1	2	1	33
Magrath	38	22	16	17	8	9	3	3	2	2	5
Olds	46	23	23	21	13	8	2	2	2	2	52
Pincher Creek	47	30	17	23	14	9	3	1	2	2	24
Ponoka	91	52	39	24	12	12	4	4	3	1	45
Raymond	58	28	30	9	6	3	4	4	4	1	29
Redclife	39	23	16	7	4	3	2	1	3	1	8
Rocky Mountain House	64	35	29	17	11	6	3	1	1	1	27
St. Paul	63	34	29	24	11	13	4	1	1	1	25
Stettler	77	33	44	19	11	8	1	1	1	1	50
Taber	127	63	64	34	17	17	4	2	3	2	64
Vegreville	52	28	24	25	13	12	1	1	1	1	41
Vermilion	53	24	29	17	8	9	2	2	2	1	46
Wainwright	47	23	24	15	9	6	2	2	2	1	32
VILLAGES:											
Black Diamond	26	13	13	5	2	3	1	3	5	1	4
Turner Valley	37	16	21	15	10	5	1	2	1	1	4

TABLE 2.—GENERAL SUMMARY OF BIRTHS, DEATHS AND MARRIAGES IN ALBERTA BY DIVISIONS INCLUDING CITIES, TOWNS AND VILLAGES OF 1,000 POPULATION AND OVER, BY PLACE OF OCCURRENCE, 1950

PROVINCE AND DIVISIONS	Births (Exclusive of Still- births)		All Ages				Deaths				Neo-natal deaths (under 1 month)		Stillbirths	Marrriages
	Total	M.	M.	F.	Under 1 year		1-4 years		M.	F.	M.	F.		
					Total	F.	M.	F.						
TOTAL FOR THE PROVINCE	25543	12103	12440	6918	4232	2686	470	362	77	58	306	211	370	9294
Division No. 1	984	486	498	253	144	109	18	13	3	3	12	10	12	397
Division No. 2	2399	1214	1185	541	328	213	45	20	3	3	34	14	39	794
Division No. 3	350	177	173	81	55	26	3	5	1	1	1	3	5	75
Division No. 4	480	255	225	155	100	55	16	4	2	5	11	2	10	180
Division No. 5	223	112	111	91	56	35	3	3	1	1	1	1	6	100
Division No. 6	5163	2618	2545	1723	1055	668	78	71	14	11	58	43	83	2273
Division No. 7	789	446	343	215	135	80	19	11	4	4	15	8	5	220
Division No. 8	2182	1147	1035	603	365	238	35	29	1	2	22	17	36	668
Division No. 9	552	285	267	157	101	56	5	4	2	6	2	3	9	142
Division No. 10	971	528	443	269	156	113	9	15	4	3	8	10	15	430
Division No. 11	7017	3582	3435	1880	1146	734	119	97	20	11	75	51	81	2987
Division No. 12	326	183	143	86	60	26	8	6	1	2	6	3	7	94
Division No. 13	883	427	456	204	122	82	28	13	8	4	12	5	13	159
Division No. 14	1165	591	574	246	150	96	31	19	4	4	21	16	23	312
Division No. 15	783	394	389	140	91	52	23	24	5	3	11	9	10	153
Division No. 16	1013	528	485	216	138	78	19	15	3	3	12	13	15	248
Division No. 17	263	130	133	58	30	28	11	13	4	3	5	3	1	62

TABLE 3.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) BY MONTHS, CLASSIFIED AS RURAL AND URBAN, IN THE PROVINCE OF ALBERTA, BY PLACE OF RESIDENCE OF MOTHERS, 1950

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
ALBERTA	25625	2034	1873	2197	2213	2354	2296	2337	2189	2038	2088	1973	2033
Rural.....	14517	1134	1120	1257	1243	1332	1313	1321	1260	1148	1166	1102	1121
Urban.....	11108	900	753	940	970	1022	983	1016	929	890	922	871	912
DIVISION No. 1	957	84	70	74	76	76	87	100	89	70	91	70	70
Rural.....	445	34	36	37	40	37	49	42	40	34	36	35	25
Urban.....	512	50	34	37	36	39	38	58	49	36	55	35	45
City of Medicine Hat.....	385	44	26	31	28	23	30	34	39	27	38	27	38
Town of Taber.....	127	6	8	6	8	16	8	24	10	9	17	8	7
DIVISION No. 2	2062	150	148	198	164	191	181	175	202	152	162	161	178
Rural.....	971	75	69	93	68	77	90	93	97	76	69	84	80
Urban.....	1091	75	79	105	96	114	91	82	105	76	93	77	98
City of Lethbridge.....	647	49	41	57	47	67	61	44	68	46	55	48	64
Town of Blairmore.....	59	2	2	6	4	7	7	6	3	2	8	7	5
Cardston.....	72	6	7	11	8	4	2	7	6	4	6	4	7
Clareholm.....	31	2	1	4	2	3	3	4	6	1	3	3	2
Coleman.....	77	6	6	4	14	14	6	3	3	6	9	5	7
Macleod.....	62	6	5	9	6	6	5	5	3	6	4	3	4
Magrath.....	38	1	5	6	2	2	5	8	7	4	2	1	4
Pincher Creek.....	47	3	5	2	6	7	2	1	4	4	2	4	7
Raymond.....	58	6	7	6	7	4	5	4	5	3	4	5	2
DIVISION No. 3	474	41	38	45	49	39	45	40	36	41	34	27	39
Rural.....	376	32	29	36	40	28	34	34	25	36	28	19	35
Urban.....	98	9	9	9	9	11	11	6	11	5	6	8	4
Town of Brooks.....	59	6	5	5	3	3	8	3	9	5	4	5	3
Redcliff.....	39	3	4	4	6	8	3	3	2	.....	2	3	1
DIVISION No. 4	837	57	59	77	66	65	87	72	71	70	68	75	70
Rural.....	729	50	48	65	56	59	76	63	62	62	61	62	65
Urban.....	108	7	11	12	10	6	11	9	9	8	7	13	5
Town of High River.....	45	4	5	5	4	.....	7	1	4	3	2	9	1
Village of Black Diamond.....	26	2	3	3	2	2	2	4	1	4	2	1	2
Turner Valley.....	37	1	3	3	4	4	2	4	4	3	3	3	2

DIVISION No. 5	376	31	27	28	27	31	31	38	34	31	37	32	29
Rural	312	24	22	21	21	26	26	32	26	29	31	25	25
Urban	64	7	5	7	7	5	5	6	8	2	6	7	4
Town of Hanna	64	7	5	7	7	5	5	6	8	2	6	7	4
DIVISION No. 6	4770	374	310	406	393	434	456	465	406	383	388	368	386
Rural	1500	122	115	133	106	135	131	139	150	110	124	111	104
Urban	3270	252	195	273	287	299	325	307	256	273	264	257	282
City of Calgary	3135	246	187	270	274	287	309	290	245	262	257	239	269
Drumheller	89	4	6	2	10	8	7	10	8	9	2	14	9
Town of Olds	46	2	2	1	3	4	9	7	3	2	5	4	4
DIVISION No. 7	791	52	76	66	56	80	88	70	64	65	66	48	66
Rural	744	46	68	64	55	75	84	67	62	62	63	40	58
Urban	47	6	2	2	1	5	4	3	2	3	3	8	8
Town of Wainwright	47	6	2	2	1	5	4	3	2	3	3	8	8
DIVISION No. 8	1998	176	152	176	192	171	233	187	137	143	156	168	149
Rural	1294	103	111	111	118	122	123	113	91	100	106	97	99
Urban	704	67	41	59	74	49	80	74	46	43	50	71	50
City of Red Deer	232	18	10	24	30	11	27	27	13	13	13	23	13
Wetaskiwin	95	10	11	9	11	5	6	10	6	4	5	12	6
Town of Camrose	90	13	6	9	10	5	12	11	3	6	4	7	4
Innisfail	45	6	3	1	4	7	7	6	4	2	1	2	2
Lacombe	74	8	3	7	8	6	5	4	2	8	6	11	6
Ponoka	91	8	4	6	2	10	5	5	10	7	10	11	8
Stettler	77	4	4	4	6	8	3	11	8	3	11	5	11
DIVISION No. 9	775	48	45	72	71	84	64	77	68	48	71	64	63
Rural	711	47	41	62	66	75	59	71	66	45	65	57	57
Urban	64	1	4	10	5	9	5	6	2	3	6	7	6
Town of Rocky Mountain House	64	1	4	10	5	9	5	6	2	3	6	7	6
DIVISION No. 10	1206	92	83	102	99	109	105	127	114	107	86	88	94
Rural	1101	83	73	94	91	103	95	118	105	90	78	83	88
Urban	105	9	10	8	8	6	10	9	9	17	8	5	6
Town of Vegreville	52	6	5	2	4	2	6	6	5	5	4	2	5
Vermillion	53	3	5	6	4	4	4	3	4	12	4	3	1
DIVISION No. 11	6439	540	471	546	541	614	513	576	567	543	538	493	488
Rural	1643	146	121	143	128	155	138	145	152	140	138	133	104
Urban	4787	394	350	403	413	459	375	431	415	403	400	360	384
City of Edmonton	4745	384	347	398	412	457	374	428	413	399	396	355	382
Town of Beverly	42	10	3	5	1	2	1	3	2	4	4	5	2
DIVISION No. 12	483	36	30	35	44	55	38	48	35	42	39	38	43
Rural	408	24	29	32	34	49	34	41	30	36	34	30	35
Urban	75	12	1	3	10	6	4	7	5	6	5	8	8
Town of Edson	75	12	1	3	10	6	4	7	5	6	5	8	8

TABLE 3.—BIRTHS (EXCLUSIVE OF STILLBIRTHS) BY MONTHS, CLASSIFIED AS RURAL AND URBAN, IN THE PROVINCE OF ALBERTA, BY PLACE OF RESIDENCE OF MOTHERS, 1950—Continued

	MONTHS											
	January	February	March	April	May	June	July	August	September	October	November	December
Total	948	78	65	93	91	84	89	79	65	69	75	76
DIVISION No. 13	885	75	62	85	85	75	81	75	61	63	70	74
Rural	63	3	3	8	6	9	8	4	4	6	5	2
Urban	63	3	3	8	6	9	8	4	4	6	5	2
Town of St. Paul												
DIVISION No. 14	1359	117	122	136	121	120	114	113	108	100	97	100
Rural	1359	117	122	136	121	120	114	113	108	100	97	100
DIVISION No. 15	838	67	82	80	76	74	60	66	56	69	67	73
Rural	838	67	82	80	76	74	60	66	56	69	67	73
DIVISION No. 16	1093	82	80	96	82	99	73	80	89	87	80	78
Rural	883	71	71	85	74	84	63	72	78	74	70	68
Urban	120	9	9	11	8	15	10	8	11	13	10	10
Town of Grande Prairie	120	9	9	11	8	15	10	8	11	13	10	10
DIVISION No. 17	318	19	26	30	35	21	25	28	25	27	22	31
Rural	318	19	26	30	35	21	25	28	25	27	22	31

TABLE 4.—LEGITIMATE AND ILLEGITIMATE BIRTHS (EXCLUSIVE OF STILL-BIRTHS), IN CITIES OF 5,000 POPULATION AND OVER IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHERS, 1950

Province, Cities and Towns	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
FOR THE PROVINCE	25625	13138	12487	24440	12530	11910	1185	608	577
Cities:									
Calgary	3135	1603	1532	2938	1485	1453	197	118	79
Edmonton	4745	2411	2334	4501	2289	2212	244	122	122
Lethbridge	647	330	317	629	321	308	18	9	9
Medicine Hat	385	186	199	369	174	195	16	12	4

TABLE 5.—MULTIPLE BIRTHS CLASSIFIED TO SHOW THE NUMBER OF CHILDREN BORN ALIVE AND STILLBORN, BY SEX IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHERS, 1950

Classification of Births	Number
TWIN BIRTHS	309
Two males (both living)	91
One male and one female (both living)	106
Two females (both living)	94
One male living and one male stillborn	2
One male living and one female stillborn	2
One male still born and one female living	2
One female living and one female stillborn	4
Two males (both still born)	4
Two females (both stillborn)	4
TRIPLET BIRTHS	3
Three males (all living)	2
Two males and one female (all living)	1
Total multiple births	Number 312
	Male 312
	Female 315
Total single live births	Number 25024
	Male 12838
	Female 12186
Total single still births	Number 346
	Male 176
	Female 170
Total confinements	25682

Swedish	585	142	69	64	9	4	3	2	56	2	5	2	1	18	47	9	10	85	16	1	1	4	1	4	
Ukrainian	2099	114	69	65	6	5	1	5	67	6	5	2	1	12	22	120	18	17	12	1489	1	2	3	1	
Yugoslavian	44	2	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	3	23	3	2	1	1	
Other	46	10	7	3	1	1	1	1	3	1	1	1	1	2	1	1	1	1	1	10	10	2	2	2	
Asiatic	172	6	5	4	1	1	1	1	1	2	1	1	1	2	1	1	3	3	1	4	1	35	2	2	
Chinese	57	4	4	3	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	3	1	35	1	1	
Hindu (East Indian)	102	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Japanese	13	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Syrian	13	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Other	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Indian	861	7	6	6	6	6	6	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Jewish	97	1	1	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Negro	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Other races	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Unspecified	7	2	4	4	4	4	4	4	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
Children born to married mothers:	24440	5818	2543	3060	282	123	76	1	196	283	70	1752	2726	12	144	35	164	28	885	839	763	111	441	550	2281
Male	12530	3027	1308	1528	141	59	34	1	104	146	35	876	1419	8	76	20	96	13	445	464	374	57	233	276	1177
Female	11910	2791	1235	1532	141	64	42	1	92	137	35	876	1307	4	68	15	68	15	440	375	389	54	208	274	1104
Children born to unmarried mothers:	1185	176	101	124	11	6	6	6	89	94	1	15	2	24	22	31	9	25	22	116	2	2	285	1	
Male	608	95	57	63	7	5	5	5	46	51	1	8	1	14	12	14	3	13	12	62	2	2	131	1	
Female	577	81	44	61	4	1	1	1	43	43	7	1	3	10	10	17	6	12	10	54	2	2	154	1	
Children born to all mothers	25625	5994	2644	3184	293	129	76	1	200	293	73	1841	2820	13	159	37	172	30	909	861	794	120	466	572	2397
Male	13138	3122	1365	1591	148	64	34	1	107	150	36	922	1470	9	84	21	99	14	459	476	388	60	246	288	1239
Female	12487	2872	1279	1593	145	65	42	1	93	143	37	919	1350	4	75	16	73	16	450	385	406	60	220	284	1158

TABLE 9.—TOTAL LIVE BIRTHS AND LIVE BIRTHS IN INSTITUTIONS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE OF MOTHER, IN ALBERTA, 1950

Province	All Live Births				Births in Institutions						
	Place of occurrence	Mother's residence elsewhere		Births to resident mothers occurring elsewhere		Place of occurrence	Mother's residence elsewhere		Births to resident mothers occurring elsewhere		
		In Canada	In United States	In Canada	In United States		In Canada	In United States	In Canada	In United States	
Total for the Province	25543	180	10	263	9	25625	175	8	258	9	24559

TABLE 10.—TOTAL LIVE BIRTHS AND LIVE BIRTHS IN INSTITUTIONS IN CITIES OF 5,000 POPULATION AND OVER, BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE OF MOTHER, IN ALBERTA, 1950

Cities	All Live Births				Births in Institutions						
	Place of occurrence	Mother's residence elsewhere		Births to resident mothers occurring elsewhere		Place of occurrence	Mother's residence elsewhere		Births to resident mothers occurring elsewhere		
		In Canada	In United States	In Canada	In United States		In Canada	In United States	In Canada	In United States	
Calgary	4060	967	3	43	2	3135	967	3	43	2	3130
Edmonton	6854	2154	.....	44	1	4745	2153	.....	43	1	4741
Lethbridge	1200	575	.....	22	.....	647	573	.....	22	.....	646
Medicine Hat	666	288	2	9	.....	385	286	2	9	.....	385

TABLE 11—ORDER OF BIRTH OF LEGITIMATE CHILDREN BORN IN 1950 (INCLUDING STILLBORN CHILDREN),
IN ALBERTA, BY AGE AND RESIDENCE OF MOTHER

Order of birth of child	Total	Age of Mother											Age not stated		
		Under 15 yrs.	15 years	16 years	17 years	18 years	19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years		45 years and over	
1st child	7024		8	39	201	410	592	1250	3279	1695	577	196	27		
2nd "	7168			6	28	65	187	286	2611	2611	1174	423	62	1	
3rd "	4616			1		6	20	27	960	1855	1170	510	91	2	1
4th "	2526				1			2	300	888	787	442	105	2	
5th "	1298								59	399	472	305	58	5	
6th "	768								20	185	293	207	59	4	
7th "	469								1	81	184	134	66	3	
8th "	305								1	29	89	123	58	5	
9th "	172								1	10	51	73	32	5	
10th "	165								1	5	34	82	40	3	
11th "	84										9	43	28	4	
12th "	82										9	34	35	4	
13th "	39										2	21	14	2	
14th "	30											14	12	4	
15th "	14											5	7	2	
16th "	13										1	3	3	2	
17th "	5														
18th "	1														
19th "															
20th and over	1								1	1	1	1			
Not stated	4														
TOTAL	24784		8	46	230	482	799	1565	7234	7759	4853	2616	705	51	1

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VITAL STATISTICS BRANCH

TABLE 12.—DEATHS OF CHILDREN UNDER ONE YEAR (EXCLUSIVE OF STILLBIRTHS) FROM CERTAIN SPECIFIED CAUSES, BY SEX AND CALENDAR MONTH OF DEATH IN ALBERTA, BY PLACE OF RESIDENCE, 1950

CAUSES OF DEATH	Total under 1 year		MONTH OF DEATH																								
	Total	Male	January		February		March		April		May		June		July		August		September		October		November		December		
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	831	470	361	52	25	27	34	31	26	43	27	36	37	49	35	42	31	36	31	37	34	35	30	41	21	41	30
001-019 Tuberculosis	7	3	4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
020-029 Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
030 Scarlet fever	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
052 Erysipelas .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
055 Diphtheria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
056 Whooping cough	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
057 Meningococcal infections .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
085 Measles	3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diseases of the thymus gland	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
340 Meningitis (non-meningococcal)	5	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
391-392 Otitis media	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
480-483 Influenza	8	5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
490-493 Pneumonia (4 weeks and over)	93	55	38	4	4	2	2	1	4	9	2	5	5	4	4	1	2	3	3	3	3	7	5	8	2	6	3
500-502 Bronchitis	5	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
571-572 Enteritis (4 weeks and over)	39	22	17	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
750-759 Congenital malformations	112	50	62	6	1	2	7	4	5	6	5	2	5	4	4	7	6	7	4	5	7	3	10	3	3	1	5
752 Congenital hydrocephalus	7	3	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
754 Congenital malformations of circulatory system	38	21	17	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
750-751 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
753-755 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
759 Others under this title	67	26	41	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
760-761 Injury at birth	79	45	34	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
763 Pneumonia of newborn (under 4 weeks)	26	16	10	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
764 Diarrhoea of newborn (under 4 weeks)	11	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
769 Antenatal toxæmia	12	9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
770 Erythroblastosis	17	11	6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
772 Nutritional maladjustment	6	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
773 Ill-defined diseases peculiar to early infancy	24	13	11	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
774-776 Immaturity	174	104	70	11	4	12	8	8	6	8	7	8	6	13	5	6	5	7	11	8	7	7	3	10	5	6	3
795 Ill-defined and unknown causes	7	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other specified causes	196	118	78	19	4	7	11	9	6	7	5	9	5	11	8	9	6	10	6	9	9	9	8	8	1	11	9

TABLE 13—INFANTILE DEATH AND STILLBIRTH RATES, ALSO NUMBER OF LIVE BIRTHS WITH OR WITHOUT A PHYSICIAN, BY DIVISIONS AND CITIES IN ALBERTA, BY PLACE OF RESIDENCE, 1950

Divisions and Cities	Death rate of children under one year of age to each 1,000 live births			Births with or without a physician in attendance			Rates of stillborn children to 1,000 live births	
	Rate per 1000 live births	Number of deaths	Total Live births	With physician	Without physician	Not stated	Number of stillbirths	Rate per 1000 live births
Division No. 1—Medicine Hat (City of Medicine Hat excepted)	28	16	572	539	33	..	9	15.7
Division No. 2—Macleod (City of Lethbridge excepted)	20	43	1415	1304	106	5	18	12.7
Division No. 3—Bow	30	14	474	4	4	..	8	16.9
Division No. 4—Nanton	29	24	837	818	19	..	20	23.9
Division No. 5—Acadia	27	10	376	373	3	..	9	23.9
Division No. 6—Calgary (Cities of Calgary and Drumheller excepted)	29	45	1546	1482	64	..	27	17.5
Division No. 7—Battle River	38	30	791	785	6	..	5	6.3
Division No. 8—Red Deer (Cities of Red Deer and Wetaskiwin excepted)	29	48	1671	1634	37	..	28	16.8
Division No. 9—Rocky Mountain House	25	19	775	757	15	3	11	14.2
Division No. 10—Victoria	22	27	1206	1194	11	1	18	14.9
Division No. 11—Edmonton (City of Edmonton excepted)	33	55	1685	1627	58	..	15	8.9
Division No. 12—Edson	39	19	483	458	24	1	8	16.6
Division No. 13—Beaver River	45	43	948	848	98	2	14	14.8
Division No. 14—Sturgeon	38	52	1359	1285	73	1	23	16.9
Division No. 15—Clearwater	60	50	838	735	93	10	11	13.1
Division No. 16—Peace River	34	34	1003	961	38	4	16	16.0
Division No. 17—Athabasca	82	26	318	181	132	5	2	6.3
City of Edmonton	29	137	4745	4740	5	..	60	12.6
City of Calgary	29	91	3135	3133	2	..	47	15.0
City of Lethbridge	28	18	647	647	..	..	12	18.5
City of Medicine Hat	26	10	385	385	..	..	5	13.0
City of Red Deer	47	11	232	232	..	..	3	12.9
City of Drumheller	56	5	89	89	..	..	1	11.2
City of Wetaskiwin	42	4	95	95	..	..	2	21.1
Divisions	34	555	16297	15451	814	32	242	14.8
Cities	30	276	9328	9321	7	..	130	13.9
Whole Province	32	831	25625	24772	821	32	372	14.5

TABLE 15.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTIONS OF CHILDREN UNDER ONE YEAR, IN CITIES OF 5,000 POPULATION AND OVER, BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, IN ALBERTA, 1950

Cities	All Deaths under one year						Deaths in Institutions					
	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		Place of residence	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		Place of residence
		In Canada	In United States	In Canada	In United States			In Canada	In United States	In Canada	In United States	
Calgary	110	22	.....	3	.....	91	101	22	.....	1	.....	80
Edmonton	196	62	3	.....	.....	137	178	58	.....	1	.....	121
Lethbridge	28	11	.....	1	.....	18	27	11	.....	1	.....	17
Medicine Hat	19	9	.....	.....	.....	10	17	9	.....	.....	.....	8

TABLE 16.—TOTAL DEATHS (EXCLUSIVE OF STILL BIRTHS) AND DEATHS IN INSTITUTIONS OF CHILDREN UNDER ONE YEAR, BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, IN ALBERTA, 1950

Total for the Province	All Deaths under one year						Deaths in Institutions					
	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		Place of residence	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		Place of residence
		In Canada	In United States	In Canada	In United States			In Canada	In United States	In Canada	In United States	
832	6	.....	.....	5	.....	831	590	5	.....	4	.....	589

TABLE 18.—CAUSES OF DEATH (INTERMEDIATE LIST) BY SEX AND MONTH OF DEATH IN ALBERTA, BY PLACE OF RESIDENCE, 1950—Continued

CAUSES OF DEATH	Total	MONTHS													
		January	February	March	April	May	June	July	August	September	October	November	December		
A 17 Scarlet fever	5	1						1	1	1				2	
Male	1														
Female	4	1						1	1	1				2	
A 18 Streptococcal sore throat	2		1	1											
Male	2		1	1											
Female															
A 19 Erysipelas	3							1						1	
Male	3							1						1	
Female															
A 20 Septicaemia and pyaemia	3		1	1											
Male	3		1	1											
Female															
A 21 Diphtheria	1														
Male	1														
Female															
A 22 Whooping cough	2														1
Male	2														1
Female															
A 23 Meningococcal infections	1														
Male	1														
Female															
A 24 Plague															
Male															
Female															
A 25 Leprosy															
Male															
Female															
A 26 Tetanus															
Male															
Female															
A 27 Anthrax															
Male															
Female															
A 28 Acute poliomyelitis	5								1					1	1
Male	3								1					1	1
Female	2														
A 29 Acute infectious encephalitis	2				2										
Male					2										
Female	2														
A 30 Late effects of acute poliomyelitis and acute infectious encephalitis	2													1	
Male														1	
Female	2														
A 31 Smallpox															
Male															
Female															
A 32 Measles	4	1	1								2				
Male	4	1	1								2				
Female															
A 33 Yellow fever															
Male															
Female															
A 34 Infectious hepatitis	2														1
Male															1
Female	2														

TABLE 18.—CAUSES OF DEATH (INTERMEDIATE LIST) BY SEX AND MONTH OF DEATH IN ALBERTA, BY PLACE OF RESIDENCE, 1950—Continued

CAUSES OF DEATH	Total	MONTHS												
		January	February	March	April	May	June	July	August	September	October	November	December	
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	27	2	1	6	2	2	2	1	5	3	1	1	2	3
Male	9	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	16	1	1	5	1	1	1	1	1	1	1	1	1	1
A 60 Benign neoplasms and neoplasms of unspecified nature	20	2	1	4	2	1	1	1	2	1	1	1	1	4
Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	4	1	1	3	1	1	1	1	1	1	1	1	1	3
A 61 Nontoxic goitre	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Male	4	2	1	1	1	1	1	1	1	1	1	1	1	1
Female	6	1	1	1	1	1	1	1	1	1	1	1	1	1
A 62 Thyrotoxicosis with or without goitre	43	4	2	6	5	5	7	3	2	1	1	2	3	4
Male	49	4	6	4	3	5	9	3	2	4	2	2	5	2
Female	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 64 Avitaminosis and other deficiency states	7	1	1	1	2	2	2	1	2	1	2	1	1	1
Male	13	2	2	1	1	1	2	1	2	1	2	1	2	1
Female	36	4	3	6	5	1	3	2	2	1	3	4	2	2
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	29	2	1	1	2	3	4	6	3	1	5	4	4	4
Male	8	1	2	3	1	1	1	1	1	1	1	1	1	1
Female	6	1	2	1	1	1	1	1	1	1	1	1	1	1
A 67 Psychoses	6	2	1	1	1	1	1	1	1	1	1	1	1	1
Male	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	3	1	1	1	1	1	1	1	1	1	1	1	1	1
A 68 Psychoneuroses and disorders of personality	5	1	2	1	1	1	1	1	1	1	1	1	1	1
Male	371	38	23	35	30	37	31	32	21	24	28	32	40	40
Female	325	28	30	27	21	34	27	28	22	20	25	29	34	34
A 69 Mental deficiency	7	1	1	1	2	1	1	1	2	2	1	1	1	1
Male	7	2	1	1	1	1	1	1	1	1	1	1	1	1
Female	5	1	1	1	1	1	1	1	1	1	1	1	1	1
A 70 Vascular lesions affecting central nervous system	371	38	23	35	30	37	31	32	21	24	28	32	40	40
Male	325	28	30	27	21	34	27	28	22	20	25	29	34	34
Female	7	1	1	1	2	1	1	1	1	1	1	1	1	1
A 71 Nonmeningococcal meningitis	7	2	1	1	1	1	1	1	1	1	1	1	1	1
Male	5	2	1	1	1	1	1	1	1	1	1	1	1	1
Female	2	1	1	1	1	1	1	1	1	1	1	1	1	1
A 72 Multiple sclerosis	6	1	1	1	1	2	1	1	2	2	1	1	1	1
Male	4	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	9	2	2	1	1	1	1	1	1	1	1	1	1	1
A 73 Epilepsy	9	2	2	1	1	1	1	1	2	2	1	1	1	1
Male	6	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	3	1	1	1	1	1	1	1	1	1	1	1	1	1
A 74 Inflammatory diseases of eye	6	1	1	1	1	1	1	1	1	1	1	1	1	1
Male	4	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	2	1	1	1	1	1	1	1	1	1	1	1	1	1
A 75 Cataract	9	2	2	1	1	1	1	1	2	2	1	1	1	1
Male	6	1	1	1	1	1	1	1	1	1	1	1	1	1
Female	3	1	1	1	1	1	1	1	1	1	1	1	1	1

AN142 Sprains and strains of joints and adjacent muscles.....	Male	64	3	3	5	2	4	4	8	6	12	5	6	6	6
AN143 Head injury (excluding fracture)	Female	10	1	1	4	1	2	4	1	1	1	8	6	1	5
AN144 Internal injury of chest, abdomen, and pelvis.....	Male	79	2	3	4	7	6	9	7	16	6	1	1	1	2
AN145 Laceration and open wounds	Female	12	1	1	4	2	2	3	4	1	3	1	1	1	1
AN146 Superficial injury, contusion and crushing with intact skin surface	Male	11	5	1	1	1	1	2	2	1	1	1	1	1	1
AN147 Effects of foreign body entering through orifice	Female	1	1	1	1	1	1	1	1	1	1	1	1	1	1
AN148 Burns	Male	10	2	1	1	1	1	1	1	2	1	3	1	1	3
AN149 Effects of poisons	Female	9	1	1	2	2	2	1	2	3	2	1	2	2	3
AN150 All other and unspecified effects of external causes.....	Male	29	4	3	2	1	2	3	1	1	1	2	1	1	7
	Female	11	1	1	4	4	1	2	3	2	1	1	2	2	5
	Male	110	9	1	4	4	15	20	15	14	11	3	4	4	10
	Female	30	2	3	2	2	3	3	4	4	4	3	1	1	1

VITAL STATISTICS BRANCH

TABLE 20.—CAUSES OF DEATH (INTERMEDIATE LIST) BY SEX AND AGE IN CALGARY, BY PLACE OF RESIDENCE, 1950—Continued

CAUSES OF DEATH	Total	AGES																Not stated									
		Under 1 year	1 year	2 years	3 years	4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years		60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85-89 years	90-94 years	95-99 years	100 years and over
Alternative classification of accidents, poisonings and violence (external cause)	62	4	1	1	1	1	2	1	3	6	3	2	3	2	4	2	6	3	6	2	4	2	4	2	1	1	1
Male	21	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	1
Female	19	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	1
AE138 Motor vehicle accidents	6	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	1
Male	7	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	1
Female	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	1
AE139 Other transport accidents	11	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	1
Male	7	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	1
Female	4	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	1
AE140 Accidental poisoning	11	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	1
Male	7	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	1
Female	4	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	1
AE141 Accidental falls	7	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	1
Male	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	1
Female	4	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	1
AE142 Accident caused by machinery	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	1
Male	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	1	1
Female	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	1	1
AE143 Accident caused by fire and explosion of combustible material	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	1	1
Male	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	1	1
Female	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	1	1
AF144 Accident caused by hot substance, corrosive liquid, steam, and radiation	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	1	1
Male	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	1	1
Female	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	1	1
AE145 Accident caused by firearm	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	1	1
Male	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	1	1
Female	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	1	1
AE146 Accidental drowning and submersion	6	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
Male	2	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	1
Female	4	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	1
AE147 All other accidental causes	8	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
Male	3	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	1
Female	5	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	1
AE148 Suicide and self-inflicted injury	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	1	1
Male	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	1	1
Female	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	1	1
AE149 Homicide and injury purposely inflicted by other persons (not in war)	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	1	1
Male	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	1	1
Female	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	1	1
AF150 Injury resulting from operations of war	62	4	1	1	1	1	2	1	3	6	3	2	5	3	2	4	2	6	3	6	2	4	2	4	2	1	1
Male	21	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	1
Female	41	2	1	1	1	1	1	1	2	5	2	4	2	1	1	1	1	5	2	5	1	3	1	3	1	1	1

TABLE 21.—CROSS CLASSIFICATION OF DEATHS DUE TO ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE BY NATURE OF INJURY)

CAUSES OF DEATH		Male	Female
	Fracture of skull (N800-N804):	104	25
800-802	Railway accidents	2	1
810-835	Motor vehicle accidents	50	18
860-866	Aircraft accidents	1	.....
900-904	Accidental falls	16	3
910-936	Other accidents	31	2
970-979	Suicide and self-inflicted injury	4	.....
980-985	Homicide and injury purposely inflicted by other persons (not in war) .....	.....	1
	Fracture of spine and trunk (N805-N809)	30	11
810-835	Motor vehicle accidents	13	7
840-845	Other road vehicle accidents	3	.....
860-866	Aircraft accidents	1	.....
900-904	Accidental falls	2	2
910-936	Other accidents	6	1
960-965	Late effects of injury and poisoning .....	.....	1
970-979	Suicide and self-inflicted injury	3	.....
980-985	Homicide and injury purposely inflicted by other persons (not in war)	2	.....
	Fracture of limbs (N810-N829).....	27	42
800-802	Railway accidents	4	.....
810-835	Motor vehicle accidents	5	2
900-904	Accidental falls	14	39
910-936	Other accidents	4	.....
960-965	Late effects of injury and poisoning .....	.....	1
	Head injury (excluding fracture) (N850-N856).....	64	10
800-802	Railway accidents	1	.....
810-835	Motor vehicle accidents	15	.....
840-845	Other road vehicle accidents	1	.....
900-904	Accidental falls	3	3
910-936	Other accidents	15	3
960-965	Late effects of injury and poisoning	2	.....
970-979	Suicide and self-inflicted injury	25	1
980-985	Homicide and injury purposely inflicted by other persons (not in war)	2	3
	Internal injury of chest, abdomen and pelvis (N860-N869)	79	12
800-802	Railway accidents	9	.....
810-835	Motor vehicle accidents	29	6
840-845	Other road vehicle accidents	1	1
860-866	Aircraft accidents	1	.....
900-904	Accidental falls .....	.....	1
910-936	Other accidents	33	.....
970-979	Suicide and self-inflicted injury	5	2
980-985	Homicide and injury purposely inflicted by other persons (not in war)	1	2
	Laceration and open wounds (N870-N908).....	11	5
800-802	Railway accidents	2	.....
810-825	Motor vehicle accidents	1	2
910-936	Other accidents	6	1
970-979	Suicide and self-inflicted injury	2	2
	Superficial injury, contusion and crushing with intact skin surface (N910-N929) .....	.....	1
900-904	Accidental falls .....	.....	1
	Effects of foreign body entering through orifice (N930-N936)	10	9
910-936	Other accidents	10	9
	Burns (N940-N949)	26	9
800-802	Railway accidents	1	.....
810-835	Motor vehicle accidents	3	.....
910-936	Other accidents	21	9
970-979	Suicide and self-inflicted injury	1	.....
	Effects of poisons (N960-N979)	2	.....
810-835	Motor vehicle accidents .....	.....	.....
870-888	Accidental poisonings by solid and liquid substances	29	11
890-895	Accidental poisonings by gases and vapours	4	2
910-936	Other accidents	8	4
970-979	Suicide and self-inflicted injury	7	3
		8	2

CAUSES OF DEATH		Male	Female
All other and unspecified effects of external causes (N959, N980-N999)		110	30
800-802	Railway accidents	1	...
810-835	Motor vehicle accidents	5	1
840-845	Other road vehicle accidents	1	...
850-858	Water transport accidents	6	2
860-866	Aircraft accidents	2	...
900-904	Accidental falls	1	...
910-936	Other accidents	75	17
940-959	Complications due to therapeutic, surgical or other procedures .....	...	1
970-979	Suicide and self-inflicted injury	19	8
980-985	Homicide and injury purposely inflicted by other persons (not in war) .....	...	1

TABLE 23.—TOTAL DEATHS (EXCLUSIVE OF STILLBIRTHS) AND DEATHS IN INSTITUTIONS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE IN ALBERTA, 1950

Province	All Deaths						Deaths in Institutions					
	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		Place of residence	Place of occurrence	Residence elsewhere		Deaths of residents occurring elsewhere		
		In Canada	In United States	In Canada	In United States			In Canada	In United States	In Canada	In United States	
Alberta	6918	151	22	94	17	6856	4243	92	14	51	9	4197

TABLE 24.—DEATHS AT ALL AGES ACCORDING TO THE ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1950

Abbrev. List	Int. List No.	Detailed List	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
B 1	001-008	Tuberculosis of respiratory system.....	3,000	187	25	137	131	1,309	536	146	121	137	271
B 2	010-019	Tuberculosis, other forms.....	582	56	4	35	28	255	49	35	41	36	43
B 3	020-029	Syphilis and its sequelae.....	377	8	2	24	9	133	110	14	12	28	37
B 4	040	Typhoid fever.....	22	1	.....	2	2	12	1	1	1	1	1
B 5	043	Cholera.....	59	6	.....	2	2	18	17	4	4	1	5
B 6	045-048	Dysentery, all forms.....	61	2	1	3	19	19	2	2	3	11	4
B 7	050,051	Scarlet fever, and streptococcal sore throat.....	49	3	1	1	1	28	8	2	3	1	1
B 8	055	Diphtheria.....	306	49	8	20	21	136	41	15	3	3	10
B 9	056	Whooping cough.....	79	3	.....	6	10	30	18	6	4	.....	2
B 10	057	Meningococcal infections.....	41	.....	4	.....	.....	8	9	1	9	8	2
B 11	058	Plague.....	173	6	.....	5	6	80	36	9	6	8	17
B 12	080	Acute poliomyelitis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 13	084	Smallpox.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 14	085	Measles.....	312	6	3	16	7	104	95	10	19	23	29
B 15	100-108	Typhus and other rickettsial diseases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 16	110-117	Malaria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 17	030,039,041,042, 044,049,052-054, 059-074,081-083, 086-096,120-138	All other diseases classified as infective and parasitic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 18	140-205 (140-200,202 203,205) (201) (204)	Malignant neoplasm, including neoplasms of lymphatic and haematopoietic tissues..... Cancer excluding Hodgkin's disease, leukaemia and aleukaemia..... Hodgkin's disease..... Leukaemia and aleukaemia.....	17,396	347	104	873	595	4,498	6,307	987	971	988	1,726
B 19	210-239	Benign and unspecified neoplasms.....	16,548	333	102	837	553	4,326	5,974	935	912	928	1,648
B 20	260	Diabetes mellitus.....	217	3	.....	6	11	37	100	14	15	16	15
B 21	290-293	Anaemias.....	631	11	2	30	31	135	233	38	44	44	63
B 22	330-334	Vascular lesions affecting central nervous system.....	1,545	17	1	16	12	77	111	17	22	39	31
B 23	340	Nonmeningococcal meningitis.....	498	10	2	73	40	493	551	68	83	91	128
B 24	400-402	Rheumatic fever.....	12,440	230	125	699	438	2,090	5,603	745	635	693	1,182
B 25	410-416	Chronic rheumatic heart disease.....	350	24	4	18	23	169	55	13	10	14	20
B 26	420-422	Arteriosclerosis and degenerative heart disease.....	210	2	3	13	12	97	26	15	11	13	18
B 27	430-434	Other diseases of heart.....	1,687	17	13	81	44	466	559	97	112	93	205
B 28	440-443	Hypertension with heart disease.....	30,533	222	245	1,364	1,048	6,130	13,513	1,663	1,477	1,583	3,288
B 29	444-447	Hypertension without mention of heart.....	1,955	137	15	122	102	619	432	147	103	152	126
B 30	480-483	Influenza.....	4,543	70	25	292	166	1,420	1,532	182	219	215	422
B 31	490-493	Pneumonia.....	940	30	10	54	47	308	286	51	75	26	53
B 32	500-502	Bronchitis.....	4,633	152	40	249	244	1,236	1,481	284	270	275	402
B 33	540,541	Ulcer of stomach and duodenum.....	534	32	3	32	23	131	183	31	17	29	52
B 34	550-553	Appendicitis.....	691	9	6	23	18	155	256	34	50	50	101
B 35	560,561,570	Intestinal obstruction and hernia.....	333	5	2	15	16	125	91	16	20	22	21
B 36	543,571,572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn.....	872	15	6	41	29	272	294	38	45	45	71
B 37	581	Cirrhosis of liver.....	1,313	58	11	49	94	528	332	61	57	69	54
B 38	590-594	Nephritis and nephrosis.....	619	3	4	16	15	201	245	28	32	47	47
			3,274	33	37	122	94	1,832	695	90	121	90	160

	610-652,660, 670-689 750-759 760-762 763-768 769-776	794	13	6	47	36	166	281	57	50	46	92
B39	Hyperplasia of prostate											
B40	Complications of pregnancy, childbirth and the puerperium	417	18	3	21	15	182	97	14	21	19	27
B41	Congenital malformations	2,236	44	11	112	98	709	781	103	106	136	136
B42	Birth injuries, postnatal asphyxia and atelectasis	2,651	56	11	122	112	914	804	120	149	175	188
B43	Infections of the newborn	715	31	7	22	31	354	144	33	34	38	21
B44	Other diseases peculiar to early infancy, and immaturity unqualified	4,272	156	20	163	246	1,836	1,052	166	182	237	214
B45	Senility without mention of psychosis, ill-defined and unknown causes	2,583	571	23	167	277	687	374	156	61	134	133
B46	All other diseases	10,508	240	63	533	413	3,194	3,306	623	564	590	982
BE47	Motor vehicle accidents	2,261	18	7	96	105	672	833	78	98	159	195
BE48	All other accidents	5,277	132	40	265	183	1,206	1,806	269	264	399	713
BE49	Suicide and self-inflicted injury	1,054	6	3	45	30	143	396	79	64	82	206
BE50	Homicide and operations of war	133	3	.....	8	2	27	51	12	3	13	14
	All causes	123,649	3,058	908	6,079	4,898	33,525	43,895	6,601	6,246	6,857	11,582

TABLE 25.—DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1950

Abbrev. List	Int. List No.	Detailed List	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
B 1	001-008	Tuberculosis of respiratory system	21.7	52.7	26.0	20.8	25.1	32.9	11.9	18.4	13.8	15.3	23.8
B 2	010-019	Tuberculosis, other forms	4.2	15.8	4.2	5.3	5.4	6.4	1.1	4.4	4.7	4.0	3.8
B 3	020-029	Syphilis and its sequelae	2.7	2.3	2.1	3.6	1.7	3.3	2.4	1.8	1.4	3.1	3.3
B 4	040	Typhoid fever	0.2	0.3	.....	0.3	0.4	0.3	(2)	0.1	0.1	0.1	0.1
B 5	043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 6	045-048	Dysentery, all forms	0.4	1.7	.....	0.3	0.4	0.5	0.4	0.5	0.5	0.1	0.4
B 7	050,051	Scarlet fever, and streptococcal sore throat	0.4	0.6	1.0	0.6	0.3	0.5	0.4	0.3	0.3	1.2	0.4
B 8	055	Diphtheria	0.4	0.8	1.0	0.2	0.2	0.7	0.2	0.3	0.3	0.1	0.1
B 9	056	Whooping cough	2.2	13.8	8.3	3.0	4.0	3.4	0.9	1.9	0.3	0.3	0.9
B 10	057	Meningococcal infections	0.6	0.8	.....	0.9	1.9	0.8	0.4	0.8	0.5	.....	0.2
B 11	058	Plague	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 12	080	Acute poliomyelitis	0.3	.....	4.2	.....	.....	0.2	0.2	0.1	1.0	0.9	0.2
B 13	084	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 14	085	Measles	1.3	1.7	.....	0.8	1.1	2.0	0.8	1.1	0.7	0.9	1.5
B 15	100-108	Typhus and other rickettsial diseases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 16	110-117	Malaria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 17	030,039,041,042, 044,049,052-054, 059-074,081-083, 086-096,120-138	All other diseases classified as infective and parasitic	2.3	1.7	3.1	2.4	1.3	2.6	2.1	1.3	2.2	2.6	2.5
B 18	140-205	Malignant neoplasm, including neoplasms of lymphatic and haematopoietic tissues	125.9	97.7	108.3	132.7	114.0	113.1	139.8	124.2	111.1	110.4	151.7

TABLE 25.—DEATH RATE PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1950—Continued

Abbrev. List	Int. List No. Detailed List	CAUSES OF DEATH										B.C.
		Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	
B19	(140-200,202 203,205)	119.7	93.8	106.3	127.2	105.9	108.8	132.4	117.6	104.3	103.7	144.8
B20	(201)	1.6	0.8	2.1	0.9	2.1	0.9	2.2	1.8	1.7	1.8	1.3
B21	(204)	4.6	3.1	4.6	4.6	5.9	3.4	5.2	4.8	5.0	4.9	5.5
B22	210-239	2.4	2.5	2.5	2.4	2.3	1.9	2.5	2.1	2.5	4.4	2.7
B23	260	11.2	4.8	1.0	11.1	7.7	12.4	12.2	8.6	9.5	10.2	11.2
B24	290-293	3.6	2.8	2.1	4.1	6.1	3.1	4.3	2.9	2.9	2.2	3.8
B25	330-334	90.0	64.8	130.2	106.2	83.9	52.6	124.2	93.7	72.7	77.4	103.9
B26	400-402	2.5	6.8	4.2	2.7	1.6	4.4	1.2	1.6	1.1	1.6	1.8
B27	410-416	1.5	0.6	3.1	2.0	2.3	2.4	0.6	1.9	1.3	1.5	1.6
B28	420-422	12.2	4.8	13.5	12.3	8.4	11.7	12.4	12.2	12.8	10.4	18.0
B29	430-434	220.9	62.5	255.2	207.3	200.8	154.2	299.5	209.2	169.0	176.9	288.9
B30	440-443	14.1	38.6	15.6	18.5	19.5	15.6	9.6	18.6	11.8	17.0	11.1
B31	444-447	32.9	19.7	26.0	44.4	31.8	35.7	34.0	22.9	25.1	24.0	37.1
B32	480-483	7.1	5.9	10.4	7.8	7.9	8.3	6.4	7.0	6.1	5.4	7.8
B33	490-493	6.8	8.5	10.4	8.2	9.0	7.7	6.3	6.4	8.6	2.9	4.7
B34	500-502	33.5	42.8	41.7	37.8	46.7	31.1	32.8	35.7	30.9	30.7	35.3
B35	540-541	3.9	9.0	3.1	4.9	4.4	3.3	4.1	3.9	1.9	4.6	4.6
B36	550-553	5.0	2.5	6.3	3.5	3.4	3.9	5.7	4.3	5.7	4.4	8.9
B37	560-561,570	2.4	1.4	2.1	2.3	3.1	3.1	2.0	2.0	2.3	2.5	1.8
B38	543,571,572	6.3	4.2	6.3	6.2	5.6	6.8	6.5	4.8	7.0	5.0	6.2
B39	581	9.5	16.3	11.5	7.4	18.0	13.3	7.4	7.7	6.5	7.7	4.7
B40	590-594	4.5	0.8	4.2	2.4	2.9	5.1	5.4	3.5	3.7	3.1	4.1
B41	610	23.7	9.3	38.5	18.5	18.0	46.1	15.4	11.3	13.8	10.1	14.1
B42	650-652,660,	5.7	3.7	6.3	7.1	6.9	4.2	6.2	7.2	5.7	5.1	8.1
B43	670-689	3.0	5.1	3.1	3.2	2.9	4.6	2.1	1.8	2.4	2.1	2.4
B44	750-759	16.2	12.4	11.5	17.0	18.8	17.8	17.3	13.0	12.1	15.2	12.0
B45	760-762	19.2	15.8	11.5	18.5	21.5	23.0	17.8	15.1	17.0	19.6	16.5
B46	763-768	5.2	8.7	7.3	3.3	5.9	8.9	3.2	4.2	3.9	4.2	1.8
B47	769-776	30.9	43.9	20.8	24.8	47.1	46.2	23.3	20.9	20.8	26.5	18.8
B48	780-795	18.7	160.8	24.0	25.4	53.1	17.3	8.3	19.6	7.0	15.0	11.7
B49	Residual	76.0	67.6	65.6	81.0	79.1	80.3	73.3	78.4	64.5	65.9	86.3
B50	E810-E825	16.4	5.1	7.3	14.6	20.1	16.9	18.5	9.8	11.2	17.8	17.1
	E800-E802	38.2	37.2	41.7	40.3	35.1	30.3	40.0	33.8	30.2	44.6	62.7
	E840-E962	7.6	1.7	3.1	6.8	5.7	3.6	8.8	9.9	7.3	9.2	18.1
	E963-E970-E979	1.0	0.8	....	1.2	0.4	0.7	1.1	1.5	0.3	1.5	1.2
	E964-E965, E980-E999	894.6	861.4	945.8	923.9	938.3	843.2	972.9	830.3	714.6	766.1	1017.8
	All causes	894.6	861.4	945.8	923.9	938.3	843.2	972.9	830.3	714.6	766.1	1017.8

TABLE 27.—MARRIAGES IN THE PROVINCE OF ALBERTA, BY MONTHS, 1950

	Total	MONTHS											
		January	February	March	April	May	June	July	August	September	October	November	December
Edmonton	2630	115	137	119	218	193	332	305	262	275	222	231	221
Calgary	1841	81	89	85	160	124	233	172	167	203	195	183	149
Lethbridge	429	22	23	22	39	25	49	44	41	44	43	46	31
Medicine Hat	284	6	16	17	20	19	36	31	25	28	32	24	30
Red Deer	156	10	8	5	16	12	21	15	13	15	11	17	13
Drumheller	71	3	2	3	7	7	7	9	5	9	8	6	5
Wetaskiwin	86	4	2	2	10	8	15	8	4	9	7	13	4
Rural Districts	3797	171	147	130	266	244	504	439	355	313	471	462	295
Total for the Province	9294	412	424	383	736	632	1197	1023	872	896	989	982	748

TABLE 28.—MARITAL STATUS OF BRIDEGROOMS AND BRIDES IN ALBERTA, 1950

	Total Marriages	Marriages between						Per cent. of Bridegrooms who were			Per cent. of Brides who were					
		Bachelors and		Widowers and		Divorced men and		Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced			
		Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters							Widows	Divorced Women	
Total for the Province	9294	7886	233	290	136	201	47	336	54	111	90.5	4.1	5.4	89.9	5.3	4.8

Mormons	176	1	7	3	1	1	1	1	1	1	112	2	1	2	13	20	2								
Non-denominational	299	11	11	9	6	1	3	1	20	1	3	141	5	9	37	44	1								
Oriental religions	27																								
Pentecostal Assemblies	127	4	4	6	2	1	1	1	6		25	2	79	2	6	14	1								
Plymouth Brethren	5	1	1	1	1	1	1	1	22																
Presbyterians	467	70	70	12	8	8	6	22	3	3	1	8	8	145	51	120	1								
Reformed Churches (Christian)	39	1	1	1	1	1	1	1	1																
Roman Catholics	1825	3	38	18	38	4	64	74	1	2	7	23	7	34	1243	196	5								
Salvation Army	25			1	1	1	1	2					2	1	2	5									
Society of Friends	2														10	1									
Spiritualists	1	1																							
Swedenborgians	1																								
Unitarians																									
United Church of Canada	2757	2	284	53	28	6	2	153	2	8	5	34	10	1	212	1795	2								
Other religions	3							2																	
Non-religious denom- inations	148	9	9	5			2	14			3	3	1	3	29	23	48								
Unspecified or unknown	2														1		1								
Total brides	9294	43	1044	4	285	30	1	7	26	9	25	25	28	138	3	392	40	1938	25	1	1	2855	6	75	4

TABLE 32.—DIVORCES AND NULLITIES BY JUDICIAL DISTRICTS
FOR THE YEAR 1950, ALBERTA

Judicial Districts	Divorces			Nullities		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton	267	118	149	1	.....	1
Calgary	195	72	123	4	1	3
Lethbridge	32	15	17	.....	.....	.....
Medicine Hat	13	5	8	.....	.....	.....
Peace River	7	5	2	.....	.....	.....
Grande Prairie	1	1	.....	.....	.....	.....
Hanna	6	3	3	.....	.....	.....
Red Deer	17	10	7	.....	.....	.....
Drumheller	2	1	1	.....	.....	.....
Macleod	7	6	1	1	.....	1
Wetaskiwin	3	3	.....	.....	.....	.....
Total	550	249	311	6	1	5

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
1941	135	176	311
1942	179	201	380
1943	190	223	413
1944	245	243	488
1945	302	273	575
1946	494	480	974
1947	404	478	882
1948	302	357	659
1949	262	332	594
1950	249	311	550

TABLE 33.—BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS), BY MONTHS IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1950

	Total	Months											
		January	February	March	April	May	June	July	August	September	October	November	December
Total for the Province ...	1221	105	102	109	102	121	99	105	107	98	73	96	104

TABLE 34.—LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS (EXCLUSIVE OF STILLBIRTHS) IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1950

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Alberta	1221	586	635	936	455	481	385	131	154

TABLE 35.—DEATHS OF INDIAN CHILDREN UNDER ONE YEAR (EXCLUSIVE OF STILLBIRTHS) FROM CERTAIN SPECIFIED CAUSES BY SEX IN ALBERTA, BY PLACE OF RESIDENCE, 1950

Int. list No.	Causes of Death	Total	Male	Female
	ALL CAUSES	109	57	52
001-019	Tuberculosis	6	2	4
020-029	Syphilis			
050	Scarlet fever			
052	Erysipelas			
055	Diphtheria			
056	Whooping cough	1	1	
057	Meningococcal infections			
085	Measles			
273	Diseases of the thymus gland			
340	Meningitis (non-meningococcal)	1		1
391,392	Otitis media	1		1
480-483	Influenza	2	2	
490-493	Pneumonia (4 weeks and over)	25	13	12
500-502	Bronchitis	2	1	1
571,572	Enteritis (4 weeks and over)	17	9	8
750-759	Congenital malformations	4	2	2
752	Congenital hydrocephalus			
754	Congenital malformations of circulatory system	2	1	1
750,751, 753,755- 759	Others under this title	2	1	1
760,761	Injury at birth	2	1	1
763	Pneumonia of newborn (under 4 weeks)	5	3	2
764	Diarrhoea of newborn (under 4 weeks)	3	1	2
769	Antenatal toxæmia			
770	Erythroblastosis			
772	Nutritional maladjustment	3	1	2
773	Ill-defined diseases peculiar to early infancy	2	1	1
774-776	Immaturity	10	5	5
795	Ill-defined and unknown causes	2	1	1
	Other specified causes	23	14	9

A 34	Infectious hepatitis	Male	
		Female	
A 35	Rabies	Male	
A 36	Typhus and other rickettsial diseases	Female	
		Male	
A 37	Malaria	Female	
		Male	
A 38	Schistosomiasis	Female	
		Male	
A 39	Hydatid disease	Female	
		Male	
A 40	Filariasis	Female	
		Male	
A 41	Ankylostomiasis	Female	
		Male	
A 42	Other diseases due to helminths	Female	
		Male	
A 43	All other diseases classified as infective and parasitic	Male	
		Female	
A 44	Malignant neoplasm of buccal cavity and pharynx	Male	
		Female	
A 45	Malignant neoplasm of esophagus	Male	
		Female	
A 46	Malignant neoplasm of stomach	Male	
		Female	
A 47	Malignant neoplasm of intestine, except rectum	Male	
		Female	
A 48	Malignant neoplasm of rectum	Male	
		Female	
A 49	Malignant neoplasm of larynx	Male	
		Female	
A 50	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male	
		Female	
A 51	Malignant neoplasm of breast	Female	
		Male	
A 52	Malignant neoplasm of cervix uteri	Female	
A 53	Malignant neoplasm of other and unspecified parts of uterus	Female	2
A 54	Malignant neoplasm of prostate	Male	
A 55	Malignant neoplasm of skin	Male	
		Female	
A 56	Malignant neoplasm of bone and connective tissue	Male	
		Female	
			1
			1

VITAL STATISTICS BRANCH

TABLE 38.—POPULATION BIRTHS, MARRIAGES, DEATHS, AND RATES FOR THE YEARS 1905-1950

Year	Population	Number of Births	Rate Birth	No. of Births Received to Date	Number of Marriages	Marriage Rate	Number of Deaths	Death Rate	Infantile Death Rate per 1,000 Births	Puerperal Death Rate per 1,000 Births	Rate of Natural Increase
1905	185,000	421	20.41	4,032	187	6.77	114	7.36	90.00	.....	13.04
1906	236,000	3,003	4.732	5,900	927	8.08	1,091	6.68	100.27	6.33	13.36
1907	266,000	5,973	22.45	7,495	2,384	7.63	2,188	8.22	126.57	6.02	14.22
1908	301,000	6,897	22.91	9,443	3,086	7.92	2,662	8.81	.....	.....	14.07
1909	336,000	8,321	24.49	10,732	3,630	9.18	3,526	10.49	129.49	8.63	14.00
1910	374,000	8,813	23.56	12,565	4,429	9.70	3,618	9.67	134.46	9.75	13.88
1911	400,000	10,284	25.71	14,434	5,053	11.07	4,232	10.58	124.75	8.26	15.13
1912	429,000	11,871	28.47	16,135	4,623	12.12	4,432	10.63	120.47	7.07	17.84
1913	459,000	13,685	30.75	18,679	5,039	10.39	4,417	9.32	100.54	6.13	21.43
1914	480,000	13,452	28.90	15,679	4,202	9.06	3,588	7.73	87.9	5.79	21.26
1915	496,000	13,331	27.87	15,557	4,230	8.53	4,058	8.18	90.5	7.20	18.69
1916	508,000	13,576	27.01	15,668	4,270	8.54	4,047	8.09	87.30	6.48	18.92
1917	522,000	14,890	28.52	16,769	4,048	6.98	7,924	13.86	107.10	5.51	11.86
1918	522,000	14,890	23.95	16,127	4,718	7.90	5,507	9.33	110.30	6.44	14.62
1919	565,000	16,565	26.72	18,451	5,110	8.24	5,675	9.15	93.70	8.38	17.57
1920	588,000	16,414	27.89	18,104	4,661	7.92	5,675	9.39	85.65	7.24	19.50
1921	593,000	16,163	26.44	17,325	4,272	6.99	5,281	8.62	91.93	6.68	17.83
1922	593,000	15,153	25.75	16,183	4,177	6.99	4,843	8.06	90.54	5.50	18.75
1923	597,000	14,598	24.74	15,569	4,160	7.50	4,907	8.30	82.40	6.18	16.42
1924	602,000	15,014	25.02	15,796	4,363	7.27	4,717	7.86	72.90	5.76	16.16
1925	608,000	14,455	23.79	15,408	4,498	7.40	5,156	8.49	81.63	5.82	15.31
1926	633,000	14,897	24.03	15,565	4,707	7.58	5,059	8.16	74.51	6.38	15.87
1927	638,000	15,692	24.79	17,446	5,776	9.12	5,699	9.00	76.50	6.75	15.79
1928	684,000	16,924	26.19	17,628	6,004	9.29	6,239	9.65	77.40	7.26	16.54
1929	708,000	17,649	26.74	18,423	5,334	8.08	5,396	8.33	63.57	6.46	18.41
1930	732,000	17,252	23.57	18,108	5,142	7.02	5,302	7.24	69.38	5.04	16.32
1931	740,000	16,990	22.96	17,788	5,054	6.83	5,521	7.46	58.68	3.76	15.50
1932	748,000	16,123	21.33	16,915	5,389	7.10	5,346	7.07	59.90	4.43	14.24
1933	756,000	16,236	21.10	17,002	6,053	7.87	5,337	6.93	54.89	4.99	14.01
1934	770,000	16,183	21.0	16,962	6,010	7.7	5,729	7.2	52.8	4.2	14.0
1935	772,782	15,786	20.4	16,423	6,020	7.8	6,147	8.0	60.0	5.8	12.5
1936	778,000	15,903	20.4	16,492	6,345	8.2	6,261	8.0	63.0	4.9	12.4
1937	783,000	15,891	20.3	16,582	6,973	8.9	5,871	7.5	51.0	4.3	12.8
1938	789,000	16,470	20.9	17,903	7,838	9.9	5,789	7.3	46.0	3.5	13.6
1939	790,000	17,359	21.8	17,725	8,782	11.8	6,203	7.8	48.0	3.9	14.1
1940	796,169	17,308	21.7	17,590	8,470	10.7	6,885	8.0	51.0	3.6	13.7
1941	805,000	18,317	22.7	16,539	9,034	11.2	6,091	7.5	38.0	2.3	15.2

1943	792,000	19,290	24.3	19,487	7,771	9.8	6,524	8.2	42.0	2.7	16.1
1944	818,000	19,373	23.7	19,486	7,299	8.9	6,320	7.7	46.0	1.6	16.0
1945	826,000	19,939	24.1	20,068	7,310	8.8	6,434	7.8	43.0	2.4	16.2
1946	803,330	22,184	27.6	23,283	9,478	11.8	6,601	8.2	42.5	1.4	19.3
1947	822,000	24,631	30.0	25,699	8,797	10.7	6,543	8.0	37.0	.9	22.0
1948	846,000	24,075	28.5	24,075	8,844	10.5	6,987	8.0	39.0	1.2	20.2
1949	871,000	24,935	28.7	24,951	9,037	10.4	7,083	8.2	33.0	1.0	20.5
1950	895,000	25,625	28.7	25,659	9,294	10.4	6,856	7.7	32.0	0.7	21.0

TABLE 39.—DEATHS AND DEATH RATES FROM PUERPERAL CONDITIONS, 1950

	Births	Deaths from Puerperal Conditions	Death Rate per 1,000 Births
Whole Province	25,625	19	.7
City of Edmonton	4,745	2	.4
City of Calgary	3,135	3	.9
Small Cities	1,448	3	2.0
Rural	15,076	7	.4
Indian	1,221	4	3.2

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	3.13	1928	1,064	2.75
1906	1,094	2.07	1929	1,042	2.71
1907	1,075	2.96	1930	1,027	3.21
1908	1,077	2.73	1931	1,075	3.25
1909	1,086	2.59	1932	1,052	3.08
1910	1,065	2.69	1933	1,053	3.01
1911	1,103	2.43	1934	1,032	3.04
1912	1,084	2.43	1935	1,055	2.81
1913	1,053	2.67	1936	1,049	2.57
1914	1,081	3.30	1937	1,019	2.38
1915	1,000	3.74	1938	1,046	2.70
1916	1,063	3.29	1939	1,046	2.85
1917	1,061	3.25	1940	1,033	2.79
1918	1,069	1.88	1941	1,054	2.71
1919	1,074	2.56	1942	1,058	3.02
1920	1,055	2.92	1943	1,041	2.96
1921	1,055	3.32	1944	1,060	3.06
1922	1,034	3.06	1945	1,061	3.08
1923	1,072	3.13	1946	1,036	3.36
1924	1,036	2.97	1947	1,061	3.76
1925	1,036	2.97	1948	1,049	3.44
1926	1,053	2.80	1949	1,051	3.52
1927	1,065	2.94	1950	1,052	3.74

