

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

### **Contributors**

Alberta. Department of Public Health.

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ANNUAL REPORT

OF THE

Department of Public Health

PROVINCE OF ALBERTA

INCLUDING

Vital Statistics Division  
1953

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON  
PRINTED BY A. SHNITKA, QUEEN'S PRINTER  
1955

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# ANNUAL REPORT

OF THE

## Department of Public Health

PROVINCE OF ALBERTA

INCLUDING

### Vital Statistics Division

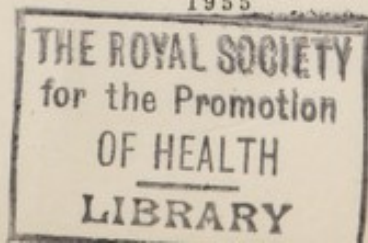
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1955



ANNUAL REPORT

Department of Public Health

Viral & Bacterial Division

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December 31, 1954.

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 1953.

I have the honour to be, Sir,

Your obedient Servant,

WALLACE WARREN CROSS,  
*Minister of Health.*

December 31, 1934

To His Honor  
J. J. Hovell

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 1934.

I have the honor to be Sir,

Yours sincerely,

Wallace Warren Cross  
Minister of Health

December 31, 1954.

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

SIR:

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

I have the honour to be be, Sir,

Your obedient Servant,

A. SOMERVILLE, B.A., M.D., D.P.H.,  
*Deputy Minister.*



December 11, 1964

The Honorable Mr. W. W. Cline  
Minister of Health  
Administration Building, Edmonton, Alberta

Sir,

I have the honor to refer herewith the Thirty-Fifth Annual  
Report of the Department of Public Health.

I have the honor to be, Sir,

Yours obedient servant,


A. SOMMERVILLE, B.A., M.D., F.R.C.P.

Deputy Minister

THIRTY-NINTH ANNUAL REPORT OF THE  
 PROVINCIAL DEPARTMENT OF PUBLIC HEALTH  
 AND THE VITAL STATISTICS DIVISION

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THIRTY-FIFTH ANNUAL REPORT OF THE  
PROVINCIAL DEPARTMENT OF PUBLIC HEALTH  
INCLUDING THE VITAL STATISTICS DIVISION

*Divisions:*

1. General Administration.
2. Communicable Diseases.
3. Health Units.
4. Entomology.
5. Cancer Services.
6. Public Health Education.
7. Nutrition Services.
8. Municipal Nursing.
9. Social Hygiene.
10. Provincial Laboratories.
11. Sanitary Engineering.
12. Hospital and Medical Services.
13. Nursing Aides School.
14. Arthritis Services.
15. Cerebral Palsy Clinics.
16. Canadian Red Cross Blood Transfusion Service.
17. Tuberculosis Control—  
Sanatoria: Aberhart Memorial Sanatorium, Edmonton.  
Central Alberta Sanatorium, Calgary.
18. Mental Health—  
Institutions: Provincial Mental Hospital, Ponoka.  
Provincial Auxiliary Mental Hospital,  
Claresholm.  
Provincial Auxiliary Mental Hospital,  
Raymond.  
Provincial Mental Institute, Edmonton.  
Provincial Training School, Red Deer.  
Rosehaven, Camrose.  
Guidance Clinics.  
Eugenics Board.
19. Vital Statistics.

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

PROVINCIAL BOARD OF HEALTH

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

There was one change in the membership of the Board brought on by the resignation of Mr. W. A. Dexter as Provincial Sanitary Engineer. Mr. Dexter was succeeded by Mr. H. L. Hogge as Provincial Sanitary Engineer and, therefore, as a member of the Board.

REGULATIONS PASSED OR AMENDED DURING THE YEAR

O.C. 111/53 and O.C. 112/53. Amendments to Provincial Board of Health Regulations respecting Nuisances and General Sanitation Nuisances. The regulations were renumbered to agree with other Provincial Board of Health Regulations. A new regulation was inserted in the section dealing with outside closets providing

authority to Local Boards of Health to give instruction concerning the location of outside closets on through lots. Another new regulation provided authority to Local Boards of Health to supervise public toilet rooms. Changes were made in the slaughter house section of the regulations to require provision of hot and cold water in slaughter houses and to make those slaughter houses slaughtering animals for animal food subject to applicable portions of the regulations. Previously, the regulations only applied where animals were slaughtered for food for humans. A new regulation was inserted providing that no animal or poultry may be slaughtered under conditions which may constitute a hazard to the health of the public.

O.C. 534/53. Provincial Board of Health Regulations for the Control of Communicable Diseases. Existing regulations for the Control of Communicable Diseases were rescinded and replaced by new regulations under this Order. The list of notifiable diseases was greatly reduced from that appearing in the old regulations. Also, the methods of notification of some diseases was changed in an effort to improve notification. The list of diseases for which placarding is required was also reduced. A new regulation provides means of dealing with cases of communicable diseases occurring in living quarters attached to restaurants for the protection of the public. The old regulations dealing with limitation of movement in and out of the province and with action to control communicable diseases in railway trains were omitted from the new regulations as not being generally applicable. The new regulations dealing with the responsibility of the Local Health Authority to secure isolation and quarantine provide that the municipality in which the case is discovered is responsible for expenses not borne by the patient except hospital charges. A new regulation prohibits treatment of persons suffering from communicable diseases for gain by any person other than a registered medical practitioner or a nurse working under supervision. Changes in the requirements of the regulations in respect to notification, placarding, isolation and quarantine for certain specific diseases were made where this was justifiable.

O.C.1173/53. Provincial Board of Health Regulations regarding Plumbing and Drainage. This Order-in-Council rescinded existing Plumbing and Drainage Regulations and replaced them with new regulations. The administration portion of the new regulations requires urban municipalities having a population in excess of 2,000 or possessing water or sewer systems to provide plumbing inspectors. The scope of the regulations has been altered so that the new regulations do not apply to plumbing installations in one-family dwellings not connected to public water or sewer systems. All private sewage disposal systems are within the scope of the regulations. The technical portion of the new regulations conforms with the National Building Code except in some instances where conditions in Alberta made necessary certain deviations.

A widespread outbreak of poliomyelitis affected the province during the year. Numbers of cases began to appear in August and the epidemic continued through the remainder of the year. Following consideration of the outbreak, the Board supplied Local Boards of Health with information concerning the transmission of the infective organism and published information in newspapers advising the public of precautions which should be taken. In an effort to reduce the spread of the disease, the Board ordered the exclusion

of children under 16 from theatres and public gatherings from the middle of August to the middle of September. The Board also ordered that the opening of schools throughout the province be delayed until September 14th, 1953.

During the year a number of cases of persons who were suffering from tuberculosis in an infectious form and who were refusing treatment were drawn to the attention of the Board. After proper investigation of the cases, the Board issued thirty Orders covering the removal of such persons to hospitals and sanatoria for treatment under the provisions of the Communicable Disease Regulations.

Following up the recommendations made in the report on the pollution of the Bow River made in 1952, the Board during 1953 issued instructions to the City of Calgary and the Town of High River requiring them to provide primary treatment for their sewage. The North Saskatchewan River also received attention particularly in reference to the effect of wastes being deposited in this river by industries in the greater Edmonton area.

A number of other matters related to public health were on the agenda of the meetings of the Board and received attention. Throughout the year, the Board gave its guidance and assistance to the various Divisions of the Department and co-related their activities into an overall programme designed to improve the health of the citizens of the province.

#### LEGISLATION PASSED DURING THE YEAR

##### *Cancer Remedy Act Repeal Act (Chapter 14).*

This Act repeals The Cancer Remedy Act, being chapter 188 of the Revised Statutes of Alberta, 1952.

This Act was obsolete and is therefore, repealed.

This Act came into force on March 31st, 1953.

##### *Alberta Health Insurance Act Repeal Act (Chapter 50).*

This Act repeals The Alberta Health Insurance Act, being chapter 204 of the Revised Statutes of Alberta, 1942.

This Act was replaced by The Alberta Health Insurance Act, 1946, and was to have been repealed thereby but the later Act did not come into force. The earlier Act was not in a form that could be implemented and it is therefore repealed.

This Act came into force on March 31st, 1953.

##### *Alberta Health Insurance Act, 1946, Repeal Act (Chapter 51).*

This Act repeals The Alberta Health Insurance Act, 1946, being chapter 3 of the Statutes of Alberta, 1946.

This Act was enacted in 1946 and was to come into force upon proclamation. It has never been proclaimed and it is not in a form that could be implemented, and it is therefore repealed.

This Act came into force on March 31st, 1953.

##### *Health Unit Act Amendment Act (Chapter 52).*

This Act amends The Health Unit Act, being chapter 38 of the Statutes of Alberta, 1951.

In certain more isolated areas within health units, municipal nurses are presently employed under the provisions of The Nursing Service Act. In other isolated areas within health units, it appears desirable to employ the services of municipal nurses in addition to

the health unit nurses. At the present time the municipal nurses are employed by the municipalities requiring the service of a municipal nurse and if the municipality, or the portion of it within which the municipal nurse is employed, is within a health unit, approximately one-fifth of the municipal nurse's services are a duplication of the services of the health unit nurse. Also, those people who are served by the municipal nurse are levied upon for the municipal nurse service and pay with the other residents of the health unit, through their taxes for the services of the health unit nurse.

The amendments to section 2 and section 10 (except the amendment to clause (f), and the new section 9a), all deal with the matter of municipal nurses. The effect of these amendments is

- (a) to define a municipal nurse for ease of reference,
- (b) to provide that for each municipal nurse employed in a municipal nursing service administered by the health unit board, the population required for the employment of a health unit nurse shall be increased by one-fifth in the computation of population,
- (c) to permit a health unit board, by agreement with the municipalities concerned, to administer their nursing service and to assume a portion of the municipalities' cost therefor.

The effect of the amendment to clause (f) of subsection (1) of section 10 is that now (instead of a part-time sanitary inspector being authorized for a population of twenty thousand or over as formerly) for every ten thousand of population over twenty thousand and or any multiple of twenty thousand, a student sanitary inspector may be employed by the board of the health unit.

This Act came into force on March 31st, 1953.

#### *Hospitalization and Treatment Services Act (Chapter 56).*

This Act enacts a new Act to be known as "The Hospitalization and Treatment Services Act".

The Minister of Health is authorized to provide for part or all of the costs of hospitalization and treatment services for a person and his dependents residing in Alberta. The person must be in receipt of provincial old age assistance, or mothers' allowance, or a supplementary allowance, or a widow's pension and must not be the responsibility for health and welfare services, of the Government of Canada.

The Minister may provide the costs of hospitalization and treatment services for persons under twenty-five years of age who are resident in Alberta and suffering from the effects of rheumatoid arthritis. This does not apply to persons who are the responsibility of the Government of Canada for health and welfare services.

Also, the Act enables the Minister to provide for the costs of similar services in the case of recipients of Canadian old age pensions or old age security benefits if they have resided in Alberta for three years prior to their application and if they can qualify to a test of means which is set out in section 5. These recipients must not be the responsibility of the Canadian Government for health and welfare purposes.

The Minister is empowered to make agreements with approved hospitals with respect to treatment services for the persons entitled

to benefits under this Act. He may also pay for hospitalization and treatment services in an approved hospital that does not enter into an agreement for such purposes but the person receiving the treatment is required to submit the account to the Minister.

The same benefits may be given under section 8 to persons afflicted with cerebral palsy.

Agreements may be entered into with other provinces having similar legislation whereby residents of that province in Alberta may receive benefits under this Act and Alberta residents in that other province receive benefits under the Act or Acts of that other province.

The Minister, with the approval of the Lieutenant Governor in Council, may pay to any general hospital operating a school of nursing a sum not exceeding three hundred dollars for each nurse trained in and graduated from that school, and may pay to any general hospital operating a school of nursing the sum of one hundred dollars for each graduate of the school of nursing of any provincial mental hospital who received approximately two years of her training in the said general hospital.

With the approval of the Lieutenant Governor in Council, the Minister may subsidize any insurance organization or company that provides a policy or scheme of insurance for Alberta residents covering all or part of the costs of the special hospital services not provided under standard ward hospitalization, and may make regulations with respect to the subsidy.

The Minister may make regulations concerning applications, investigations, defining and determining income for the purpose of section 5, and such regulations as may be necessary to effect the purposes of the Act.

The expenses incurred in administering the Act are to be met by moneys appropriated for the purpose by the Legislature.

This Act came into force on March 31st, 1953.

#### *Hospitals Act Amendment Act (Chapter 57).*

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

Section 2 is amended by the addition of clause (m) defining "special hospital services".

Sections 3h, 3i, 3j, 3k, 3l, and 3m are added to the Act. Section 3h provides for the designating of special hospital services by the Lieutenant Governor in Council.

Section 3i provides for the payment by the Minister of a refund for special hospital services in the case of municipal hospital district boards and local authorities entitled to the hospitalization grant provided for by this Act. The refund will not exceed fifty per cent of the amount remitted or paid by the board or local authority on account of special hospital services supplied a ratepayer or contract holder.

Section 3j provides for the payment or reimbursement for special hospital services in the case of a ratepayer or contract holder hospitalized in a hospital other than the municipal hospital district hospital, or an approved hospital with which the board or local authority has a special hospital services agreement.



Section 3k prohibits the payment of a special hospital services grant in respect of a person referred to in section 3d.

Section 3l provides for the making of regulations in connection with the administration and payment of special hospital services reimbursement payments.

Section 3m provides that the Province's share of the costs of providing the special hospital services refund and reimbursement be paid out of moneys appropriated therefor by the Legislature.

This Act came into force on June 1st, 1953.

*Mental Diseases Act Amendment Act (Chapter 73).*

This Act amends The Mental Diseases Act, being chapter 192 of the Revised Statutes of Alberta, 1942.

Section 2 is amended. "Hospital" is redefined. "Psychiatric ward" is redefined to mean a part of a hospital declared by the Lieutenant Governor in Council to be a psychiatric ward. "Superintendent" is redefined to mean the superintendent of the mental hospital, where such is concerned, or the superintendent of the hospital in which there is established a psychiatric ward, where such wards are concerned.

Part II is amended by striking out sections 35 to 44 and by substituting therefor new sections. Section 35 permits the Lieutenant Governor in Council to declare a part of an approved hospital to be a psychiatric ward.

Section 36 sets out the duties of the superintendent with respect to a psychiatric ward.

Section 37 provides that no one is to be admitted to or hospitalized in a psychiatric ward otherwise than in accordance with Part II.

Section 38 provides that upon the application of a medical doctor, consented to by the superintendent, a person who has signed an application or for whom an application has been signed by the spouse, relative or guardian, may be admitted to a psychiatric ward if no coercion is necessary to have him so admitted.

Section 39 prohibits the admission of certain mental and other cases such as alcoholics, drug addicts, persons suffering from senility, or a communicable disease, mental hospital patients and certain persons out of penal institutions.

Section 40 permits the superintendent to refuse admission to prevent overcrowding in the ward.

Section 41, subsection (1) provides when a patient shall be discharged from a psychiatric ward. Subsection (2) provides that no patient shall be kept in a psychiatric ward for a longer period than three months in a twelve month period.

Section 42 authorizes such restraint of the patient as may be necessary for his treatment.

Section 43 provides for the discharge of a patient.

Section 44 authorizes the Lieutenant Governor in Council to make necessary regulations to implement the intent of Part II.

This Act came into force on June 1st, 1953.

*Municipal Hospitals Act Amendment Act (Chapter 83).*

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

Section 47a is new. This Act did not clearly define the time when a newly elected member of a municipal hospital board took his office. Section 47a provides that a newly elected member takes office at a meeting subsequent to the declaration of the returning officer as to the results of the poll. A member of the board holds office until his successor takes his oath of office which must be taken by a member of the board before entering upon his duties.

Section 71 is amended. Subsection (2) is renumbered as subsection (4). New subsections (2) and (3) are added. The effect of the amendment is to permit a board which has once obtained authority for an increased capital expenditure and which later finds that its estimate of the additional amount required is inadequate, to borrow a further additional amount for capital expenditure. If the amount required is not over forty thousand dollars or thirty per cent of the original estimate, whichever is less, they may borrow with the approval of the Minister and the Board of Public Utility Commissioners. If the additional amount required is greater, however, they must obtain approval by a vote, in addition to the approval of the Minister and the Board.

Section 73, subsection (1a) is amended. The effect of this amendment is to make this section conform with The Assessment Act, as amended, in respect of equalizing the distribution of requisitions where different index values for assessment have been used by contributing municipalities.

This Act came into force on March 31, 1953 and the amendments to section 73 are retroactive to January 1st, 1953.

#### *Poliomyelitis Sufferers Act Amendment Act (Chapter 91).*

This Act amends The Poliomyelitis Sufferers Act, being chapter 193 of the Revised Statutes of Alberta, 1942.

Section 2a is new. By it the Minister of Health, with the approval of the Lieutenant Governor in Council, is empowered to appoint a medical supervisor in every hospital which has entered into an agreement under this Act to supervise the care and treatment of the poliomyelitis sufferers who have been admitted to such hospital, or who require further treatment as out-patients after discharge from hospital; the Minister is also authorized to provide medical and surgical care for persons suffering from the effects of this disease.

Section 3 is repealed as this provision is now to appear in another Act.

Section 5 is new. It enables the Minister of Health to make any necessary rules or regulations to carry out the intent of this Act.

This Act came into force on March 31st, 1953.

#### *Solemnization of Marriage Act Amendment Act (Chapter 106).*

This Act amends The Solemnization of Marriage Act, being chapter 303 of the Revised Statutes of Alberta, 1942.

A new section 7a is added. This section provides that a license issuer under this Act is ex officio a commissioner for taking affidavits. It further provides that affidavits heretofore or hereafter taken by a license issuer shall have the same force as an affidavit taken by a commissioner under the Commissioners for Oaths Act. Sections of this Act require affidavits to be "made or

delivered to" a license issuer but heretofore there was no express authority for a license issuer to take the required affidavits.

This Act came into force on the 1st day of July, 1953.

*Tuberculosis Act Amendment Act (Chapter 117).*

This Act amends The Tuberculosis Act, being chapter 195 of the Revised Statutes of Alberta, 1942.

Section 2, clause (c) is amended to remove the reference to the Central Alberta Sanatorium.

Section 3 is amended. The effect of the amendment is to remove the reference to the Central Alberta Sanatorium, and to permit the Minister, with the approval of the Lieutenant Governor in Council, to operate sanatoria for the treatment of tuberculosis without reference to any particular sanatorium.

This Act came into force on March 31st, 1953.

DEPARTMENT OF PUBLIC HEALTH			
REVENUE AND EXPENDITURE FOR FISCAL YEAR ENDED MARCH 31, 1954			
	Salaries	Expenses	Revenue
601. Administration (General) .....	\$ 11,558.90	\$ 3,165.75	\$
602. Administration (General) .....	55,712.76	2,449.59	2,227.54
618. Administration (Postage) .....		4,641.47	
603. Hospitals Division—Administration and Grants .....	8,249.24	1,384,149.54	55.00
605. Communicable Diseases .....	5,421.19	77,768.57	
605. Sanitary Engineering .....	22,977.96	12,347.52	4,416.53
606. Municipal Nursing .....	7,549.42	121,352.89	53,404.21
607. Bureau of Vital Statistics .....	53,544.63	10,231.10	103,588.34
608. Municipal Hospitals .....	6,493.69	1,872.40	
609. Insulin .....		9,350.28	
610. Social Hygiene .....	47,546.95	18,324.25	32,225.99
622. Mental Health .....	31,123.59	12,774.38	
626. Public Health Laboratory .....		251,116.64	32,511.95
631. Poliomyelitis .....		816,275.89	
633. Cancer Clinics .....	108,043.21	397,170.89	236,898.30
637. Maternity Hospitalization .....	4,631.55	2,023,511.82	
638. Civil Service Nurse .....	3,030.79	2,070.73	
639. Public Health Education .....	11,040.13	4,568.17	
640. Division of Entomology .....	7,600.39	5,774.50	
641. Health Units .....	5,787.53	343,373.33	93,382.29
643. Nursing Aides Act .....	5,990.51	1,082.56	1,626.00
644. Pensioners, Hospital and Medical Services .....	15,174.18	2,424,060.23	
645. Health Services, Extension Programme .....	361,883.63	536,480.21	636,992.24
646. Hospital Construction Grants .....		1,256,803.56	1,025,876.62
647. Grants to Local Authorities .....	13,510.45	2,216,432.69	
648. Grants for Public Health Services .....		58,437.89	
649. Alcoholic Foundation of Alberta .....		43,309.63	
651. Division of Cerebral Palsy Clinics .....	31,616.52	4,119.44	39,145.41
652. Division of Arthritis Services .....	10,883.18	6,435.44	
S.W. No. 49 Hospital Finance and Fact Finding Committee .....		1,002.50	
S.W. No. 49 Hospital Construction Grant to City of Calgary as assistance towards construction of Psychiatric Unit at Calgary General Hospital .....		70,000.00	
<b>Institutions</b>			
604-1. Division of Tuberculosis Control .....	24,231.26	45,491.90	
604-2. Central Alberta Sanatorium, Calgary .....	512,849.78	254,548.31	204,639.62
604-3. Aberhart Memorial Sanatorium, Edmonton .....	490,351.31	173,734.28	223,806.63
612-1. } Prov. Mental Institute, Oliver .....	790,465.59	347,474.79	254,996.24
612-2. } Prov. Training School, Red Deer .....	442,088.57	173,186.29	112,497.30
612-3. } Prov. Mental Hospital, Ponoka .....	1,022,541.07	491,610.22	335,538.87
612-4. } Prov. Auxiliary Mental Hospital, Claresholm .....	47,334.86	31,259.67	17,229.45
612-5. } Prov. Auxiliary Mental Hospital, Raymond .....	65,604.15	27,002.14	21,798.84
650. Rosehaven, Camrose .....	189,127.66	63,191.35	180,201.54
	\$4,413,964.65	\$13,727,952.81	\$ 3,613,058.91
Total Expenditure—Department of Public Health .....			\$18,141,917.46
Less: Public Health Revenue .....			3,613,058.91
Net Expenditure—Department of Public Health .....			\$14,528,858.55

### Vital Statistics

Vital Statistics registered during the year are as follows:

Births .....	31,376
Marriages .....	10,126
Deaths .....	7,646

In all cases where rates are shown, such rates are based on a population of 1,002,000, this being the estimated population figure for 1953. 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 1948 to 1953:

Year	No. of Births	Birth Rate	No. of Marriages	Marriage Rate	No. of Deaths	Death Rate
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
1951 .....	27,003	28.70	9,305	9.90	7,167	7.60
1952 .....	29,105	30.00	9,514	9.80	7,345	7.60
1953 .....	31,376	31.30	10,126	10.10	7,646	7.60

The birth rate for 1953 is 31.3 as compared with 30.0 for 1952. The marriage rate for 1953 is 10.1 as compared with 9.8 for 1952. The death rate for 1953 is 7.6, the same rate as for the previous year.

The general death rate in Alberta at 7.6 per thousand can be considered good. There have, however, been some changes in the causes of death which call for thought. A study of the list of causes of death for 1953 shows that tuberculosis is no longer in the first ten causes of death. This disease is far from finished but one can now dream of its eventual elimination. In 1952 poliomyelitis first appeared among the first ten by taking tenth place with 79 deaths. In 1953 it has superseded tuberculosis, suicides and diabetes mellitus to reach seventh place with a total of 108 deaths.

The big three still retain their position with diseases of the heart, cancer and cerebral hemorrhage in first, second and third place. However, the death rate for these three is down slightly.

In maternal deaths (0.7) and infant deaths (30) Alberta has a better than average rate in Canada. However, better infant death rates exist in other countries to show that our job is incomplete.

More detailed information is available in the report of the Vital Statistics Division.

### General Health Conditions

For two years Alberta has failed to make a gain in the general death rate, the 1951, 1952 and 1953 rates being identical at 7.6 per thousand. With the increasing number of older people in Alberta, it is quite possible that we are reaching the stage where a continued drop in death rate cannot be achieved.

During 1952 and 1953 Alberta has had the two worst epidemics of poliomyelitis in its history. No explanation has been found for the occurrence of two major epidemic years in a row nor has any explanation been found for the unusual incidence of cases during November and December, 1953, and extending over into January and February of 1954. This high incidence of poliomyelitis has made it the major communicable disease in place of tuberculosis. It has replaced this disease as a cause of death and as a cause of permanent disability and has placed a heavy burden on the hospital services under The Poliomyelitis Act.

During the 1953 epidemic gamma globulin was used extensively

with rather indefinite results. The evidence in relation to this experiment was hard to get and even harder to evaluate. This general idea was experimented with in Alberta from 1928 to 1941. At that time blood was collected from persons who had recovered from poliomyelitis and the serum was supplied by the Provincial Laboratory for use with exposed children. The service was discontinued because it had been impossible to get information to prove that it was effectual. The dose used at that time was 15 c.c. serum in the earlier stages and 20 c.c. in the later period. This dose is considerably less than the amount of gamma globulin used in 1953 which was equivalent to a pint of whole blood. However, that point is offset to some extent when one considers that the serum in the earlier Alberta experiment was from persons who had recovered from polio, while the gamma globulin used recently was obtained from the general population.

Deaths due to accident has retained the fourth place among the causes of death in Alberta. This is much too high for a cause that is fundamentally preventable. Of a total of 667 accidental deaths, motor vehicles tops the list with 263.

#### Local Health Services

It is pleasing to see the continued expansion of Health Units throughout rural Alberta. During 1953 one new Health Unit was established, namely, the Barons-Eureka Health Unit at Coaldale. This brings the total of rural Health Units to 15 covering a population of about 410,118 people.

Further information can be found in the report of the division.

#### Federal Health Grants

The Federal Health Grants are now in their sixth year. An additional amount of money has been made available for a variety of public health purposes. This money can only be obtained through a "project" which must have the approval of federal authorities.

The official figure for the 1953/54 fiscal year are as follows and Alberta stands second in the use of these grants among the provinces of Canada.

Grant	Amount 1953/54	Projects Approved	
		Amount	Percentage
Crippled Children .....	\$ 36,073.00	\$ 36,073.00	100 %
Professional Training .....	36,073.00	32,079.71	88.9 %
Hospital Construction .....	766,575.00	742,975.26	96.9 %
Venereal Disease Control .....	36,073.00	36,073.00	100 %
Mental Health .....	424,804.00	424,345.51	99.8 %
Tuberculosis Control .....	252,439.00	252,439.00	100 %
General Public Health .....	535,000.00	525,086.32	98.1 %
Cancer Control .....	241,917.00	241,917.00	100 %
Laboratory and Radiological Services .....	291,000.00	.....	.....
Medical Rehabilitation .....	16,620.00	11,893.20	71.5 %
Child and Maternal Health .....	4,273.00	.....	.....
<b>TOTAL</b> .....	<b>\$2,640,847.00</b>	<b>\$2,302,882.00</b>	<b>87.2 %</b>

Detailed reports of the work of the various divisions of this department will be found in the reports of those divisions.

I would like to record here my appreciation of the co-operation received from the Directors of the various divisions of the Department and my sincere thanks for the excellent work done by the numerous employees.

Respectfully submitted,

A. SOMERVILLE, M.D., D.P.H.,  
Deputy Minister of Health.

## Communicable Diseases

C. E. ANDERSON, M.D., *Director*

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The work of the Division falls under two headings:

1. Communicable Disease Control.
2. Supervision of Health Units.

### 1. COMMUNICABLE DISEASES

It is the responsibility of this Division to supervise generally the control of communicable diseases throughout the Province. Direct control is by the Local Health Authorities in organized areas. In unorganized areas, the Division acts directly. The Cities of Edmonton, Calgary and Lethbridge have well organized Health Departments; two of the smaller cities—Red Deer and Medicine Hat—are serviced by the Health Units with these municipalities as contributing authorities. The Boards of the Health Units act as the local authority, and the Medical Officer of Health of the Health Unit as the Health Officer.

Ascertainment is the first step in control. Notification is required by every doctor treating a case listed in the schedule of communicable diseases. The notification is directed to the Local Health Authority where one exists; otherwise, directly to the Provincial Health Department. In theory this should work out well, but in practice it has many weaknesses. Many cases of communicable diseases, even the more serious ones, are "not-reported" either because of neglect by the doctor or because of misunderstanding between doctors where the case is referred. Used as a measure of incidence of disease, the figures obtained are of relative value and one can only infer from them that the incidences is rising or falling.

A return showing the number of cases of each disease notified is sent to the Dominion Government, to all principal local Health Authorities in the Province, and to neighbouring provinces and the nearby States of the United States. Similar returns are received. By this means, Health Departments can be kept aware of what is happening in adjacent areas. This information is of value in controlling infectious diseases in that trends may be forecast. The statistics are also of assistance in assessing the value of measures taken to control.

The Regulations for the control of Communicable Disease which were revised and rewritten were approved by Order-in-Council No. 534/53. These Regulations were published in booklet form and distributed to medical practitioners, health authorities and school districts. The Regulations were formulated with a view to improving ascertainment, and the list of notifiable disease was reduced. The Regulations pertaining to specific diseases were made to conform as far as is practical with those approved by the World Health Organization.

## DISTRIBUTION OF BIOLOGICAL PRODUCTS

The Communicable Disease Division is in charge of the distribution of vaccines and other material used for immunization.

Immunization is being carried out as a routine against Diphtheria, Whooping Cough, Small Pox and Tetanus. It is carried out to protect special groups at risk against Typhoid and Paratyphoid, Rocky Mountain Spotted Fever, Rabies and Measles. Immune Serum Globulin was given as an immunizing agent to immediate contacts of poliomyelitis. It is too early to definitely appraise the value of this procedure. The amount of Immune Serum Globulin sent to Health Officers, physicians, etc. during the year was 48,000 c.c.'s.

The cost of supplying biologicals during the year was in excess of last year. The total cost of the programme was \$95,598.21. The material is supplied by the Department at no cost to the recipients. It is distributed by the Provincial Laboratories and through about thirty local centres in the Province so that it is readily available

## POLIOMYELITIS

The greatest outbreak of poliomyelitis in the history of the Province occurred during 1953. In all there were reported 1,458 cases with 111 deaths. Up until 1953, the year 1952 was reported as the largest epidemic recorded in the Province with 774 cases and 81 deaths. The high incidence in 1953 was not expected, as it is unusual to have two epidemic years following each other. Eight cases were reported in January, three in February, eight in March, and one in April. This would seem to indicate the end of the 1952 epidemic.

As indicated in previous reports it would appear that a year from June to June would be a better recording year for poliomyelitis cycle than the calendar year. Four cases were reported in May, four in June, seventy-three cases were reported in July, indicating the beginning of another epidemic year. August followed with three hundred and thirty-four cases, and September was the peak month with four hundred and sixteen cases. A decline in incidence then occurred; there were two hundred and forty-one cases in October; two hundred and forty in November, and one hundred and twenty-five in December.

Of the three main cities, Edmonton was the most seriously affected; there were three hundred and twenty-two (322) reported cases with sixteen (16) deaths. The curve of weekly incidence showed an unusual and unexpected upswing in the first week of November. It was assumed from past experience that the peak had occurred in the week ending October 3rd with twenty cases reported for the week in Edmonton alone. By the end of October the weekly incidence was reduced by half. In the first week of November there were thirty-seven new cases and a further thirty-eight new cases in the second week. From the third week in November there was a decline and in the last week of the year no new cases were reported.

As one method of control, the Provincial Board of Health ordered the exclusion of all children of sixteen years and under from theatres, swimming pools and other public gatherings; the elementary, junior high and high schools were closed. These orders remained in force until September 14th, 1953.

Gamma Globulin was supplied free by the Department for the inoculation of intimate contacts. In all approximately 48,000 cc's were supplied. At the present time the efficacy of Gamma Globulin as an immunizing agent, has not been clearly established. The earlier it can be administered to the intimate contacts, the greater is the chance of inducing a protective effect. However, it usually happens that by the time the initial case in the family is diagnosed and isolated, the great majority of the contacts who are going to be infected have already become so and have progressed too far into their incubation period for Gamma Globulin to become effective. This time relationship is due to the fact that in most instances an individual is infectious for an indefinite period of several days prior to the appearance of any recognizable symptoms.

The Department purchased a total of thirty-seven respirators and three rocking beds. This equipment was available to any area in the Province when needed. The transportation of this equipment was assumed by the Department. Every case requiring a respirator was supplied.

In December a Committee was set up to study the epidemic with the object of studying the statistics and to obtain, if possible, information on the mode of spread, measures to be taken to combat future outbreaks; also a study of the effect, the usefulness or otherwise, of gamma globulin. This survey is under the direction of Dr. E. S. Orford Smith, and should be concluded by the middle of next year.

#### RABIES

There was gratifying progress made in the control of this disease in animals during the year 1953. In the Spring of the year the disease had spread as far south as the Lethbridge area, but due to the control measures adopted by the fall of the year the disease was localized in the Athabasca area, as approximately one-half of the reported cases in animals were from that area. There were some isolated cases reported from the Peace River area.

The educational programme carried out by the Department and other government agencies was most fruitful. People were made aware of the conditions and the measures to be taken for prevention in the event of being bitten or scratched by animals.

It is difficult to determine exactly how many persons were given the Pasteur treatment. There were 135 treatment packages sent out, but from the unused and partly used packages returned, it is estimated that approximately 82 full treatments were administered. Vaccine was sent out from this Division in every case where it was asked for or indicated. It frequently happened that the doctor in attendance, after examination decided to withhold treatment. It is extremely pleasing to report that no human cases of rabies have occurred.

#### DIPHTHERIA

(28 cases, 3 deaths)

There was an increase in the number of cases notified. However, the total number of cases was quite small and does not indicate a return to the incidence of former years. The immunization programme carried out throughout the Province and the examination and control of contacts as carried out by the local health agencies has, without doubt, contributed materially to the control of this



disease. It is of interest to note that in two of the fatal cases, toxoid had been offered but had been refused.

#### TYPHOID

(9 cases, 1 death)

There was considerable decrease in the number of cases notified. The number of cases of typhoid occurring is a good index of the sanitary conditions prevailing. As sanitation improves and more districts have the benefit of better water and sewerage facilities, we may look forward to the day when typhoid will be a rarity.

#### WHOOPIING COUGH

(1,085 cases, 15 deaths)

The incidence of whooping cough was slightly lower than last year. It is felt that the number of cases reported does not convey a true picture of the number of cases occurring. When more adequate health services are provided, there will doubtless be increased notification which will make it difficult to dissociate from increased incidence. The small number of deaths supports the impression that immunization greatly reduces the severity of the disease in those cases which fail to obtain complete protection.

#### SCARLET FEVER AND STREPTOCOCCAL SORE THROAT

(2,163 cases, 3 deaths)

There was considerable reduction in the number of cases reported. The cases reported, however, must represent only a small part of the cases occurring, especially of streptococcal sore throat with a rash. Modern methods of treatment have greatly modified the outlook in scarlet fever.

Table 1  
NUMBER OF CASES OF COMMUNICABLE DISEASES REPORTED IN THE YEARS  
1952 and 1953

	1952	1953		1952	1953
Acute Anterior Poliomyelitis	774	1,399	Rocky Mountain Spotted Fever	.....	.....
Chicken Pox	4,470	3,169	Rubella	1,017	4,165
Diphtheria	11	28	Scarlet Fever and Sptic	.....	.....
Dysentery	9	53	Throat	3,829	2,173
Food Poisoning	4	84	Smallpox	.....	.....
Glandular Fever	1	.....	Tetanus	.....	1
Infectious Hepatitis	58	117	Tuberculosis—Pulmonary	769	726
Leprosy	.....	1	Tuberculosis—Non-pulmonary	50	140
Malaria	5	.....	Tularaemia	.....	3
Measles	3,515	7,260	Typhoid Fever	16	9
Meningitis	9	13	Undulant Fever	2	2
Mumps	1,306	1,760	Whooping Cough	1,105	1,085
Paratyphoid Fever	7	8			

TABLE 2  
DEATHS ASCRIBED TO COMMUNICABLE DISEASES IN THE PROVINCE OF  
ALBERTA FOR THE YEAR 1952 and 1953

Name of Disease	1952		1953	
	Total Deaths	Rate Per 100,000 Population	Total Deaths	Rate Per 100,000 Population
Acute Anterior Poliomyelitis and Polio-encephalitis	81	8.3	109	10.9
Gastroenteritis and Colitis (except Diarrhoea of the Newborn)	77	7.9	47	4.6
Diphtheria	1	.1	3	0.3
Influenza	47	4.8	33	3.3
Measles	7	.72	8	0.8
Pneumonia	298	30.7	324	32.3
Scarlet Fever	2	.2	3	0.3
Small Pox	0	0.0	0	0.0
Tuberculosis (Pulmonary)	91	9.4	51	5.1
Tuberculosis (Other)	34	3.5	17	1.7
Typhoid	2	.2	1	0.1
Whooping Cough	8	.82	12	1.2
Meningococcal Meningitis	2	.2	13	1.3
Population of Alberta in 1952	970,000			
Population of Alberta in 1953	1,002,000			

TABLE 3  
CHICKEN POX

1952	SEX		MONTHS												AGES					TOTAL	
	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age Not Stated
			300	245	152	123	147	89	33	1	.....	.....	.....	.....	.....	.....	14	120	396		2
Edmonton	335	343	275	163	152	88	.....	.....	.....	.....	.....	.....	.....	.....	52	215	377	7	19	8	.....
Lethbridge	110	85	70	56	35	34	.....	.....	.....	.....	.....	.....	.....	.....	4	48	140	.....	2	1	.....
Urban	310	310	131	113	69	66	48	57	19	7	13	24	35	38	25	162	378	15	29	11	.....
Rural	587	544	209	270	262	109	89	77	30	9	5	33	9	29	38	197	812	35	22	27	.....
<b>TOTAL</b>	<b>1,642</b>	<b>1,527</b>	<b>837</b>	<b>725</b>	<b>665</b>	<b>386</b>	<b>170</b>	<b>135</b>	<b>49</b>	<b>16</b>	<b>18</b>	<b>57</b>	<b>44</b>	<b>67</b>	<b>133</b>	<b>742</b>	<b>2,103</b>	<b>59</b>	<b>81</b>	<b>51</b>	<b>51</b>

DIPHtheria

1952	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over	Age Not Stated	
Edmonton	1	5	.....	4	.....	.....	.....	1	.....	.....	.....	4	.....	4	1	4	6	.....	1	.....	.....
Urban	6	9	3	2	2	2	.....	1	.....	.....	1	1	1	2	2	3	7	.....	1	.....	.....
Rural	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>TOTAL</b>	<b>14</b>	<b>14</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>14</b>	<b>.....</b>	<b>2</b>	<b>2</b>	<b>2</b>

MEASLES

1952	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over	Age Not Stated	
Calgary	203	183	18	12	43	100	95	75	25	7	4	2	2	3	6	129	246	2	3	.....	.....
Edmonton	2,026	2,052	65	248	773	1,161	1,145	521	96	18	34	10	9	8	159	1,661	2,147	28	57	36	.....
Lethbridge	55	46	.....	.....	.....	15	24	38	19	2	2	.....	2	1	7	25	64	.....	3	2	.....
Urban	360	322	24	54	80	135	.....	115	34	43	28	7	12	150	27	207	383	35	21	9	.....
Rural	1,001	1,002	126	103	156	222	563	290	140	106	46	40	58	153	74	496	1,147	73	48	38	.....
<b>TOTAL</b>	<b>3,645</b>	<b>3,615</b>	<b>233</b>	<b>417</b>	<b>1,052</b>	<b>1,633</b>	<b>1,827</b>	<b>1,039</b>	<b>314</b>	<b>176</b>	<b>112</b>	<b>59</b>	<b>83</b>	<b>315</b>	<b>273</b>	<b>2,518</b>	<b>4,114</b>	<b>138</b>	<b>132</b>	<b>85</b>	<b>85</b>

TABLE 3—Continued

1952	SEX		MONTHS												AGES					TOTAL	
	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age Not Stated
Calgary	123	131	24	20	6	10	194								7	49	157	26	10	5	254
Edmonton	294	291	127	154	186	118									7	93	412	19	48	6	585
Lethbridge	14	17	5	7	7	17										5	24			1	31
Urban	164	142	10	21	25	90	50	70	17	2	7	5	3	6	2	35	200	34	32	3	306
Rural	325	259	88	76	50	99	111	64	26	13	8	29	5	15	2	70	336	42	74	60	584
TOTAL	920	840	254	271	274	334	355	136	43	15	15	34	8	21	18	252	1,129	121	165	75	1,760
RUBELLA																					
Calgary	117	133	2	5	20	32	54	118	6	1	5	1	3	3	1	22	214	5	8		250
Edmonton	903	1,125	131	296	425	401	374	293	54	20	4	9	14	7	42	312	1,355	164	145	10	2,028
Lethbridge	30	21	8	2	4	1	8	6	4	11	4	3			4	21	20	2	3	1	51
Urban	265	312	49	93	52	87	84	112	38	4	17	6	11	24	48	121	339	50	17	2	577
Rural	575	684	131	129	250	181	232	108	34	36	37	22	18	81	55	220	814	97	62	11	1,259
TOTAL	1,890	2,275	321	525	751	702	752	637	136	72	67	41	46	115	150	696	2,742	318	235	24	4,165
SCARLET FEVER																					
Calgary	162	145	59	34	51	24	37	17	3	2	4	9	22	45	1	74	214	9	9		307
Edmonton	314	326	157	136	87	68	32	50	24	10	16	20	9	31	1	197	376	20	43	3	640
Lethbridge	20	22	6	16	9	3	2	1	3							5	32	1	2	2	42
Urban	121	105	28	47	18	28	21	19	9	7	10	8	19	12		59	140	12	13	2	236
Rural	318	373	190	133	93	70	49	24	14	5	8	17	28	60	16	144	429	29	65	8	691
TOTAL	935	971	440	366	258	193	141	111	52	24	38	54	78	150	13	479	1,191	71	132	15	1,906

SEPTIC SORE THROAT

Edmonton	10	1	4	1	5	3	1	1	1	1	22	1	1	2	7	11
Urban	13	20	4	4	1	1	1	1	1	1	70	8	14	13	11	33
Rural	103	120	51	4	5	4	16	14	1	1	58	2	29	86	69	223
TOTAL	126	141	55	9	11	7	17	15	2	2	92	2	38	101	87	267

POLIOMYELITIS

Calgary	140	125	1	1	2	23	71	86	50	27	4	8	50	88	18	101	265
Edmonton	155	160	1	1	1	8	29	55	65	109	46	4	67	101	31	108	315
Lethbridge	28	28	1	1	1	4	16	13	18	18	4	1	7	23	11	14	56
Urban	187	164	2	2	3	10	88	117	55	45	30	8	67	103	35	127	351
Rural	226	186	6	1	5	30	79	124	81	46	36	6	84	130	52	133	412
TOTAL	736	663	10	1	7	75	283	395	269	227	120	27	275	445	147	483	1,399

TYPHOID FEVER

Calgary	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Urban	4	3	2	2	2	1	1	2	1	1	1	1	1	1	3	2	4
Rural	1	3	2	2	2	1	1	3	1	1	1	1	1	1	2	2	4
TOTAL	6	3	2	2	2	1	1	3	1	1	1	1	1	1	5	5	9

PARATYPHOID FEVER

Edmonton	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Lethbridge	3	2	1	1	1	1	1	3	1	1	1	1	1	1	2	2	5
Rural	4	4	1	1	1	1	1	3	1	1	1	2	2	2	2	2	8
TOTAL	8	7	3	3	3	3	3	5	3	3	3	4	4	4	5	5	15

WHOOPING COUGH

Calgary	13	10	3	2	6	8	2	3	1	3	2	3	10	10	1	6	23
Edmonton	107	162	2	19	14	14	34	49	31	21	10	47	115	100	1	6	269
Lethbridge	16	17	10	12	8	3	26	20	14	15	10	6	10	16	1	1	33
Urban	91	113	3	6	7	11	29	35	14	15	10	25	71	63	5	2	204
Rural	297	259	5	23	9	46	158	96	38	50	36	64	200	261	14	16	556
TOTAL	524	561	23	62	44	68	194	180	84	89	58	145	406	450	20	24	1,085

TABLE 3—Continued  
UNDULENT FEVER

1952	SEX		MONTHS												AGES					TOTAL	
	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age Not Stated
Rural	2							1	1											2	
MENINGITIS																					
Urban	2	4	1	2	1					1					1	2	3	1			
Rural	3	4		4	1					1		1				1	2				3
TOTAL	5	8	1	6	2					2		1			1	3	5	1			3
FOOD POISONING																					
Rural	57	22		84															72	12	
LEPROSY																					
Calgary	1																			1	
PULMONARY TUBERCULOSIS																					
Calgary	60	49	8	6	9	9	10	9	10	8	9	7	13	11			5	1	2	87	14
Edmonton	89	74	19	15	14	20	22	11	11	12	6	13	7	13			8	6	10	133	5
Lethbridge	9	10	1	4	1	2	4		1	1	3	2	1						1	16	2
Medicine Hat	7	4	1	1	2	1			2	1	1	1	1							6	2
Urban	63	75	16	12	9	6	6	11	9	19	14	13	12	13			11	8	8	103	8
Rural	150	136	16	14	12	28	26	27	20	20	27	34	29	33			13	39	17	198	18
TOTAL	378	348	61	50	47	66	68	58	53	60	60	69	63	71		2	37	55	40	543	49
TOTAL																					84

NON-PULMONARY TUBERCULOSIS

Calgary .....	7	6	2	1	1	1	1	2	2	2	3	1	1	1	1	1	1	1	10	3	13
Edmonton .....	9	11	2	4	1	1	1	2	2	2	4	1	1	1	1	1	1	1	16	1	20
Lethbridge .....	2	6	1	4	1	1	1	2	2	2	4	1	1	1	1	1	1	1	5	1	8
Medicine Hat .....	9	19	2	3	6	5	3	1	1	2	3	1	1	1	1	1	1	1	14	2	28
Urban .....	18	17	3	1	3	2	2	5	5	1	5	1	1	1	1	1	1	1	19	2	35
Rural .....			10	13	12	13	7	9	8	9	8	3	2	2	1	1	1	1	64	9	104
<b>TOTAL</b> .....	45	59	10	13	12	13	7	9	8	9	8	3	2	2	1	1	1	1	64	9	104

TABLE 4  
INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES FOR  
THE TEN YEAR PERIOD, 1943-1953

DIPHTHERIA				
Date	Population	Total Cases	Total Deaths	Mortality Rate
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	895,000	13	1	.1
1951	939,501	2	1	.1
1952	970,000	11	1	.1
1953	1,002,000	28	3	0.3

TYPHOID FEVER				
Date	Population	Total Cases	Total Deaths	Mortality Rate
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	0	0
1947	822,000	17	1	0.12
1948	846,000	13	0	0
1949	871,000	13	1	.11
1950	895,000	13	1	.1
1951	939,501	37	0	0
1952	970,000	16	2	.2
1953	1,002,000	9	1	0.1

ACUTE ANTERIOR POLIOMYELITIS				
Date	Population	Total Cases	Total Deaths	Mortality Rate
1943	792,000	24	0	0
1944	818,000	107	1	0.1
1945	826,000	19	0	0
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	895,000	143	7	.7
1951	939,501	84	2	.2
1952	970,000	774	81	8.1
1953	1,002,000	1,399	109	10.9

WHOOPIING COUGH				
Date	Population	Total Cases	Total Deaths	Mortality Rate
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	895,000	120	3	.3
1951	939,501	827	7	.7
1952	970,000	1,105	8	.8
1953	1,002,000	1,085	12	1.2

SCARLET FEVER				
Date	Population	Total Cases	Total Deaths	Mortality Rate
1943	792,000	1,675	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	0	0
1948	846,000	248	0	0
1949	871,000	865	0	0
1950	895,000	2,309	0	0
1951	939,501	2,304	6	.6
1952	970,000	*3,829	2	.2
1953	1,002,000	*2,173	3	0.3

\*Represents combined total of Scarlet Fever and Septic Sore throat.

SMALL POX				
Date	Population	Total Cases	Total Deaths	Mortality Rate
1943	792,000	2	0	0
1944	818,000	0	0	0
1945	826,000	0	0	0
1946	803,330	0	0	0
1947	822,000	0	0	0
1948	846,000	0	0	0
1949	871,000	0	0	0
1950	895,000	0	0	0
1951	939,501	0	0	0
1952	970,000	0	0	0
1953	1,002,000	0	0	0

## 2. HEALTH UNITS

This division supervises the work of the Health Units. Under the Public Health Act, Public Health is made the responsibility of local government agencies. However, outside the major cities, no local government authority in the Province is large enough to maintain its own Public Health Nurse. Grouping of local government agencies into health units makes it possible for the group to receive the benefit of a well organized service. The Provincial Government contributes 60% of an approved budget, the local contributing authorities contribute 40%. The district designated as a health unit is divided into wards, each ward is represented by one member from one of the contributing councils in the ward. This constitutes the board or governing body of the health unit. This organization brings an efficient public health service within the reach of everyone in the Province with the exception of those living in the most sparsely settled areas. It makes it possible for the residents of the area served to receive a service—the equal of the service they would enjoy in the major cities.

The services which are provided include the following:

1. The Control of Communicable Diseases,
2. Tuberculosis Control,
3. Sanitation,
4. Pre and Post Natal care,
5. School Health,
6. Mental Health,
7. Nutrition advice,
8. Health Education,
9. Dental Service for Children.

The Health Unit in addition, acts as the serum centre storing and distributing the sera and vaccines supplied by the Provincial Health Department.

The Units are staffed by a medical officer, nurses, sanitary inspectors and steno-technicians, the number employed depending on the population served.

The Medical Officer acts as director of the unit and usually as Medical Officer of Health for its contributing councils.

During the year, the Barons-Eureka Health Unit was established, making in all fifteen full-time Health Units in operation, viz:

Drumheller	Bow Valley
Foothills	Medicine Hat
Red Deer	Alberta East Central
Leduc-Strathcona	Athabasca
Minburn-Vermilion	Vegreville
Sturgeon	Grande Prairie
Stony Plain-Lac Ste. Anne	Barons-Eureka
Mountain View	

The staff position was good and at the end of the year there were very few staff vacancies. Collectively the units employ the following staff:

Medical Officers of Health .....	14
Public Health Nurses .....	59
Sanitary Inspectors .....	18
Stenographer-Technicians .....	18
Secretary-Treasurers .....	15



Dr. Norman Baster who was Director of the Division of Communicable Diseases and Health Units resigned in August of 1953. In November, Dr. C. E. Anderson was appointed as Acting Director. In September, Mrs. D. McPhail, who had been Assistant Director of the Municipal Nursing Services, was appointed as Nurse Consultant to the Health Unit Nurses and Assistant to the Director of the Division.

The Department of Public Health is organized into several divisions. The Division of Communicable Diseases and Health Units is responsible for the control and prevention of communicable diseases. The Division of Sanitation is responsible for the control of environmental health hazards. The Division of Vital Statistics is responsible for the collection and analysis of vital statistics. The Division of Health Services is responsible for the provision of health services to the community. The Division of Health Education is responsible for the promotion of health and the prevention of disease.

- The following are the names of the members of the Department of Public Health:
- 1. The Director of Communicable Diseases
  - 2. The Director of Sanitation
  - 3. The Director of Vital Statistics
  - 4. The Director of Health Services
  - 5. The Director of Health Education

The Department of Public Health is a key agency in the community health care system. It is responsible for the control and prevention of communicable diseases, the control of environmental health hazards, the collection and analysis of vital statistics, the provision of health services to the community, and the promotion of health and the prevention of disease.

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The staff complement was good and at the end of the year there were very few vacancies. The following table shows the staff complement at the end of the year:

14	Medical Officers of Health
23	Public Health Nurses
18	Sanitary Inspectors
18	Investigative Technicians
13	Administrative Staff

## Division of Entomology

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

The Division of Entomology deals with insect borne diseases, with particular attention being paid to Rocky Mountain Spotted Fever, Bubonic Plague, Tularaemia and Encephalitis.

Other insect problems, such as fly and mosquito control, insecticides, insect infestation in food-stuffs and insect pests of institutions, fall within the work of the Division. Furthermore, a considerable amount of time is devoted to determining the distribution of insects, ticks and mites that are involved in the transmission of human diseases.

### *Tick Survey.*

1. *Rocky Mountain Spotted Fever*—This is a seasonal disease occurring from April to September, but being most common during June and July. It is transmitted to man through the bite of an infected tick. The fatality rate in Alberta was 80% but this has been decreased somewhat by vaccination programs and the use of the newer antibiotics. In Alberta it is transmitted by the Spotted Fever Tick and the Rabbit Tick.

(a) *Cases*—One human case occurred west of Calgary during June, 1953. This case involved an 18 year old female. This girl gave a history of visiting an area where 3 collections of infected ticks were made in May of 1952. She responded to treatment.

(b) *Vaccinations*—The use of Rocky Mountain Spotted Fever vaccine as a protection against Spotted Fever is well-established in Alberta. It is given in three 1-cc doses one week apart and confers good protection for one year.

During 1953 a total of 2,240 doses were given. Of these 470 were given at Manyberries, 347 at Redcliff, 282 at Medicine Hat, 69 at Elkwater, and 1,072 at Ralston.

2. *Collections*—During 1953 a total of 1,828 ticks were collected. Of these 76 were taken from small wild animals and 1,752 were collected from grass by means of a cloth flag.

3. *Infected Ticks*—Twenty-five separate collections totalling 589 ticks were found to be infected. These were as follows:

Disease	Collections	Ticks	Place
R.M.S.F. ....	1	25	Milk River
Tularaemia .....	3	214	Foremost
Tularaemia .....	1	100	Nemiscam
Colorado Tick .....	20	250	Banff
Totals .....	25	589	

4. *Colorado Tick Fever*—The first record of Colorado Tick Fever in Canada was made in 1953 when 20 lots totalling 250 ticks collected at Banff on May 11, 1953, were found to be infected. The determination of the infection in the ticks was made by Dr. C. L. Larson, Director, Rocky Mountain Laboratory, Hamilton, Montana.

Colorado Tick Fever in man is caused by the bite of an infected tick. It is characterized by a very sudden onset of chills, headaches, and fever 4 to 5 days following the tick bite. It can be confused with dengue or influenza. Determination is made on the basis of complement-fixation tests using 8 to 10 cc. of blood.

At present there is no treatment other than supportative treatment in hospital.

5. *Tick Paralysis*—The first fatal case of Tick Paralysis in Alberta occurred at Edmonton, during April, 1953. It involved an 18 months old female. This child came with her parents to visit relatives in Smoky Lake from Vernon, British Columbia, where she presumably picked up the tick.

#### *Plague Survey.*

1. *Bubonic Plague*—Sylvatic or Bubonic Plague is a serious human disease. It is carried by rats, gophers and mice, and the fleas that infest such rodents. It is transmitted to man through handling plague infected animals and by the bite of infected fleas. Although no human cases have occurred in Alberta in recent years the presence of the disease in gophers and fleas constitutes a serious health hazard.

2. *Distribution*—Two very large areas of plague infection, one centering on Hanna and the other on Brooks, are present in Alberta. In both of these areas plague-infected gophers and plague-infected gopher fleas are present in large numbers.

3. *Animals Involved*—Most of the plague infection has been found in the prairie gopher as it is the most plentiful of the susceptible animals. However, there are indications that the "pallid vole" (a small field mouse) is also carrying the infection.

Up until 1950 rats were not present in Alberta. On July 18, 1950 the first colony in Alberta was found on a farm on Sec. 36, Twp. 26 Rg. 1, W. of the 4M., near Alsask. Since then there has been a steady infiltration and during 1953 rats were trapped on the eastern edge of plague area at Sibbald, Oyen and Cereal.

4. *Collections*—During the course of the Plague Survey 109 collections were made consisting of 538 animals, of which 248 were shot and 290 trapped. A total of 1,121 fleas and 364 tissue specimens, mostly from the prairie gopher, were recovered and submitted to the Laboratory for bacteriological examination. No positives were recovered.

5. *Fleas Involved*—It is now known that there are 14 species of fleas in Alberta that are capable of transmitting plague from infected animals to man. Fortunately most of these species are not very numerous, and in many cases their distribution is limited. However, their presence indicates that in the event of an outbreak of plague there are sufficient vectors present to build it up to epidemic proportions.

#### *Tularaemia.*

1. *The Disease in Man*—Tularaemia or, as it is frequently called Rabbit Fever, is an accidental infection of man and occurs through handling infected animals, by the bite of infected ticks and by the bite of infected deer flies. It is a serious disease and although the fatality rate is low the period of convalescence may extend over

several weeks. There is no vaccination against the disease but some of the newer antibiotics are fairly effective in treatment.

2. *Tularaemia in Nature*—Tularaemia infection in Alberta is known to be present in cats, fleas, deer flies, field mice, gophers, grouse, gulls, mice, mink, muskrats, rabbits, sheep, shunks, swine and ticks. One case of Tularaemia in man was traced to the contaminated water in a settling tank at the Canadian Pacific Railway roundhouse in Lethbridge.

3. *Collections*—During 1953 four collections of ticks, three made at Foremost and one at Nemiscam, were positive for tularaemia infection.

#### *Fly Control.*

1. *Lethbridge Fly Control District*—The fly control program was very successful, with the benefits being received by the towns, villages and dairy farmers participating far outweighing the actual cost. It is anticipated that the program will become an integral part of the basic sanitation program in that area.

2. *Camrose Fly Control*—During the summer the town of Camrose became interested in a Fly Control Program. In order to achieve maximum results in the short time available it was recommended that the whole town be "fogged" with an insecticide. A commercial pest control firm was engaged and, apparently, good results were obtained.

#### *Mosquito Control.*

1. *Edmonton*—At the request of the Edmonton Chamber of Commerce suggestions for a Mosquito Control Program in the City were prepared. These were approved by the Chamber and forwarded to the City. The City Commissioners placed the Control Program under the Parks Department for implementing.

2. *High River*—At the request of the Local Medical Officer of Health and the Executive of the Active Club suggestions for a Control Program were prepared. The Control Program is to go into effect in the Spring of 1954.

3. *In Irrigated Districts*—The great expansion of irrigation in Alberta has brought about a serious mosquito problem, because of the shallow pools created.

4. *Number of Species Present*—To date 31 species of mosquitoes are known to be present; six of these are potential transmitters of equine encephalomyelitis. Considerable effort is being devoted to determining the distribution of *Culex tarsalis*, which is of considerable importance in the transmission of encephalomyelitis.

#### *Encephalomyelitis.*

1. *The Disease*—Encephalomyelitis is a virus disease that affects both man and animals. The type that occurs in Alberta is known as the Western Encephalomyelitis. Intermittent outbreaks of this disease have occurred generally attacking horses, although a number of human beings were also affected. This disease belongs in a group referred to as Viral Encephalitides which have many similarities to Poliomyelitis.

2. *Distribution*—In Alberta indications of the virus infection have been demonstrated in such animals as horses, prairie gophers and small birds.

3. *Mosquitoes*—A number of species of mosquitoes have been shown to be capable of transmitting the virus. Six of these species are present in Alberta, with *Culex tarsalis* (which is a common mosquito), being the most important transmitting agent. The distribution of the mosquitoes involved is being determined.

*Laboratory Work.*

1. *Insect Collections*—Since moving into our new quarters in the Administration Building great progress has been made in arranging the collection of insects and ticks injurious to human health. This has been primarily due to the laboratory facilities that are now available.

2. *Insect Infestations in Foodstuffs*—The infestation of foodstuffs, particularly flour, rolled oats, dry cereals, raisins, currants, nuts, etc, with insects has become a serious problem and complaints are constantly received from purchasers of such infected materials. This is a Federal responsibility under The Food and Drug Act, so these problems are drawn to the attention of the Federal Authorities.

3. *Vaporizers*—Vaporizers are mechanical devices for releasing the fumes of DDT and other insecticides by means of electrical heating elements. They are recommended by manufacturers for use in restaurants, hotels, etc., as a means for control of pest insects. There is a considerable element of risk associated with the improper use of these devices as most of the insecticides are toxic to man. This Division has always maintained that vaporizers should only be used in places where they are properly installed and serviced. As no Provincial regulations exist in regard to their use representations were made to the Pesticide Division of the Department of National Health and Welfare for regulations.

*General*—The usual procedure of keeping the Provincial, City, Health Unit and Liquor Board Inspectors informed on the latest methods of control of pest insects was continued with gratifying results.

The usual Lectures to Medical Students, Public Health Nurses in training, and Undergraduates in Home Economics were given, and in some cases, expanded.

*Education Work.*

The usual educational work in regard to the control of insect-borne diseases was carried out by means of radio, motion pictures, newspapers and lectures.

During 1953 two papers were published. They are:

1. A Chicken Mite Infestation in a Hospital—by J. H. Brown, M.Sc., *Journal Economic Entomology*, 46 (5), p. 900, October, 1953.
2. The Division of Entomology—by J. H. Brown, B.Sc., M.Sc., F.A.P.H.A., *Alberta Medical Bulletin*, Vol 18, No. 1, p. 37 February, 1953.

## Division of Cancer Services

V. W. WRIGHT, M.D., *Director*

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The recent addition to the Edmonton Clinic has practically been completed and should be ready for occupancy about the end of January. This will provide suitable quarters for Dr. M. Marlborough, Head of the X-ray Department and Dr. John Hurley, in charge of diagnostic x-ray.

Certain x-ray machines presently located in the old part will have to be transferred and can be moved at the week-end without disruption of the Diagnostic and Therapy Treatment Service.

The X-ray Department will then have the following units:

1. a Picker Diagnostic Unit (500 M A).
2. a 140 KV Picker Superficial Therapy Unit.
3. a 260 KV Picker Intermediate Therapy Unit.
4. a 270 KV Picker Rotational Therapy Unit.
5. We expect to have installed a 60 Cobalt Rotational Therapy unit which has been ordered and which should arrive in the near future.

Radium with necessary accessories for intra-cavity treatment is in use and will be installed in the new building and radium in suitable form for interstitial treatment has been ordered.

Protection against X-rays for the Therapist and Trainees has been taken care of and monitor badges worn by each testify to the protection provided. This set up will provide the residents of the Province of Alberta with as adequate and as modern an X-ray Department as there is on the Continent of North America.

A certified Physicist will be employed as soon as the Cobalt 60 Machine is installed.

A Haematology Laboratory was put in operation on July 22nd, 1953 and to December 31st, 1953 performed 1,184 Blood Counts.

A start has been made towards providing Clinical Statistics. A copy of all deaths in the Province for 1953 has been made and checking against our Index Cards of patients is proceeding. This was found necessary as the Cause of Death of patients registered with us as proven cancer was in many cases shown as heart disease, pneumonia, etc. and would therefore not have been noted unless a check were made.

The International Code of Neoplasms has been set up in combination with our daily patient register and diagnosis entered on the Register as Pathological Reports were received. Files of patients which show malignancy are then drawn and entered on a card from which information will be punched on an International Business Machine Card. Statistics can then be obtained from machines presently in use at the statistical Branch of the Department of Health.

The Statistical report for 1953 is hereto appended:

I. Number of Examinations made Malignant and Benign ..... 10,827.

	New	Follow-up	Total
Edmonton .....	2,470	4,515	6,985
Calgary .....	1,327	1,644	2,971
Lethbridge .....	453	418	871
	<u>4,250</u>	<u>6,577</u>	<u>10,827</u>

It will be noted that the total number of examinations made in the Edmonton, Calgary and Lethbridge Clinics is 10,827 as compared with 9,291 in 1952 and 9,034 in 1951.

II. Number of examinations made where malignancy was proven ..... 6,175

New Reporting Malignant Examinations:			Total			
Edmonton	937	Calgary	361	Lethbridge	147	1,445
Review examinations of malignant cases:						
Edmonton	3,716	Calgary	508	Lethbridge	339	4,563
New non-reporting malignant cases:						
Edmonton		Calgary	134	Lethbridge	33	167
Total Malignant Case Examinations:						
Edmonton	4,653	Calgary	1,003	Lethbridge	519	6,175

III. Number of examinations made which proved to be non-malignant ..... 4,652

	Edmonton	Calgary	Lethbridge	Total
New reporting non-mal. exam. ....	1,533	701	220	2,454
Review non-mal. exam. ....	799	1,136	79	2,014
Examinations where diagnosis was not arrived at .....		131	53	184
Total non-mal. examinations .....	<u>2,332</u>	<u>1,968</u>	<u>352</u>	<u>4,652</u>

Following are set out the number of procedures authorized by the Clinics and paid for during the Calendar year 1953 (A number of procedures were authorized but not done for various reasons and a number were done but reports were not received during the calendar year 1953).

(A) The Total number of cases referred:

	For Hospital Services	For X-ray and Radium Treatment	For Diagnostic X-ray
Edmonton .....	1,470	630	1,966
Calgary .....	529	260	396
Lethbridge .....	221	121	284
Total .....	<u>2,220</u>	<u>1,011</u>	<u>2,646</u>

The Edmonton Clinic X-ray department made 2,274 X-ray examinations on 1,734 patients and 489 series of X-ray treatments for Cancer were given in the Clinic. This total does not include services performed by Dr. Marlborough, Director of the X-ray Department, with regard to Radium treatment with authorized gynecologists at the University of Alberta Hospital.

Sixty biopsies were done in the Clinic by Dr. Marlborough and Dr. Morrish.

CASES REFERRED

	Major Surgery	Exploratory Laparotomy	Breast Biopsies	Other Biopsies
Edmonton .....	541	126	233	387
Calgary .....	244	42	146	203
Lethbridge .....	65	21	46	99
TOTAL .....	<u>850</u>	<u>189</u>	<u>425</u>	<u>689</u>

	Diagnostic Curettings	Encephalo- grams, etc.	Bronch- oscopy and Oesopha- gосcopy	Sigmoid- oscopy
Edmonton .....	250	21	87	118
Calgary .....	20	0	21	3
Lethbridge .....	43	0	5	13
<b>TOTAL</b> .....	<b>313</b>	<b>21</b>	<b>113</b>	<b>134</b>

	Cystoscopy	Diagnostic Consulta- tions	Laboratory Tests	Other X-ray Examinations
Edmonton .....	149	115	1,370	1,966
Calgary .....	47	11	*	374
Lethbridge .....	22	2	7	173
<b>TOTAL</b> .....	<b>218</b>	<b>128</b>	<b>1,377</b>	<b>2,513</b>

Since the opening of the Clinics in 1941 the total number of examinations made is 71,937.



## Division of Public Health Education

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

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Seeing and hearing, looking and listening are major ways and means by which human beings learn. Aimed at broader opportunity for learning and more effectiveness in learning, many media have been developed and are widely used in all quarters of the world.

Audio-visual materials related to health should be recognized as aids or as some ways and means of realizing the objectives or goals of an educational program. Audio-visual materials are not ends in and of themselves but rather tools of learning and teaching. Since they are tools, these materials must be utilized within and along with the pattern of the health instructional programme.

### Tours

A variety of public health talks ranging in subject matter from the organization of health units to work shop lectures were presented this year. Citizens of the province interested in health unit service received help in understanding the program of local health administration. As a result of these discussions and other factors one new health unit was established and new areas incorporated into existing units.

To present health education media and explain their use to new nurses in municipal districts and health units and also to maintain the interest of nurses in service a tour was made of twelve municipal nursing centres and two health units. An increase in the use of films and health education literature was the result of this orientation. Nurses and medical officers of health were most receptive to suggestions for further applications of educational methods in their respective fields of work.

Public meetings were addressed by the health educator upon request from municipal nurses and medical officers in health units. Subjects included services of the Department in general and specifically Alberta's Hospitalization Program and the Health Unit Organization. The nutritionist of the Department of Health often spoke on phases of her work on joint programs with the health educator.

Conferences of nurses and sanitary inspectors held in Edmonton, were attended. At the former, a special film "Our School Children's Health" was presented to point out an important phase of the workshop on health education. The sanitary inspectors requested a workshop on film utilization to enable them to use audio-visual equipment to the best advantage. Classes of twenty-five and thirty-five members respectively attended these workshops.

There are still a large number of one-room schools in Alberta. Most of these seldom have an opportunity to receive health education supplemented by a film. It has been the phase of the program of this division to bring to some of these isolated points health films approved by both the departments of education and health. Requests are received from teachers and nurses for this type of teach-

ing service. In preparing an itinerary for an area our objective is to contact as many adults as possible in addition to the school children. This is made possible through public meetings usually arranged by one of our public health nurses.

Teachers and pupils participate in each program which consists of a lesson taught by the health educator or nutritionist based on the curriculum and related to the film to be presented. Following the screening of the film a discussion is held based on the work covered by the lesson and film. Suggestions are given for follow-up activities which will provide material to be used in the learning process. Teachers and nurses will take advantage of this opportunity to receive help from the program, give suggestions to the educators and assist in the development of the child's health education.

A number of schools were visited during the year. Programs presented included lessons on services of the Department of Public Health, Communicable Diseases, Immunization, Dental Health, Nutrition, Sanitation, Pasteurization and Safety.

Public meetings were held at various points in the province as the need was indicated through requests from nurses, health units, organizations and other individuals.

### Films

Use of films and filmstrips from the Health Education Film Library increased 75 percent during the year. There were 1,552 bookings of films and filmstrips for approximately 3,100 screenings to a total reported audience in excess of 110,000 persons.

Bookings were for 60 filmstrips, 71 silent films and 1,421 sound films. These were in addition to 154 bookings of films from the pool reserved for use by schools of nursing.

About 55 per cent of the bookings were for classroom use in schools, 10 per cent for professional groups, doctors, nurses, sanitary inspectors, druggists or teachers. The remainder were booked for community groups such as Home and School Associations, church organizations, Women's Institutes and general public meetings.

Many of the latter bookings were arranged through the Health Units or Municipal Nurses. For many of these meetings the Division supplied source material for speakers, in addition to the films.

Local sanitary inspectors have reported on the value of films in promoting interest in community sanitation programs and projects. The Edmonton Board of Health during the year used films in educational work among food handlers and restaurant help.

Staff members of the Edmonton Guidance Clinic have given their time in the evenings to present mental health films to Home and School Associations. Staff of the Calgary Guidance Clinic have utilized these films in group work in the clinic as well as for showings to other groups being addressed by staff members.

Many of the bookings were for films to assist in professional training of various groups in public health work. These included provision by the Division of Health Education of a number of films on first aid and obstetrics for a group of R.C.M.P. constables going to isolated postings in the North-West territories. These films

provided them with some preparation for unexpected emergencies they might have to meet without benefit of medical or nursing aid.

To meet the needs of this growing program 28 new sound films, one silent film and 41 filmstrips were added to the library during the year. Additional copies of a number already in the catalogue were secured to provide for heavier demands or replace worn out films. Titles now in the library number 224 sound films, 35 silent films and 118 filmstrips.

### **Radio**

The cooperation of eleven Alberta radio stations was secured by the Division in dissemination of facts about the various divisions of the Department and general health information. A series of brief, factual "spot" announcements regarding the work of the Alberta Department of Public Health have been prepared by the division and are broadcast by the eleven stations. The announcements are aired at different times on the stations when convenient in their programs.

A weekly health program sponsored by the Department of Public Health through an arrangement made by the Division is presented every week over CKUA. Discs for the programs are obtained in sets by the Division and supplied to CKUA.

### **Publications**

The booklet ALBERTA'S HOSPITALIZATION PROGRAM, to inform residents of the Province of the hospital services available to them and explaining in detail how they are obtained, was prepared and 10,000 copies were printed. More than 6,000 copies have been distributed to municipal officials, Health unit boards and officials and hospital boards, newspaper editors, doctors, executives of community organizations such as Home and School Associations and Women's Institutes and the general public. Considerable appreciation has been received from those receiving the booklet for the clarity and brevity of its information.

Minor revisions were made in the booklet YOUR HEALTH SERVICES and 3,000 copies were printed and distributed. A further revision covering the changes in services available for poliomyelitis patients was made in December and an additional 3,000 copies are being printed which will largely be used up by unfilled orders.

A new catalogue for this division entitled HEALTH EDUCATION SERVICES and describing and listing the films, filmstrips, literature, displays and services available from the division, was completed early in the year and 3,000 copies were printed. The catalogue binding was designed to allow new pages listing additional material, to be inserted as they are released to those using the catalogue.

The two booklets MENTAL HEALTH SERVICES, outlining the work of the Mental Health Division, and YOUR HEALTH UNIT, describing Alberta's Health Units, were revised and new editions printed during the year. A revised edition of the mimeographed publication ORGANIZATION AND SERVICES, ALBERTA DEPARTMENT OF PUBLIC HEALTH, was also prepared and published by the Division. It has been distributed to health

workers, professional groups and students and teachers of public health.

A bright poster on spring clean-up to promote local clean-up campaigns, was prepared and printed by the division. It was widely used by local Boards of Health and Health Units' sanitary inspectors.

New versions of the four pamphlets CHICKEN POX, MEASLES, SCARLET FEVER and TYPHOID PARATYPHOID, DYSENTERY and FOOD INFECTION were prepared and printed. New versions of pamphlets on several other communicable diseases have been prepared and will be printed in the near future.

A monthly mimeographed publication HEALTH EDUCATION NOTES, was prepared and published by the division and distributed to the staff of the department and other public health workers in the province.

### Exhibits and Displays

General supervision of arrangements for and planning of the exhibits of the Department of Public Health at the Edmonton Exhibition in July, 1953 and especially preparation of the Health Education exhibit was the principal display activity of the division during the year.

All divisions of the department except one were represented at the exhibition, most of them with new displays and material. As far as possible all exhibits pointed to the common theme of the need of public cooperation with the program of the Department of Public Health. The Division of Communicable Diseases and Health Units was represented by an excellent exhibit placed by the Stony Plain Health Unit.

Attractiveness of the exhibits was augmented by the continuation of alterations and improvements that had been started the previous year in the Health Exhibits building. These included paintings, changes in the floor plan to allow easier movement of spectators to all exhibits and erection of more picket fences.

The exhibit drew a gratifying response from the public which, added to the interest accumulated from previous years, resulted in a record attendance for the six days. From sample counts made daily it is estimated that more than 20,000 persons visited the exhibits.

Assistance was given to Health Units in planning displays at local exhibitions in Camrose, Stettler, Vegreville, Athabasca, Grande Prairie and Westlock. Material and equipment was loaned by the Division for these displays. Theme of the displays was the work of the Health Units in their communities and in each case the work of the Department of Public Health and its relationship to the Health Unit was tied in to the exhibit.

Several of these exhibits featured the filmstrip HEALTH OF THE PEOPLE dealing with the work of the department. It was shown on an automatic projector on the projectograph with an explanatory comment offered by the attendants at the exhibits.

Exhibits were also arranged by the Division at a number of gatherings and conventions during the year. These included the annual meeting of the Alberta Home and School Associations where

our display featured literature and program planning help available from the division.

At the annual meeting of the Alberta division of the Canadian Medical Association a display representing the Department of Public Health was arranged and a representative of the division was in attendance for five days. More than 400 doctors viewed the exhibit and 127 stopped to discuss the exhibit, ask questions about the Department and leave requests for specific material.

Exhibits demonstrating the use of health education materials and resources in community work were shown at the previously mentioned conferences for the Sanitary Inspectors and Municipal Nurses.

As a result of these exhibits and activity following them, closer liason has been established between the Division of Health Education and the medical profession and the Home and School Associations in Alberta. Through the courtesy of the Alberta C.M.A. office, an informative letter and several booklets including ALBERTA'S HOSPITALIZATION PROGRAM were mailed to every doctor in the province. Many doctors have received other material directly from the division for distribution to their patients.

The central office of the Alberta Home and School Association also handled a similar mailing of letters and booklets to its 500 members associations in the province and an increasing number of these groups are using our films, materials and program help.

#### **Health Literature**

More than 196,000 pieces of health literature and 6,600 posters were distributed by the Division during the year. By subject matter the largest distribution was in the field of child health and welfare and child training to the number of 95,000 booklets and pamphlets. In the field of maternal health and welfare 12,000 booklets were distributed. Approximately 22,000 booklets and pamphlets dealing with services and work of the Department of Public Health were distributed including about 6,000 copies of the booklet Alberta's Hospitalization Program.

A consistent effort has been made to direct this material to readers who would have an immediate interest and use for it. A large proportion is passed out through physicians, nurses and other public health workers dealing with personal queries on specific subjects. Other methods have been worked out such as having local Home and School Associations in the summer distribute the leaflet PREPARING YOUR CHILD FOR SCHOOL to parents of children starting school in the fall.

## Nutrition Services

ELVA M. PERDUE. B.Sc. (H.Ec.)

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During the year, Nutrition Services has endeavoured to meet the request from health units, municipal nurses, city health departments, municipal hospitals, and individuals. This office has not been able to respond to all the requests for assistance with programs; however a greater total volume of work than in the past was accomplished due to better organization and enlarged facilities.

### *Work with Nurses.*

The staff education program for the public health nurses was continued during the field visits of the nutritionist. The topics discussed varied with the nurses and the locale and included, in part: a review of the basic information about nutrition; the effect of food habits upon nutrition practices in Alberta; nutrition for children; adequate diets for families with low incomes; special dietary problems such as diabetes; obesity and underweight. During the year twenty-four public health nurses were visited.

In March, 1953 the nutritionist assisted at a workshop for the school nurses in Calgary. The subject of the workshop was "Allergies". In April, the nutritionist participated in a workshop designed for the municipal nurses on the subject School Health Services at which she conducted the section dealing with school lunch programs. The feeling of the nurses was that they should concentrate their efforts on educating the parents and children to bring a good lunch from home, rather than promote a lunch program where the meal or part of it is prepared at school.

Nutrition Services received and answered written inquiries from public health, industrial and hospital nurses on various phases of nutrition. These included: sources of materials, food fads and fallacies, budgets, and the relative cost of cod liver oil preparations.

The mimeographed leaflet entitled "Nutrition News" continued to be distributed to the public health and industrial nurses to keep them posted in the trends of the science of Nutrition. The topics included: school lunches, vitamin D and extracts from current journals.

Time was devoted to professional training—lecturing and the supplying of teaching aids—in cooperation with the University of Alberta and the training schools for nurses.

### *Clinics.*

During scheduled field visits the services of the nutritionist were available to the well-baby and pre-school clinics sponsored by the health units and municipal nurses. Group discussions and individual conferences with parents were held at these clinics. Other people were referred in person and by letter to the nutritionist from the health unit doctor or nurse.

*Work with Teacher.*

Instruction in nutrition and special assistance to teachers has been continued in the province during the school year. Teachers have requested specific help in classroom teaching and have included planned nutrition teaching with the children as part of their health program. The teachers have requested and received nutrition pamphlets and posters.

*Assistance to Institutions.*

The Dietary Consultant service to small hospitals which was begun in 1949 has continued to be well received. It has included assistance with therapeutic diets; providing menu guides and quantity recipes; the preparation and distribution of the monthly mimeographed release entitled, "Institutional Supper Menus". At the request of the Department of Welfare, the names of institutions under their jurisdiction were added to the mailing lists for Institutional Supper Menus.

The nutritionist assisted two hospitals in obtaining the services of qualified dietitians to lecture to the student nurses and to manage the dietary departments.

*Special Activities.*

The work with lay groups in the various communities has continued, as in the past. This has included study groups composed of parents, industrial workers, Home and School Associations, Women's Institutes and others. The energies of the nutritionist have also been directed to furthering work with teen age groups (e.g. Girl Guides and Church Groups).

The nutritionist worked with two industrial nurses in planning and preparing food guides for working girls and family groups in their organizations.

Nutrition Services prepared mimeographed materials for use in special programs planned by the nurses (e.g. pre-natal leaflet). In addition materials prepared in previous years were revised and mimeographed for distribution.

*Summer Projects.*

Nutrition exhibits were planned for the Edmonton Exhibition and for some of the class B fairs.

Pre-planning for food service at summer camps and assistance to food service personnel throughout the camping period was given. Educational materials about food as it is related to health were made available to the camp leaders during the camping period.

In March the nutritionist attended the meeting of the Dominion Provincial Nutrition Committee in Ottawa.

## Division of Municipal Nursing

MARGUERITE M. MACALISTER, P.H.N., *Director*

The year 1953 has been a very busy one for the Nursing Division. There were a total of thirty-four (34) Municipal Nursing Services open, twenty-seven (27) in Local Improvement Districts and six (6) full time and one part time in organized Municipalities; and one (1) One Nurse Health Unit. A new Municipal Nursing Service was opened at Tomahawk in the Municipal District of Stony Plain in December.

In September Mrs. Dorothy K. McPhail, Assistant Director was transferred to the Division of Communicable Disease and Health Units, and a replacement was not made in the Nursing Division.

During the year there were four (4) permanent appointments and thirteen (13) new appointments. There were eleven (11) resignations from the staff, three (3) to take other employment and eight (8) nurses married; five (5) of these eight (8) nurses were temporary employees. Three nurses transferred from Municipal Nursing, two to Health Units and one to the Ponoka Mental Hospital. Mrs. Johnson of Tangent had four months' leave of absence to take the Advanced Course in Practical Obstetrics and Miss Gibson of Warner took leave of absence in September to take the course in Public Health Nursing

Municipal Nursing Services in Local Improvement Districts are as follows:

Alder Flats	Hines Creek	Sunnynook
Blueberry Mountain	Kinuso	Tangent
Bonanza	Lindale	Valleyview
Breton	Lomond	Vauxhall
Breynat	New Brigden	Wanham
Dixonville	Peers	Whitecourt
Fawcett	Plamondon	Winfield
Fort Assiniboine	Slave Lake	Worsley
Hilda	Smith	Youngstown

Municipal Nursing Services in Municipal Districts are as follows:

- Foremost in M.D. of Burlington No. 2.
- Grassland in M.D. of Athabasca No. 103.
- Milk River in M.D. of Warner No. 4.
- Warner in M.D. of Warner No. 4.
- Tulliby Lake in M.D. of Vermilion River No. 71.
- Tomahawk in M. D. of Stony Plain No. 84.
- Whitemud Creek in M.D. of Smoky River No. 130 (part time service).

Regular Clinics in connection with the above centres are as follows:

Alder Flats	—Buck Lake
Bonanza	—Bay Tree and Cherry Point
Fawcett	—Flatbush and Jarvie



Foremost	—Etzikom, Hoping School, Orion, Manyberries and Lucky Strike
Fort Assiniboine	—Timeu and Doris
Hilda	—Schuler
Kinuso	—Faust
Lea Park	—Fish Lake
Milk River	—Coutts
New Brigden	—Esther, Compeer, Sibbald, Consort, Bodo, Altario, Kirriemuir, Sedalia, Naco, Farming Valley, Lanfine
Peers	—Haddock and Shining Bank
Slave Lake	—Canyon Creek and Widewater
Smith	—Chisholm
Sunnynook	—Iddesleigh, Cessford, Sheerness, Craigmyle, Scapa, Elmer School, Hand Hills, Jenner
Tangent	—Eaglesham and Watino
Vauxhall	—Hays
Wanham	—Belloy
Warner	—Wrentham
Whitecourt	—Blue Ridge
Youngstown	—Hemaruka, Veteran, Chinook

See Appendix No. I and II for Statistics.

The One-Nurse Health Unit or nurses serving School Divisions were located at:

Wainwright Health Unit at Wainwright.

MacLeod-Pincher Creek Health Unit at Granum.

The Wainwright Unit was included in the Minburn-Vermilion Health Unit as of September 1st.

A new car was purchased by the School Division for the MacLeod-Pincher Creek Nursing Service in December. There are two nurses serving this unit and it has been fully staffed since June 1st when Miss E. McLean was appointed.

(See appendix No. 3 for Statistics)

The increase of population in the Province is being felt in the outlying district and the Municipal nurses load, with regard to Public Health Service, is continually increasing. The statistics of work accomplished as shown in the appendix is the smallest part of the work. The thorough care and the time and energy and patience consumed with the many problems and consultations, often with regard to social and welfare situations, are not shown by simple numbers. Many welfare cases were brought to the attention of the nurse in her Public Health work and these cannot be disregarded, as the R.C.M.P. who act as welfare officers are also limited in the amount of attention they can provide.

#### *Staff Education.*

All of the nurses were in Edmonton for three days following Easter week-end for the Spring Conference. A workshop was held the first two days, the theme of which was "The Improvement of the School Health Program in Alberta." Miss R. Chittick, Associate Professor, Faculty of Education, University of Alberta, Calgary Branch, was guest speaker and consultant. The final day included

a speaker on New Drugs and use of Penicillin, and a discussion period of general problems.

The News Letter was issued quarterly to all staff members with general information on newer trends in nursing applicable to the Municipal Nursing program.

New staff members were given a few days orientation in the Nursing Office and observed clinics and school health programs conducted by other health agencies. They also spent a few days in a district with a senior nurse before proceeding to an appointed centre.

Reports are submitted at the end of each month through which a certain amount of assistance can be directed to the nurse regarding the service. Correspondence is heavy when less than one field trip is made a year.

#### *Supervision.*

Twenty-five districts were visited by the office staff of the Nursing Division. Many problems which the nurse had encountered in the course of duty were discussed and a brief inspection given of the service rendered. In each district visited the Nurses' Home Committee had a meeting in order that their problems and responsibilities could be discussed.

#### *Miscellaneous.*

A four-hour evening course was given at the University of Alberta on "Nursing Care of Patients with "Polio" which was attended by the Director. Mimeographed lectures regarding the above were provided to us by the Nurse Consultant of Civil Defence which were distributed to all Municipal Nurses.

The Annual Meeting of the A.A.R.N. and A.P.H.A. was attended by the Director.

Lectures given by the office staff were as follows:

- 1 lecture to 30 Public Health Nursing students on "Prematurity and care of Premature Babies."
- 1 lecture to 30 Public Health Nursing students on "Nursing care of Radiation sickness."
- 1 lecture to 30 Public Health Nursing students on "Municipal nursing."
- 1 lecture to third year medical students on "Municipal and Public Health Nursing in Alberta".
- 1 summary and discussion to Officers of Health in Alberta on the workshop of "Improvement of School Health".
- 6 lectures at High School Careers Night on "Nursing".

The film "District Nurse" was used in each instance when speaking on Municipal Nursing. A new leaflet "Municipal Nursing" was released in November describing the organization and service offered.

## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 1

REPORT OF MUNICIPAL NURSING CENTRES  
(Exclusive of work done in schools)

No. Treatment Consultations .....	37,986	Total
No. Treatment Consultations Postpartum .....	927	
No. Miscellaneous P.H. Consultations .....	12,373	
No. Antepartum Consultations .....	1,733	
No. Infant and Pre-School Consultations .....	8,068	
No. Treatment Home Visits .....	7,452	
No. Miscellaneous P.H. Home Visits .....	2,379	
No. Communicable Disease Home Visits .....	1,859	
No. Maternal Welfare Home Visits .....	634	
No. Infant and Pre-School P.H. Home Visits .....	1,369	
No. Deliveries .....	72	
No. Abortions .....	45	
No. Cases sent to doctor or hospital .....	2,172	
No. Deaths under 1 year .....	6	
No. Deaths over 1 year .....	33	
No. Cases of Communicable Diseases Reported .....	2,169	
No. Pieces P.H. Literature Distributed .....	5,491	
Fees Collected .....	\$24,379.09	
Municipal District .....	3,585.33	
	<hr/>	
	\$27,964.42	
 IMMUNIZATION WORK DONE AT OFFICE OR CLINICS:		
No. Immune Serum Globulin for Measles .....	116	
No. Immune Serum Globulin for Mumps .....	86	
No. Immune Serum Globulin for Poliomyelitis .....	78	
No. Staphylococcus Toxoid (Doses) .....	21	
No. Rabies Vaccine (Doses) .....	10	
No. Diphtheria Toxoid (Doses) .....	7,117	
No. Pertussis Vaccine (Doses) .....	6,394	
No. Tetanus Toxoid (Doses) .....	5,559	
No. Smallpox Vaccine .....	1,885	
No. Typhoid Fever Vaccine (Doses) .....	58	
No. Patch Tests .....	153	
Old Tuberculin Tests .....	30	
<b>TOTAL</b> .....	<b>21,499</b>	
 MISCELLANEOUS:		
No. Lectures to Organizations .....	86	
No. Films shown .....	21	
No. Generalized Clinics .....	217	
No. Child Welfare Clinics .....	125	
No. Classes Home Nursing .....	24	
No. Classes First Aid .....	8	
Other Groups .....	38	
Old Age Pensioners—Home Visits (treated free) .....	539	
Old Age Pensioners—Office Calls .....	284	
Swimming Classes twice a week.		
4 Mental Hygiene Plays.		
1 trip Drumheller Hospital suspected Rabies.		
4 T.B. Cases sent to Sanatorium.		
1 pre-natal Class.		
1 Class Civil Defence.		
72 Welfare Cases.		
234 V.D. Cases.		
4H Club—Girl Guides, Scout Troops, Cubs, C.G.I.T. organized in one district.		

TABLE No. 2  
SCHOOL HEALTH PROGRAMME

1. No. of Visits to Schools .....	464
2. No. of Students Inspected .....	6,707
3. No. with Suspected Defects .....	3,872
(a) Defective Vision .....	700
(b) Defective Hearing .....	164
(c) Diseased Tonsils .....	1,869
(d) Unsound Teeth .....	2,742
(e) Eye Diseases .....	89
(f) Ear Diseases .....	102
(g) Enlarged Cervical Glands .....	471
(h) Enlarged Thyroid Glands .....	45
(i) Malnutrition .....	260
(j) Nervous Disorders .....	160
(k) Faulty Posture .....	288
(l) Orthopaedic Defects .....	13
(m) Ringworm .....	19
(n) Impetigo .....	82
(o) Scabies .....	49
(p) Pediculosis .....	61
(q) Other Skin Conditions .....	154
(r) No. exclusion, Suspected Communicable Disease .....	293
4. No. Correction of Defects .....	1,004
5. Classroom Talks .....	198
6. Sanitary Inspection of Schools .....	422
7. No. Consultations with Teachers .....	594
8. No. Consultations with Parents .....	614
9. No. School follow-up Home Visits .....	330
10. No. Pre-School Children seen at School .....	24

## IMMUNIZATIONS:

1. Total No. of Doses of the following:	
(a) Diphtheria Toxoid .....	2,083
(b) Tetanus .....	937
(c) Smallpox Vaccine .....	818
(d) Whooping Cough Vaccine .....	1,461
(e) Typhoid Fever Vaccine .....	6
2. Mantoux Tests and Patch Tests .....	113

TABLE No. 3

SCHOOL HEALTH PROGRAMME:	Macleod- Pincher Creek	Wainwright	TOTAL
1. No. of Visits to Schools .....	198	34	232
2. No. of Students Inspected .....	694	376	2,076
3. No. with Suspected Defects .....	718	115	833
(a) Defective Vision .....	238	26	264
(b) Defective Hearing .....	44	.....	44
(c) Diseased Tonsils .....	205	40	245
(d) Unsound Teeth .....	578	60	638
(e) Eye Diseases .....	22	1	23
(f) Ear Diseases .....	.....	.....	.....
(g) Enlarged Cervical Glands .....	111	20	131
(h) Enlarged Thyroid Glands .....	19	.....	19
(i) Malnutrition .....	70	2	72
(j) Nervous Disorders .....	22	9	31
(k) Faulty Posture .....	85	6	91
(l) Orthopaedic Defects .....	24	.....	24
(m) Ringworm .....	7	.....	7
(n) Impetigo .....	5	1	6
(o) Scabies .....	16	.....	16
(p) Pediculosis .....	.....	2	2
(q) Other Skin Conditions .....	.....	3	3
4. No. Correction of Defects .....	212	11	223
5. Classroom Talks .....	24	13	37
6. Sanitary Inspection of Schools .....	51	20	71
7. No. Consultations with Teachers .....	212	29	241
8. No. Consultations with Parents .....	74	9	83
9. No. School follow-up Home Visits .....	181	21	202
10. No. Pre-school children seen at school .....	15	.....	15

CLINICS:	Macleod- Pincher Creek	Wainwright	TOTAL
1. Child Welfare Clinics held .....	75	19	94
Attendance: (a) Infants .....	891	240	1,080
(b) Pre-schools .....	555	166	721
2. Pre-natal Home Visits .....	19	1	20
3. Infant Welfare Visits .....	51	.....	51
4. Pre-school Home Visits .....	89	.....	89
5. Tuberculosis Home Visits .....	184	14	198
6. Mental Hygiene Home Visits .....	26	3	29

## IMMUNIZATIONS:

1. Total No. of Doses of the following:			
(a) Diphtheria and Tetanus .....	57		57
(b) Diphtheria Toxoid .....	12	58	70
(c) Smallpox Vaccine .....	217	70	287
(d) Scarlet Fever Toxin .....		3	3
(e) Diphtheria and Tetanus and Pertussis .....	724	40	764
(f) Whooping Cough Vaccine and Diphtheria Toxoid .....	155	233	388
2. Mantoux Tests and Patch Tests .....	23	15	43

## COMMUNICABLE DISEASE CONTROL:

1. Visits to Cases, Contacts and Suspects	397	24	421
2. No. cases Quarantined or Isolated .....	414	60	474
(a) Scarlet Fever .....	109	10	119
(b) Measles .....	97	26	113
(c) Chickenpox .....	24	5	29
(d) Mumps .....	100	6	106
(e) Whooping Cough .....	19	2	21
(f) Rubella .....	1	4	5
3. Contacts Isolated .....		7	7

## HEALTH EDUCATION:

1. Interviews .....	782	3	785
2. No. of Lectures .....	5	3	8
3. Literature Distributed (approx.) .....	359		359
4. Films shown .....	5		5
5. Newspaper Publicity .....	80		80
6. School Health Paper Published .....	851		851

## Division of Social Hygiene

P. L. RENTIERS, M.D., *Director*

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This Division has completed another very active year of operation. Our three full time clinics in Edmonton, Calgary, and Lethbridge, have all shown a greater patient attendance during the past year, although there has been no significant change in rate of any of the venereal disease entities. The heavier patient load has resulted because of : (a) constant effort to bring all persons named as contacts to venereal disease under care, (b) the intensification of the follow-up programme carried out on all treated cases of venereal disease, and (c) a larger number of persons reporting to the clinics, either referred by the private physician or coming of their own volition, for routine examination. This growing tendency for persons to report for periodic examination is, without a doubt, the result of health education and the resultant public awareness of venereal diseases. It is gratifying to note that despite the rapid increases in population, particularly in urban centres, no significant rise in venereal disease cases occurred.

The Mobile Clinic unit was utilized to its full capacity in 1953. This was made possible by the fine co-operation of the Mobile Tuberculosis Chest X-ray Service. Arrangements were completed to allow the mobile unit to accompany the former group, thus assuring a far better patient attendance. It is hoped that this programme will continue in 1954. In the past year a large part of north-eastern Alberta was thus surveyed. Independent spot surveys were also done by the mobile unit in the Chard and the Lac La Biche areas. The Unit functioned both as a diagnostic and treatment clinic.

The Division has continued distributing antibiotics and heavy metals to private physicians and institutions for treatment of patients suffering from venereal disease. It also maintains, largely through the Edmonton office, a consultation service to physicians, public health nurses, and other interested persons. The three clinics continue to offer diagnostic and treatment service for those patients wishing to report directly to them.

Lectures to medical, nursing, and lay audiences form an important part of the educational programme of the Division. At the same time distribution of free literature on venereal diseases and the showing of motion pictures of educational value has been encouraged. An effort to interest large groups was undertaken last year with the showing of a continuously run film on venereal disease entitled "Look at a Stranger", at the Edmonton Exhibition. It is felt that this type of programme could be of great value and might be extended to other centres.

During the year consultations were held with social workers from other Divisions with a view to extending our own social service. It is felt that personal counselling and rehabilitation can play a great part in the control and prevention of venereal diseases, particularly in the younger age group. We are attempting to put

more time and emphasis on this phase of the work and we hope that the result will prove the value of the project.

The work and aims of the Division have been greatly facilitated by the encouragement and help of a large number of interested people. The Division is most appreciative of the co-operation of the private physicians, the public health nurses, and the health unit personnel, who have contributed much to the success of the venereal disease control programme. Special thanks are extended to the staff members of the Provincial Laboratory of Public Health, the Division of Public Health Education, and the Bureau of Vital Statistics for their advice and assistance.

In addition, we wish to express our appreciation to Dr. G. R. Davison of the Division of Tuberculosis Control, Mr. E. R. Baxter, Director of X-ray Surveys, Alberta Tuberculosis Association, the Department of Indian Affairs, the Edmonton City Police and the Royal Canadian Mounted Police, for their co-operation in the furtherance of the work and objectives of this Division.

Finally, my sincere thanks to the entire staff of the Division of Social Hygiene.

The statistical report of the Division is as follows:

ALLEGED SOURCES OF VENEREAL INFECTION OR CONTACTS  
For the Period January 1st, 1953 to December 31, 1953

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 *	696	572	82%
Calgary	273	241	88%
Lethbridge	15	9	60%
Medicine Hat	7	6	85%
Remainder of Province	745	659	88%
<b>ALBERTA TOTALS</b>	<b>1,736</b>	<b>1,487</b>	<b>86%</b>
Sources of Infection or Contacts reported outside of the Province of Alberta	171	84	49%
<b>TOTALS</b>	<b>1,907</b>	<b>1,571</b>	<b>82%</b>

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	159	111	70%
Private Doctors and Provincial Clinics	1,598	1,365	85%
Other Provinces	150	95	63%
<b>TOTALS</b>	<b>1,907</b>	<b>1,571</b>	<b>82%</b>

Sources of Infection in Alberta who could not be located by Authorities concerned	105
Sources of Infection outside of Alberta who could not be located by Authorities concerned	3
Number of Notification Cards (N.H. 1) with no information for contact finding	194

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	Street or Outdoors
Common-law Wife	Friend or Private House
House of Prostitution	Hotel
Appointment	Marital Partner
No Data Available	Recreation or Private Party
	Train, Railway Station, Bus Depot
	House of Prostitution
	Taxi or Taxi Office
	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.	168	9 %	Waitress	175	9 %
Private House	151	8 %	Housewife	54	2 %
Outdoors	103	5 %	Prostitute or Street Walker	77	4 %
Car or Truck	239	12 %	Domestic, Hotel, Hospital		
Train, Boat, Auto-Camp	30	2 %	Maid	109	6 %
House of Prostitution	4	.2 %	Clerk, Salesman, Steno,		
Taxi or Taxi Office	2	.1 %	Teacher or Cashier	67	4 %
Hotel	282	15 %	Factory or Plant Worker	8	.4 %
Room, House or Shack	431	23 %	Service Personnel	11	1 %
No Data Available	497	26 %	Unemployed	6	.3 %
			Laundress or Dry Cleaner	7	.3 %
			Truck, Taxi or Bus Driver	28	1 %
			Farmer, Trapper or		
			Fisherman	35	2 %
			Nurse, Student	8	.4 %
			Dressmaker, Hairdresser	3	.2 %
			Laborer or Transient	51	3 %
			Business man	1	0.05 %
			Tradesman, Electrician,		
			Plumber	21	1 %
			Dispatcher	2	.1 %
			No Data Available	1,244	65 %

PROVINCIAL CLINIC—Provincial Building, 10048-101A Ave., Edmonton, 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.	M. F.	M. F.	M. F.	M. F.			
Gonorrhoea (all forms)							34	42	551	122			749
Syphilis (Congenital)											1		1
Acquired—Primary							1	10	1				12
Acquired—Secondary							2		2				4
Acquired—Latent							2	5	12				19
<b>TOTALS</b>							34	47	566	138			785

Number of cases of Syphilis—Male 15, Female 21 ..... 36  
 Number of Cases of Gonorrhoea—Male 585, Female 164 ..... 749  
 Number and results of Serological tests for Syphilis: 8,457 of which 566 were positive.  
 Number and results of Cerebrospinal fluid tests: 29 of which 8 were positive.  
 Number and results of Bacteriological tests for gonococci: 1,973 of which 135 were positive.  
 Number and results of Cultures taken for gonococci: 1,252 of which 200 were positive.

PROVINCIAL CLINIC—711-3rd Street East, Calgary, 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.	M. F.	M. F.	M. F.	M. F.			
Gonorrhoea (all forms)							6	6	213	46			271
Syphilis (Congenital)									1				1
Acquired—Primary							1		6	1			8
Acquired—Secondary										2			2
Acquired—Latent							1		4	2			7
Other									2				2
<b>TOTALS</b>							8	6	226	51			291

Number of cases of Syphilis—Male 15, Female 5 ..... 20  
 Number of cases of Gonorrhoea—Male 219, Female 52 ..... 271  
 Number and results of Serological tests for Syphilis: 3,286 of which 252 were positive.  
 Number and results of Cerebrospinal fluid tests: 5 of which 1 was positive.  
 Number and results of Bacteriological tests for gonococci: 2,247 of which 244 were positive.  
 Number and results of Cultures taken for gonococci: 1,389 of which 28 were positive.

LETHBRIDGE CLINIC—315-10th Street South, 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.	M. F.	M. F.	M. F.	M. F.			
Gonorrhoea (all forms)							1		4	3			8
Syphilis (Congenital)													
Acquired—Primary									2				2
Acquired—Secondary													
Acquired—Latent									1				1
<b>TOTALS</b>							1		7	3			11

Number of Cases of Syphilis—Male 3, Female 0 ..... 3  
 Number of cases of Gonorrhoea—Male 5, Female 3 ..... 8  
 Number and results of Serological tests for Syphilis: 399 of which 22 were positive.  
 Number and results of Cerebrospinal fluid tests: 18 of which 5 were positive.  
 Number and results of Bacteriological tests for gonococci: 37 of which 4 were positive.  
 Number and results of Cultures taken for gonococci: 2 of which 0 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) .....							3	15	20	44			82
Syphilis (Congenital) .....													
Acquired—Primary .....													
Acquired—Secondary .....									2	3			5
Acquired—Latent .....							1	1					2
Other .....													
<b>TOTALS</b> .....							4	16	22	47			89

Number of cases of Syphilis—Male 3, Female 4 .....

7

Number of cases of Gonorrhoea—Male 23, Female 59 .....

82

Number and results of Serological tests for Syphilis: 3,612 of which 122 were positive.

Number and results of Cerebrospinal fluid tests: 0 of which 0 were positive.

Number and results of Bacteriological tests for gonococci: 1,316 of which 49 were positive.

Number and results of Cultures taken for gonococci: 1,184 of which 54 were positive.

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) .....							1		4				5
Syphilis (Congenital) .....									1				1
Acquired—Primary .....													
Acquired—Secondary .....													
Acquired—Latent .....							1						1
<b>TOTALS</b> .....							2		5				7

Number of cases of Syphilis—Male 2 .....

2

Number of Cases of Gonorrhoea—Male 5 .....

5

Number of prisoners admitted, 1,662.

Number and results of Serological tests for Syphilis: 1,401 of which 13 were positive.

MOBILE CLINIC—Chard, Lac La Biche and Surrounding Areas

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
Syphilis (Congenital) .....					2								2
Acquired—Primary .....													
Acquired—Secondary .....													
Acquired—Latent .....							1	1	1	6			9
Other .....							1		1				2
<b>TOTALS</b> .....					2		2	2	2	6			14

Number of cases of Syphilis—Male 6, Female 7 .....

13

Number of cases of Gonorrhoea—Male 0, Female 1 .....

1

Number and results of Serological tests for Syphilis: 4,986 of which 65 were positive.

Number and results of Cerebrospinal fluid tests: 2 of which 0 were positive.

Number and results of Bacteriological tests for gonococci: 1 of which 0 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	33	26	286	41	33	8		429
Syphilis (Congenital) .....	2		1	1	1	1	1		1				9
Acquired—Primary .....						2	1	4					7
Acquired—Secondary .....								1	1				2
Acquired—Latent .....						1	1	12	15	2	2		33
Other .....								19	8		1		28
<b>TOTALS</b> .....	2		2	1	2	37	29	322	66	35	12		508

Number of cases of Syphilis—Male 45, Female 34 .....

79

Number of cases of Gonorrhoea—Male 352, Female 77 .....

429

Number of Doctors in the Province receiving consultative service, 328.

Number of doses of Arsenicals distributed to Private Physicians, 74.

Number of doses of Bismuth distributed to Private Physicians, 1,110.

Number of Units of Penicillin distributed to Private Physicians, 1,212—Vials (3,000,000 Units) Procaine G in Oil.

**NEW CASES OF SYPHILIS AND GONORRHOEA REPORTED IN ALBERTA—1953**  
**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		111	90	1213	257	38	8	1719
Syphilis (Congenital) .....	2		1	3	1	1	1	1	2	2		1	14
Acquired—Primary .....							4	2	25	2			33
Acquired—Secondary .....							2	1	5				8
Acquired—Latent .....							4	4	25	38	2	2	75
Other .....							2	1	22	8	1		34
<b>TOTALS</b> .....	<b>2</b>		<b>2</b>	<b>3</b>	<b>2</b>		<b>122</b>	<b>100</b>	<b>1288</b>	<b>312</b>	<b>41</b>	<b>11</b>	<b>1883</b>

Total number of cases of Syphilis—Male 94, Female 70 ..... 164  
 Total Number of cases of Gonorrhoea—Male 1,362, Female 357 ..... 1,719

**TOTAL NUMBER OF CASES ADMITTED TO THE VARIOUS CLINICS OF THE  
 DIVISION OF SOCIAL HYGIENE**

Sex	Syphilis	Gonorrhoea	Total
Male .....	44	837	881
Female .....	37	279	316
<b>TOTALS</b> .....	<b>81</b>	<b>1,116</b>	<b>1,197</b>

**CASES REPORTED BY DOCTORS AND MILITARY AUTHORITIES**

	Private Physicians	Armed Forces	Total
Syphilis .....	79	4	83
Gonorrhoea .....	429	174	603
<b>TOTALS</b> .....	<b>508</b>	<b>178</b>	<b>686</b>

Total number of cases of Syphilis reported in Alberta ..... 164  
 Total number of cases of Gonorrhoea reported in Alberta ..... 1,719  
 1,883

Total number of cases of Syphilis reported in Alberta exclusive of Armed Personnel ..... 160  
 Total number of cases of Gonorrhoea reported in Alberta exclusive of Armed Personnel ..... 1,545  
 1,705

## Report of the Provincial Laboratories

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

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During 1953 the Provincial Laboratories carried out 277,374 examinations, the nature of which is shown in the accompanying tables. The work done has increased by 24,594 examinations or by 10%. To this increase the contribution of the Calgary Laboratory, directed by Dr. Shute, was notable being almost 9,000 examinations or 15% of its previous total.

*Central Provincial Laboratory.* In Edmonton, our recent provision of gonococcal culture facilities has amply justified the time and energy put into it. It is hoped that 1954 will see the Southern Branch Laboratory taking over the investigations of this nature applicable to its own area. The value of our program of routine bacterial sensitivity tests is, I think, being increasingly appreciated by clinical workers in view of the developing complexities of antibiotic therapy. In sanitary bacteriology the trend to centralization of water examinations under the control of health units has produced circumstances favourable to our development of special transport methods applicable to the widely dispersed sources of potable waters in the Province.

Dr. Macgregor, Provincial Pathologist, in recording an increase in the number of Ascheim Zondek tests for pregnancy carried out by his department, has indicated that the frog test is now replacing the rabbit test. Frogs can readily be obtained commercially at all times of the year, cost considerably less than rabbits, and their use entails no expense for maintenance.

*Southern Brank Laboratory.* In Calgary, a trend away from its immediate service attachment to the Provincial T.B. Sanatorium has arisen owing to the impracticability of correlating laboratory and Sanatorium working hours. Laboratory technicians must perforce return to Calgary at times fixed by available transport. This has re-emphasized the unfortunate siting of our public health laboratory with all its disadvantages, the provision of special transport, difficulties of attracting and retaining staff, etc. In the long view, a re-location of our Calgary Laboratory in the city itself would achieve economy and would undoubtedly result in an increasingly valuable service.

### *New or Supplementary Services.*

Due largely to the crippling influence of staff resignations, often through the attraction of higher salaries in commercial undertakings, no developments worthy of note have occurred in the Central Laboratory this year. Supplementary, however, to our normal service we have undertaken a survey of the incidence of Tularaemia and Brucellosis among the Indian population in collaboration with physicians of the Camsell Hospital.

In the Calgary Laboratory a diagnostic service in Mycology is being actively developed by Dr. Crichton who has received special

training in this work through a Provincial Training Grant. Dr. Crichton has also undertaken a painstaking survey of the relationship between community serum antibody levels and the applications of the popular Widal technique to the diagnosis of enteric infections.

#### *Regular Laboratory Services.*

The general level of bacteriological investigations has been maintained in both laboratories. The epidemiological importance of our enteric investigations and particularly the valuable information on the spread of Salmonellosis derived through our excellent relationship with the Provincial Veterinary Laboratory has been favourably commented on in Ottawa. The occurrence in an Indian reserve at Vilna of a small typhoid outbreak caused by a type of typhoid bacillus not previously recorded in Canada is an interesting though puzzling example of such an epidemiological circumstance. The importance of our Indian populations as possible reservoirs of human epidemic diseases is also emphasized by the occurrence of four cases of diphtheria on the Reserve at Cardston. An investigation under Dr. Shute's direction revealed that ten out of a total of 150 children were carrying virulent diphtheria bacilli in their throats.

The considerable increase in syphilis serology recorded under Wassermann and Kahn tests is mainly ascribable to a vigorous campaign by the Division of Social Hygiene. Special surveys have been undertaken in the far north of the Province during the late summer and early fall with a view to determining the incidence of latent or unrecognized syphilis in the local populations. Except among the Indian and half-breed population of the Lac La Biche area no significant incidence of endemic syphilis was revealed.

#### *Sanitary Bacteriology.*

The very considerable increase in water examinations in both the Edmonton and Calgary Laboratories is due partly to the increase of commercial undertakings throughout the Province and partly to the greater emphasis on the importance of bacteriological control of water supplies in general. Much of this stems from the increasing public health supervision now available through the increased number of health units.

#### *Pathology.*

The importance of this work is demonstrated by the continued demand on the surgical diagnostic tissue service. Both Edmonton and Calgary Laboratories report an increase in the numbers of specimens received. Dr. Macgregor and Dr. Shute independently comment on the value of this service particularly to rural communities where the services of a tissue pathologist are not available and both emphasize its importance in cancer diagnosis. In this last connection, the increasing reliance in smear techniques for the examination of bronchial washings, sputum, cervical secretions, etc. is noteworthy. Such techniques are speedy in performance but demand an extremely high level of professional skill and experience. The clinical acceptance of our findings reflects great credit on our pathologists and their staffs.

#### *Staff.*

In the Central Laboratory, Dr. C. R. Amies, M.B., B.S., M.D., D.T.M. and H., L.R.C.P., M.R.C.P. (Lond.), M.R.C.S. (Eng.), has

recently arrived to fill the vacancy created by the transfer of Dr. J. H. Stirrat. Dr. Amies, who was trained in the best laboratories in England, comes to this department from a senior position in the South African Institute of Medical Research. His wide experience in general bacteriology and his special acquaintance with virus research should prove of great value to the Province. No other changes have occurred in the senior professional staff.

In the Calgary Laboratory, Dr. Shute returned to full duty from the early part of the year. His satisfactory recovery from the serious illness which caused grave concern at this time last year is most gratifying.

TABLE No. 1  
WORK PERFORMED SHOWING COMMERCIAL VALUE IN THE PROVINCIAL LABORATORIES DURING THE YEAR 1953

Item	Unit Value	Edmonton		Calgary		Total	
		Number	Value \$	Number	Value \$	Number	Value \$
Sputum Examinations	1.00	1,547	1,547.00	5,052	5,052.00	6,599	6,599.00
Diphtheria and Haemolytic Streptococci	1.00	3,467	3,467.00	838	838.00	4,305	4,305.00
Diphtheria Virulence Tests	5.00			28	140.00	28	140.00
Typhoid Fever (Agglutination Test)	1.00	2,262	2,262.00	1,313	1,313.00	3,575	3,575.00
Milk	3.00	1,615	4,845.00	1,136	3,408.00	2,751	8,253.00
Water	10.00	6,284	62,840.00	1,796	17,960.00	8,080	80,800.00
Guinea Pig Inoculations	3.00	2,325	6,975.00	1,199	3,597.00	3,524	10,572.00
Miscellaneous Bacteriology	3.00	6,741	20,223.00	985	2,955.00	7,726	23,178.00
Blood Cultures	3.00	900	2,700.00	129	387.00	1,029	3,087.00
Enterobacteria and Intestinal Parasites	3.00	3,381	10,143.00	278	834.00	3,659	10,977.00
Urinalysis	1.00	11	11.00	2,873	2,873.00	2,884	2,884.00
Medico-legal (Blood, Seminal, etc.)	5.00	8	40.00			8	40.00
Blood Counts	1.00			1,501	1,501.00	1,501	1,501.00
Biochemistry Investigations	3.00			380	1,140.00	380	1,140.00
Cerebro-spinal Fluids for the Wassermann Test	1.00	2,144	2,144.00	1,146	1,146.00	3,290	3,290.00
Bloods for the Quantitative Kahn Test	2.00	898	1,796.00	313	626.00	1,211	2,422.00
Bloods for the Wassermann Test	1.00	5,249	5,249.00	2,616	2,616.00	7,865	7,865.00
Bloods for the Standard Kahn Test	1.00	5,154	5,154.00	2,431	2,431.00	7,585	7,585.00
Bloods for the Presumptive Kahn Test	1.00	94,551	94,551.00	27,719	27,719.00	122,270	122,270.00
Smears for Gonococcus	1.00	10,200	10,200.00	2,619	2,619.00	12,819	12,819.00
Cultures for Gonococcus	1.00	8,704	8,704.00			8,704	8,704.00
Pathological Histological Material	5.00	10,989	54,945.00	2,735	13,675.00	13,724	68,620.00
Blood Smear Examinations	2.00	230	460.00	94	188.00	324	648.00
Post Mortem Examinations	25.00	339	8,475.00	4	100.00	343	8,575.00
Post Mortem Reports (Outside Points)	10.00	189	1,890.00	7	70.00	189	1,960.00
Ascheim Zondek Tests	5.00	107	535.00			107	535.00
Frog Tests	5.00	408	2,040.00			408	2,040.00
Fluids for Cancer Cells	5.00	268	1,340.00	165	825.00	433	2,165.00
Cancer Cytology	2.00	69	138.00			69	138.00
Bone Marrows	5.00	23	115.00			23	115.00
Cerebro-spinal Fluids, Examinations (Colloidal Gold, Pandy)	2.00	2,594	5,188.00	1,128	2,256.00	3,722	7,444.00
Bacteriological Examinations (P.M.)	5.00	107	535.00			107	535.00
P. abortus Examinations (Agglutination Test)	.50	2,335	1,167.50	1,313	656.50	3,648	1,824.00
P. tularensis (Agglutination Test)	.10	2,387	1,193.50	1,313	656.50	3,700	1,850.00
Antibiotic Sensitivities, etc. (Discs)	3.00	28,650	2,865.00			28,650	2,865.00
Mycological Examinations	3.00	736	2,208.00			736	2,208.00
Well Felix	1.00	12	12.00			12	12.00
Paul Bunnell Tests	2.00	928	1,856.00			928	1,856.00
T.B. Smears and Cultures	3.00	3,215	9,645.00	739	2,217.00	3,954	11,862.00
Autogenous Vaccine	5.00	24	120.00			24	120.00
Cattle Bloods	1.00	375	375.00			375	375.00
<b>TOTALS</b>		<b>209,426</b>	<b>\$337,954.50</b>	<b>61,843</b>	<b>\$ 99,729.00</b>	<b>271,269</b>	<b>\$437,753.00</b>

TABLE No. 2

## DETAILS OF EXAMINATIONS OF MILK PERFORMED DURING THE YEAR 1953

Milk	Edmonton	Calgary
Number of milks examined bacteriologically .....	1,615	1,136
Number of milks examined for butterfat .....	250	228
Number of milks examined for B. coli .....	699	1,127
Number of milks tested by the Phosphatase Test .....	274	236
Number of ice creams examined .....	70	.....
Number of rinse waters examined bacteriologically .....	.....	28

TABLE No. 3

## DETAILS OF THE BACTERIOLOGICAL AND CHEMICAL EXAMINATIONS OF WATER PERFORMED THROUGHOUT THE YEAR 1953

Water	Edmonton	Calgary
Number of samples of water examined bacteriologically and found fit for human consumption .....	3,136	1,243
Number of samples of water examined bacteriologically and found unfit for human consumption .....	922	552
Number of samples of water examined bacteriologically and chemically and found fit for human consumption .....	572	.....
Number of samples of water examined bacteriologically and chemically and found unfit for human consumption .....	544	.....
Number of samples of water examined chemically and found fit for human consumption .....	1,349	.....
Number of samples of water examined chemically and found unfit for human consumption .....	865	.....
Number of samples of ice examined bacteriologically and found fit for human consumption .....	12	1
Number of samples of ice examined bacteriologically and found unfit for human consumption .....	.....	.....

TABLE No. 4  
LABORATORY WORK DONE IN RELATION TO THE CONTROL OF TUBERCULOSIS DURING 1953

Specimen	Guinea Pig Smear and Culture		Smear and Culture		Positive		% Positive		Negative		% Negative		
	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	
Sputum and Gastric Washings .....	897	488	936	38	275	38	15.0%	7.79%	1,558	450	85.0%	92.21%	
Urine .....	660	513	29	29	68	29	9.9%	5.65%	621	484	90.1%	94.35%	
Pleural Fluids .....	119	36	35	5	18	5	11.7%	13.9%	136	31	88.3%	86.1%	
C.S.F. ....	106	23	.....	8	16	8	15.0%	34.78%	90	15	85.0%	65.22%	
Joint Fluids .....	51	11	2	.....	3	.....	5.7%	.....	50	11	94.3%	100.0%	
Abdominal Fluids .....	10	6	1	2	.....	2	.....	33.3%	11	4	100.0%	66.7%	
Bronchial Aspirations .....	144	.....	19	.....	2	.....	1.2%	.....	161	.....	98.8%	.....	
*Miscellaneous Specimens .....	160	121	46	12	23	12	11.1%	9.9%	183	109	88.9%	90.1%	
<b>TOTAL</b> .....	<b>2,147</b>	<b>1,198</b>	<b>1,068</b>	<b>94</b>	<b>405</b>	<b>94</b>			<b>2,810</b>	<b>1,104</b>			
Specimens Examined by Smear and Culture (Edmonton) .....	1,068	.....	.....	.....	93	963	6.0%	19.06%	1,454	4,089	94.0%	80.94%	
Sputums Examined by Smear only .....	1,547	5,052	.....	.....	.....	31	.....	5.9%	.....	492	.....	94.1%	.....
Miscellaneous Examined by Smear only .....	.....	523	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
<b>GRAND TOTAL</b> .....	<b>4,762</b>	<b>6,773</b>	.....	.....	<b>498</b>	<b>1,088</b>			<b>4,264</b>	<b>5,685</b>			

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



TABLE No. 5

## TESTS MADE IN RESPECT TO THE USE OF ANTIBIOTICS PENICILLIN, STREPTOMYCIN, AUREOMYCIN, TERRAMYCIN AND CHLOROMYCETIN—Calgary

Calgary	
Penicillin sensitivity of a variety of organisms isolated from cases of infection .....	312
Streptomycin sensitivity of Mycobacterium tuberculosis isolated from cases .....	31
Ditubin sensitivity of Mycobacterium tuberculosis isolated from cases .....	23
Streptomycin sensitivity of other bacteria .....	312
Aureomycin sensitivity of other bacteria .....	312
Terramycin sensitivity of other bacteria .....	312
Chloromycetin sensitivity of other bacteria .....	312
Thiosulfil sensitivity of other bacteria .....	3
Erythromycin sensitivity of other bacteria .....	6

TABLE No. 6

## BACTERIOLOGICAL EXAMINATIONS FOR EVIDENCE OF TYPHOID, DYSENTERY AND RELATED INFECTIONS—Edmonton

Stool and urine cultures .....	937
Blood cultures .....	1,969
Bloods examined by agglutination test for typhoid and related fevers, undulant fever and tularaemia .....	2,387
Other materials .....	23

## Details of Results

Source	Salmonella Typhi	S. paratyphi B.	Other Salmonella	Shigella	Negative	Total
Stool cultures .....	5	5	33	57	824	924
Urine cultures .....	1	—	—	—	12	13
Blood cultures .....	3	—	—	—	1,966	1,969
Total isolations .....	9	5	33	57	2,802	2,906
Number of cases .....	5	3	19	41	—	68
Number of carriers .....	—	—	—	—	—	—

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

Details of Salmonella cases and carriers		Salmonellae from Poultry	
S. typhosa .....	5	S. typhi-murium .....	39
S. paratyphi B .....	3	S. gallinarum .....	19
S. typhi-murium .....	15	S. oranienburg .....	1
S. bareilly .....	1	S. bareilly .....	6
S. tennessee .....	2	S. bredeney .....	9
S. oranienburg .....	1	S. newport .....	1
Total .....	27	S. thompson .....	19
		S. anatum .....	1
		S. san diego .....	1
		S. derby .....	1
		S. tennessee .....	2
		*Total .....	99
Shigella Isolations		Salmonellae from Animal Sources	
Sh. sonnei .....	32	S. typhi-murium .....	5
Sh. flexneri 2a .....	1	S. cholerae-suis .....	2
3a .....	1	S. thompson .....	1
3b .....	1	S. bredeney .....	1
Alkalescens dispar .....	6	Total .....	9
Total .....	41		

TABLE No. 6A

## INTESTINAL PARASITES

Number of specimens examined and found negative for parasites .....	294
Showing cysts and Protozoa:	
Endolimax nana .....	3
E. coli .....	17
Giardia lamblia .....	2
Iodamoeba butschlii .....	2
Trichuris trichiura .....	2
	26
Showing Ova:	
Ascaris lumbricoides .....	2
Enterobius vermicularis .....	10
	12
Worms or portions of worms:	
Ascaris lumbricoides .....	12
	12
TOTAL .....	344

TABLE 6

BACTERIOLOGICAL EXAMINATIONS FOR EVIDENCE OF TYPHOID FEVER, DYSENTERY AND RELATED FEVERS—Calgary						
Stool and Urine Cultures .....						278
Blood Cultures .....						
Bloods examined by agglutination test for typhoid and related fevers, undulant fever and tularemia .....						1,313
Details of Results						
Source	Salmonella typhi	S. paratyphi	Other Salmonella	Shigella	Negative	Total
Stool Cultures .....			5	3	215	223
Urine Cultures .....					54	54
Number of bloods examined by agglutination tests and found negative .....						796
Number of bloods examined by agglutination tests and found positive .....						505
Number of bloods unsuitable for agglutination test .....						15
Number of bloods for agglutination tests broken in transit .....						1
Details of Salmonella Cases:			Details of Shigella Cases:			
Salmonella typhi murium .....	2		Shigella .....			3
Salmonella paratyphi B .....	1					
						Positives
S. typhi .....						129
S. typhi and Paratyphoid A .....						87
S. typhi and Paratyphoid B .....						30
S. typhi and B. abortus .....						15
S. typhi and P. tularensis .....						1
S. typhi, Paratyphoid A and Paratyphoid B .....						83
S. typhi, Paratyphoid A and B. abortus .....						12
S. typhi, Paratyphoid A, Paratyphoid B and B. abortus .....						6
S. typhi, Paratyphoid A, Paratyphoid B, B. abortus and P. tularensis .....						1
S. typhi, Paratyphoid B and B. abortus .....						4
S. typhi, Paratyphoid A, Paratyphoid B and P. tularensis .....						2
S. typhi, Paratyphoid A, B. abortus and P. tularensis .....						2
Paratyphoid A .....						12
Paratyphoid A and Paratyphoid B .....						2
Paratyphoid A and B. abortus .....						1
Paratyphoid A and P. tularensis .....						1
Paratyphoid B .....						16
Paratyphoid B and B. abortus .....						4
Paratyphoid B and P. tularensis .....						1
Brucella abortus .....						67
P. tularensis .....						13
B. abortus and P. tularensis .....						6
Weil Felix .....						6
S. typhi and Weil Felix .....						1
S. typhi, Paratyphoid A, Paratyphoid B and Weil Felix .....						2
S. typhi, Paratyphoid B and Weil Felix .....						1
Paratyphoid B and Weil Felix .....						1

TABLE No. 6A

## INTESTINAL PARASITES—Calgary

Number of specimens examined and found negative for parasites .....		50
Number of specimens examined and found positive for parasites .....		6
Worms:	Ova:	Protozoan:
Ascaris lumbricoides .....	3	Scanty unfertilized
Enterobius Vermicularis .....	1	ascaris ova .....
		1
		Giardia lamblia .....
		1

TABLE No. 7

## MYCOLOGICAL EXAMINATIONS—Edmonton

Type of material examined	Number of specimens	Number found positive for pathogenic fungi
Skin and nail scrapings .....	405	66
Sputum .....	109	48
Scalp hairs .....	45	16
Beard hairs .....	22	7
Vaginal swabs .....	34	10
Mouth and throat .....	44	32
Miscellaneous .....	77	16
Total .....	736	195

Fungi identified	Source	No. of specimens
<i>Aspergillus fumigatus</i> .....	lung cavity .....	1
<i>Candida albicans</i> .....	sputum, vaginal smears, skin and nail scrapings, nose, throat and ear swabs, abscesses .....	102
<i>Geotrichum</i> sp. ....	sputum .....	2
<i>Mallassezia furfur</i> .....	skin .....	6
<i>Microsporum audouinii</i> .....	hair .....	2
<i>Microsporum canis</i> .....	hair, skin scrapings .....	7
Mosaic fungus .....	skin scrapings .....	24
<i>Trichophyton faviforme</i> .....	hair, skin scrapings .....	6
<i>Trichophyton mentagrophytes</i> .....	hair, skin scrapings .....	38
<i>Trichophyton rubrum</i> .....	hair, skin, nails .....	7

TABLE No. 8

NUMBER OF BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY  
SEROLOGICAL TESTS FOR THE DIAGNOSIS OF SYPHILIS DURING THE YEAR 1953

	Edmonton	Calgary
Bloods examined—Presumptive Kahn .....	94,551	27,719
Standard Kahn .....	5,154	2,431
Quantitative Kahn .....	898	313
Wassermann (Kolmer) .....	5,249	2,616
Cerebro-spinal fluids examined by Wassermann (Kolmer) test .....	2,144	1,146
Bloods and cerebro-spinal fluids unsuitable for examination .....	1,586	432
Bloods broken and leaked in transit .....	213	76
Bloods and cerebro-spinal fluids "Positive" to reaction .....	806	322
Bloods and cerebro-spinal fluids "Negative" to reaction .....	94,387	29,253
Bloods giving "Reaction Not Interpreted" .....	1,621	1,217

TABLE No. 9

NUMBER OF BLOOD AND CEREBRO-SPINAL FLUID EXAMINATIONS BY  
SEROLOGICAL TESTS FOR THE DIAGNOSIS OF SYPHILIS, BY THE MONTH  
DURING THE YEAR 1953

	Presumptive Kahn Test		Standard Kahn Test		Quantitative Kahn Test		Blood Wassermann		C.S.F. Wassermann		Unsuitable for Examination	
	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary
January .....	6,909	1,787	523	421	58	26	524	430	170	64	241	56
February .....	6,482	1,891	469	302	70	39	480	313	166	68	118	22
March .....	7,055	2,202	518	183	63	28	526	208	206	48	120	38
April .....	7,529	2,200	510	189	73	43	515	206	188	74	91	28
May .....	7,553	2,288	334	161	81	28	346	175	163	55	111	13
June .....	9,720	2,699	359	115	63	32	358	199	175	70	101	32
July .....	9,107	2,495	403	177	75	21	415	198	187	69	141	34
August .....	8,952	2,506	312	188	57	14	335	205	164	171	130	55
September .....	7,763	2,421	400	167	108	24	405	191	181	182	128	26
October .....	8,536	2,589	496	204	104	25	498	118	193	139	127	40
November .....	7,258	2,345	426	161	69	20	432	184	165	128	110	39
December .....	7,687	2,296	404	163	77	13	415	189	186	78	168	49
Totals .....	94,551	27,719	5,154	2,431	898	313	5,249	2,616	2,144	1,146	1,586	432

TABLE No. 10

NUMBER OF PREMARITAL BLOODS SUBMITTED FOR SEROLOGICAL TESTS FOR  
SYPHILIS DURING THE YEAR 1953

	Negative		Positive		Reactions Not Interpreted		Unsuitable		Total	
	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary	Edmonton	Calgary
January .....	583	408	3	8	2	20	14	614	424	
February .....	580	414	1	9	2	6	1	596	418	
March .....	658	539	2	3	8	9	6	672	553	
April .....	939	581	1	5	2	12	5	957	589	
May .....	1,025	640	1	4	1	6	4	1,035	646	
June .....	1,519	1,041	2	6	7	7	11	1,534	1,059	
July .....	1,490	848	1	15	2	19	9	1,525	860	
August .....	1,122	797	3	3	4	5	10	1,133	811	
September .....	1,070	708	6	7	1	8	7	1,091	717	
October .....	1,359	768	1	8	5	8	3	1,375	776	
November .....	1,034	686	2	3	3	9	4	1,048	693	
December .....	825	615	1	7	3	12	11	845	629	
Totals .....	12,204	8,045	22	78	30	121	85	12,425	8,175	

TABLE No. 11

## NUMBER OF CORD BLOODS SUBMITTED FOR SEROLOGICAL TEST FOR SYPHILIS DURING THE YEAR 1953—Edmonton

			Unsuitable for Examination							Total
	Negative	Positive	Reaction not Interpreted	Anti-Comp.	Fatty	Haem.	N.S.Q.	N.S.Q. Leaked	Accid. Broken	
January .....	756	.....	5	1	11	38	2	5	.....	820
February .....	801	1	9	.....	4	19	1	7	1	843
March .....	856	.....	2	.....	10	17	1	1	.....	887
April .....	848	.....	9	1	3	15	4	1	1	882
May .....	936	.....	7	2	5	16	8	4	.....	978
June .....	982	.....	5	4	11	12	4	1	.....	1,019
July .....	971	.....	6	.....	21	19	8	2	.....	1,027
August .....	911	.....	4	.....	7	20	5	1	.....	948
September .....	1,094	1	2	.....	12	12	19	5	.....	1,145
October .....	903	.....	1	.....	9	13	12	.....	1	939
November .....	790	.....	3	.....	4	15	10	2	.....	824
December .....	1,107	1	5	1	10	28	7	.....	5	1,164
Totals .....	10,955	3	58	9	107	224	81	29	10	11,476

TABLE No. 12  
SERA AND VACCINES DISTRIBUTED DURING THE YEAR 1953

	Edmonton	Calgary
<b>Smallpox Vaccine, Glycerinated:</b>		
1 point package .....	2,226	2,532
10 points package .....	4,637	2,552
<b>Diphtheria Toxoid:</b>		
3 x 1 c.c. amps. ....	949	1,225
4 x 1 c.c. amps. (diluted) .....	14	10
6 x 3 c.c. amps. ....	24	....
6 x 6 c.c. amps. ....	436	330
<b>Diphtheria Toxoid and Tetanus Toxoid Combined:</b>		
4 x 1 c.c. amps. ....	393	390
6 x 6 c.c. amps. ....	149	....
<b>Diphtheria Toxoid and Pertussis Vaccine Combined:</b>		
4 x 1 c.c. amps. ....	3,121	2,195
6 x 6 c.c. amps. ....	702	328
<b>Diphtheria Toxoid, Pertussis Vaccine and Tetanus Toxoid:</b>		
4 x 1 c.c. amps. ....	4,427	4,330
6 x 6 c.c. amps. ....	1,790	386
<b>Diphtheria Antitoxin:</b>		
1,000 units .....	268	72
10,000 units .....	65	18
20,000 units .....	141	53
<b>Diphtheria Toxin for Schick Test:</b>		
25 tests .....	213	463
<b>Scarlet Fever Streptococcus Toxin:</b>		
5 x 1 c.c. vials .....	537	485
6 x 6 c.c. vials .....	343	11
Strength "A"—30 c.c. pkg. ....	30	....
Strength "B"—30 c.c. pkg. ....	47	....
Strength "C"—30 c.c. pkg. ....	43	....
Strength "D"—30 c.c. pkg. ....	30	....
Strength "E"—30 c.c. pkg. ....	31	....
<b>Scarlet Fever Streptococcus Antitoxin:</b>		
3,000 units .....	228	82
9,000 units .....	83	63
<b>Scarlet Fever Streptococcus Toxin for Dick Test:</b>		
10 tests .....	173	196
<b>Typhoid-Paratyphoid Vaccine:</b>		
3 amps. ....	387	364
10 c.c. ....	388	299
<b>T.A.B.T. Vaccine:</b>		
3 c.c. vial .....	502	354
8 person package .....	171	....
<b>Pertussis Vaccine:</b>		
4 x 1 c.c. amps. ....	564	341
6 x 6 c.c. amps. ....	37	13
<b>Tetanus Toxoid:</b>		
3 x 1 c.c. amps. ....	360	306
<b>Rocky Mountain Spotted Fever:</b>		
1 c.c. bottle .....	15	....
2 c.c. bottle .....	1	....
20 c.c. bottle .....	1	....
<b>Tetanus Antitoxin:</b>		
1,500 units .....	827	1,000
10,000 units .....	10	51
20,000 units .....	42	38
<b>Staphylococcus Toxoid:</b>		
2 c.c. vial .....	127	171
<b>Staphylococcus Antitoxin:</b>		
10,000 units .....	5	3
20,000 units .....	8	....
<b>Gas Gangrene Antitoxin:</b>		
4,000 units .....	123	196
10,000 units .....	153	85
<b>Anti-Measles Serum:</b>		
5 c.c. vial .....	1,153	542
<b>Immune Serum Globulin:</b>		
2 c.c. vial .....	3,745	386
10 c.c. vial .....	182	....
5 c.c. vial .....	8,972	....
<b>Autogenous Vaccine:</b>		
25 c.s. ....	23	3
<b>Rabies:</b>		
14 dose treatment package .....	137½	....
<b>Snakebite Antivenin:</b>		
15 c.c. ....	2	....

TABLE No. 13  
Clinical Pathology Investigations  
CONDUCTED FOR THE CENTRAL ALBERTA SANATORIUM DURING THE  
YEAR 1953—Calgary

Blood counts .....	1,501
Urinalysis .....	2,873
Biochemistry Investigation (Blood Sugars, N.P.N.'s, Etc.) .....	380

## Division of Sanitary Engineering

H. L. HOGGE, B.Sc., *Director*

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The continued generally high level of prosperity has resulted in the amount of construction in the province maintaining the pace of the last few years. This is reflected in the work of all sections of the division; municipal engineering, stream sanitation, sanitary inspection and plumbing inspections. Some major industries adjacent to Edmonton have started production this year and have greatly increased the work of the stream sanitation division on the North Saskatchewan River.

### *Engineering.*

*Municipal*—Many more Alberta towns and villages have either constructed waterworks and/or sewerage system this year or have made plans to construct them in 1954. At the end of the year 110 urban municipalities had waterworks and/or sewerage systems installed, 18 of them being constructed during the last year. Thirty-two municipalities are either presently constructing utility systems or plan to construct them next year.

The plans and specifications of these systems are checked by the engineers of the division and discussed with town officials and the designing engineers. The source of water supply and method of sewage disposal are considered to ensure that an adequate supply of suitable water is available and that the sewage disposal facilities are adequate.

Some assistance on problems of operating existing waterworks and sewerage systems was accomplished but there is still much work to be done in this field.

### *Stream Sanitation.*

On the basis of the report on Bow River, completed in 1952, directives have been sent to the City of Calgary and the Town of High River to make provision for adequate sewage treatment facilities.

Work during the summer of 1953 was concentrated on the Oldman and South Saskatchewan River system, from the Crowsnest Pass to the City of Medicine Hat. Data on the condition of the river during the winter time are being compiled to complete the report. This report will be considered by the Provincial Board of Health and the report will be circulated to municipalities and industries concerned.

The latter part of this year saw the start of production at two new industries in the Edmonton area which are discharging wastes to the North Saskatchewan River. Also one industrial plant at Duvernay commenced production with some wastes being discharged to the same river. Investigations during November and December showed that a degree of pollution exists which is impairing the quality of the water for some uses. Subsequently negotiations with industrial firms have resulted in full scale waste surveys.

It is proposed to intensify the work on the North Saskatchewan River in the coming year to assess the effect of improvements in waste disposal systems and to study means of maintaining a satisfactory quality of the water in this river.

The preliminary survey of the Oldman and South Saskatchewan Rivers in 1953 has completed the initial survey of the main rivers in the province which are receiving significant amounts of waste material at this time. This program was initiated in 1950 in order to obtain information on the sanitary quality of these streams and to determine areas of importance. Future work can now be concentrated in these areas of the rivers and on the waste effluents affecting them. The rapid expansion of cities and industries has taxed the capacity of some rivers very heavily and the need for adequate waste disposal facilities is becoming increasingly important.

### SANITARY INSPECTION SECTION

The year 1953 saw the staffing of the Grande Prairie and Barons-Eureka Health Units, each of which employs a full time Sanitary Inspector. Thus at the year's end there was a total of 43 full time Sanitary Inspectors employed in the Province, 3 by the Division of Sanitary Engineering, 17 by Health Units and 23 by City Health Departments.

The Town of Fairview and the Village of Sedgewick passed compulsory pasteurization by-laws during the year, increasing the total number of cities, towns and villages with such by-laws to 34 at the year's end. New pasteurizing plants were opened at Fairview, Grimshaw, Sangudo, Sedgewick, Stettler and Sundre. Plants at Cadomin, Macleod and Strathmore were closed during the year. The communities formerly served by the plants at Macleod and Strathmore now receive pasteurized milk from other sources, while the closing of coal mines at Cadomin has resulted in most families leaving the community. At the year's end there were 77 pasteurization plants in the Province supplying milk to the public, while a further 6 operated for the benefit of schools and institutions.

The Department of Industries and Labour revised its licensing regulations during the year replacing the annual licenses formerly issued to restaurants and bakeshops with permanent licenses. The full effect of these changes on the sanitary control of these premises may not be known for some time, but it would appear that the changes should have very little, if any, effect as provision is made for the suspension or cancellation of any license for cause on the recommendation of the Local Board of Health. Some problems may rise during the change-over period but it is anticipated that these can be solved with the high degree of co-operation which exists between the Licensing Office and Health Authorities.

One meat canning license was issued during the year by the Provincial Board of Health to a plant under the supervision of the City of Calgary Health Department.

A number of new waste disposal grounds were established during the year throughout the province. In most instances the sites selected received the approval of the Division of Sanitary Engineering or the Health Unit concerned due to the co-operation received from the Lands Branch of the Departments of Lands and Forests and the Surveys Branch of the Department of Highways.

Provisional Certificates of Approval were issued covering the sites selected for 18 new cemeteries during the year. Prior to issue of the certificates, inspections were made by the Division of Sanitary Engineering or the Health Unit concerned. Arrangements were made to co-operate closely with the Department of Highways in regard to sites adjacent to Provincial Highways. Final Certificates were issued to 35 cemeteries which had completed the establishment procedure provided by the cemetery regulations.

Arrangements were made early in the year whereby City Health Departments and Health Units took over the inspection of tourist camps in areas under their supervision for the enforcement of the Department of Industries and Labour's Tourist Camp Regulations. Previously, all these inspections were made by the Inspectors of the Division of Sanitary Engineering. The new arrangements should provide a better service in the cases of new tourist camps and those under construction, though some uniformity in the matter of classification may be lost. During the change-over period, a number of tourist camps were inspected jointly by the Provincial Sanitary Inspector and the local Sanitary Inspector in order to familiarize local Sanitary Inspectors with the program. The full effect of this change will therefore not be felt by the Division of Sanitary Engineering until 1954.

Provincial Sanitary Inspectors employed in the Division of Sanitary Engineering operating from offices in Edmonton and Calgary, continued the program of assisting Local Health Authorities in areas outside Cities, and Health Units in dealing with sanitary matters. The number of inspections made was reduced below the number made in 1952 as the number of Provincial Sanitary Inspectors was reduced during 1952 from 5 to 3 because of the increasing number of inspectors in Health Units. The service provided in 1953 in the north half of the Province remained about the same as in previous years, while that in the south half of the Province was somewhat reduced to about the same level as that provided in the north.

Emphasis has again been placed on inspection of eating establishments and milk handling premises. Less frequent inspections have been made at tourist camps, industrial and construction camps, bakeries, waste disposal grounds and in connection with private water supplies and sewage disposal systems.

It came to our attention during the early part of the year that the operations of some milk pasteurizing plants were unsatisfactory. The inspection program in these premises was therefore stepped up though this meant reducing the program in other directions. As a result of the activities of the Provincial Sanitary Inspectors and with the co-operation of local authorities and the Dairy Branch of the Department of Agriculture, much desirable improvement has been obtained, particularly in three plants where operations had been hazardous. There appears to be continuing need for frequent inspection of milk pasteurizing plants by qualified personnel interested primarily in the safety of the milk supply, notwithstanding the activities of other Departments.

In the fall of the year, the Division co-operated with the Dairy Branch of the Department of Agriculture in the judging of milk plants, creameries and cheese factories for competitions receiving the support of the Dairy Branch.



The number of inspections of dairy farms which can be made by the present staff is limited by the location of these premises, poor side road conditions during certain seasons and by the need to carry out other inspections of an equally essential nature. Some improvement has, nevertheless, been obtained in some areas though it cannot be suggested as yet that there is any marked trend to improvement in the conditions under which raw milk is supplied to many communities.

The Division's restaurant inspection program was continued with some reduction in frequency of inspection in areas where population is lower. This program continues to produce gradual improvement in the industry from a public health viewpoint. In some communities where Local Boards of Health were very active and co-operated fully with the Provincial Sanitary Inspector, remarkable improvements were obtained.

The increasing danger of rats becoming established in Alberta and the condition into which many waste disposal grounds have deteriorated has caused the Division to give more attention to waste disposal ground inspections, particularly in the eastern portion of the Province. For the most part, only first inspections have been carried out so it is not possible to assess results achieved in obtaining improvements.

Complaints were again received during the year concerning sanitary conditions at industrial and construction camps particularly those where employees are engaged in the lumbering industry, road building, and general construction activities. The inspections made in response to these complaints have indicated that in many camps sanitation standards are low though there are outstanding exceptions. Co-operation has been received from the Division of Public Health Engineering of the Department of National Health and Welfare towards obtaining improvement in those camps where employees were engaged on Federal projects. The Division has great difficulty in maintaining an inspection service to even a token number of these camps due to the limitation of their operating seasons, mobility of some types, remoteness of location in other cases, and the limited staff available. Some of these camps are, or will be, located in Health Units but many, including most of the 1,000 or more sawmill camps operated during part of each winter, are in remote locations beyond the boundaries of Health Units. It can be anticipated that these will remain a responsibility of the Provincial Department of Public Health.

The staffing of the two new Health Units during the year reduced to some extent the area and population served by the Provincial Sanitary Inspectors. At the end of the year there was still a population of approximately 200,000 not served by City Health Departments or Health Units. The areas dependent for service on Provincial Sanitary Inspectors are much larger and more scattered than those served by Health Unit Inspectors. It is not possible for the present staff of Provincial Sanitary Inspectors to provide a service which will cover all sanitation matters.

## PLUMBING REPORT

During the year 1953 the Plumbing and Drainage Regulations were completely revised and were passed as Order-in-Council 1173/53. The revision was necessary in order to modernize the regulations and to conform with the Plumbing Section of the National Building Code. It was necessary to deviate from the National Building Code in certain instances because of conditions peculiar to our climate therefore a number of regulations were maintained from the previous set. The new regulations become effective on the 15th day of March 1954. A complimentary copy of the new regulations was sent to every individual within the province who is in possession of a certificate of proficiency as a plumber. Every registered plumbing apprentice was also forwarded a copy.

A course was held in February of 1953 to assist local plumbing inspectors as appointed under the provisions of the Plumbing and Drainage Regulations. This course was given to familiarize these inspectors with the regulations as well as with proper installation practises. The course was attended by 18 inspectors.

There are 98 urban municipalities in the province responsible for their own plumbing inspections but this figure will be increased by at least 20 during 1954.

During the year this office issued 550 plumbing permits valued at \$3,814.50. These figures show a decline from 1952 but this is because of the greater number of urban municipalities issuing plumbing permits.

During 1953 this office viewed 14 rural school plans and 10 rural hospital plans as well as the plans of the sanitary sewage systems installed in a number of the new industrial establishments erected on the eastern outskirts of the City of Edmonton.

A number of requests were received from various School Boards to inspect existing systems and to submit reports to the Board concerned to improve the operation of the plumbing system installed. In each case this was done resulting in a standard of school sanitation superior to that experienced in the past by the schools concerned. It would appear that requests for such inspections will become more numerous in the future.

This division is now mainly responsible for rural plumbing installations, however a considerable amount of time was devoted to assisting urban municipal inspectors. It was necessary on a few occasions to arbitrate disputes which arose between these inspectors and local plumbing contractors.

## Division of Hospital and Medical Services

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

### INTRODUCTION

The Division of Hospitals and Medical Services administers the legislation whereby the Department of Health provides, out of general revenue of the Province, maternity hospitalization for residents; hospitalization, medical, dental, optical and special treatment services for the social service groups and their dependents who qualify for these services. The Division is also responsible for the administration of the Provincial Municipal Hospitalization Plan, supervision of Municipal Hospital Districts, supervision of Nursing Aide School, inspection of hospitals, hospital grants, hospital construction grants, orthopaedic care grants, poliomyelitis hospitalization and medical care, nurses training grants and home confinement grants.

The following report presents information on the foregoing as well as statistical tables and diagrams.

### Statistical Summary

Through consecutive legislative programmes over a period of years, the Provincial Department of Public Health has made provision for the hospitalization of residents of the Province. Its expenditures for the year 1953 for hospitalization were as follows:

Provincial Municipal Hospitalization Plan .....	\$ 2,043,896.99
Maternity Hospitalization .....	1,955,989.95
Pension Group Hospitalization .....	1,688,243.00
70 cents per Diem Hospitalization Grant .....	1,269,433.20
Orthopaedic Hospitalization .....	45,172.80
Out-post Hospital Grant .....	10,531.20
Poliomyelitis Hospitalization .....	700,019.00
<b>SUBTOTAL .....</b>	<b>\$ 7,713,286.14</b>
*Cancer Hospitalization .....	\$ 57,965.00
*Tuberculosis Hospitalization (Fiscal Year 53/54) .....	1,609,217.76
*Mental Hospitalization (Fiscal Year 53/54) .....	4,169,465.28
<b>TOTAL .....</b>	<b>\$13,549,934.18</b>

The above data shows the expenditures by the Province for hospitalization. The items marked with an asterisk are not administered through the Division of Hospital and Medical Services and will appear no further in this report.

Other expenditures through the Hospital and Medical Services Division, were as follows:

Poliomyelitis (medical, surgical, etc.) .....	\$ 78,149.30
Maternity Confinements at home .....	4,880.00
Pension Group (Medical, Dental, Optical, etc.) .....	676,757.56
Nurse Training Programme .....	63,880.00
Hospital Construction Grants (Fiscal year 53/54) .....	661,600.25
	<b>\$ 1,485,187.11</b>

The general, hospitals in the Province are classified into groups according to their facilities and the services they are able to provide. Group A comprises the six large hospitals in the cities of Edmonton and Calgary.

Group B hospitals are for the main part located in the small cities. The number of hospitals in each group is as follows:

Group A .....	6
Group B .....	8
Group C .....	35
Group D .....	47
Group E .....	4
<b>Total</b> .....	<b>100</b>

The four Group E hospitals are outpost hospitals. They receive a special outpost grant of \$1.80 per adult day and \$1.30 per child day on behalf of hospitalized residents. Table I shows the distribution of patient days by hospital group and months, excluding the D.V.A. Division of the University of Alberta Hospital. Diagram I gives the same information in graphical form.

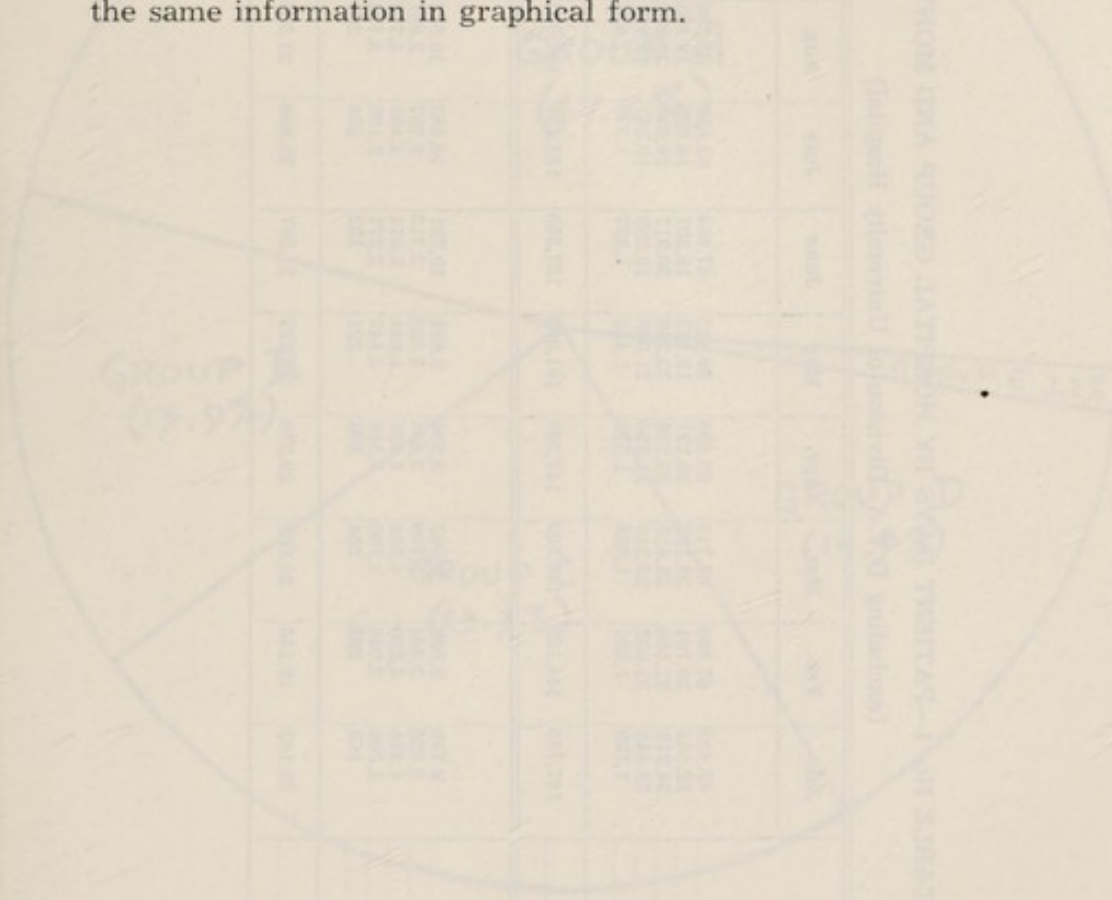


Table 3 gives the distribution of patient days by hospital group and months, excluding the D.V.A. Division of the University of Alberta Hospital. Diagram 2 shows the same information in graphical form.

TABLE No. 1—PATIENT DAYS BY HOSPITAL GROUP AND MONTH, 1953  
(excluding D.V.A. Division of University Hospital)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
<b>ADULTS AND CHILDREN</b>													
Group A Hospitals	65,493	67,896	63,719	69,698	66,815	67,664	63,839	63,306	65,056	64,230	68,333	69,809	795,858
Group B Hospitals	22,065	20,701	22,197	20,291	19,423	18,301	18,093	19,105	18,056	18,539	19,199	18,569	234,539
Group C Hospitals	34,918	32,188	35,419	33,836	33,246	30,917	29,699	30,883	30,094	34,246	34,494	32,319	392,259
Group D Hospitals	23,445	21,632	23,345	21,930	21,066	19,289	19,247	19,151	18,385	19,530	20,519	19,126	246,665
Group E Hospitals	1,799	1,691	1,829	1,539	1,414	1,397	1,579	1,617	1,585	1,562	1,428	1,629	19,069
Provincial Total	147,720	144,108	146,509	147,294	141,963	137,568	132,457	134,062	133,176	138,107	143,973	141,452	1,688,390
<b>NEWBORN</b>													
Group A Hospitals	9,740	8,969	9,002	9,586	9,882	10,791	10,482	10,573	9,895	10,247	9,110	9,445	117,722
Group B Hospitals	2,653	2,661	2,709	2,644	3,003	2,713	2,767	2,891	2,641	2,570	2,611	2,843	32,706
Group C Hospitals	4,416	4,209	4,964	4,896	4,644	5,074	4,467	4,717	4,475	4,432	4,554	4,333	55,181
Group D Hospitals	3,204	3,044	3,706	3,246	3,447	3,277	3,106	3,184	3,466	3,158	3,198	2,856	38,892
Group E Hospitals	169	263	284	204	221	132	234	221	238	231	151	238	2,586
Provincial Total	20,182	19,146	20,665	20,576	21,197	21,987	21,056	21,586	20,715	20,638	19,624	19,715	247,087

DISTRIBUTION OF PATIENT DAYS BY HOSPITAL GROUP (EXCLUDING NURSERY DAYS AND D.V.A. DAYS IN THE D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL)

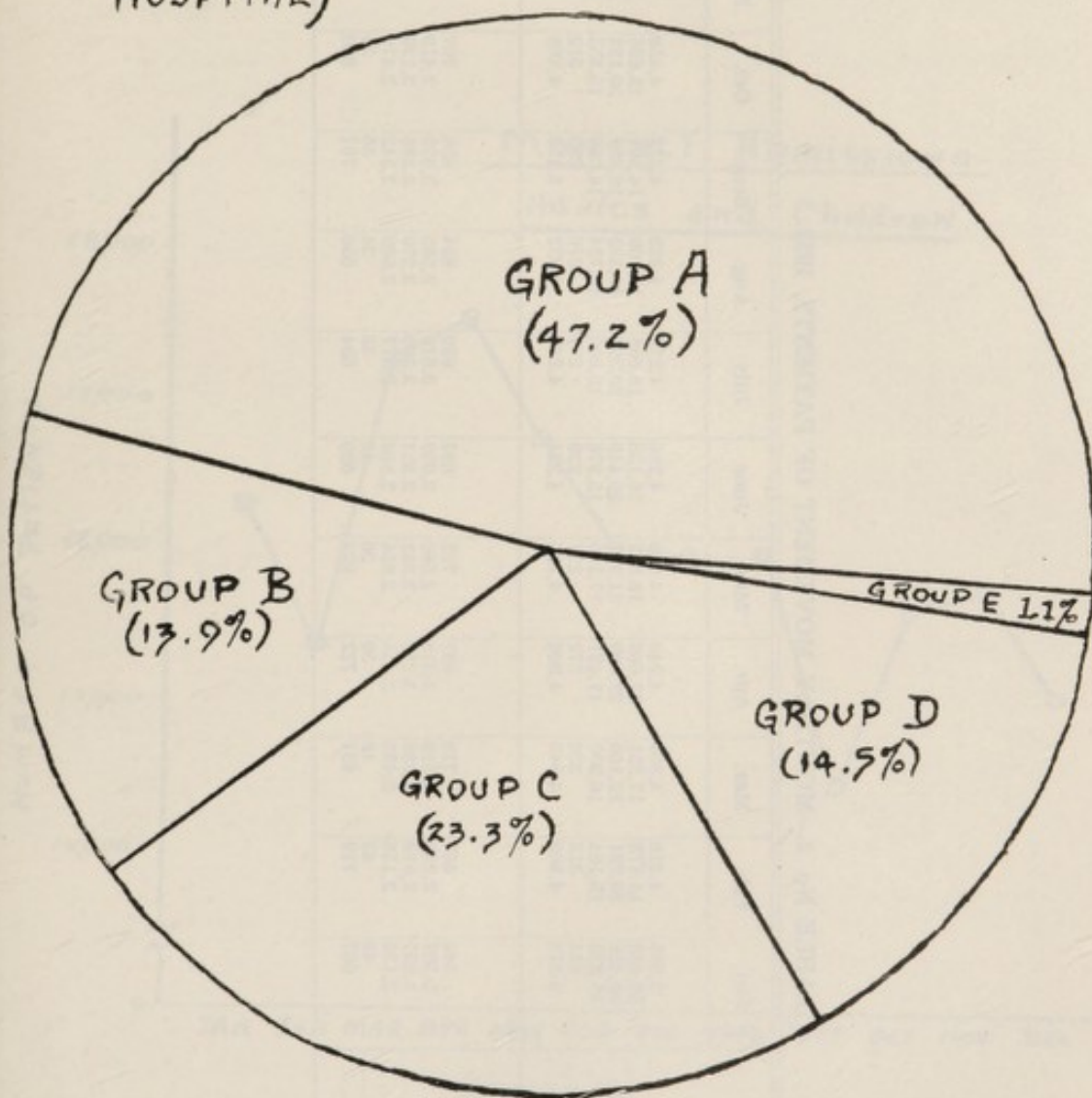


Diagram 1

Table 2 gives the monthly movement of patients for adults and children and newborn. Again, data for the D.V.A. Division of the University of Alberta hospital is excluded. Diagram 2 shows monthly admissions and births graphical form.

TABLE No. 2—MONTHLY MOVEMENT OF PATIENTS, 1953

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
<b>ADULTS AND CHILDREN</b>													
In at the beginning .....	3,985	4,818	4,809	4,940	4,906	4,296	4,234	4,223	4,332	4,458	4,488	4,888	3,985
Admissions .....	16,443	15,473	17,351	17,669	16,827	16,153	16,066	16,109	14,507	15,695	15,842	15,108	193,243
Total Under Care .....	20,428	20,291	22,160	22,609	21,733	20,449	20,300	20,332	18,839	20,153	20,330	19,996	197,228
Discharges .....	15,329	15,164	16,900	17,431	17,160	15,976	15,800	15,724	14,088	15,353	15,134	15,629	189,688
Deaths .....	281	318	320	272	277	239	277	276	293	312	308	286	3,459
In at the end .....	4,818	4,809	4,940	4,906	4,296	4,234	4,223	4,332	4,458	4,488	4,888	4,081	4,081
<b>NEWBORN</b>													
In at the beginning .....	544	667	719	697	722	692	699	694	656	707	600	667	544
Live Births .....	2,307	2,252	2,519	2,518	2,660	2,639	2,610	2,585	2,629	2,419	2,475	2,463	30,076
Total Under Care .....	2,851	2,919	3,238	3,215	3,382	3,331	3,309	3,279	3,285	3,126	3,075	3,130	30,620
Discharges .....	2,136	2,158	2,495	2,454	2,654	2,589	2,577	2,589	2,542	2,475	2,366	2,500	29,535
Deaths .....	48	42	46	39	36	43	38	34	36	51	42	43	498
In at the end .....	667	719	697	722	692	699	694	656	707	600	667	587	587

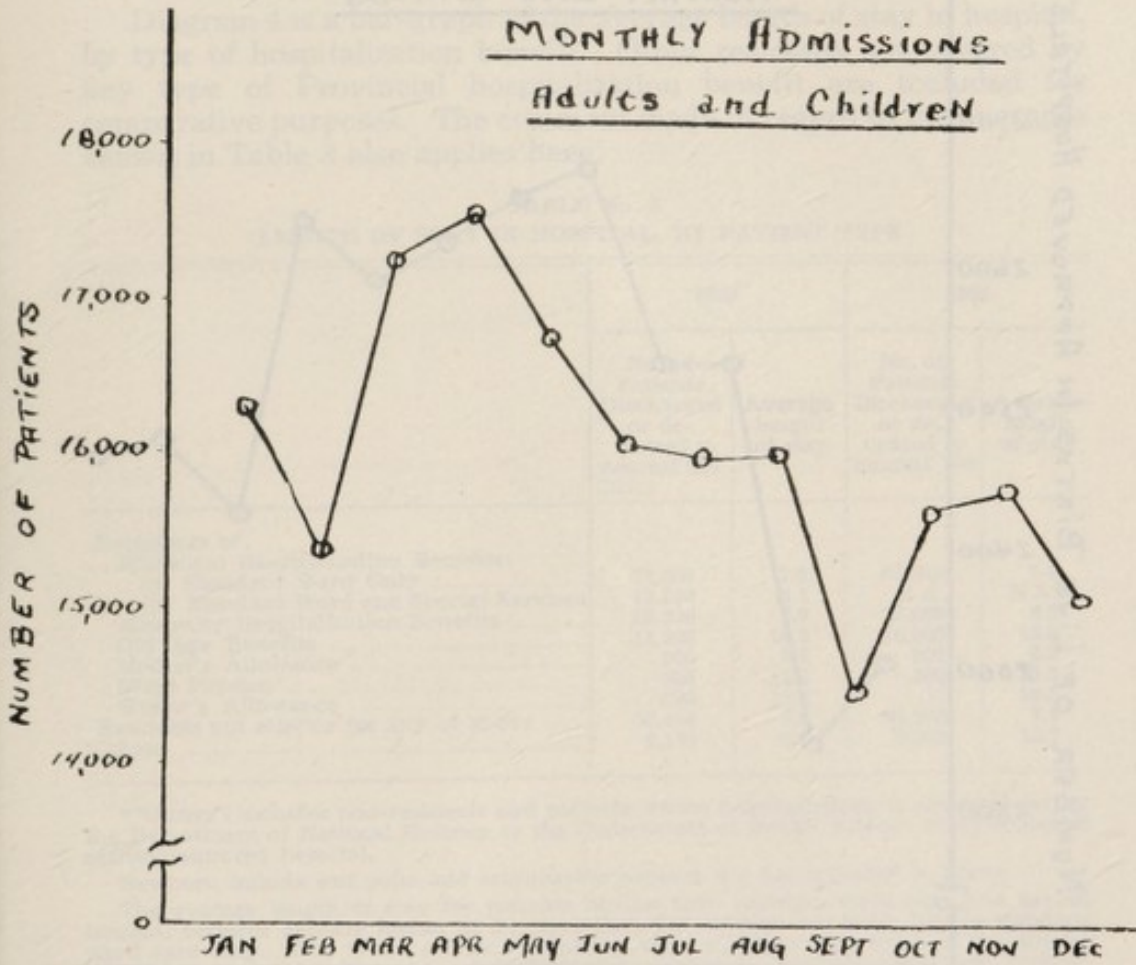


Diagram 2a



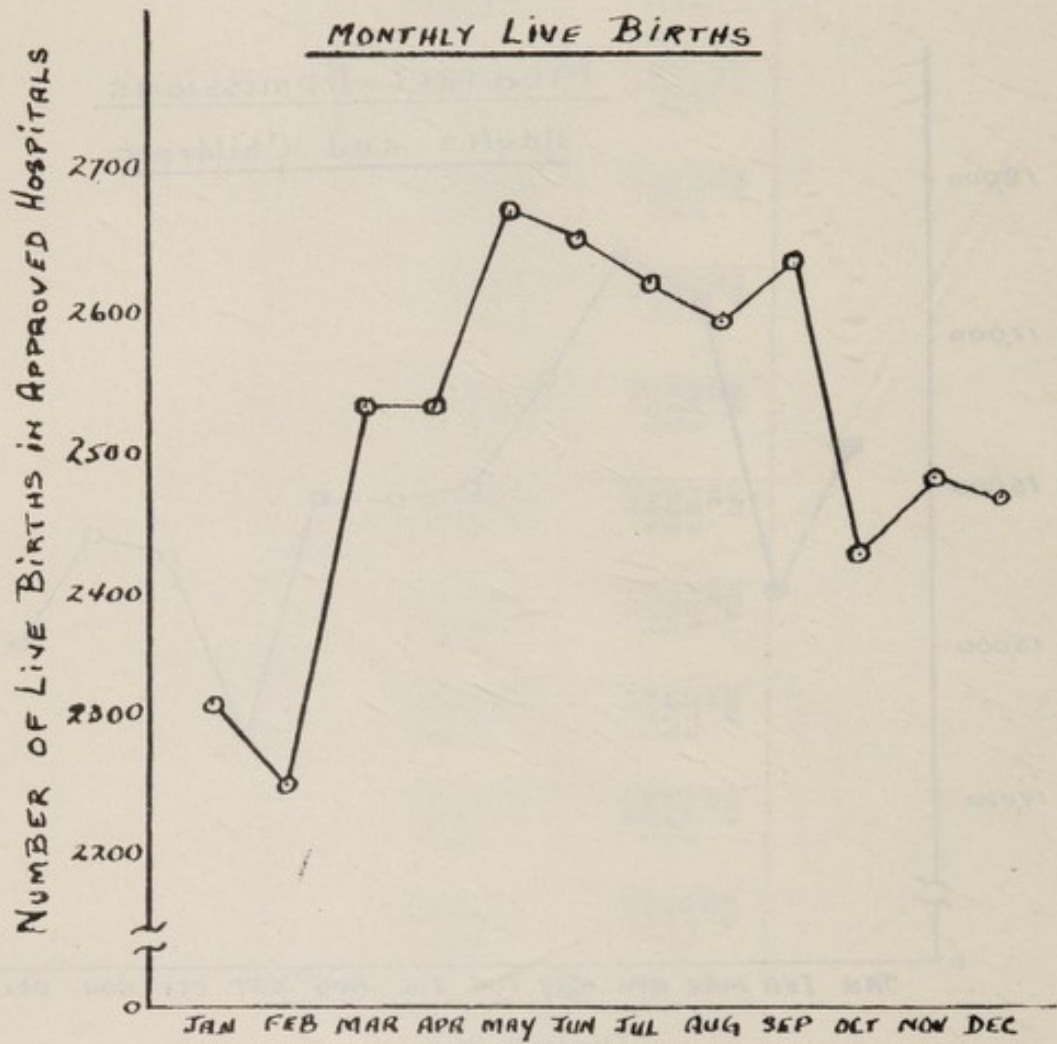


Diagram 2b

Table 3 records the distribution of patients discharged from hospital, or deceased, according to the type of Provincial hospitalization benefit, if any, that they received. The average length of stay in hospital, from time of admission to discharge, is also shown. For purposes of comparison, similar data for 1952 is included. It is of interest to note here that there has been no change in the average length of stay in hospital of patients whose standard ward care was part of the Provincial-Municipal Hospitalization Plan, since the inception of the plan in June, 1950.

Diagram 3 illustrates similar information for all patients under care during the year 1953.

Diagram 4 is a bar-graph of the average length of stay in hospital, by type of hospitalization benefit. Other residents not covered by any type of Provincial hospitalization benefit are included for comparative purposes. The comment made in regard to the averages shown in Table 3 also applies here.

TABLE No. 3  
LENGTH OF STAY IN HOSPITAL, BY PATIENT TYPE

	1953		1952	
	No. of Patients Discharged or deceased to nearest 100	Average length of stay	No. of Patients Discharged or deceased to nearest 100	Average length of stay
Recipients of:				
Municipal Hospitalization Benefits:				
(a) Standard Ward Only .....	72,400	7.6	65,900	7.6
(b) Standard Ward and Special Services .....	13,200	8.1	N.A.	N.A.
Maternity Hospitalization Benefits .....	28,300	7.9	26,000	8.2
Old Age Benefits .....	12,200	16.2	10,900	15.9
Mother's Allowance .....	900	7.6	900	6.9
Blind Pension .....	300	14.4	300	13.5
Widow's Allowance .....	200	12.2	.....	10.5
Residents not eligible for any of above .....	55,400	7.6	66,800	7.8
*Others .....	9,100	9.7	9,000	10.7

\*"Others" includes non-residents and patients whose hospitalization is provided for by the Department of National Defence or the Department of Indian Affairs, in an approved active-treatment hospital.

Newborn infants and polio and orthopaedic patients are not included in above.

The average length of stay for patients having both standard ward care and special hospital services appears higher at 8.1 days than the average for those having standard ward care only. This is not a true comparison since a higher proportion of the special hospital services recipients were hospitalized in Group A hospitals, which, as referral centers tend to have a longer average length of stay than the smaller rural hospitals. As the coverage for special hospital services becomes more widespread throughout the province, the comparison of these averages will have more meaning.

Expenditures of the Provincial Department of Public Health for active treatment care in general hospitals is illustrated in the following diagram for a period of four years. The term "per diem" refers to the 70 cent per diem grant paid to hospitals on behalf of hospitalized residents and persons who qualify under the Provincial-Municipal Hospitalization Programme.

"Standard Ward" refers to the Provincial-Municipal Hospitalization Plan for standard ward care which came into effect in June, 1950. In July, 1953 this plan was expanded to cover special hospital services as well.

DISTRIBUTION OF PATIENTS UNDER CARE, BY TYPE  
(EXCLUDING NEWBORN AND D.V.A. DIVISION OF  
UNIVERSITY HOSPITAL)

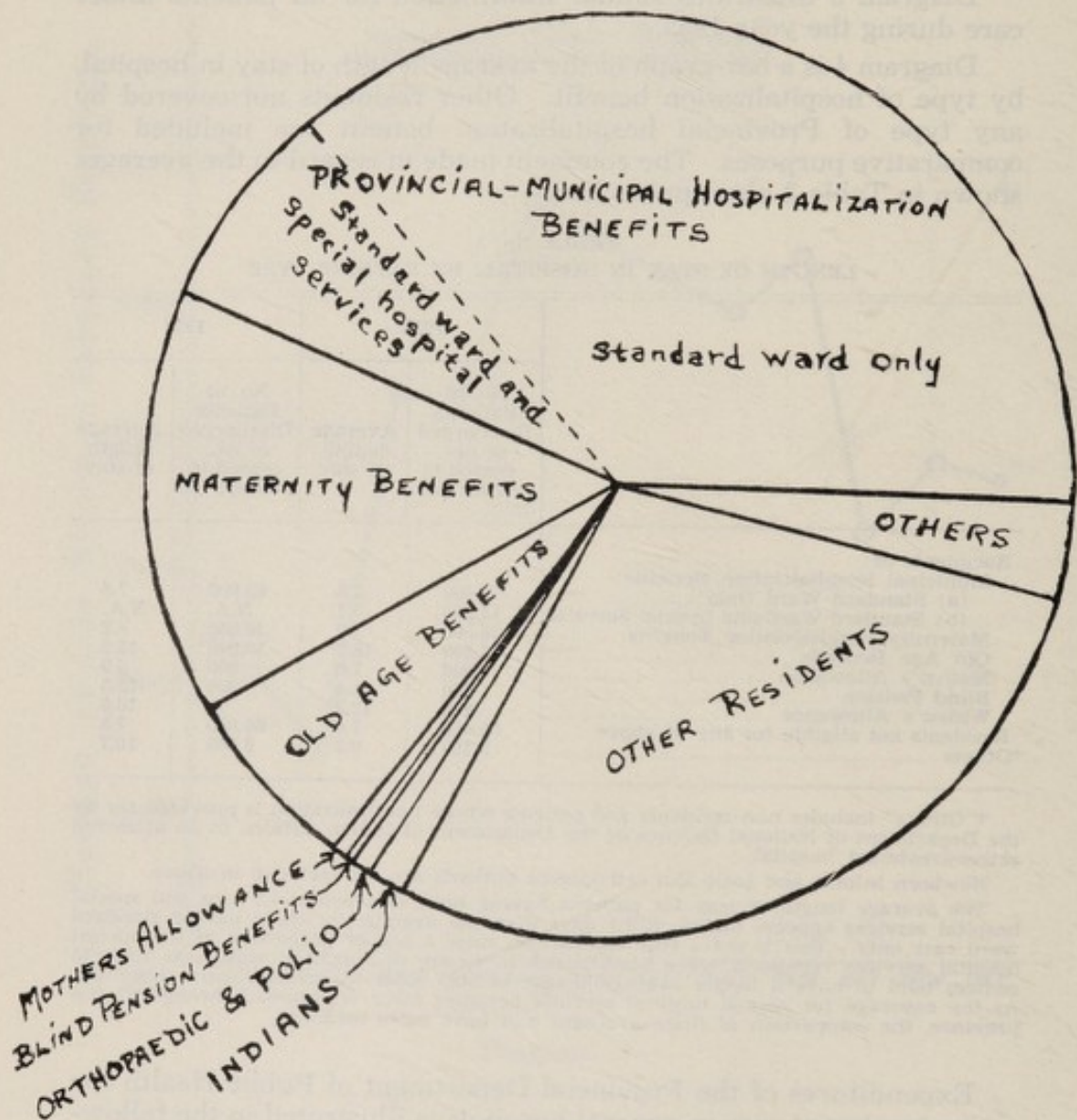


Diagram 3

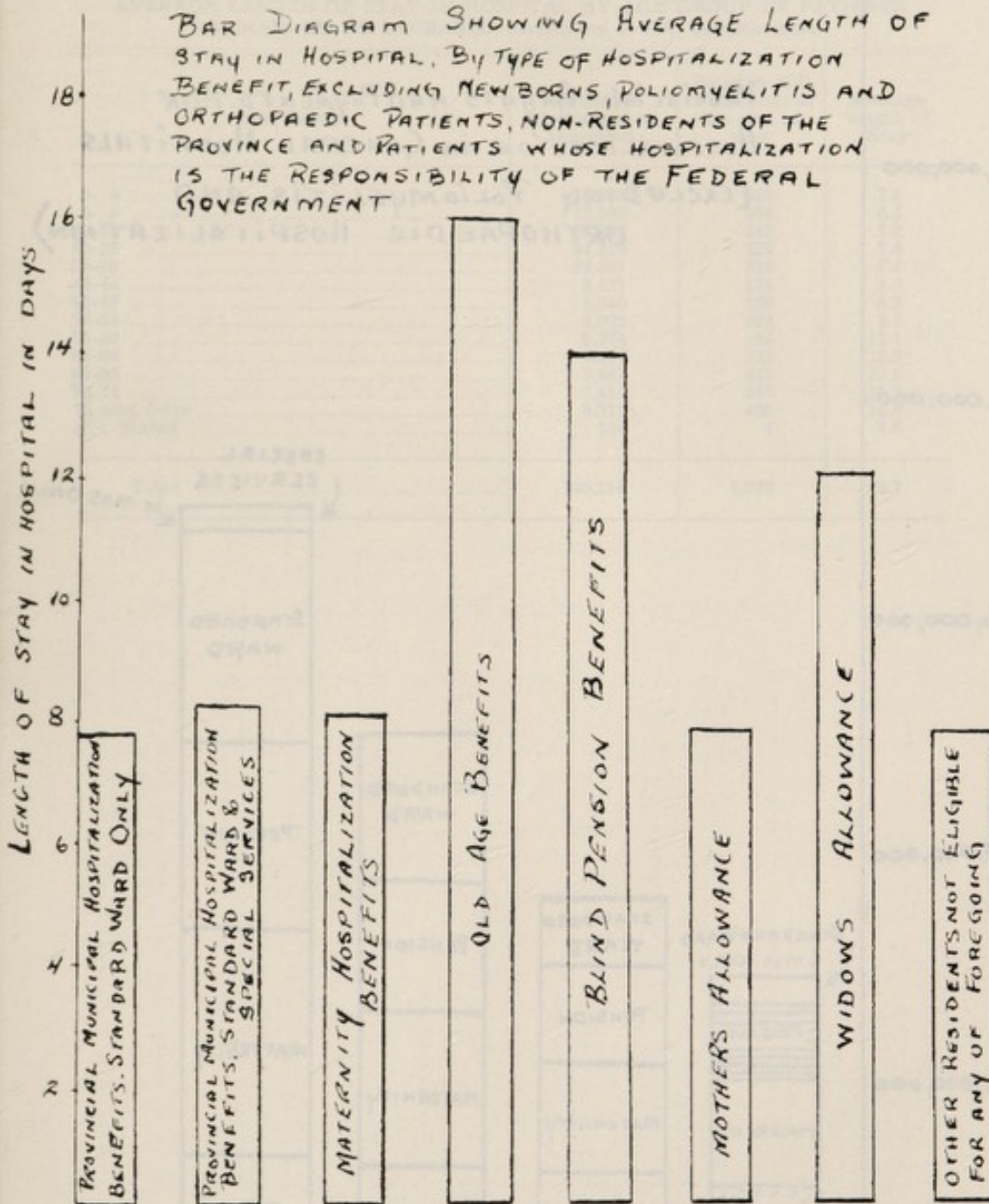


Diagram 4

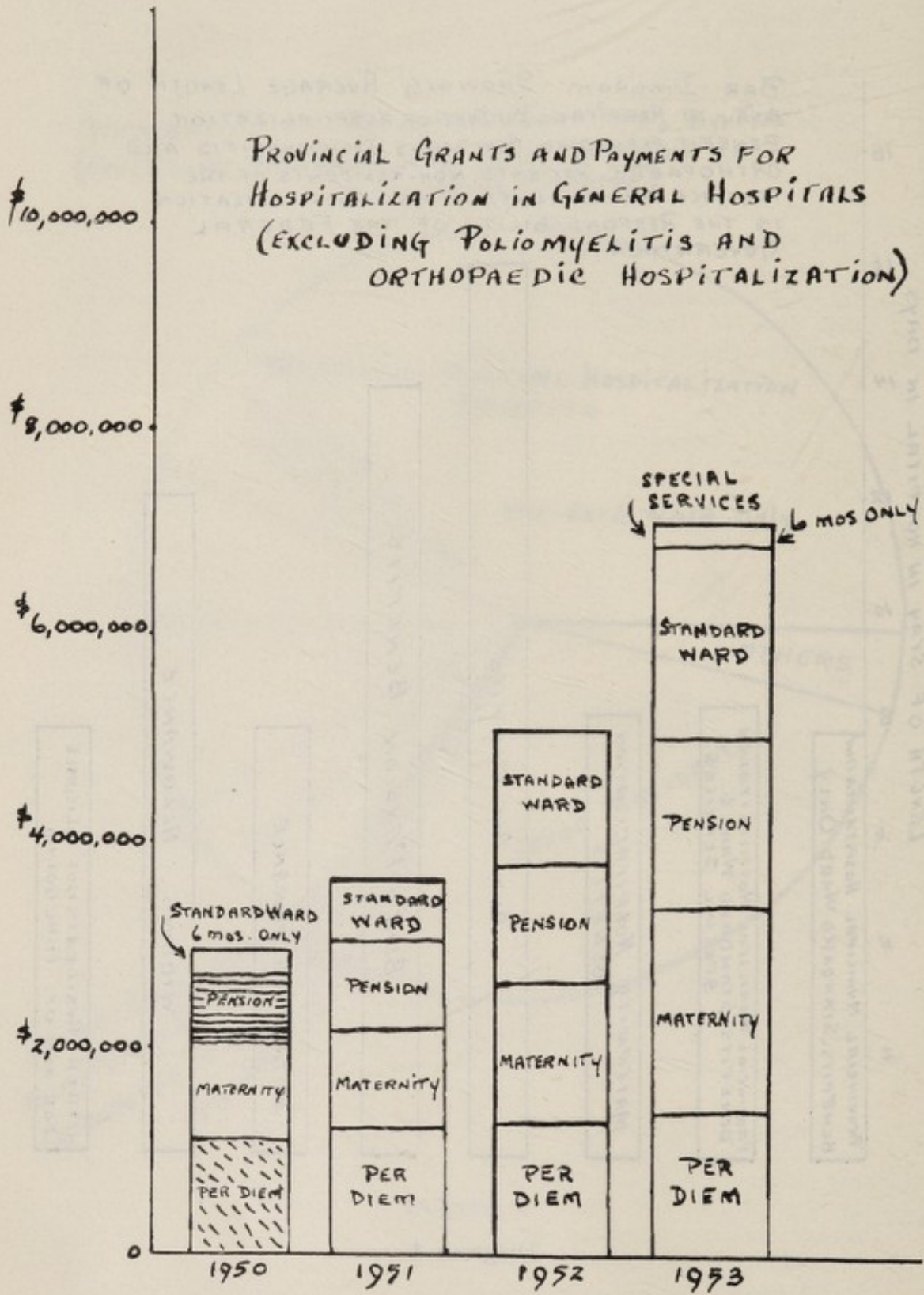


Diagram 5

The average length of stay in hospital from time of admission to discharge, is shown by age-group of the patients in Table 4. The same information is presented in graphical form in diagram 6.

TABLE No. 4  
 AVERAGE LENGTH OF STAY IN HOSPITAL BY AGE GROUP OF PATIENTS  
 DISCHARGED OR DECEASED (excluding D.V.A. and Newborn)

Age Group	Patients Discharged or Deceased	Patients still in Hospital at the end of year	Average length of Stay
0- 4	19,963	388	7.1
5- 9	13,996	206	6.1
10-19	20,246	343	7.2
20-29	44,210	720	7.0
30-39	29,881	526	7.4
40-44	9,487	178	8.3
45-49	8,546	166	8.9
50-54	8,032	202	9.7
55-59	6,774	165	11.1
60-64	7,297	232	12.5
65-69	7,841	246	13.5
70-74	7,411	297	15.3
75 and Over	9,318	408	16.8
Not Stated	154	1	7.6
<b>Total</b>	<b>193,156</b>	<b>4,078</b>	<b>8.7</b>

18 LENGTH OF STAY IN HOSPITAL OF PATIENTS  
DISCHARGED OR DECEASED, BY AGE GROUP  
(NEWBORN EXCLUDED)

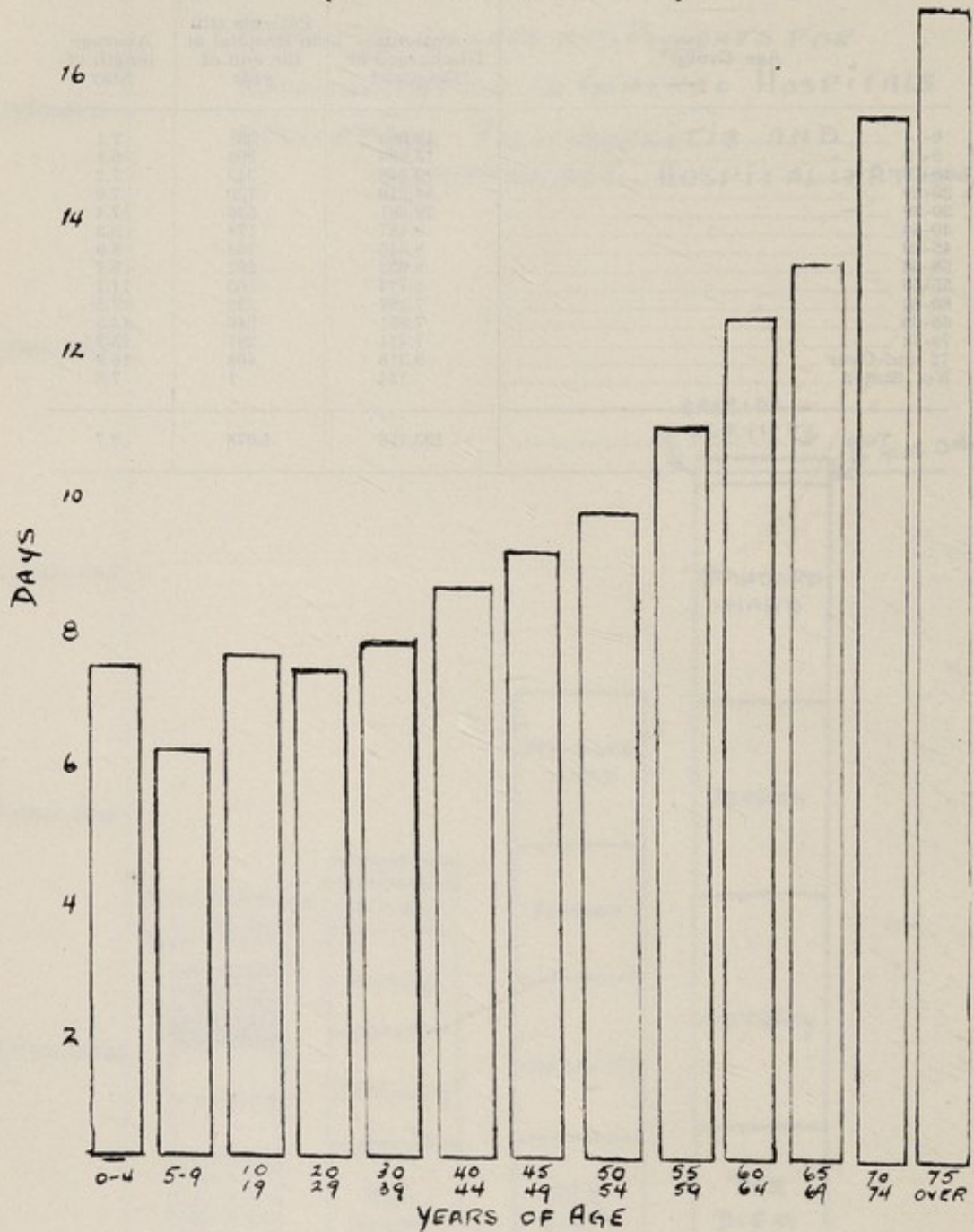


Diagram 6

### Alberta Approved Hospitals

An "Approved Hospital" is an active treatment public hospital which is receiving a per diem allowance for all residents hospitalized therein. The term does not include chronic hospitals, mental hospitals, tuberculosis sanatoria, private hospitals, or nursing homes. The statistics in this section pertain to approved hospitals only.

At December 31st, 1953, there were 100 approved hospitals operating in the Province, divided as follows:

	1953	1952
Municipal .....	51	51
Municipally Owned and Community .....	7	6
Denominational .....	37	37
Industrial .....	2	2
Service Group .....	2	2
Provincial .....	1	1
	<hr/>	<hr/>
	100	99
	<hr/>	<hr/>

The Isolation Hospitals in Edmonton, Calgary, and Lethbridge are included with the respective city hospitals. The hospital at Hythe is a sub-hospital of Grande Prairie Municipal and therefore is not counted separately. The community hospital at Coaldale became an approved hospital effective January 1st, 1953.

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

Table 5—Bed Capacity, bed complement, and movement of patients.

Table 6—Patient days, average stay in hospital and occupancy.

Table 7—Staff.

Table 8—Operating expenditure.

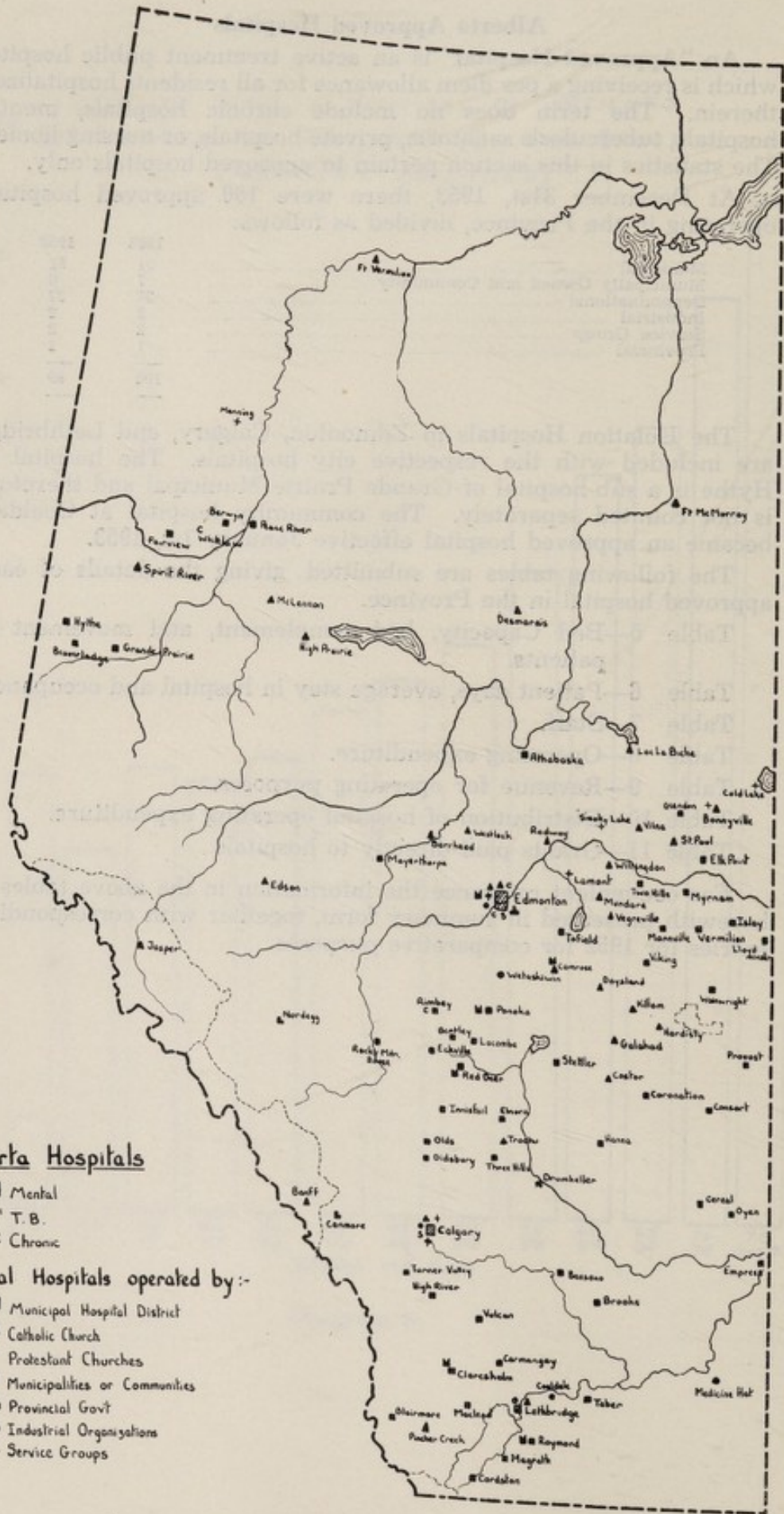
Table 9—Revenue for operating purposes.

Table 10—Distribution of hospital operating expenditure.

Table 11—Grants paid directly to hospitals.

For convenient reference the information in the above tables is herewith presented in summary form, together with corresponding entries for 1952 for comparative purposes.





## ACTIVE TREATMENT HOSPITAL BEDS

	1953		1952	
	Capacity	Complement	Capacity	Complement
Beds and cribs .....	6,371	6,810	5,752	6,159
Bassinets .....	1,083	1,241	1,022	1,165
	<u>7,454</u>	<u>8,051</u>	<u>6,774</u>	<u>7,324</u>
Beds per thousand population (excluding Bassinets) .....	6.3	6.7	5.9	6.3
Beds per thousand population (including Bassinets) .....	7.4	7.9	6.9	7.5
Patients accommodated per bed per year (excluding newborn) .....	29.0	.....	30.2	.....

## PATIENT DAYS

	1953	1952
Adults and children .....	1,731,621	1,614,151
Newborn .....	247,087	231,292
All Patients .....	<u>1,978,708</u>	<u>1,845,443</u>
Patient days (excluding newborn) per capita of population .....	1.7	1.6

## PATIENTS UNDER CARE DURING THE YEAR

	1953	1952
Adults and children .....	198,847	186,025
Average stay .....	8.8	9.0
Newborn .....	30,620	28,164
Average stay .....	8.7	8.9
Total .....	<u>239,467</u>	<u>214,189</u>
Average stay .....	8.7	8.9
Average in hospital daily .....	5,421	5,042
% of population in hospital daily .....	0.53	0.51
% of population admitted per year (excluding births) .....	19.1	18.6

## BIRTHS

	1953	1952
Live births in approved hospitals .....	30,075	27,650
Still births .....	447	367
Percentage of births in approved hospital to total births in Province .....	96.0%	95.0%

## STAFF—FULL TIME AND PART TIME

	1953	1952
Total Staff .....	7,544	6,443
Nurses:		
Graduate .....	1,562	1,298
Student .....	1,253	1,182
Nurses Aides:		
Certified .....	475	412
Trainee .....	25	65
Orderlies .....	152	116
Internes .....	111	99
Salaried Doctors .....	43	31
Technicians .....	244	177
Dietitians .....	74	40
All Others .....	3,605	3,023

## FINANCIAL

	1953	1952
Total revenue for operating purposes .....	\$21,471,679.90	\$17,340,006.97
Total operating expenditures .....	20,946,569.04	17,188,076.16
Revenue per patient per day .....	11.84	10.29
Expenditure per patient per day .....	11.55	10.20
Salaries and wages .....	54.5%	52.6%
Supplies .....	28.4%	31.1%
Purchased services .....	3.0%	3.1%
Insurance .....	0.8%	0.9%
Depreciation .....	4.4%	4.4%
Repairs and Replacements .....	3.4%	3.7%
Interest and exchange .....	3.8%	2.8%
Miscellaneous .....	1.7%	1.4%

TABLE No. 5—HOSPITAL BEDS AND MOVEMENT OF PATIENTS, 1953

Hospitals	Bed Capacity			Bed Complement			Patients Under Care During Year						Discharges		Deaths		Stillbirths			
	Beds	Bassinets	Total	Beds	Bassinets	Total	Adults and Children		Newborn		Total	Adults and Children	Newborn	Adults and Children	Newborn					
							M.	F.	M.	F.										
	M.		F.		M.		F.		M.		F.		M.		F.					
Athabasca, Municipal	42	13	55	45	13	58	772	1,033	111	116	883	1,149	2,032	1,794	224	1,781	223	16	1	4
Banff, Mineral Springs	42	4	46	60	6	66	417	448	42	40	459	488	947	850	82	819	81	18	1	2
Barrhead, St. Joseph's	24	7	31	39	10	49	688	970	114	100	802	1,070	1,872	1,629	82	787	82	25	1	1
Bassano, Municipal	26	6	32	25	6	31	384	438	42	41	426	479	905	805	210	1,612	209	23	2	2
Beaverlodge, Municipal	9	6	15	13	5	18	198	289	61	52	259	341	600	476	113	466	111	13	1	1
Bentley, Municipal	16	7	23	20	6	26	177	262	21	18	198	280	478	435	39	422	38	6	6	...
Berwyn, Municipal	21	5	26	23	5	28	252	343	51	34	303	377	680	578	82	580	83	7	2	1
Blairmore, Crow's Nest Pass, Mun.	72	6	78	70	10	80	740	1,015	121	104	861	1,119	1,980	1,733	224	1,696	218	45	5	6
Bonnyville, Kath. H. Prittle	8	5	13	5	28	215	325	41	28	256	353	609	527	67	533	67	1	1	1	5
Bonnyville, St. Louis	24	5	29	41	8	49	588	791	88	66	676	857	1,533	1,348	153	1,342	148	12	1	5
Brooks, Municipal	64	13	77	64	13	77	716	998	110	127	826	1,125	1,951	1,680	232	1,676	232	15	3	5
Calgary, Alberta Red Cross	156	...	156	156	...	156	250	196	...	...	250	196	446	321	...	322	...	1	1	...
Calgary, General	692	56	748	572	80	652	5,641	9,413	1,562	1,484	7,203	10,897	18,100	14,754	3,003	14,195	2,938	479	58	42
Calgary, Holy Cross	328	54	382	336	60	396	4,593	8,143	1,373	1,271	5,966	9,414	15,380	12,495	2,593	12,187	2,537	282	50	42
Calgary, Salvation Army Grace	25	28	53	20	16	36	...	224	103	101	103	325	428	223	203	216	195	1	1	4
Camrose, St. Mary's	98	22	120	98	18	116	1,474	2,074	187	217	1,661	2,291	3,952	3,501	399	3,425	385	74	8	4
Canmore, Canmore	12	4	16	14	4	18	124	114	19	17	143	131	274	237	36	233	34	3	2	...
Cardston, Municipal	24	6	30	32	12	44	424	753	94	118	518	871	1,389	1,160	209	1,135	206	26	3	...
Carmanagay, Little Bow Municipal	14	...	14	7	1	8	151	169	20	10	171	179	350	312	29	304	27	9	2	1
Castor, Our Lady of the Rosary	25	8	33	28	8	36	426	720	51	48	477	768	1,245	1,130	96	1,121	96	8	1	2
Cereal, Municipal	9	3	12	14	4	18	126	132	15	11	141	143	284	255	26	249	25	3	...	...
Clareholm, Municipal	42	6	48	47	7	54	468	797	94	97	562	894	1,456	1,246	186	1,218	186	24	1	4
Coaldale, Community	8	4	12	14	6	20	168	377	51	47	219	424	643	534	93	527	94	6	3	2
Cold Lake, John Nell	15	3	18	22	6	28	271	322	55	64	326	386	712	589	119	578	114	3	2	...
Consort, Municipal	22	8	30	24	7	31	214	281	43	28	257	309	566	481	71	477	69	9	...	1
Coronation, Municipal	18	3	21	20	5	25	220	336	32	50	252	386	638	548	81	546	80	4	...	...
Daysland, Providence	16	...	16	23	5	28	383	434	33	31	416	465	881	798	61	788	62	12	...	...
Desmarais, St. Martin's	14	2	16	18	7	25	146	239	9	17	155	256	411	381	25	379	26	3	...	1
Didsbury, Municipal	25	7	32	22	7	29	346	495	72	57	418	552	970	830	126	803	119	16	...	3
Drumheller, Municipal	65	7	72	77	13	90	986	1,325	180	191	1,166	1,516	2,682	2,254	364	2,219	358	45	...	7

Eckville, Municipal	29	5	34	30	8	38	480	669	68	53	548	722	1,270	1,133	119	1,128	120	9	1
Edmonton, Beulah Home	6	2	8	6	6	12	1	133	64	68	65	201	266	131	126	128	127	163	1
Edmonton, General	378	69	447	386	56	442	4,744	6,400	707	646	5,451	7,046	12,497	10,916	1,335	10,727	1,286	24	19
(a) Pollo							56	47			56	47	103	89		78			
Edmonton, Misericordia	294	64	358	308	62	370	4,329	8,196	1,247	1,271	5,576	9,467	15,043	12,323	2,481	12,118	2,435	168	31
Edmonton, Royal Alexandra	460	80	540	569	88	657	5,699	9,841	1,882	1,758	7,581	11,599	19,180	15,171	3,576	14,970	3,524	55	67
(a) Isolation							502	444			502	444	946	914		873		33	
Edmonton, University of Alberta	879	40	919	839	71	910	6,318	7,436	923	781	7,241	8,217	15,458	13,404	1,670	13,063	1,660	13	15
(a) D.V.A.							N't available				N't available		1,619	1,525		1,481		39	
(b) Pollo							103	137			103	137	240	174		176			
Edson, St. John's	37	5	42	33	5	38	560	687	120	120	680	807	1,487	1,232	237	1,210	226	12	11
Elk Point, Municipal	51	9	60	52	9	61	720	1,142	90	85	810	1,227	2,037	1,826	173	1,808	172	23	1
Elnora, Municipal	16	6	22	17	5	22	91	122	21	13	112	135	247	208	34	200	34	5	
Empress, Municipal	23	4	27	15	3	18	187	220	24	33	211	253	464	397	55	387	55	7	
Fairview, Municipal	32	10	42	40	11	51	441	712	76	83	517	795	1,131	1,131	156	1,109	151	15	4
Fort Macleod, Municipal	14	6	20	24	6	30	278	352	33	40	311	392	703	613	71	605	70	18	2
Ft. McMurray, St. Gabriel's	28	6	34	29	4	33	192	268	26	35	218	303	521	455	61	449	57	3	2
Ft. Vermilion, St. Theresa	13	5	18	28	4	32	233	377	45	28	278	405	683	585	73	573	71	5	2
Galahad, St. Joseph's	15	5	20	24	6	30	405	506	35	24	440	530	970	895	57	892	57	5	1
Glendon, Municipal	8	7	15	15	7	22	196	294	32	28	228	322	550	486	59	476	58	5	5
Grande Prairie, Municipal	79	20	99	90	18	108	1,151	1,582	204	170	1,355	1,752	3,107	2,682	369	2,638	366	47	8
(a) Hythe Sub.-Hospital							104	143	25	31	129	174	303	241	56	245	56		
Hanna, Municipal	35	9	44	42	9	51	482	618	86	65	568	683	1,251	1,078	150	1,065	147	22	3
Hardisty, St. Anne's	20	6	26	23	6	29	360	501	39	38	399	539	938	846	75	831	71	10	4
High Prairie, Providence	41	12	53	64	12	76	926	1,275	171	161	1,097	1,436	2,533	2,147	322	2,134	316	35	7
High River, Municipal	44	11	55	53	15	68	597	1,027	139	136	736	1,163	1,899	1,597	273	1,574	269	32	4
Innisfail, Municipal	28	8	36	43	8	51	473	563	79	85	552	648	1,200	1,020	160	990	163	26	1
Islay, Municipal	13	4	17	12	4	16	180	215	22	11	202	226	428	388	33	380	32	9	1
Jasper, Seton	26	8	34	27	8	35	384	323	44	47	428	370	798	697	91	690	87	3	3
Killam, General	27	6	33	28	7	35	397	714	58	59	455	773	1,228	1,095	115	1,072	111	17	2
Lac la Biche, St. Catherine's	23	8	31	30	8	38	510	779	125	104	635	883	1,518	1,271	228	1,262	224	8	7
Lacombe, Municipal	50	16	66	52	15	67	692	1,165	155	116	847	1,281	2,128	1,830	264	1,788	259	35	5
Lamont, Archer Memorial	95	12	107	97	12	109	1,046	1,493	84	93	1,130	1,586	2,716	2,492	171	2,477	168	23	7
Lethbridge, Galt	86	8	94	123	8	131	1,425	2,040	242	206	1,667	2,246	3,913	3,373	437	3,313	432	72	10
(a) Isolation							53	61			53	61	114	111		111		3	
Lethbridge, St. Michael's General	181	18	199	199	40	239	2,715	4,069	518	415	3,233	4,424	7,657	6,584	912	6,484	897	112	8
Lloydminster, Lloydminster	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	570	896	115	116	685	1,012	1,697	1,433	226	1,430	227	7	3
McLennan, Sacred Heart	29	4	33	37	10	47	635	970	127	112	762	1,082	1,844	1,580	230	1,571	229	11	4
Magrath, Municipal	22	8	30	28	6	34	200	331	46	20	246	351	597	523	65	516	65	7	1
Manning, Battle River	12	4	16	12	6	18	239	297	56	39	295	336	631	531	93	526	93	7	3

TABLE No. 5—HOSPITAL BEDS AND MOVEMENT OF PATIENTS, 1953—Continued

Hospitals	Bed Capacity			Bed Complement			Patients Under Care During Year						Admissions		Discharges		Deaths		Stillbirths	
	Beds	Bassinets	Total	Beds	Bassinets	Total	Adults and Children		Newborn		Total	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn			
							M.	F.	M.	F.								M.		F.
Mannville, Municipal	15	4	19	22	5	27	232	326	54	48	286	374	660	101	544	95	5	4	1	
Mayerthorpe, Municipal	20	8	28	31	4	35	540	611	91	64	631	675	1,306	150	1,125	149	7	1	2	
Medicine Hat, General	118	10	128	142	35	177	1,791	2,494	387	352	2,178	2,846	5,024	728	4,090	711	123	14	9	
Medicine Hat, Isolation	11	11	22	11	11	22	3	1	1	3	1	4	4	4	4	4	4	4	4	4
Mundare, General	26	4	30	28	4	32	409	474	14	24	423	498	921	37	855	36	17	4	4	
Myrnam, Municipal	13	3	16	17	5	22	273	349	14	19	287	368	655	31	607	31	5	1	1	
Nordegg, General	14	5	19	14	5	19	46	73	15	16	61	89	150	31	117	28	28	1	1	
Olds, Municipal	31	9	40	34	10	44	438	658	114	96	552	754	1,306	204	1,038	204	38	4	3	
Oyen, Municipal	17	5	22	20	4	24	162	189	27	21	189	210	399	48	344	45	5	3	3	
Peace River, Municipal	37	9	46	44	9	53	592	756	108	97	700	853	1,553	202	1,313	200	13	3	5	
Pincher Creek, St. Vincent's	64	6	70	63	12	75	589	781	68	61	657	842	1,499	128	1,325	120	13	3	3	
Ponoka, Municipal	48	11	59	48	10	58	641	858	95	116	736	974	1,710	208	1,446	205	19	2	3	
Provost, Municipal	26	6	32	29	5	34	387	527	42	44	429	571	1,000	83	878	84	18	3	3	
Radway, St. Joseph's	14	6	20	20	6	26	277	386	49	41	276	427	703	86	600	89	8	1	1	
Raymond, Municipal	18	5	23	18	6	24	210	441	63	78	273	519	792	139	626	137	14	3	3	
Red Deer, Municipal	104	30	134	105	24	129	1,496	2,270	290	289	1,786	2,559	4,345	566	3,649	557	51	11	6	
Rimby, Municipal	19	8	27	26	8	34	399	644	83	87	482	731	1,213	168	1,011	164	13	1	4	
Rocky Mountain House, Municipal	35	9	44	34	10	44	425	510	59	65	484	575	1,059	122	895	119	16	3	4	
Smoky Lake, George McDougall	15	5	20	16	5	21	237	323	54	41	291	364	655	93	545	92	9	1	1	
Spirit River, Holy Cross	27	4	31	32	11	43	479	671	55	44	534	715	1,249	98	1,104	94	15	3	3	
St. Paul, St. Theresa	37	16	53	66	24	90	1,004	1,338	154	135	1,158	1,473	2,631	282	2,294	278	10	3	3	
Stettler, Municipal	56	8	64	44	3	47	884	1,195	174	147	1,058	1,242	2,400	315	1,993	307	42	10	3	
Taber, Municipal	37	8	45	45	12	57	731	1,111	166	181	897	1,292	2,189	338	1,791	335	22	7	3	
Three Hills, Municipal	25	10	35	25	12	37	210	426	61	67	271	493	764	625	124	609	125	2	1	
Tofield, Municipal	21	5	26	15	3	18	315	504	62	70	377	574	951	805	792	129	12	2	2	
Trochu, St. Mary's	31	6	37	31	6	37	150	277	28	29	178	306	484	57	411	55	9	1	1	
Turner Valley, Municipal	13	6	19	19	6	25	268	322	50	28	318	350	668	77	560	75	18	2	3	
Two Hills, Municipal	25	10	35	28	10	38	415	563	44	47	459	610	1,069	88	957	88	3	2	3	
Vegreville, St. Joseph's General	85	14	99	91	15	106	920	1,418	106	106	1,026	1,524	2,550	208	2,268	204	29	2	1	
Vermillion, Municipal	37	4	41	40	10	50	401	674	100	94	501	768	1,269	189	1,037	189	24	4	2	

Viking, Municipal .....	35	9	44	40	9	49	517	722	51	45	568	767	1,335	1,216	93	1,205	90	17	4	...
Vilna, Our Lady's .....	14	3	17	18	4	22	190	257	31	43	221	300	521	433	71	432	71	7	1	3
Vulcan, Municipal .....	37	7	44	37	7	44	497	654	60	62	557	716	1,273	1,127	120	1,123	118	12	3	3
Wainwright, Municipal .....	48	14	62	50	14	64	573	793	125	121	698	914	1,612	1,343	244	1,309	234	25	3	1
Westlock, Immaculata .....	75	18	93	75	20	95	1,331	1,723	155	157	1,486	1,880	3,365	2,996	306	2,945	302	52	4	4
Wetaskiwin, Community .....	60	12	72	65	13	78	1,016	1,295	196	175	1,212	1,470	2,682	2,278	364	2,227	355	51	10	7
Willington, General .....	13	3	16	25	4	29	388	555	34	33	422	588	1,010	931	67	914	63	13	1	...
Grand Total .....	6,371	1,083	7,454	6,810	1,241	8,051	79,618	117,610	15,802	14,818	95,420	132,428	229,467	194,768	30,076	191,167	29,536	3,501	497	447
Less D.V.A., Orthopaedic, Polio, Division Cases .....	519	.....	519	518	.....	518	409	380	.....	.....	409	380	2,408	2,109	.....	2,057	.....	40	.....	.....
NET TOTAL .....	5,852	1,083	6,935	6,292	1,241	7,533	79,209	117,230	15,802	14,818	95,011	132,048	227,059	192,659	30,076	189,110	29,536	3,461	497	447

\*Does not include D.V.A. Division of University Hospital, for which information was not available.

†Lloydminster Hospital is located in Saskatchewan.

TABLE No. 6—PATIENT DAYS AND OCCUPANCY, 1953

Hospitals	PATIENT DAYS										Occu- pancy
	Patient Days During 1953					Patient Days of Patients Dis- charged or Deceased					
	Adults and Children		Newborn		Total	Adults and Children		Newborn		Total	
	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total		
Athabasca, Municipal	7,677	1,728	9,405	7,699	1,732	9,431	4.3	7.7	4.7	50.1	
Banff, Mineral Springs	10,659	545	11,204	8,742	545	9,287	10.4	6.6	10.1	69.5	
Barrhead, St. Joseph's	10,147	1,531	11,678	10,407	1,542	11,949	6.4	7.3	6.5	115.8	
Bassano, Municipal	5,480	638	6,118	5,484	642	6,126	6.8	7.7	6.8	57.7	
Beaverlodge, Municipal	2,919	552	3,471	3,018	551	3,569	6.3	4.9	6.0	88.9	
Bentley, Municipal	2,240	302	2,542	2,421	298	2,719	5.7	7.8	5.8	38.4	
Berwyn, Municipal	4,666	711	5,377	4,749	725	5,474	8.1	8.5	8.1	60.9	
Blairmore, Crow's Nest Pass Municipal	12,712	1,555	14,267	12,833	1,555	14,388	7.4	7.0	7.3	48.4	
Bonnyville, Kath. H. PrITTLE	3,625	498	4,123	3,713	529	4,242	7.0	7.9	7.1	124.1	
Bonnyville, St. Louis	10,424	1,396	11,820	10,484	1,310	11,794	7.7	8.8	7.8	119.0	
Brooks, Municipal	10,765	1,692	12,457	11,197	1,610	12,807	6.6	6.9	6.6	46.1	
Calgary Alberta Red Cross	45,895		45,895	45,228		45,228	140.0		140.0	80.6	
Calgary, General	140,300	23,587	163,887	138,014	23,353	161,367	9.4	7.8	9.1	91.7	
Calgary, Holy Cross	109,804	20,650	130,454	108,579	20,742	129,321	8.7	8.0	8.6	81.1	
Calgary, Salvation Army Grace	2,053	1,914	3,967	1,999	1,837	3,836	9.2	9.4	9.3	22.5	
Camrose, St. Mary's	23,041	3,438	26,479	23,035	3,414	26,449	6.6	8.7	6.8	64.4	
Canmore, Canmore	1,556	230	1,786	1,569	230	1,799	6.6	6.4	6.6	35.5	
Cardston, Municipal	6,878	1,540	8,418	7,032	1,551	8,583	6.1	7.4	6.3	78.5	
Carngay, Little Bow Municipal	2,445	254	2,699	2,465	260	2,725	7.9	9.0	8.0	47.8	
Castor, Our Lady of the Rosary	5,939	819	6,758	6,003	817	6,820	5.3	8.4	5.6	65.1	
Cereal, Municipal	1,937	216	2,153	1,884	207	2,091	7.5	8.3	7.5	59.0	
Clareholm, Municipal	10,745	1,560	12,305	10,747	1,576	12,323	8.7	8.4	8.6	70.1	
Coaldale Community	2,975	761	3,736	2,976	786	3,762	5.6	8.1	6.0	101.9	
Cold Lake, John Neil	2,898	785	3,684	2,888	779	3,667	5.0	6.7	5.3	52.9	
Consort, Municipal	4,031	658	4,689	3,934	652	4,586	8.1	9.4	8.3	50.2	
Coronation, Municipal	4,921	830	5,751	4,845	824	5,669	8.8	10.3	9.0	74.9	
Daysland, Providence	5,679	550	6,229	5,669	557	6,226	7.1	9.0	7.2	97.2	
Desmarais, St. Martin's	3,043	195	3,238	4,117	196	4,313	10.8	7.5	10.6	59.5	
Didsbury, Municipal	6,294	1,099	7,393	6,140	1,063	7,203	7.5	8.7	7.7	69.0	
Drumheller, Municipal	21,612	2,670	24,282	21,784	2,651	24,435	9.6	7.3	9.3	91.1	

Eckville, Municipal	6,511	859	7,370	6,753	867	7,320	5,9	7.2	6.1	61.5
Edmonton, Beulah Home	1,832	2,294	4,126	1,782	2,314	4,096	13.9	18.2	16.1	83.7
Edmonton, General	96,960	11,050	108,010	97,434	10,745	108,179	8.9	8.2	8.9	74.7
(a) Polio	6,107	6,107	6,107	4,475	4,475	4,475	57.4	.....	57.4	.....
Edmonton, Misericordia	102,337	17,430	119,767	101,663	17,365	119,028	8.3	7.0	8.1	95.4
Edmonton, Royal Alexandra	141,577	29,095	170,672	145,383	29,142	174,525	9.6	8.1	9.3	91.3
(a) Isolation	11,680	11,680	11,680	10,596	11,7	10,596	11.7	.....	11.7	.....
Edmonton, University of Alberta	167,265	15,910	183,175	162,643	15,837	178,480	12.1	9.5	11.8	71.8
(a) D.V.A.	43,231	43,231	43,231	39,400	25.9	39,400	25.9	.....	25.9	.....
(b) Polio	19,828	19,828	19,828	17,333	.....	17,333	98.5	.....	98.5	.....
Edson, St. John's	8,222	2,263	10,485	8,064	2,237	10,301	8.4	9.4	7.1	60.9
Elk Point, Municipal	12,351	1,465	13,816	12,216	1,460	13,676	6.7	8.4	6.8	66.3
Elnora, Municipal	2,222	332	2,554	1,965	332	2,297	9.6	9.8	9.6	38.0
Empress, Municipal	3,642	548	4,190	3,700	528	4,228	9.4	9.6	9.4	43.3
Fairview, Municipal	8,118	1,261	9,379	8,062	1,239	9,301	7.2	8.0	7.3	69.5
Ft. Macleod, Municipal	4,813	573	5,386	4,992	545	5,537	8.0	7.6	8.0	94.2
Ft. McMurray, St. Gabriel's	3,450	520	3,970	3,429	609	3,938	7.6	8.6	7.7	33.8
Ft. Vermilion, St. Theresa	10,149	649	10,798	10,080	647	10,727	17.4	9.1	16.5	213.9
Galahad, St. Joseph's	4,921	574	5,495	4,926	577	5,503	5.5	10.1	5.7	89.9
Glendon, Municipal	2,683	536	3,219	2,643	539	3,182	5.5	9.1	5.9	91.9
Grande Prairie, Municipal	21,155	2,693	23,848	21,987	2,611	24,598	8.2	7.1	8.1	77.9
(a) Hythe Sub-Hospital	1,299	455	1,754	1,273	455	1,728	5.2	8.1	5.7	.....
Hanna, Municipal	9,462	1,359	10,821	9,884	1,359	11,243	9.1	9.1	9.1	74.0
Hardisty, St. Anne's	7,116	732	7,848	7,024	741	7,765	8.4	9.9	8.5	97.5
High Prairie, Providence	18,853	2,536	21,389	18,813	2,567	21,380	8.7	7.9	8.6	126.0
High River, Municipal	11,302	1,991	13,293	11,514	2,015	13,529	7.2	7.4	7.2	70.4
Innisfail, Municipal	8,452	1,171	9,623	8,276	1,180	9,456	8.1	7.2	8.0	82.7
Islay, Municipal	3,193	276	3,469	3,279	276	3,555	8.4	8.4	8.4	67.3
Jasper, Seton	5,038	888	5,926	4,863	887	5,750	7.0	9.9	7.3	53.7
Killam, General	6,658	1,121	7,779	6,464	1,101	7,565	5.9	9.8	6.3	67.6
Lac la Biche, St. Catherine's	7,709	1,585	9,294	7,724	1,568	9,292	6.1	7.0	6.2	91.8
Lacombe, Municipal	13,486	2,303	15,789	13,366	2,289	15,655	7.3	8.7	7.5	73.9
Lamont, Archer Memorial	18,088	1,467	19,555	17,192	1,476	18,668	6.9	8.4	7.0	52.2
Lethbridge, Galt	33,077	3,975	37,052	35,010	4,030	39,040	10.3	9.1	10.2	110.1
(a) Isolation	1,497	1,497	1,497	1,528	.....	1,528	13.4	.....	13.4	.....
Lethbridge, St. Michael's General	57,182	7,867	65,049	56,415	7,729	64,144	8.6	8.5	8.6	91.7
Lloydminster, Lloydminster*	13,934	1,951	15,885	13,746	2,030	15,776	9.6	8.8	9.5	N.A.
McLennan, Sacred Heart	11,111	1,898	13,009	11,162	1,939	13,101	7.1	8.2	7.2	105.0
Magrath, Municipal	3,863	577	4,440	3,791	578	4,369	7.2	8.8	7.4	48.1
Manning, Battle River	2,572	631	3,203	2,377	624	3,201	4.8	6.6	5.1	58.7



TABLE No. 6—PATIENT DAYS AND OCCUPANCY, 1953—Continued

Hospitals	PATIENT DAYS										Occu- pancy
	Patient Days During 1953					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	Total			
Mannville, Municipal	3,696	734	4,430	3,626	726	4,352	6.6	7.3	6.7	67.5	
Maverthorpe, Municipal	7,118	1,525	8,643	6,982	1,507	8,489	6.2	10.0	6.6	97.5	
Medicine Hat, General	34,648	6,420	41,068	33,827	6,187	40,014	8.0	8.5	8.1	80.4	
Medicine Hat, Isolation	32	32	32	32	32	32	8.0	8.0	8.0	0.8	
Mundare, General	5,616	319	5,935	5,746	310	6,056	6.6	8.6	6.7	59.2	
Myrnam, Municipal	3,321	317	3,638	3,339	338	3,677	5.5	10.3	5.7	70.0	
Nordegg, General	491	229	720	486	224	710	4.2	7.7	4.9	9.6	
Olds, Municipal	9,308	1,617	10,925	9,266	1,634	10,900	8.6	7.9	8.5	82.3	
Oyen, Municipal	2,373	371	2,744	2,351	371	2,722	6.7	7.7	6.9	38.2	
Peace River, Municipal	11,843	2,099	13,942	12,590	2,118	14,708	9.5	10.4	9.6	87.7	
Pincher Creek, St. Vincent's	10,163	1,031	11,194	8,866	1,018	9,884	6.6	8.3	6.8	43.5	
Ponoka, Municipal	9,640	1,619	11,259	9,330	1,617	10,947	6.4	7.8	6.5	55.0	
Provost, Municipal	6,436	537	6,973	6,393	538	6,931	7.1	6.4	7.1	67.8	
Radway, St. Joseph's	3,341	761	4,102	3,397	790	4,187	5.6	8.8	6.0	65.4	
Raymond, Municipal	3,920	889	4,809	3,720	894	4,614	5.8	6.4	5.9	59.7	
Red Deer, Municipal	25,482	4,949	30,431	25,500	5,043	30,543	6.9	8.9	7.2	67.1	
Rimbey, Municipal	7,636	1,124	8,760	7,566	1,123	8,689	7.4	6.8	7.3	110.1	
Rocky Mountain House, Municipal	6,553	1,016	7,569	6,537	1,020	7,557	7.2	8.4	7.3	51.3	
Smoky Lake, George McDougall	2,710	629	3,339	2,722	635	3,357	4.9	6.8	5.2	49.5	
Spirit River, Holy Cross	9,234	891	10,125	8,987	882	9,869	8.0	9.1	8.1	93.7	
St. Paul, St. Theresa	15,792	2,860	18,652	15,697	2,886	18,583	6.8	10.3	7.2	116.9	
Stettler, Municipal	18,128	2,485	20,613	18,474	2,474	20,948	9.1	7.8	8.9	88.7	
Taber, Municipal	11,519	2,717	14,236	11,523	2,802	14,325	6.4	8.2	6.6	85.2	
Three Hills, Municipal	3,573	1,002	4,575	3,552	1,040	4,592	5.7	8.2	6.1	39.1	
Tofield, Municipal	5,683	903	6,586	5,496	905	6,401	6.8	7.0	6.9	74.1	
Trochu, St. Mary's	3,694	591	4,285	3,717	574	4,291	8.9	10.4	9.0	32.6	
Turner Valley, Municipal	5,879	620	6,499	6,105	609	6,714	10.6	7.9	10.3	123.9	
Two Hills, Municipal	6,127	715	6,842	6,128	729	6,857	6.4	8.1	6.5	67.1	
Vegreville, St. Joseph's General	19,880	1,920	21,800	19,672	1,921	21,593	8.6	9.3	8.6	64.1	
Vermilion, Municipal	8,056	1,508	9,564	8,158	1,523	9,681	7.7	7.9	7.7	59.7	

Viking, Municipal .....	8,246	887	9,133	8,324	887	9,211	6.8	9.4	7.0	64.5
Vilna, Our Lady's .....	3,360	703	4,063	3,429	701	4,130	7.8	9.7	8.1	65.8
Vulcan, Municipal .....	6,695	1,110	7,805	6,865	1,095	7,960	6.0	9.0	6.3	49.6
Wainwright, Municipal .....	11,926	2,009	13,935	11,906	1,978	13,884	8.9	8.3	8.8	68.1
Westlock, Immaculata .....	22,098	2,872	24,970	21,598	2,873	24,471	7.2	9.4	7.4	80.7
Wetaskiwin, Community .....	15,474	2,795	18,269	15,221	2,756	17,977	6.7	7.6	6.8	70.7
Willingdon, General .....	5,624	573	6,197	5,595	558	6,153	6.0	8.7	6.2	118.5
Grand Total .....	1,731,621	247,087	1,978,708	1,715,805	246,158	1,961,963	8.8	8.2	8.7	
Less D.V.A., Orthopaedic and Polio Division Cases .....	115,061	.....	115,061	106,436	.....	106,436	50.8	.....	50.8	
NET TOTAL .....	1,616,560	247,087	1,863,647	1,609,369	246,158	1,855,527	8.4	8.2	8.3	

TABLE No. 7—STAFF AS AT DECEMBER 31st, 1953—Full Time and Part Time

Hospital	Total	Nurses			Nurses Aides		Orderlies	Internes	Salaried Doctors	Technicians	Dietitians	All Others	Organized Medical Staff	Nurses Training School	Graduated During the Year
		Graduate	Student	Certified	Trainee										
Athabasca, Municipal	20	4					2			2		14			
Banff, Mineral Springs	42	11								1		27			
Barrhead, St. Joseph's	27	9		1						2		14			
Bassano, Municipal	15	3		2								10			
Beaverlodge, Municipal	14	3		3			2				1	5			
Bentley, Municipal	9	4										5			
Berwyn, Municipal	12	2										10			
Blairmore, Crows Nest Pass Municipal	43	9		5		1						28			
Bonnyville, Katherine H. Prittle	11	2		1								8			
Bonnyville, St. Louis	25	4		3								18			
Brooks, Municipal	47	14		7		1				2	1	22			
Calgary, Alberta Red Cross	138	41		31						2	1	63			
Calgary, General	947	228	170	110	10		27	10	2	22	7	361		*	45
Calgary, Holy Cross	602	98	176	16			13	13	3	18	2	263		*	56
Calgary, Salvation Army Grace	9	3										6			
Camrose, St. Mary's	104	25		6		2				4	1	66		*	
Cannore, Cannore	9	4										5			
Cardston, Municipal	26	5		5					3			13			
Carmangay, Little Bow Municipal	9	3		1								5			
Castor, Our Lady of the Rosary	27	6								2	2	17			
Cereal, Municipal	6											6			
Ciaresholm, Municipal	26	10		3						1		12			
Coaldale, Community	8	2		2								4			
Cold Lake, John Neil	14	5										9			
Consort, Municipal	13	3		1								9			
Coronation, Municipal	14	4										10			
Daysland, Providence	20	4								2	1	13			
Desmarais, St. Martins	7											7			
Didsbury, Municipal	24	6		2						1		15		*	
Drumheller, Municipal	73	18		6		2				2	1	44		*	

Eckville, Municipal	19	4	1	10	2	11	40	5	21	205	82	24	3	17	24	7	499	61
Edmonton, Buelah Home	13	1	1	10	2	11	40	4	4	6	8	4	2	4	2	2	12	
Edmonton, General	586	104	160	11	11	6	1	7	7	32	8	25	3	4	22	3	274	48
Edmonton, Misericordia	456	94	113	8	6	6	1	10	1	10	201	26	4	26	25	3	192	39
Edmonton, Royal Alexandra	824	141	201	82	24	26	1	1	1	23	82	3	4	26	26	4	317	49
Edmonton, University	1,018	158	205	21	5	42	5	205	21	205	21	17	7	17	24	7	499	61
Edson, St. John's	28	6	4	4	4	4	4	4	4	6	4	4	2	4	4	2	12	
Elk Point, Municipal	32	5	7	7	5	7	5	7	7	32	7	5	2	7	5	2	20	
Elnora, Municipal	10	4	1	1	4	1	1	1	1	10	1	1	1	1	1	1	5	
Empress, Municipal	12	3	1	1	3	1	1	1	1	12	1	1	1	1	1	1	8	
Fairview, Municipal	20	7	7	7	7	7	7	7	7	20	7	7	7	7	2	11	11	
Fort Macleod, Municipal	17	7	1	1	7	1	1	1	1	17	1	1	1	1	2	1	8	
Fort McMurray, St. Gabriel's	10	1	1	1	1	1	1	1	1	10	1	1	1	1	2	2	8	
Fort Vermilion, St. Theresa	23	1	1	1	1	1	1	1	1	23	1	1	1	1	2	1	18	
Galahad, St. Joseph's	13	2	2	2	2	2	2	2	2	13	2	2	2	2	1	1	10	
Glendon, Municipal	14	4	4	4	4	4	4	4	4	14	4	4	4	4	1	1	8	
Grande Prairie, Municipal	50	18	18	18	18	18	18	18	18	50	18	18	18	18	3	1	19	
(a) Hythe, Sub-hospital	3	1	1	1	1	1	1	1	1	3	1	1	1	1	2	2	2	
Hanna, Municipal	36	10	10	10	10	10	10	10	10	36	10	10	10	10	2	20	20	
Hardisty, St. Anne's	16	5	5	5	5	5	5	5	5	16	5	5	5	5	1	9	9	
High Prairie, Providence	47	4	4	4	4	4	4	4	4	47	4	4	4	4	4	39	39	
High River, Municipal	29	12	12	12	12	12	12	12	12	29	12	12	12	12	1	15	15	
Innisfail, Municipal	29	8	8	8	8	8	8	8	8	29	8	8	8	8	1	20	20	
Islay, Municipal	11	2	2	2	2	2	2	2	2	11	2	2	2	2	1	6	6	
Jasper, Seton	12	4	4	4	4	4	4	4	4	12	4	4	4	4	1	6	6	
Killam, General	23	5	5	5	5	5	5	5	5	23	5	5	5	5	2	15	15	
Lac La Biche, St. Catherine's	9	1	1	1	1	1	1	1	1	9	1	1	1	1	2	6	6	
Lacombe, Municipal	46	14	14	14	14	14	14	14	14	46	14	14	14	14	1	31	31	
Lamont, Archer Memorial	113	12	12	12	12	12	12	12	12	113	12	12	12	12	3	53	53	13
Lethbridge, Galt	166	29	29	29	29	29	29	29	29	166	29	29	29	29	5	61	61	19
Lethbridge, St. Michael's General	227	50	49	16	3	1	16	3	1	49	16	7	10	2	87	2	45	45
McLennan, Sacred Heart	32	5	5	5	5	5	5	5	5	32	5	5	5	5	1	21	21	
Magrath, Municipal	17	3	3	3	3	3	3	3	3	17	3	3	3	3	1	13	13	
Manning, Battle River	9	3	3	3	3	3	3	3	3	9	3	3	3	3	1	6	6	
Mannville, Municipal	11	3	3	3	3	3	3	3	3	11	3	3	3	3	1	7	7	
Mayerthorpe, Municipal	27	5	5	5	5	5	5	5	5	27	5	5	5	5	1	15	15	
Medicine Hat, General	176	44	33	8	3	2	8	3	2	33	8	1	2	2	2	83	83	9
Mundare, General	16	3	3	3	3	3	3	3	3	16	3	3	3	3	1	10	10	
Myrnam, Municipal	13	1	1	1	1	1	1	1	1	13	1	1	1	1	1	9	9	
Olds, Municipal	24	6	6	6	6	6	6	6	6	24	6	6	6	6	1	13	13	

DEPARTMENT OF PUBLIC HEALTH

TABLE No. 7—STAFF AS AT DECEMBER 31st, 1953—Full Time and Part Time—Continued

Hospital	Total		Nurses		Nurses Aides		Orderlies	Internes	Salaries Doctors	Technicians	Dietitians	All Others	Organized Medical Staff	Nurses Training School	Graduated During the Year
	Graduate	Student	Certified	Trainee											
Oyen, Municipal	8	2	2	2	2	2	1	1	1	1	1	2	2	21	2
Peace River, Municipal	36	12	12	2	2	2	1	1	1	2	1	1	21	20	1
Pincher Creek, St. Vincent's	30	7	7	7	7	7	1	1	1	1	1	17	17	17	1
Ponoka, Municipal	37	12	12	7	7	7	2	2	2	2	2	16	16	16	1
Provost, Municipal	25	7	7	2	2	2	2	2	2	2	2	16	16	16	1
Radway, St. Joseph's	15	3	3	3	3	3	1	1	1	1	1	10	10	10	1
Raymond, Municipal	16	5	5	5	5	5	1	1	1	1	1	9	9	9	1
Red Deer, Municipal	102	36	36	4	4	4	1	1	1	2	1	57	57	57	1
Rimbey, Municipal	18	5	5	5	5	5	1	1	1	1	1	7	7	7	1
Rocky Mountain House, Municipal	20	5	5	5	5	5	1	1	1	1	1	15	15	15	1
Smoky Lake, George McDougall	12	2	2	1	1	1	1	1	1	1	1	9	9	9	1
Spirit River, Holy Cross	27	2	2	4	4	4	1	1	1	3	1	17	17	17	1
St. Paul, St. Theresa	53	6	6	3	3	3	1	1	1	2	1	42	42	42	1
Stettler, Municipal	61	15	15	8	8	8	1	1	1	2	1	35	35	35	1
Taber, Municipal	36	13	13	7	7	7	1	1	1	1	1	14	14	14	1
Three Hills, Municipal	19	5	5	4	4	4	1	1	1	1	2	7	7	7	1
Tofield, Municipal	16	5	5	4	4	4	1	1	1	1	1	11	11	11	1
Trochu, St. Mary's	14	2	2	2	2	2	1	1	1	1	3	7	7	7	1
Turner Valley, Municipal	20	5	5	5	5	5	1	1	1	1	1	14	14	14	1
Two Hills, Municipal	23	5	5	4	4	4	1	1	1	2	1	12	12	12	1
Vegreville, St. Joseph's General	141	19	19	44	44	44	1	1	1	5	1	71	71	71	10
Vermilion, Municipal	23	7	7	4	4	4	1	1	1	2	1	10	10	10	1
Viking, Municipal	25	7	7	6	6	6	1	1	1	1	1	11	11	11	1
Vilna, Our Lady's	11	3	3	3	3	3	1	1	1	1	1	8	8	8	1
Vulcan, Municipal	21	6	6	6	6	6	1	1	1	1	1	14	14	14	1
Wainwright, Municipal	34	11	11	8	8	8	1	1	1	2	1	13	13	13	1
Westlock, Immaculata	66	13	13	5	5	5	4	4	4	4	1	38	38	38	1
Wetaskiwin, Community	47	20	20	4	4	4	1	1	1	1	1	22	22	22	1
Willington, General	10	4	4	4	4	4	1	1	1	1	1	6	6	6	1
<b>TOTAL</b>	<b>7,544</b>	<b>1,562</b>	<b>1,253</b>	<b>475</b>	<b>25</b>	<b>152</b>	<b>111</b>	<b>43</b>	<b>244</b>	<b>74</b>	<b>3,605</b>	<b>N.A.</b>	<b>N.A.</b>	<b>394</b>	<b>394</b>

Not Reported: Medicine Hat Isolation; Nordegg, General.

TABLE No. 8—OPERATING EXPENDITURES, 1953

Hospitals	Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	Total Expenditure
Athabasca, Municipal	\$ 31,788.79	\$ 21,150.02	\$ 4,626.25	\$ 1,046.50	\$ 8,144.90	\$ 1,068.62	\$ 13,876.63	\$ 9,911.13	\$ 91,612.84
Banff, Mineral Springs	66,273.04	42,878.23	4,112.57	1,818.80	3,207.20	7,136.17	116.26	1,096.23	126,638.50
Barhead, St. Joseph's	60,817.89	22,162.57	3,166.23	603.86	1,492.15	3,049.69	4,037.15	507.38	95,836.92
Bassano, Municipal	24,072.51	17,663.89	4,938.75	234.89	2,528.51	2,550.91	292.77	609.63	52,891.86
Beaverlodge, Municipal	14,328.84	11,354.14	2,608.62	349.42	645.20	1,277.78	233.54	979.94	31,777.48
Bentley, Municipal	14,777.34	9,337.04	2,044.23	298.33	6,510.87	1,102.52	2,315.43	62.60	36,448.36
Berwyn, Municipal	16,391.12	10,206.66	2,138.65	578.09	6,000.00	1,142.13	1,495.56	1,614.86	39,567.07
Blairmore, Crow's Nest Pass Municipal	76,520.48	43,226.67	2,937.57	989.05	20,627.50	3,193.93	9,305.35	3,506.17	160,306.72
Bonnyville, Katherine H. Prittie	12,044.68	10,741.86	1,554.41	.....	.....	3,507.69	7.38	695.51	28,551.53
Bonnyville, St. Louis	45,494.56	18,021.30	1,707.61	17.00	4,156.43	2,147.80	7.90	739.54	72,292.14
Brooks, Municipal	66,867.00	44,230.41	6,493.78	1,005.26	9,750.00	8,526.95	7,891.06	.....	144,764.46
Calgary, Alberta Red Cross	286,761.12	73,347.69	7,455.71	5,363.13	.....	3,690.09	.....	3,299.29	379,917.03
Calgary, General	1,635,835.61	581,839.16	33,641.40	3,820.98	.....	51,732.32	211,324.90	60,000.05	2,578,194.42
Calgary, Holy Cross	870,336.83	422,087.17	39,512.32	8,251.93	80,332.95	31,084.82	7,166.96	43,154.88	1,501,927.86
Calgary, Salvation Army Grace	14,772.40	10,910.27	780.60	317.75	920.48	1,326.49	.....	909.17	29,937.16
Camrose, St. Mary's	163,243.32	58,408.53	8,768.97	1,625.39	20,701.34	13,463.84	12,672.39	1,954.62	280,838.40
Cardston, Municipal	39,068.55	33,881.07	3,225.35	348.15	3,040.54	3,545.64	198.21	9,085.53	92,393.04
Cardmangay, Little Bow Municipal	25,052.27	11,050.26	2,021.00	407.38	.....	8,351.82	12.47	118.10	47,013.30
Castor, Our Lady of the Rosary	24,329.34	18,980.24	2,052.98	.....	4,500.00	2,999.45	.....	1,244.16	54,106.17
Cereal, Municipal	10,586.10	10,641.87	1,415.08	110.00	2,083.63	926.87	.....	2,355.00	28,118.55
Claresholm, Municipal	50,589.65	27,686.47	4,511.09	503.42	5,499.29	2,730.17	1,100.00	162.50	92,782.59
Cold Lake, John Neil	14,864.50	10,396.19	1,389.81	50.00	781.12	2,124.78	6.20	238.55	29,851.15
Consort, Municipal	18,863.26	14,848.05	4,561.84	207.50	7,100.00	1,919.55	1,852.55	25.00	49,377.75
Coronation, Municipal	19,857.45	15,160.69	2,140.16	217.13	2,472.65	5,432.91	2.15	2,308.02	47,591.16
Daysland, Providence	30,522.96	16,058.05	2,074.55	686.44	5,472.92	3,177.44	20.77	356.63	58,369.76
Desmarais, St. Martin's	5,340.00	5,479.65	735.00	46.15	400.00	1,588.00	.....	231.15	13,819.95
Didsbury, Municipal	35,631.10	29,377.17	2,144.45	765.44	7,078.23	2,440.32	3,005.85	1,154.29	81,596.85
Drumheller, Municipal	128,966.94	81,271.33	9,545.87	1,544.48	5,219.18	12,807.73	3,603.50	8,920.88	251,879.91
Eckville, Municipal	28,288.80	16,793.33	5,473.82	724.98	8,607.55	1,841.19	2,702.57	463.50	64,895.74
Edmonton, General	741,993.43	356,686.58	24,842.77	14,989.60	97,173.39	36,553.21	122,422.34	20,749.54	1,415,410.86
Edmonton, Misericordia	698,814.44	343,130.33	36,477.14	6,795.65	62,832.00	59,428.09	15,839.34	14,016.69	1,237,334.08
Edmonton, Royal Alexandra	1,212,003.85	624,561.36	28,823.25	53,975.42	45,578.35	103,028.49	62,775.04	15,458.60	2,146,203.96
Edmonton, University of Alberta	1,674,154.59	836,758.74	53,670.17	13,349.51	59,217.53	64,688.94	118,305.26	26,383.76	2,846,528.50
Edson, St. John's	47,878.58	16,480.80	2,045.88	533.27	5,315.15	5,411.84	51.65	309.96	78,027.13
Elk Point, Municipal	40,039.80	32,360.28	5,041.46	680.35	14,479.83	4,418.91	6,854.69	1,639.16	105,514.48

TABLE No. 8—OPERATING EXPENDITURES, 1953—Continued

Hospitals	Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	Total Expenditure
Elnora, Municipal	\$ 13,749.15	\$ 8,875.33	\$ 1,060.74	282.78	\$ 3,943.52	\$ 854.33	1,947.58	\$ 1,569.40	\$ 32,282.83
Empress, Municipal	20,856.43	16,340.65	2,571.06	800.72	.....	3,133.51	85.18	700.61	44,488.16
Fairview, Municipal	28,848.66	25,631.81	4,050.42	593.00	7,172.23	3,484.10	2,443.59	4,022.22	76,246.03
Fort Macleod, Municipal	34,050.27	24,869.39	341.30	457.80	2,957.58	5,915.40	560.00	1,165.88	70,317.62
Fort McMurray, St. Gabriel's	25,344.55	9,911.36	1,808.55	55.10	6,033.00	163.87	2,970.99	1,509.94	47,797.36
Fort Vermillion, St. Theresa	24,354.48	17,968.33	42.51	.....	4,697.44	2,138.11	4,012.77	277.65	53,491.29
Galahad, St. Joseph's	24,610.30	9,988.56	1,043.47	329.96	1,639.83	3,225.04	28.19	113.25	40,978.60
Glendon, Municipal	16,515.93	10,807.30	3,018.86	245.00	2,574.65	1,862.84	3,344.35	971.05	39,339.98
Grande Prairie, Municipal	86,266.43	63,849.70	13,782.62	1,646.98	16,889.53	1,573.38	2,268.88	11,843.95	198,121.47
Hanna, Municipal	51,497.70	37,230.31	5,685.72	1,765.74	3,818.52	6,670.19	3,819.49	368.18	110,855.85
Hardisty, St. Anne's	31,099.97	19,047.48	2,059.19	772.18	4,711.44	2,764.58	1,866.58	472.84	62,794.26
High Prairie, Providence	67,977.65	44,659.61	4,443.21	755.69	5,608.51	6,273.16	819.95	1,190.03	131,727.81
High River, Municipal	56,105.78	33,707.55	4,758.28	961.94	10,028.15	6,348.54	2,986.67	1,032.19	115,929.10
Innisfail, Municipal	35,747.44	29,903.75	3,875.89	510.27	6,274.10	11,591.92	26.79	3,696.90	91,627.06
Islay, Municipal	15,713.82	7,872.54	1,698.26	196.85	1,134.25	1,903.27	3.15	2,757.02	31,279.16
Jasper, Seton	29,066.25	10,581.94	1,182.94	870.00	4,073.72	2,123.77	813.58	346.50	49,058.70
Killam, General	33,796.90	20,330.01	1,645.63	341.00	4,620.34	2,210.71	988.57	321.00	64,254.16
Lac la Biche, St. Catherine's	29,215.00	18,445.54	3,050.33	791.13	1,699.05	1,002.40	1.05	1,379.40	55,583.90
Lacombe, Municipal	65,739.93	51,810.12	11,530.24	1,477.90	11,485.90	1,724.08	3,854.39	1,081.70	148,704.26
Lamont, Archer Memorial	100,216.70	77,078.85	7,496.72	.....	4,067.67	8,938.97	2,040.46	4,451.22	204,290.59
Lethbridge, Galt	189,300.23	162,100.12	12,271.62	2,988.02	21.49	13,082.04	834.40	1,619.05	382,216.97
Lethbridge, St. Michael's General	345,989.11	178,051.25	16,633.24	2,335.32	19,901.23	8,034.35	28,061.14	2,903.11	601,908.75
McLennan, Sacred Heart	41,489.38	42,843.21	3,354.75	581.11	2,666.60	1,443.17	31.27	1,314.27	93,723.76
Magrath, Municipal	25,289.35	14,585.93	4,155.92	357.59	5,220.24	700.73	3,528.35	298.37	54,136.48
Manning, Battle River	12,826.50	8,771.27	1,437.34	148.77	2,303.08	309.04	19.95	543.26	26,339.21
Mannville, Municipal	18,488.50	13,101.54	2,336.94	453.14	1,975.70	1,408.85	3.10	3,054.50	40,822.27
Mayerthorpe, Municipal	40,804.03	34,607.02	5,017.70	912.60	7,979.81	4,880.31	4,176.36	4,548.89	102,926.72
Medicine Hat, General	227,226.24	113,948.30	31,955.23	1,870.54	2,666.60	5,589.12	920.57	6,291.65	387,801.65
Mundare, General	47,496.76	12,260.68	825.14	84.70	2,098.68	5,106.37	6.20	5,522.64	73,401.17
Myrnam, Municipal	27,237.33	15,891.69	4,692.03	198.50	3,021.20	2,429.40	.....	773.06	54,243.21
Olds, Municipal	41,716.15	31,730.25	8,910.59	554.37	5,178.49	4,695.82	3,666.21	489.57	96,941.45
Oyen, Municipal	13,507.42	9,810.70	2,591.66	298.74	1,744.11	1,816.98	621.80	3,627.50	34,018.91
Peace River, Municipal	61,445.25	38,487.87	5,337.38	1,113.33	9,500.00	3,722.36	2,521.62	3,221.10	125,348.91
Pincher Creek, St. Vincent's	41,240.40	18,486.29	1,877.55	275.30	10,900.00	6,948.97	.....	217.50	79,946.01
Ponoka, Municipal	58,462.68	29,782.23	7,177.68	1,597.66	18,041.59	4,524.63	8,665.10	512.42	128,763.99

Provost, Municipal	37,192.51	29,053.32	3,988.20	633.07	9,725.13	2,692.79	6,706.80	1,028.07	91,019.89
Radway, St. Joseph's	26,736.95	12,661.49	1,751.88	158.16	326.75	549.12	23.22	179.60	42,387.17
Raymond, Municipal	20,508.26	16,087.34	1,962.25	176.77	1,799.11	867.11	1,388.55	947.76	43,737.15
Red Deer, Municipal	159,987.18	95,173.52	23,110.04	1,539.14	30,112.07	7,467.75	15,926.76	1,837.72	335,154.18
Rimbey, Municipal	31,970.05	33,156.52	6,995.48	736.20	9,008.24	6,120.07	4,894.03	340.00	93,220.59
Rocky Mountain House, Municipal	26,143.83	20,108.78	5,460.96	1,150.00	2,695.40	1,708.05	4,516.74	188.35	61,972.11
Smoky Lake, George McDougall	22,507.08	8,901.08	1,233.23	140.27	1,765.12	1,793.78	168.63	342.15	36,851.34
Spirit River, Holy Cross	31,298.18	34,906.74	1,952.04	214.43	2,309.10	4,599.35	558.65	6,247.66	82,086.15
St. Paul, St. Theresa	76,415.06	32,461.85	3,428.88	1,450.86	11,639.27	14,836.74	1,740.65	673.84	142,647.15
Stettler, Municipal	98,848.03	68,286.12	8,542.14	1,182.13	9,309.57	6,640.39	5,531.34	1,203.95	199,543.67
Taber, Municipal	61,444.54	40,206.48	5,282.51	250.01	10,385.08	6,040.96	3,864.49	1,324.31	128,798.38
Three Hills, Municipal	32,979.00	16,900.95	4,528.79	471.25	10,014.74	1,607.34	3,232.90	736.30	70,471.27
Tofield, Municipal	23,749.22	22,625.80	2,702.79	829.64	7,646.79	2,272.54	3,875.59	193.20	63,895.57
Trochu, St. Mary's	19,529.35	12,341.52	1,089.34	246.21	11,183.99	1,143.21	2,157.45	449.51	48,140.58
Turner Valley, Municipal	24,783.77	18,768.63	3,108.36	70.50	741.19	17,448.83	552.06	4,117.35	69,590.69
Two Hills, Municipal	33,435.20	21,922.15	3,489.10	380.76	5,960.44	1,887.03	3,736.02	432.24	71,242.94
Vegreville, St. Joseph General	76,605.24	67,972.13	14,168.55	2,261.23	21,030.78	7,496.20	3,094.21	2,091.92	194,720.26
Vermilion, Municipal	36,154.45	19,610.51	4,363.20	453.62	5,996.63	1,718.62	10.55	4,755.50	73,063.08
Viking, Municipal	35,688.91	30,689.10	3,078.47	1,288.75	4,030.08	2,079.54	5,506.75	6,171.98	88,533.58
Vilna, Our Lady's	30,773.19	11,521.01	1,087.09	678.25	2,827.00	4,059.34	38.75	420.00	51,404.63
Vulcan, Municipal	35,913.66	22,964.33	3,542.12	813.85	9,899.44	3,717.83	2,200.69	5,250.62	84,302.54
Wainwright, Municipal	52,142.20	38,678.45	5,052.39	1,190.78	16,569.28	3,284.84	6,898.25	1,604.87	125,421.06
Westlock, Immaculata	102,637.28	38,321.77	6,537.03	1,483.72	23,275.26	8,839.05	16,004.43	549.23	197,647.77
Wetaskiwin, Community	72,456.20	51,906.01	6,882.43	779.03	15,583.23	5,599.69	29.98	505.29	153,741.86
Willingdon, General	31,552.67	13,050.96	581.79	153.61	2,113.83	1,351.00	24.07	4,102.17	52,930.10
TOTAL	\$11,431,915.82	\$5,940,813.11	\$ 626,319.11	\$ 167,611.22	\$ 921,798.06	\$ 713,832.58	\$ 790,115.71	\$ 354,163.43	\$20,946,569.04

Not Reporting: Canmore, Canmore; Coaldale, Community; Edmonton, Buelah Home; Medicine Hat, Isolation; Nordegg, General.



TABLE No. 9.—REVENUE FOR OPERATING PURPOSES

Hospitals	Day Rate Services	Special Services	Gross Earnings	Deductions	Net Earnings	Grants	Out-Patient Earnings	Total Operating Revenue	Other Revenue	Total Revenue
Athabasca, Municipal	\$ 66,220.85	16,379.50	82,600.35	43,968.05	38,632.30	56,117.94	13,222.20	94,750.24	129.82	94,880.06
Banff, Mineral Springs	87,524.80	23,235.04	110,759.84	3,709.62	107,050.22	8,395.91	.....	128,668.33	11.82	128,680.15
Barrhead, St. Joseph's	64,718.40	25,848.46	90,566.86	9,239.57	81,327.29	8,040.99	.....	89,368.28	625.45	89,993.73
Bassano, Municipal	32,453.55	9,721.81	42,175.36	21,160.55	21,014.81	29,147.55	1,309.10	51,471.46	2,067.50	53,538.96
Beaverlodge, Municipal	11,291.85	3,646.73	14,938.58	1,512.05	13,426.53	19,715.95	1,595.00	34,737.48	920.24	35,657.72
Bentley, Municipal	15,057.65	4,009.45	19,067.10	13,479.79	5,587.31	25,138.90	948.30	31,674.51	261.99	31,936.50
Berwyn, Municipal	27,749.65	4,590.25	32,339.90	24,176.68	8,163.22	33,584.10	385.00	42,132.32	173.50	42,305.82
Blairmore, Crow's Nest Pass Municipal	83,665.50	35,242.50	118,908.00	39,152.17	79,755.83	96,228.71	.....	175,984.54	.....	175,984.54
Bonnyville, Katherine H.	21,884.55	4,716.55	26,601.10	2,448.40	24,152.70	12,905.65	.....	37,058.35	233.46	37,291.81
Bonnyville, St. Louis	67,034.60	14,999.00	82,033.60	9,392.49	72,641.11	6,989.50	1,270.05	80,900.66	75.34	80,976.00
Brooks, Municipal	69,417.50	33,706.98	103,124.48	45,999.08	57,125.40	72,997.95	1,632.35	131,755.70	.....	131,755.70
Calgary, Alberta Red Cross	1,214,522.72	471,587.17	1,686,109.89	173,260.74	1,512,849.15	1,039,847.33	25,497.94	Details Not Available	.....	379,475.47
Calgary, General	993,863.54	494,243.71	1,488,107.25	154,335.13	1,333,772.12	119,927.60	42,737.20	1,496,436.92	23,872.65	1,520,309.57
Calgary, Holy Cross	11,963.90	2,254.35	14,218.25	485.40	13,732.85	18,162.90	.....	31,895.75	3,137.40	35,033.15
Calgary, Salvation Army Grace	173,800.90	77,235.53	251,036.43	16,456.93	234,579.50	25,841.70	.....	260,421.20	1,416.31	261,837.51
Cardston, Municipal	41,257.65	9,388.80	50,646.45	20,377.60	29,768.85	58,973.30	3,675.70	92,417.85	27.75	92,445.60
Cardmangay, Little Bow Municipal	18,120.90	2,822.80	20,943.70	7,658.10	13,285.60	32,109.40	.....	45,395.00	844.03	46,239.03
Castor, Our Lady of the Rosary	34,317.70	11,529.21	45,846.91	4,824.30	41,022.61	4,830.70	.....	45,853.31	7,283.50	53,136.81
Cereal, Municipal	10,116.70	2,565.12	12,681.82	3,535.60	9,146.22	17,668.35	1,215.58	28,030.15	1,035.39	29,065.54
Claresholm, Municipal	68,065.90	13,980.25	82,046.15	32,802.15	49,244.00	54,327.80	5,835.72	109,407.52	300.00	109,707.52
Cold Lake, John Nell	15,955.65	4,200.05	20,155.70	1,504.17	18,651.53	3,547.55	1,465.05	22,199.08	69.10	22,268.18
Consort, Municipal	26,123.75	4,121.69	30,245.44	13,749.35	16,496.09	27,738.35	.....	45,690.49	567.11	46,257.60
Coronation, Municipal	28,237.70	6,361.28	34,598.98	14,384.88	20,214.10	24,613.35	.....	44,287.45	44,287.45	44,287.45
Daysland, Providence	32,800.25	17,645.75	50,446.00	1,935.79	48,510.21	4,372.90	.....	52,883.11	119.68	53,002.79
Desmarais, St. Martin's	13,553.80	872.05	14,425.85	8,227.70	6,198.15	.....	.....	6,198.15	7,621.80	13,819.95
Didsbury, Municipal	37,878.50	10,861.97	48,740.47	20,461.38	28,279.09	62,166.30	3,335.59	93,780.98	253.83	94,034.81
Drumheller, Municipal	144,892.70	44,975.87	189,868.57	79,241.16	110,627.41	175,625.38	.....	286,252.79	2,104.36	288,357.15
Eckville, Municipal	35,036.60	7,100.82	42,137.42	17,343.15	24,794.27	47,514.10	257.80	72,566.17	673.11	73,239.28
Edmonton, General	853,713.56	442,356.01	1,296,069.57	104,899.55	1,191,170.02	83,369.30	43,454.53	1,317,993.85	28,702.70	1,346,696.55
Edmonton, Misericordia	863,932.60	405,279.03	1,269,211.63	166,284.08	1,102,927.55	93,381.90	16,030.00	1,212,339.45	26,304.67	1,238,644.12
Edmonton, Royal Alexandra	1,434,743.10	591,709.34	2,026,452.44	152,556.67	1,873,895.77	179,768.57	60,519.18	2,114,183.52	32,020.44	2,146,203.96



## DEPARTMENT OF PUBLIC HEALTH

Table No. 9—Continued

Hospitals	Day Rate Services	Special Services	Gross Earnings	Deductions	Net Earnings	Grants	Out-Patient Earnings	Total Operating Revenue	Other Revenue	Total Revenue
Raymond, Municipal	\$ 24,064.40	8,477.06	32,541.46	20,281.25	12,260.21	\$ 33,243.90	\$ 1,149.44	46,653.55	250.67	46,904.22
Red Deer, Municipal	177,660.20	52,753.70	230,413.90	71,896.61	158,517.29	188,829.70	1,856.60	349,203.59	4,294.56	353,498.15
Rimbey, Municipal	47,514.40	15,516.85	63,031.25	20,916.82	42,114.43	51,591.04	3,903.05	97,608.52	.....	97,608.52
Rocky Mountain House, Municipal	39,539.60	9,998.61	49,538.21	19,727.30	29,810.91	43,478.15	567.00	73,856.06	183.00	74,039.06
Smoky Lake, George McDougall	16,953.60	4,187.06	21,140.66	194.85	20,945.81	6,106.30	441.67	27,493.78	3,053.83	30,547.61
Spirit River, Holy Cross	54,505.00	17,053.50	71,558.50	5,497.63	66,060.87	6,982.50	.....	73,043.37	159.00	73,202.37
St. Paul, St. Theresa	103,244.28	39,898.59	143,142.87	18,063.69	125,079.18	11,089.30	.....	136,168.48	.....	136,168.48
Stettler, Municipal	113,668.44	36,803.35	150,471.79	69,173.49	81,298.30	114,447.17	1,349.15	197,094.62	180.00	197,274.62
Taber, Municipal	79,962.85	28,074.05	108,036.90	34,911.45	73,125.45	72,504.05	.....	145,629.50	479.19	146,108.69
Three Hills, Municipal	22,881.00	8,532.56	31,413.56	9,925.05	21,488.51	47,265.90	2,368.45	71,122.86	286.00	71,408.86
Tofield, Municipal	34,298.00	12,037.25	46,335.25	30,001.70	16,333.55	41,284.85	.....	57,618.40	.....	57,618.40
Trochu, St. Mary's	23,971.90	4,771.57	28,743.47	1,227.59	27,515.88	2,963.10	2,183.65	32,662.63	223.98	32,886.61
Turner Valley, Municipal	37,720.34	10,270.24	47,990.58	18,603.80	29,386.78	39,126.22	937.55	69,450.55	181.03	69,631.58
Two Hills, Municipal	38,207.50	7,525.05	45,732.55	19,389.15	26,343.40	52,842.15	3,375.20	82,560.75	873.69	83,434.44
Vegreville, St. Joseph General	139,430.65	50,201.05	189,631.70	29,388.26	160,243.44	14,401.80	5,866.44	180,511.68	589.26	181,100.94
Vermilion, Municipal*	49,398.00	7,886.55	57,284.55	25,775.70	31,508.85	53,788.75	1,682.50	86,980.10	383.77	87,363.87
Viking, Municipal	49,059.90	19,366.53	68,426.43	43,264.18	25,162.25	83,219.19	1,880.40	110,261.84	2,960.04	113,221.88
Vilna, Our Lady's	21,339.35	6,718.77	28,058.12	2,209.55	25,848.57	2,178.40	.....	28,026.97	.....	28,026.97
Vulcan, Municipal	44,543.17	13,228.85	57,772.02	30,156.65	27,615.37	54,919.50	1,771.57	84,306.44	.....	84,306.44
Wainwright, Municipal	73,666.05	24,163.68	97,829.73	38,887.42	58,942.31	59,966.10	4,508.09	123,416.50	555.00	123,971.50
Westlock, Immaculata	137,953.10	49,266.89	187,219.99	14,773.72	172,446.27	17,282.30	.....	189,728.57	1,582.65	191,311.22
Wetaskiwin, Community	95,949.44	36,390.20	132,339.64	3,815.23	128,524.41	12,284.30	173.75	140,982.46	265.24	141,247.70
Willingdon, General	33,761.30	9,504.83	43,266.13	5,375.31	37,890.82	3,713.50	2,409.72	44,014.04	3,382.60	47,396.64
<b>TOTAL</b>	<b>\$12,870,377.81</b>	<b>\$ 4,975,080.01</b>	<b>\$17,845,457.82</b>	<b>\$ 2,674,843.43</b>	<b>\$15,170,614.39</b>	<b>\$5,151,564.68</b>	<b>\$ 441,222.98</b>	<b>\$20,763,402.05</b>	<b>\$ 328,802.38</b>	<b>\$21,471,679.90</b>

Not Reporting: Edmonton, Beulah Home; Canmore, Canmore Hospital; Coaldale, Community; Medicine Hat, Isolation; Nordegg, General.

- In Calculating patient day revenue and cost, three newborn nursery days were considered equivalent to one adult day.
- Total Revenue data for Municipal Hospitals includes funds obtained through tax requisition from contributing municipalities. Therefore Revenue per patient per day data for this group of hospitals is not comparable with that of other hospitals.

TABLE No. 10—DISTRIBUTION OF HOSPITAL OPERATING EXPENDITURE, 1953

Hospitals	Operating Cost Per Patient Per Day	Percentage of Total Operating Expenditure										Revenue per Patient per day
		Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous			
Athabasca, Municipal	\$ 11.10	34.7	23.1	5.1	1.1	8.9	1.2	15.1	10.8			\$11.50
Banff, Mineral Springs	11.68	52.4	33.9	3.2	1.4	2.5	5.6	0.1	0.9			11.87
Barrhead, St. Joseph's	8.99	63.5	23.1	3.3	0.6	1.6	3.2	4.2	0.5			8.44
Bassano, Municipal	9.29	45.5	33.4	9.3	0.4	4.8	4.8	0.6	1.2			9.40
Beaverlodge, Municipal	10.24	45.1	35.8	8.2	1.1	2.0	4.0	0.7	3.1			11.49
Bentley, Municipal	15.57	40.5	25.6	5.6	0.8	17.9	3.0	6.4	0.2			13.64
Berwyn, Municipal	8.07	41.4	25.8	5.4	1.5	15.1	2.9	3.8	4.1			8.63
Blairmore, Crow's Nest Pass, Mun.	12.12	47.7	27.0	1.8	0.6	12.9	2.0	5.8	2.2			13.30
Bonnyville, Katherine H. Prittle	7.53	42.3	37.6	5.4	0.0	5.7	12.3	0.0	2.4			9.84
Bonnyville, St. Louis	6.64	63.0	24.9	2.4	0.0	5.7	3.0	0.0	1.0			7.44
Brooks, Municipal	12.78	46.2	30.5	4.5	0.7	6.7	5.9	5.5	0.8			11.63
Calgary, Alberta Red Cross	8.28	75.5	19.3	2.0	1.4	0.0	1.0	0.0	0.8			8.27
Calgary, General	17.40	63.5	22.6	1.3	0.1	0.0	2.0	8.2	2.3			17.40
Calgary, Holy Cross	12.87	58.0	28.1	2.6	0.5	5.3	2.1	0.5	2.9			13.03
Calgary, Salvation Army Grace	11.12	49.3	36.5	2.6	1.1	3.1	4.4	0.0	3.0			13.02
Camrose, St. Mary's	11.61	58.1	20.8	3.1	0.6	7.4	4.8	4.5	0.7			10.83
Cardston, Municipal	12.50	42.3	36.7	3.5	0.4	3.3	3.8	0.2	9.8			12.51
Carmangay, Little Bow Municipal	18.58	53.3	23.5	4.3	0.9	0.0	17.8	0.0	0.2			18.28
Castor, Our Lady of the Rosary	8.71	45.0	35.1	3.8	0.0	8.3	5.5	0.0	2.3			8.55
Cereal, Municipal	14.00	37.7	37.8	5.0	0.4	7.4	3.3	0.0	8.4			14.47
Claresholm, Municipal	8.24	54.5	29.9	4.9	0.5	5.9	2.9	1.2	0.2			9.74
Cold Lake, John Neil	9.45	49.8	34.8	4.7	0.2	2.6	7.1	0.0	0.8			7.05
Consort, Municipal	11.62	38.2	30.1	9.2	0.4	14.4	3.9	3.8	0.0			10.88
Coronation, Municipal	9.16	41.7	31.9	4.5	0.5	5.2	11.4	0.0	4.8			8.62
Daysland, Providence	9.96	52.3	27.5	3.6	1.2	9.4	5.4	0.0	0.6			9.04
Desmarais, St. Martin's	4.45	38.6	39.7	5.3	0.3	2.9	11.5	0.0	1.7			4.45
Didsbury, Municipal	12.25	43.7	36.0	2.6	0.9	8.7	3.0	3.7	1.4			14.12
Drumheller, Municipal	11.19	51.2	32.3	3.8	0.6	2.1	5.1	1.4	3.5			12.81
Eckville, Municipal	9.55	43.6	25.9	8.4	1.1	13.3	8.4	4.2	0.7			10.76
Edmonton, General	13.26	52.4	25.2	1.8	1.1	6.8	2.6	8.6	1.5			12.62
Edmonton, Misericordia	11.44	56.5	27.7	3.0	0.5	5.1	4.8	1.3	1.1			11.45
Edmonton, Royal Alexandra	13.17	56.5	29.1	1.4	2.5	2.1	4.8	2.9	0.7			13.17

Table No. 10—Continued

Hospitals	Operating Cost Per Patient Per Day	Percentage of Total Operating Expenditure								Revenue per Patient per day
		Salaries and Wages	Supplies	Purchased Services	Insurance	Depreciation	Repairs and Replacements	Interest and Exchange	Miscellaneous	
Edmonton, University of Alberta	\$ 12.08	58.8	29.4	1.9	0.5	2.1	2.3	4.1	0.9	13.46
Edson, St. John's	8.69	61.4	21.1	2.6	0.7	6.8	6.9	0.1	0.4	8.57
Elk Point, Municipal	8.22	37.9	30.7	4.8	0.6	13.7	4.2	6.5	1.6	8.11
Elora, Municipal	13.84	42.6	27.5	3.3	0.9	12.2	2.6	6.0	4.9	15.23
Empress, Municipal	11.63	46.9	36.7	5.8	1.8	.....	7.0	0.2	1.6	11.99
Fairview, Municipal	8.93	37.8	33.6	5.3	0.8	9.4	4.6	3.2	5.3	9.84
Fort Macleod, Municipal	14.05	48.4	35.4	0.5	0.7	4.2	8.4	0.8	1.6	14.90
Ft. McMurray, St. Gabriel's	13.19	53.0	20.8	3.8	0.1	12.6	0.3	6.2	3.2	7.97
Fort Vermillion, St. Theresa	5.16	45.5	33.6	0.1	.....	8.8	4.0	7.5	0.5	5.55
Galahad, St. Joseph's	8.02	60.0	24.4	2.5	0.8	4.0	7.9	0.1	0.3	7.71
Glendon, Municipal	13.75	42.0	27.5	7.7	0.6	6.5	4.7	8.5	2.5	13.21
Grande Prairie, Municipal	8.43	43.6	32.2	7.0	0.8	8.5	0.8	1.1	6.0	9.25
Hanna, Municipal	11.18	46.5	33.6	5.1	1.6	3.4	6.0	3.5	0.3	12.81
Hardisty, St. Anne's	8.53	49.5	30.3	3.3	1.2	7.5	4.4	3.0	0.8	8.30
High Prairie, Providence	6.69	51.6	33.9	3.4	0.6	4.2	4.8	0.6	0.9	6.88
High River, Municipal	9.69	48.4	29.0	4.1	0.8	8.7	5.5	2.6	0.9	10.55
Innisfail, Municipal	10.36	39.0	32.7	4.2	0.6	6.8	12.7	0.0	4.0	10.45
Islay, Municipal	9.52	50.3	25.2	5.4	0.6	3.6	6.1	0.0	8.8	10.28
Jasper, Seton	9.20	59.2	21.6	2.4	1.8	8.3	4.3	1.7	0.7	9.19
Killam, General	9.14	52.6	31.7	2.6	0.5	7.2	3.4	1.5	0.5	8.95
Lac la Biche, St. Catherine's	6.75	52.5	33.2	5.5	1.4	3.1	1.8	0.0	2.5	6.66
Lacombe, Municipal	10.43	44.2	34.8	7.8	1.0	7.7	1.2	2.6	0.7	10.39
Lamont, Archer Memorial	11.06	49.0	37.7	3.7	.....	2.0	4.4	1.0	2.2	10.86
Lethbridge, Galt	10.65	49.6	42.4	3.2	0.8	0.0	3.4	0.2	0.4	11.51
Lethbridge, St. Michael's General	10.06	57.5	29.6	2.8	0.4	3.3	1.3	4.7	0.5	12.16
McLennan, Sacred Heart	7.97	44.3	44.3	3.6	0.6	2.8	1.5	0.0	1.4	7.63
Magrath, Municipal	13.35	46.7	26.9	7.7	0.7	9.6	1.3	6.5	0.6	15.87
Manning, Battle River	9.47	48.7	33.3	5.5	0.5	8.7	1.2	0.0	2.1	9.39
Mannville, Municipal	10.36	45.3	32.1	5.7	1.1	4.8	3.5	0.0	7.5	12.27
Mayerthorpe, Municipal	13.50	39.6	33.6	4.9	0.9	7.8	4.7	4.1	4.4	16.77
Medicine Hat, General	10.54	58.6	29.4	8.2	0.2	.....	1.5	0.2	1.6	10.34
Mundare, General	12.83	64.7	16.7	1.1	0.1	2.9	7.0	0.0	7.5	13.25
Myram, Municipal	15.82	50.2	29.3	8.6	0.4	5.6	4.5	.....	1.4	15.17

Olds, Municipal	9.84	43.1	32.7	9.2	0.6	5.3	4.8	3.8	0.5	10.36
Oyen, Municipal	13.62	39.7	28.9	7.6	0.9	5.3	5.3	1.8	10.7	12.81
Peace River, Municipal	9.99	49.0	30.7	4.2	0.9	7.6	3.0	2.0	2.6	9.92
Pincher Creek, St. Vincent's	7.61	51.6	23.2	2.3	0.3	13.6	8.7	...	0.3	6.72
Ponoka, Municipal	12.65	45.5	23.1	5.6	1.2	14.0	3.5	6.7	0.4	12.75
Provost, Municipal	13.76	40.9	31.9	4.4	0.7	10.7	2.9	7.4	1.1	14.04
Radway, St. Joseph's	11.79	63.1	29.9	4.1	0.4	0.8	1.3	0.0	0.4	8.94
Raymond, Municipal	10.36	46.9	36.7	4.5	0.4	4.1	2.0	3.2	2.2	11.11
Red Deer, Municipal	12.35	47.7	28.4	6.9	0.5	9.0	2.2	4.8	0.5	13.03
Rimbey, Municipal	11.64	34.3	35.5	7.5	0.8	9.6	6.6	5.3	0.4	12.18
Rocky Mountain House, Municipal	8.99	42.2	32.4	8.8	1.8	4.4	2.8	7.3	0.3	10.74
Smoky Lake, George MacDougall	12.62	61.1	24.1	3.3	0.4	4.8	4.9	0.5	0.9	10.46
Spirit River, Holy Cross	8.61	38.1	42.5	5.6	0.3	2.8	5.6	0.7	7.6	7.68
St. Paul, St. Theresa	8.52	53.5	22.8	2.4	1.0	8.2	10.4	1.2	0.5	8.13
Stettler, Municipal	10.53	49.5	34.2	4.3	0.6	4.7	3.3	2.8	0.6	10.41
Taber, Municipal	10.37	47.7	31.2	4.1	0.2	8.1	4.7	3.0	1.0	11.76
Three Hills, Municipal	18.04	46.8	24.0	6.4	0.7	14.2	2.3	4.6	1.0	18.28
Tofield, Municipal	10.68	37.1	35.4	4.2	1.3	12.0	3.6	6.1	0.3	9.63
Trochu, St. Mary's	12.37	40.6	25.6	2.3	0.5	23.2	2.4	4.5	0.9	8.45
Turner Valley, Municipal	11.43	35.6	27.0	4.4	0.1	1.1	25.1	0.8	5.9	11.44
Two Hills, Municipal	11.19	46.9	30.8	4.9	0.5	8.4	2.6	5.3	0.6	13.11
Vegreville, General	9.49	39.3	34.9	7.3	1.2	10.8	3.8	1.6	1.1	8.83
Vermilion, Municipal	8.54	49.5	26.8	6.0	0.6	8.2	2.4	0.0	6.5	10.21
Viking, Municipal	10.36	40.3	34.7	3.5	1.5	4.5	2.3	6.2	7.0	13.25
Vilna, Our Lady's	14.30	59.9	22.4	2.1	1.3	5.5	7.9	0.1	0.8	7.80
Vulcan, Municipal	11.93	42.6	27.3	4.2	1.0	11.7	4.4	2.6	6.2	11.93
Wainwright, Municipal	9.96	41.6	30.0	4.0	0.9	13.2	2.6	5.5	1.3	9.84
Westlock, Immaculata	8.57	51.9	19.4	3.3	0.8	11.8	4.5	8.1	0.2	8.30
Wetaskiwin, Community	9.37	47.2	33.8	4.5	0.5	10.1	3.6	0.0	0.3	8.61
Willingdon, General	9.77	59.6	24.7	1.1	0.3	4.0	2.6	0.0	7.7	8.15
All Hospitals	\$ 11.55	54.5	28.4	3.0	0.8	4.4	3.4	3.8	1.7	\$11.84

Not Reported: Canmore, Canmore; Coaldale, Community; Edmonton Beulah Home; Medicine Hat, Isolation; Nordegg, General.

TABLE No. 11A—GRANTS AND PAYMENTS TO HOSPITALS, 1953

Approved Hospitals	70c Per Diem Grant			Maternity Benefits						Total Amount	
	Grant Days	Non-Grant Days	Amount \$	Jan.-Feb. Days	Amount \$	Mar.-Dec. Days	Amount \$	Mar.-Dec. Cases Discharged	Amount \$		Total Days
Athabasca, Municipal	9,099	306	6,369	225	1,327	1,432	9,021	185	2,035	1,657	\$ 12,384
Banff, Mineral Springs	8,080	3,124	5,656	64	377	325	2,047	52	572	389	2,997
Barrhead, St Joseph's	11,488	190	8,041	217	1,204	1,225	7,717	174	1,566	1,442	10,487
Bassano, Municipal	6,024	94	4,216	140	777	538	3,389	65	585	678	4,751
Beaverlodge, Municipal	3,438	33	2,406	101	530	475	2,992	84	756	576	4,278
Bentley, Municipal	2,513	29	1,759	60	354	253	1,593	31	341	313	2,288
Berwyn, Municipal	5,329	48	3,730	138	765	568	3,578	64	576	706	4,920
Blairmore, Crows Nest Pass Municipal	14,079	188	9,855	208	1,227	1,248	7,862	193	2,123	1,456	11,212
Bonnyville, Katherine H. Prittie	3,906	217	2,734	82	455	423	2,664	54	486	505	3,606
Bonnyville, St. Louis	9,985	1,835	6,989	165	915	1,014	6,388	117	1,053	1,179	8,356
Brooks, Municipal	12,361	96	8,652	277	1,634	1,421	8,952	194	2,134	1,698	12,720
Calgary, Alberta Red Cross	43,792	2,103	30,654								
Calgary, General	155,259	8,628	108,681	2,850	20,235	17,010	141,083	2,452	44,136	19,951	205,454
Calgray, Holy Cross	122,978	7,476	86,084	2,857	20,284	14,764	121,803	2,034	36,612	17,621	178,699
Calgary, Salvation Army Grace	3,408	559	2,385	157	926	1,301	8,196	157	1,727	1,458	10,849
Camrose, St. Mary's	26,310	169	18,417	606	3,848	2,774	19,140	314	4,082	3,380	27,070
Canmore, Canmore	1,687	99	1,179	38	199	180	1,134	28	252	218	1,585
Cardston, Municipal	8,298	120	5,808	217	1,204	1,416	8,920	181	1,629	1,633	11,754
Carmangay, Little Bow Municipal	2,668	31	1,867	38	199	193	1,215	24	216	231	1,631
Castor, Our Lady of the Rosary	6,561	197	4,592	85	501	689	4,340	82	902	774	5,744
Cereal, Municipal	2,077	76	1,453	30	157	179	1,127	21	189	209	1,474
Claresholm, Municipal	11,817	488	8,271	239	1,410	1,246	7,849	146	1,606	1,485	10,865
Coaldale, Community	3,570	166	2,499	153	803	543	3,420	67	603	696	4,827
Cold Lake, John Neil	2,231	1,453	1,561	74	388	470	2,820	66	462	544	3,670
Consort, Municipal	4,284	405	2,998	54	299	570	3,591	61	549	624	4,439
Coronation, Municipal	5,713	38	3,999	110	577	650	4,095	68	612	760	5,284
Daysland, Providence	6,233		4,363	64	355	455	2,866	51	459	519	6,800
Desmarais, St. Martin's	895	2,343	626	28	147	70	441	9	81	98	669
Didsbury, Municipal	7,325	68	5,127	181	1,067	869	5,474	99	1,089	1,050	7,631
Drumheller, Municipal	23,479	803	16,435	386	2,451	2,264	15,621	308	4,004	2,650	22,076
Eckville, Municipal	7,356	14	5,149	119	702	741	4,668	103	1,133	860	6,503
Edmonton, Beulah Home	3,517	609	2,461	142	788	1,124	7,081	93	837	1,266	8,706
Edmonton, General	107,933	6,184	75,553	1,316	9,343	8,501	70,133	1,097	19,746	9,817	99,222
Edmonton, Misericordia	115,675	4,092	80,972	2,565	18,211	13,370	110,302	1,983	35,694	15,935	164,208
Edmonton, Royal Alexandra	166,623	15,729	116,636	4,065	28,797	22,184	183,018	2,924	52,632	26,240	264,447

Edmonton, University .....	185,374	60,860	129,761	1,889	13,400	11,837	97,655	1,364	24,552	13,726	135,607
Edson, St. John's .....	9,697	788	6,787	396	2,336	1,853	11,673	185	2,035	2,249	16,045
Elk Point, Municipal .....	12,775	1,041	8,942	179	939	1,051	6,621	133	1,197	1,230	8,758
Elmora, Municipal .....	2,435	119	1,704	36	199	283	1,782	28	252	319	2,234
Empress, Municipal .....	3,171	1,019	2,219	88	488	357	2,249	32	288	445	3,025
Fairview, Municipal .....	9,273	106	6,491	216	1,274	1,011	6,369	126	1,386	1,227	9,029
Fort McLeod, Municipal .....	5,108	278	3,375	135	749	369	2,324	51	459	504	3,532
Fort McMurray, St. Gabriel's .....	2,267	1,703	1,586	85	471	357	2,142	39	273	442	2,886
Fort Smith, N.W.T., General .....	467	N.A.	326	.....	.....	28	168	2	18	28	186
Fort Vermilion, St. Theresa .....	3,263	7,535	2,284	97	509	310	1,860	36	252	407	2,621
Galahad, St. Joseph's .....	5,472	23	3,830	83	460	494	3,112	48	432	577	4,004
Glendon, Municipal .....	3,213	6	2,249	154	854	359	2,261	46	414	513	3,530
Grande Prairie, Municipal .....	22,174	1,674	15,321	442	2,607	2,148	13,532	309	3,399	2,590	19,539
Hythe Sub-Hospital .....	1,417	337	991	29	152	272	1,713	43	387	301	2,252
Hanna, Municipal .....	10,405	416	7,283	204	1,203	1,103	6,948	125	1,375	1,307	9,527
Hardisty, St. Anne's .....	7,844	4	5,490	174	965	619	3,899	60	540	793	5,405
High Prairie, Providence .....	17,395	3,994	12,176	341	1,892	1,731	10,905	235	2,115	2,072	14,912
High River, Municipal .....	13,090	203	9,163	418	2,319	1,513	9,531	215	1,935	1,931	13,786
Innisfail, Municipal .....	9,540	83	6,678	211	1,244	971	6,117	137	1,507	1,182	8,869
Islay, Municipal .....	3,472	.....	2,430	68	357	209	1,316	27	243	277	1,916
Jasper, Seton .....	4,025	1,901	2,817	133	738	598	3,767	62	558	731	5,063
Killam, General .....	7,701	78	5,390	184	1,021	1,012	6,375	96	864	1,196	8,260
Lac La Biche, St. Catherine's .....	9,273	21	6,491	285	1,581	1,331	8,385	187	1,683	1,616	11,650
Lacombe, Municipal .....	15,704	85	10,992	321	1,893	1,944	12,247	222	2,442	2,265	16,583
Lamont, Archer Memorial .....	17,308	2,247	12,115	242	1,536	1,266	8,735	149	1,937	1,508	12,209
Lethbridge, Galt .....	35,088	3,461	24,561	586	3,721	2,899	20,003	358	4,654	3,485	28,378
Lethbridge, St. Michael's General .....	62,799	2,250	43,959	1,121	7,118	6,283	43,352	757	9,841	7,404	60,312
Lloydminster, Lloydminster .....	15,669	216	10,968	319	1,882	1,560	9,828	190	2,090	1,879	13,800
McLennan, Sacred Heart .....	12,748	261	8,923	249	1,381	1,432	9,021	194	1,746	1,681	12,149
Magrath, Municipal .....	4,401	39	3,080	87	482	451	2,841	54	486	538	3,810
Manning, Battle River .....	3,145	58	2,201	117	649	537	3,222	77	539	654	4,410
Mannville, Municipal .....	4,428	2	3,099	150	832	653	4,113	82	738	803	5,684
Mayerthorpe, Municipal .....	8,560	83	5,992	131	727	1,249	7,868	134	1,206	1,380	9,801
Medicine Hat, General .....	37,538	3,530	26,276	792	5,029	4,533	31,277	565	7,345	5,325	43,651
Medicine Hat, Isolation .....	32	.....	22	.....	.....	.....	.....	.....	.....	.....	.....
Mundare, General .....	5,935	.....	4,154	44	244	288	1,814	31	279	332	2,337
Myrnam, Municipal .....	3,621	17	2,534	12	63	269	1,694	29	261	281	2,018
Nordegg, General .....	718	2	502	47	246	168	1,058	23	207	215	1,512
Olds, Municipal .....	10,692	233	7,484	294	1,734	1,378	8,681	170	1,870	1,672	12,286
Oyen, Municipal .....	2,700	44	1,890	34	188	347	2,186	42	378	381	2,752



Table 11A—Continued

Approved Hospitals	70c Per Diem Grant			Maternity Benefits							
	Grant Days	Non-Grant Days	Amount	Jan.-Feb. Days	Amount	Mar.-Dec. Days	Amount	Mar.-Dec. Cases Discharged	Amount	Total Days	Total Amount
Peace River, Municipal	13,109	833	9,176	301	1,775	1,631	10,275	172	1,892	1,932	13,943
Pincher Creek, St. Vincent's	9,735	1,459	6,814	140	826	888	5,594	97	1,067	1,028	7,487
Ponoka, Municipal	11,198	61	7,838	191	1,126	1,426	8,983	178	1,958	1,617	12,008
Provost, Municipal	6,714	259	4,699	82	455	443	2,790	67	603	525	3,849
Radway, St. Joseph's	3,988	114	2,791	156	819	644	4,057	73	657	800	5,533
Raymond, Municipal	4,538	271	3,176	130	721	755	4,756	115	1,035	885	6,513
Red Deer, Municipal	29,554	877	20,687	567	3,600	3,685	25,426	476	6,188	4,252	35,214
Rimbey, Municipal	8,725	35	6,107	153	902	1,068	6,723	146	1,606	1,221	9,237
Rocky Mountain House, Municipal	7,273	296	5,091	182	1,010	807	5,084	102	918	989	7,012
Smoky Lake, George McDougall	3,339	.....	2,337	84	466	570	3,591	81	729	654	4,786
Spirit River, Holy Cross	9,949	176	6,964	125	693	763	4,806	85	765	888	6,265
St. Paul, St. Theresa	15,865	2,787	11,105	346	2,041	2,123	13,374	211	2,321	2,469	17,737
Stettler, Municipal	20,345	268	14,241	321	1,893	2,077	13,085	275	3,025	2,398	18,004
Taber, Municipal	13,617	619	9,531	375	2,081	2,075	13,072	268	2,412	2,450	17,565
Three Hills, Municipal	4,458	117	3,120	198	1,168	705	4,441	95	1,045	903	6,654
Tofield, Municipal	6,551	35	4,585	103	607	825	5,197	109	1,199	928	7,004
Trochu, St. Mary's	4,249	36	2,974	104	577	412	2,595	43	387	516	3,559
Turner Valley, Municipal	6,322	177	4,425	81	449	543	3,420	68	612	624	4,482
Two Hills, Municipal	6,783	59	4,748	90	531	652	4,107	75	825	742	5,463
Vegreville, St. Joseph's General	20,506	1,294	14,354	343	2,178	1,409	9,722	163	2,119	1,752	14,019
Vermilion, Municipal	9,233	331	6,463	264	1,557	1,342	8,454	162	1,782	1,606	11,794
Viking, Municipal	9,025	108	6,317	85	446	788	4,964	82	738	873	6,148
Vilna, Our Lady's	3,112	951	2,178	53	294	579	3,647	56	504	632	4,445
Vulcan, Municipal	7,474	331	5,231	196	1,087	785	4,945	97	873	981	6,906
Wainwright, Municipal	13,451	484	9,415	349	2,059	1,547	9,746	188	2,068	1,896	13,873
Westlock, Immaculata	24,688	282	17,281	414	2,442	2,478	15,611	258	2,338	2,892	20,892
Wetaskiwin, Community	17,545	724	12,281	333	1,964	2,153	13,563	296	3,256	2,486	18,784
Willingdon, General	6,204	.....	4,342	131	727	489	3,080	55	495	620	4,302
<b>Total for Approved Hospitals</b>	<b>1,813,477</b>	<b>165,711</b>	<b>\$1,269,433</b>	<b>34,332</b>	<b>\$ 220,475</b>	<b>189,311</b>	<b>\$1,378,342</b>	<b>24,336</b>	<b>\$ 347,579</b>	<b>223,643</b>	<b>\$1,946,397</b>

PRIVATE HOSPITALS:

Luscar .....	23	\$	103	83	373	N.A.	106	477
Mercoal .....	88		396	339	1,535	N.A.	427	1,931
Sexsmith .....	188		846	1,069	4,810	N.A.	1,257	5,656
Swalwell .....	33		99	308	924	N.A.	341	1,023
Total for Private Hospitals .....	332	\$	1,444	1,799	\$ 7,643	N.A.	2,131	9,088
Total for all Hospitals .....	34,664	\$	221,920	191,110	\$1,385,986	\$ 347,579	225,774	\$1,955,485

TABLE No. 11B—GRANTS AND PAYMENTS TO HOSPITALS

Approved Hospitals	Pension Benefits							Total Payment	
	Jan.-Feb Days	Amount	Mar.-Dec. Days	Amount	Special Services Days Mar.-Dec.	Amount	Total Days		Total Amount
Athabasca, Municipal	96	\$ 571	580	\$ 3,654	578	982	676	\$ 5,207	\$ 23,961
Banff, Mineral Springs	72	428	415	2,614	235	399	487	3,442	12,095
Barrhead, St Joseph's	396	2,217	1,573	9,909	1,311	2,032	1,969	14,139	32,689
Bassano, Municipal	70	392	324	2,041	300	465	394	2,898	11,866
Beaverlodge, Municipal	89	498	274	1,726	205	317	363	2,542	9,227
Bentley, Municipal	90	535	273	1,719	249	423	363	2,678	6,726
Berwyn, Municipal	65	386	762	4,800	543	841	831	6,028	14,679
Blairmore, Crows Nest Pass Municipal	395	2,350	2,069	13,034	1,426	2,424	2,464	17,809	38,877
Bonnyville, Katherine H. Prittie	174	974	290	1,827	260	403	464	3,204	9,544
Bonnyville, St. Louis	517	2,895	1,302	8,202	1,093	1,694	1,819	12,791	28,138
Brooks, Municipal	155	922	855	5,386	558	948	1,010	7,257	28,630
Calgary, Alberta Red Cross	2,460	17,712	12,575	103,743	7,346	18,365	15,035	139,820	30,654
Calgary, General	1,531	11,023	8,236	67,947	5,430	13,575	9,767	92,545	453,956
Calgary, Holy Cross									357,329
Calgary, Salvation Army Grace									13,235
Camrose, St. Mary's	526	3,366	2,607	17,988	2,010	3,718	3,133	25,073	70,560
Canmore, Canmore	107	590	126	793	72	111	233	1,496	4,261
Cardston, Municipal	198	1,108	617	3,887	545	844	815	5,840	23,403
Cardangay, Little Bow Municipal	142	795	201	1,266	182	282	343	2,343	5,842
Castor, Our Lady of the Rosary	108	604	566	3,565	563	872	674	5,043	15,380
Cereal, Municipal	60	318	413	2,601	373	578	473	3,498	6,426
Clareholm, Municipal	188	1,118	1,248	7,862	696	1,183	1,436	10,164	29,302
Coaldale, Community	40	212	223	1,404	223	345	263	1,962	9,288
Cold Lake, John Neil	6	31	126	756	114	142	132	930	6,162
Consort, Municipal	23	128	433	2,727	341	528	456	3,385	10,823
Coronation, Municipal	122	646	458	2,885	342	530	580	4,062	13,345
Daysland, Providence	83	464	505	3,181	467	723	588	4,370	12,413
Desmarais, St. Martin's			34	214	34	52	34	266	1,562
Didsbury, Municipal	46	273	172	1,083	172	292	218	1,649	14,408
Drumheller, Municipal	360	2,304	1,947	13,434	1,265	2,340	2,307	18,078	56,590
Eckville, Municipal	128	716	752	4,737	556	861	880	6,316	17,968
Edmonton, Beulah Home									11,168
Edmonton, General	2,461	17,719	13,244	109,263	10,198	25,495	15,705	152,477	327,253
Edmonton, Misericordia	2,349	16,912	12,521	103,298	9,233	23,082	14,870	143,293	388,474
Edmonton, Royal Alexandra	2,574	18,532	14,160	116,820	8,893	22,232	16,734	157,585	538,669

Edmonton, University .....	3,103	22,341	17,028	140,481	10,110	25,275	20,131	188,097	453,467
Edson, St. John's .....	65	386	737	4,643	677	1,150	802	6,180	29,013
Elk Point, Municipal .....	364	2,038	2,411	15,189	2,072	3,211	2,775	20,439	38,139
Einora, Municipal .....	145	812	59	371	59	91	204	1,275	5,214
Empress, Municipal .....	59	330	353	2,223	188	291	412	2,845	8,090
Fairview, Municipal .....	114	678	801	5,046	572	972	915	6,697	22,217
Fort McLeod, Municipal .....	64	358	609	3,836	577	894	673	5,089	12,198
Fort McMurray, St. Gabriel's .....	33	174	264	1,584	200	250	297	2,008	*6,482
Fort Smith, N.W.T., General .....									512
Fort Vermilion, St. Theresa .....	11	58	299	1,794	212	265	310	2,117	*7,022
Galahad, St. Joseph's .....	129	722	342	2,154	279	432	471	3,309	11,144
Glendon, Municipal .....	145	812	472	2,973	454	703	617	4,489	10,268
Grande Prairie, Municipal .....	341	2,028	2,076	13,078	1,555	2,643	2,417	17,751	52,812
Hythe Sub-Hospital .....	44	233	63	396	53	82	107	712	3,957
Hanna, Municipal .....	155	922	1,102	6,942	931	1,582	1,257	9,447	26,258
Hardisty, St. Anne's .....	136	761	649	4,088	536	830	785	5,681	16,577
High Prairie, Providence .....	162	963	1,346	8,479	1,104	1,876	1,508	11,320	38,409
High River, Municipal .....	279	1,660	815	5,134	631	1,072	1,094	7,867	30,817
Innisfall, Municipal .....	98	583	699	4,403	490	833	797	5,819	21,367
Islay, Municipal .....	47	263	251	1,581	219	339	298	2,183	6,531
Jasper, Seton .....	35	196	135	850	33	51	170	1,097	8,978
Killam, General .....	123	731	565	3,559	536	911	688	5,202	18,854
Lac La Biche, St. Catherine's .....	277	1,551	802	5,052	733	1,136	1,079	7,739	25,881
Lacombe, Municipal .....	335	1,993	1,149	7,238	939	1,596	1,484	10,828	38,404
Lamont, Archer Memorial .....	423	2,707	2,408	16,615	1,704	3,152	2,831	22,474	46,799
Lethbridge, Galt .....	954	6,105	4,497	31,029	2,481	4,589	5,451	41,724	94,664
Lethbridge, St. Michael's General .....	1,554	9,945	4,996	34,472	2,971	5,496	6,550	49,914	154,185
Lloydminster, Lloydminster .....	223	1,326	1,530	9,639	1,034	1,757	1,753	12,723	37,492
McLennan, Sacred Heart .....	99	554	719	4,529	639	990	818	6,074	22,147
Magrath, Municipal .....	47	263	406	2,557	318	492	453	3,313	10,204
Manning, Battle River .....	96	508	192	1,152	184	230	288	1,890	* 8,502
Mannville, Municipal .....	63	352	482	3,036	431	668	545	4,057	12,841
Mayerthorpe, Municipal .....	146	868	985	6,205	788	1,339	1,131	8,413	24,207
Medicine Hat, General .....	827	5,292	4,362	30,097	3,195	5,910	5,189	41,301	111,229
Medicine Hat, Isolation .....									22
Mundare, General .....	298	1,668	1,231	7,755	1,176	1,822	1,529	11,246	17,739
Myram, Municipal .....	185	1,036	567	3,572	567	878	752	5,486	10,040
Nordegg, General .....									2,014
Olds, Municipal .....	157	934	985	6,205	674	1,145	1,142	8,285	28,055
Oyen, Municipal .....	40	238	262	1,650	232	394	302	2,283	6,925

TABLE No. 11B—GRANTS AND PAYMENTS TO HOSPITALS, 1953

Approved Hospitals	Pension Benefits						Total Payment		
	Jan.-Feb. Days	Amount	Days Mar.-Dec.	Amount	Special Services Days Mar.-Dec.	Amount		Total Days	Total Amount
Peace River, Municipal	81	481	592	3,729	478	812	673	5,024	28,143
Pincher Creek, St. Vincent's	116	690	904	5,695	656	1,115	1,020	7,500	21,802
Ponoka, Municipal	34	202	902	5,682	694	1,179	936	7,064	26,972
Provost, Municipal	97	543	838	5,279	740	1,147	935	6,969	15,518
Radway, St. Joseph's	129	722	524	3,301	504	781	653	4,804	13,129
Raymond, Municipal	31	173	239	1,505	204	316	270	1,995	11,685
Red Deer, Municipal	579	3,705	2,701	18,636	2,164	4,003	3,280	26,345	82,248
Rimbey, Municipal	252	1,499	1,005	6,331	890	1,513	1,257	9,343	24,688
Rocky Mountain House, Municipal	136	761	1,034	6,514	839	1,300	1,170	8,576	20,679
Smoky Lake, George McDougall	111	621	484	3,049	472	731	595	4,402	11,525
Spirit River, Holy Cross	118	660	842	5,304	780	1,209	960	7,174	20,404
St. Paul, St. Theresa	472	2,808	2,046	12,889	1,806	3,070	2,518	18,768	47,611
Stettler, Municipal	327	1,945	1,740	10,962	1,160	1,972	2,067	14,879	47,125
Taber, Municipal	263	1,472	669	4,214	502	778	932	6,465	33,563
Three Hills, Municipal	39	232	199	1,253	178	302	238	1,788	11,563
Tofield, Municipal	204	1,213	880	5,544	719	1,222	1,084	7,980	19,570
Trochu, St. Mary's	71	397	464	2,923	306	474	535	3,795	10,329
Turner Valley, Municipal	87	461	404	2,545	254	393	491	3,400	12,307
Two Hills, Municipal	152	904	928	5,846	844	1,434	1,080	8,185	18,397
Vegreville, St. Joseph's General	728	4,659	3,189	22,004	2,424	4,484	3,917	31,147	59,521
Vermilion, Municipal	125	700	1,007	6,344	702	1,088	1,132	8,132	26,389
Viking, Municipal	112	627	819	5,159	760	1,178	931	6,964	19,431
Vilna, Our Lady's	153	810	396	2,494	342	530	549	3,835	10,460
Vulcan, Municipal	104	618	275	1,732	217	368	379	2,720	14,858
Wainwright, Municipal	313	1,862	1,595	10,048	1,232	2,094	1,908	14,005	37,294
Westlock, Immaculata	786	4,676	4,090	25,767	2,837	4,822	4,876	35,266	73,440
Wetaskiwin, Community	118	702	1,552	9,777	1,150	1,935	1,670	12,434	43,500
Willingdon, General	322	1,803	1,515	9,544	1,488	2,306	1,837	13,654	22,299
Total for Approved Hospitals	33,071	\$ 215,116	168,363	\$1,228,086	120,709	\$ 245,040	201,434	\$1,688,243	\$4,904,074

PRIVATE HOSPITALS:

Luscar .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	\$ 477
Mercoal .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1,931
Swalwell .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	5,656
Sexsmith .....	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1,023
<b>Total for Private Hospitals .....</b>	<b>33,071</b>	<b>\$ 215,116</b>	<b>168,363</b>	<b>\$1,228,086</b>	<b>120,709</b>	<b>\$ 245,040</b>	<b>201,434</b>	<b>\$1,688,243</b>	<b>\$ 9,088</b>
<b>Total for all Hospitals .....</b>									<b>\$4,913,162</b>

Note included in above:

\$45,172.80 paid to Calgary Alberta Red Cross on behalf of 18,822 Orthopaedic days .....  
 Cold Lake, John Niel, 1,179 days @ \$1.80 and 109 days @ \$1.30 .....  
 Ft. McMurray, St. Gabriel's, 928 days @ \$1.80 and 317 days @ \$1.30 .....  
 Ft. Vermilion, St. Theresa, 1,306 days @ \$1.80 and 592 days @ \$1.30 .....  
 Manning, Battle River, 1,506 days @ \$1.80 and 272 days @ \$1.30 .....

Hospitalization of Pensioners in Macklin Hospital, Saskatchewan .....

Hospitalization of Maternity cases in border hospitals outside the Province. ....

Hospitalization of Maternity cases in hospitals not having maternity agreements .....

TOTAL ..... \$4,969,804

### Provincial-Municipal Hospitalization Programme

The Provincial-Municipal Hospitalization Programme is administered under the authority of the Hospitals Act, which provides that the Provincial Department of Public Health may pay a hospitalization grant to the board of any municipal hospital district, or to the local authority of any municipality which provides for the hospitalization of its ratepayers and its contract holders at a direct cost to the patient of not more than one dollar a day for standard ward care. The Provincial Department of Public Health may also pay a special hospital services grant to the board of any municipal hospital district or to the local authority of any municipality which has entered into an agreement with an approved hospital to pay for the cost of special hospital services, as laid down by Provincial regulations, provided to its ratepayers and contract holders. The latter part of the programme, pertaining to special hospital services, came into effect July 1st, 1953. Therefore the amounts shown in Table 12 are for a period of six months or less, depending on the date the local authority made the service available. Many municipalities, not having budgeted for this expenditure, waited until the beginning of 1954 to participate in this phase of the programme.

If the price of a non-ratepayer's contract for standard ward care does not exceed \$8.00 (or \$10.00 in Edmonton, and Calgary) for either an individual or a family, the local authority or municipal hospital district will be reimbursed by the province on a monthly basis. A few areas sell contracts for standard ward care at higher rates, and they must wait until the end of the year for payment on behalf of contract holders, following a review of their accounts. Payments on behalf of contract holders to such areas are listed separately at the end of Table 12.

The price of a special hospital services contract is \$4.00 per year where the service is provided by a Group A or B hospital; otherwise it is \$2.00 per year. Many local authorities sell a combined contract covering both standard ward care and special hospital services.

The Provincial-Municipal Hospitalization Plan provides for hospitalization as long as active treatment care is required.

Ordinarily, this service is provided in the Patient's local hospital. However, it was realized that it was essential to provide service in other than the local hospital for patients requiring emergent or referral services, and consequently this provision was made.

The plan for standard ward care is now in effect in municipalities and hospital districts which contain 92% of the population of the province, outside of National Parks and Indian Reserves. The foregoing is based on the distribution of population as given by the Dominion Census of June, 1951. As at December 31st, 1953, 37.4% of this group were in areas where special hospital services were also provided.

It is of interest to note that the length of stay in hospitals of patients provided with standard ward care for a dollar per day has remained the same at 7.6 days since the Plan went into effect in 1950.

Due to the possession of other hospital insurance, lack of knowledge about the Plan, or indifference, there are still many non-ratepayers who have not purchased hospital contracts. In 1953, of the total number of hospitalized in-patients, 28.3% were residents of the Province not receiving benefits under any Provincial

legislation for hospitalization. The corresponding percentage in 1952 was 37.7, indicating that as time goes on, more and more people are availing themselves to this type of hospitalization coverage.

Grants paid or payable to local authorities by the Province for hospitalization under the Provincial-Municipal Plan in 1953 amounted to \$2,043,896.99. This was an increase of \$727,065.69 over 1952. Part of this increase, namely \$131,889.00 was paid on behalf of special hospital services. The remainder was due to increased utilization and higher grant rates as a result of increased hospital costs.

For persons having both standard ward and special services coverage, the hospital received an average amount of \$10.35 per patient day, including the per diem allowance. This was made up as follows: \$1.41 from the patient, \$.70 from the Province, \$8.24 from the local authority for which it is reimbursed 50% by the Province. In addition, the patient would have paid for any difference between standard ward rates and the price of private or semi-private accommodation, if the latter was requested.

The standard ward rates as established by Provincial regulations for Provincial-Municipal Hospitalization Plan were increased, effective April 1st, 1953 to the following:

Group A Hospitals .....	\$8.25 per day
Group B Hospitals .....	\$6.90 per day
Group C and D Hospitals .....	\$6.30 per day
Group E Hospitals .....	\$6.00 per day

The patient pays \$1.00 of the above amounts and the remainder is paid by the municipal hospital district or local municipal authority which is later reimbursed 50% by the Province. The rates for special hospital services were established as follows when this part of the programme came into being on July 1st, 1953:

Group A Hospitals .....	\$4.00 per day
Group B Hospitals .....	\$3.20 per day
Group C Hospitals .....	\$2.40 per day
Group D Hospitals .....	\$2.00 per day
Group E Hospitals .....	\$1.20 per day

The patient pays 25% of the above amounts, and the remainder is paid by the municipal hospital district or local municipal authority, which is later reimbursed 50% by the Province.

The following table gives the details of the amounts paid to individual municipal hospital districts and local municipal authorities.



TABLE No. 12—HOSPITALIZATION PAYMENTS TO LOCAL AUTHORITIES, 1953

Local Authority	No. of Participating Months	Age 16 Years and Over		Age Under 16 Years		Special Servicest		Total	
		Days	Amount	Days	Amount	Days	Amount	Days	Amount
			\$		\$		\$		\$
Andrew, Village	12	335	871.95	151	295.95	.....	.....	486	1,167.90
Athabasca, Municipal Hospital District	12	3,896	9,911.90	1,246	2,554.10	.....	.....	5,142	14,466.00
Barrhead, Town	12	980	2,456.15	140	295.15	.....	.....	1,120	2,751.30
Bashaw, Village	12	199	562.35	53	117.65	.....	.....	252	680.00
Bassano, Municipal Hospital District	12	3,242	8,076.50	717	1,480.80	.....	.....	3,959	9,557.30
Bawlf, Village	12	110	278.80	56	101.45	.....	.....	166	380.25
Beaver, Municipal District	12	629	1,773.25	107	247.75	.....	.....	736	2,021.00
Beaverlodge, Municipal Hospital District	12	1,222	3,085.75	337	699.80	.....	.....	1,559	4,206.30
Bentley, Municipal Hospital District	12	1,140	2,897.10	362	724.90	.....	.....	1,502	3,622.00
Berwyn, Municipal Hospital District	12	1,952	4,879.40	498	966.75	.....	.....	2,450	6,606.65
Bittern Lake, Village	12	22	60.10	7	16.75	.....	.....	29	76.85
Bonnyville, Municipal District	12	2,179	5,416.60	997	1,968.05	.....	.....	3,176	7,384.65
Bow Island, Municipal District	12	1,003	2,704.30	388	896.10	.....	.....	1,391	3,600.40
Bowness, Town	12	1,670	5,726.08	783	2,303.35	.....	.....	2,453	8,029.43
Boyle, Municipal Hospital District	12	1,425	3,553.50	496	1,016.60	.....	.....	1,921	4,570.10
Brooks, Municipal Hospital District	12	5,544	14,223.60	2,181	4,426.05	.....	.....	7,725	18,649.65
Bruderheim, Village	12	288	800.40	34	78.10	.....	.....	322	878.50
Burdett, Village	12	30	73.65	15	32.25	.....	.....	45	105.90
Burlington, Municipal District	12	839	2,390.65	252	586.20	.....	.....	1,091	2,976.85
Calgary, City with Holy Cross	12	27,795	95,382.51	5,847	17,069.43	.....	.....	33,642	112,451.94
Calgary, City with Calgary General	12	38,021	131,625.24	10,347	30,192.03	.....	.....	48,368	161,817.27
Calgary, City Emergency and Referrals	12	1,591	4,930.03	375	979.40	.....	.....	1,966	5,909.43
Calgary, Rural Municipal Hospital District	12	12,369	41,640.27	4,587	13,204.13	.....	.....	16,956	54,844.40
Camrose, Municipal District	12	5,931	16,654.60	1,038	2,393.90	.....	.....	6,969	19,048.50
Camrose, Town	12	2,868	8,046.20	432	995.20	.....	.....	3,300	9,041.40
Cardston, Municipal Hospital District	12	3,811	9,611.35	1,110	2,223.15	.....	.....	4,921	11,834.50
Castor, Municipal Hospital District	12	2,205	5,474.25	571	1,154.75	.....	.....	2,776	6,629.00
Cereal, Municipal Hospital District	12	1,017	2,570.85	360	716.40	.....	.....	1,377	3,287.25
Chipman, Village	12	56	162.40	61	144.25	.....	.....	117	306.65
Claresholm, Municipal Hospital District	12	5,090	13,078.70	837	1,716.75	.....	.....	5,927	14,795.45
Consort, Municipal Hospital District	12	2,037	5,108.25	349	708.95	.....	.....	2,386	5,817.20
Coronation, Municipal Hospital District	12	2,392	5,869.60	561	1,098.75	.....	.....	2,953	6,968.35
Crow's Nest Pass Municipal Hospital District	12	5,063	13,030.25	1,128	2,300.40	.....	.....	6,191	15,330.65

Daysland, Municipal Hospital District .....	12	3,060	8,065.60	1,216	2,420.35	.....	4,276	10,485.95
Delburne, Municipal Hospital District .....	12	1,040	2,714.90	259	581.80	.....	1,299	3,296.70
Didsbury, Municipal Hospital District .....	12	3,171	8,135.25	962	1,964.80	1,511	4,133	11,459.95
Drumheller, Municipal Hospital District .....	12	10,999	31,072.85	2,443	5,701.85	5,701	13,442	43,614.40
Edmonton, City with General .....	12	17,093	59,141.90	3,989	11,706.55	10,643	21,082	86,812.95
Edmonton, City with Misericordia .....	12	17,516	59,911.43	3,627	10,318.66	9,386	21,143	84,309.09
Edmonton, City with Royal Alexandra .....	12	24,399	83,311.21	11,007	31,259.81	14,419	35,406	136,199.52
Edmonton, City with University .....	12	28,408	97,196.42	3,802	10,957.60	14,628	32,210	130,096.02
Edmonton, City Emergency and Referrals .....	12	263	759.36	97	213.65	192	360	1,167.11
Eckville, Municipal Hospital District .....	12	3,125	7,724.15	1,808	3,529.00	.....	4,933	11,253.15
Elk Point, Municipal Hospital District .....	12	3,211	8,131.15	1,012	2,049.35	.....	4,223	10,180.50
Einhora, Municipal Hospital District .....	12	1,171	3,030.25	120	231.45	.....	1,291	3,261.70
Empress, Municipal Hospital District .....	12	1,442	3,612.50	396	786.15	.....	1,838	4,398.65
Fairview, Municipal Hospital District .....	12	5,445	13,997.85	1,082	2,238.40	2,929	6,527	18,872.35
Ferintosh, Village .....	12	37	102.35	7	16.35	.....	44	118.70
Flagstaff, Municipal District .....	12	6,982	17,601.15	2,691	5,375.10	4,041	9,673	26,257.80
Foremost, Village .....	12	559	1,572.65	203	486.00	.....	762	2,058.65
*Forestburg, Village .....	12	231	508.20	102	173.40	.....	333	681.60
*Galahad Village .....	12	76	114.00	56	70.00	30	132	206.50
Girouxville, Village .....	12	102	224.40	59	100.30	.....	161	324.70
Glendon, Municipal Hospital District .....	12	1,078	2,704.60	547	1,071.20	654	1,625	4,266.30
Granum, Town .....	12	248	627.50	45	89.55	.....	293	717.05
Grande Prairie, Municipal Hospital District .....	12	10,419	26,458.05	2,869	5,896.85	4,003	13,288	35,927.90
Hanna, Municipal Hospital District .....	12	3,744	9,607.50	811	1,657.25	.....	4,555	11,264.75
Hay Lakes, Village .....	12	76	211.00	154	374.90	.....	230	585.90
High River, Municipal Hospital District .....	12	7,042	17,971.15	842	1,714.00	3,155	7,884	22,524.65
*Hughenden, Municipal Hospital District .....	12	1,533	3,730.20	405	823.65	.....	1,938	4,553.85
Innisfail, Municipal Hospital District .....	12	5,166	13,306.70	910	1,855.85	.....	6,076	15,162.55
Irma, Municipal Hospital District .....	12	1,048	2,566.60	152	290.20	260	1,200	3,051.80
Islay, Municipal Hospital District .....	12	2,089	5,277.10	609	1,202.25	986	2,698	7,218.85
*Killam, Village .....	12	201	504.85	65	136.45	120	266	749.30
Kitscoty, Village .....	12	216	494.85	11	20.35	.....	227	515.20
Lac La Biche, Town .....	12	358	787.60	114	193.80	.....	472	981.40
Lacombe, Municipal Hospital District .....	12	6,973	17,765.95	1,821	3,737.25	.....	8,794	21,503.20
Lamont, Village .....	12	628	1,789.40	59	139.35	.....	687	1,928.75
Lamont, Municipal District .....	12	7,417	20,402.75	2,751	6,011.30	.....	10,168	26,414.05
Leduc, Municipal District .....	12	7,003	23,549.20	1,742	4,969.65	4,318	8,745	34,766.05
Leduc, Town .....	12	1,291	4,468.19	577	1,663.22	.....	1,868	6,131.41
Lethbridge, M.H.D. with St. Michale's .....	12	17,292	48,958.20	4,923	11,451.35	.....	22,215	60,409.55
Lethbridge, M.H.D. with Galt .....	12	8,231	23,307.45	1,839	4,272.75	.....	10,070	27,580.20
Lethbridge, M.H.D. with Coaldale .....	12	859	2,176.75	344	665.20	.....	1,203	2,841.95
Lethbridge, M.H.D. Emergency and Referrals .....	12	1,407	4,037.75	121	296.45	.....	1,528	4,334.20

## DEPARTMENT OF PUBLIC HEALTH

Table 12—Continued

Local Authority	No. of Participating Months	Age 16 Years and Over		Age Under 16 Years		Special Services†		Total	
		Days	Amount	Days	Amount	Days	Amount	Days	Amount
			\$		\$		\$		\$
Little Bow, Municipal Hospital District	12	1,229	3,126.50	104	211.00	.....	.....	1,333	3,331.50
Lloydminster, Municipal Hospital District	12	8,030	20,556.80	1,510	3,068.90	.....	3,577.50	9,540	27,203.20
Loughheed, Village	12	143	359.75	103	214.25	.....	.....	246	574.00
Magrath, Municipal Hospital District	12	1,908	4,730.85	586	1,177.55	.....	685.50	2,494	6,593.90
Manning, Village	12	247	573.40	49	93.05	.....	.....	296	666.45
Mannville, Municipal Hospital District	12	1,611	4,082.85	560	1,163.80	.....	844.50	2,171	6,091.15
Mayerthorpe, Municipal Hospital District	12	1,461	3,748.05	613	1,288.25	.....	941.40	2,074	5,977.70
Mimburn, Municipal District	12	1,340	3,658.90	429	973.70	.....	.....	1,769	4,632.60
Macleod, Municipal Hospital District	12	1,392	3,497.55	284	571.90	.....	.....	1,676	4,069.45
McLennan, Town	12	455	1,140.95	356	725.35	.....	.....	811	1,866.30
Medicine Hat, City	12	9,436	26,731.40	1,209	2,871.25	.....	.....	10,645	29,602.65
Millet, Village	9	108	295.96	9	19.35	.....	15.00	117	330.31
Milo, Village	12	22	51.70	20	37.00	.....	.....	42	88.70
Morinville, Municipal District	12	4,711	15,265.47	1,589	4,387.90	.....	.....	6,300	19,653.37
Mundare, Town	12	380	836.00	57	96.90	.....	.....	437	932.90
Municipal Affairs, S.A. No. 2 and No. 3	12	173	500.45	.....	.....	.....	.....	173	500.45
Municipal Affairs, I.D. No. 11, No. 21 and No. 22	12	1,643	4,588.45	636	1,473.00	.....	.....	2,279	6,061.45
Municipal Affairs, I.D. No. 76 and No. 77	12	3,219	9,510.65	1,150	2,690.60	.....	.....	4,369	12,201.25
Municipal Affairs, I.D. No. 78 and No. 95	12	1,680	4,278.30	523	1,072.85	.....	.....	2,203	5,351.15
Municipal Affairs, I.D. No. 101	12	2,398	5,893.75	1,291	2,577.20	.....	.....	3,689	8,470.95
Municipal Affairs, I.D. No. 102	12	1,626	4,059.60	713	1,401.40	.....	.....	2,339	5,461.00
Municipal Affairs, I.D. No. 107 and No. 108	12	1,747	4,486.00	722	1,493.20	.....	.....	2,469	5,979.20
Municipal Affairs, I.D. No. 125 and No. 126	9	1,151	3,050.15	272	584.80	.....	.....	1,423	3,634.95
Municipal Affairs, I.D. No. 138 and No. 146	12	1,569	3,821.85	473	882.70	.....	.....	2,042	4,704.55
Municipal Affairs, I.D. No. 147	12	656	1,531.55	379	709.85	.....	.....	1,035	2,241.40
Myrnam, Municipal Hospital District	12	1,318	3,289.75	683	1,354.60	.....	576.75	2,001	5,221.10
New Norway, Village	12	74	214.70	6	13.50	.....	.....	80	228.20
Okotoks, Town	12	546	1,640.58	55	113.08	.....	.....	601	1,753.66
Olds, Municipal Hospital District	12	4,119	10,529.55	868	1,794.80	.....	.....	4,987	12,324.35
Oyen, Municipal Hospital District	12	1,495	4,201.00	344	698.50	.....	.....	1,839	4,899.50
Peace River, Municipal Hospital District	12	4,762	12,206.20	1,462	3,040.10	.....	2,233.80	6,224	17,480.10
Pembina, Municipal District	12	1,848	6,396.89	295	854.57	.....	.....	2,143	7,251.46
Penhold, Village	12	268	773.00	43	96.15	.....	.....	311	869.15
Pincher Creek, Municipal District	12	2,204	5,638.40	1,036	2,111.00	.....	.....	3,240	7,749.40
Pincher Creek, Town	12	1,468	3,728.50	550	1,133.00	.....	.....	2,018	4,861.50

Provost, Municipal Hospital District	12	3,133	7,920.85	662	1,311.25	.....	.....	3,795	9,232.10
Ponoka, Municipal Hospital District	12	4,821	12,463.05	1,512	3,137.10	.....	.....	6,333	15,600.15
Provost, Municipal District	12	344	866.60	132	251.40	.....	.....	476	1,118.00
Public Welfare, Metis Colony No. 1	12	134	314.90	70	85.40	.....	.....	204	400.30
Public Welfare, Metis Colony No. 3	12	204	532.20	57	122.55	.....	.....	261	654.75
Public Welfare, Metis Colony No. 78	12	28	65.65	63	129.60	.....	.....	91	195.25
Public Welfare, Metis Colony No. 8	12	28	73.30	142	298.55	.....	.....	170	371.85
Public Welfare, Metis Colony No. 10	12	93	231.00	165	326.10	.....	.....	258	557.10
Radway, Village	12	77	186.50	.....	.....	.....	.....	77	186.50
Raymond, Municipal Hospital District	12	1,954	5,011.15	330	659.10	.....	.....	2,284	5,670.25
Redcliff, Town	12	819	2,336.05	170	400.50	.....	.....	989	2,736.55
Red Deer, Municipal Hospital District	12	8,771	24,769.25	2,541	5,823.45	.....	.....	11,312	30,592.70
Rimbej, Municipal Hospital District	12	2,948	7,495.40	636	1,312.20	.....	.....	3,584	8,807.60
Rocky Mountain House, Municipal Hospital District	12	2,424	6,157.65	860	1,769.35	.....	.....	3,284	7,927.00
Sedgewick, Village	12	600	1,550.25	105	219.90	.....	431	705	2,156.70
Smoky Lake, Municipal District	12	4,053	10,092.75	889	1,760.45	.....	.....	4,942	11,853.20
Smoky River, Municipal District	12	4,188	10,770.80	2,595	4,688.00	.....	.....	6,783	15,458.80
Spirit River, Municipal Hospital District	12	4,462	9,689.60	1,497	2,499.30	.....	.....	5,959	12,188.90
*St. Paul, Municipal Hospital District	12	5,781	13,953.15	3,429	6,521.70	.....	.....	9,210	20,474.85
*Stettler, Municipal Hospital District	12	7,559	19,320.65	1,933	3,980.75	.....	3,804	9,492	26,725.00
Stony Plain, Town	12	449	1,560.22	55	168.99	.....	.....	504	1,729.21
Stony Plain, Municipal District	12	4,312	14,748.70	1,210	3,523.00	.....	2,339	5,522	21,780.20
Strathcona, Municipal District	12	4,355	14,596.48	1,113	3,123.81	.....	.....	5,468	21,221.29
Strome, Village	12	176	443.85	26	53.20	.....	22	202	516.85
Sturgeon, Municipal District	12	3,645	11,891.91	1,055	2,858.08	.....	.....	4,700	14,749.99
Sylvan Lake, Town	12	641	1,814.15	155	359.35	.....	.....	796	2,173.50
Taber, Municipal Hospital District	12	3,471	8,676.60	1,070	2,137.15	.....	.....	4,541	10,813.75
Thorhild, Village	9	62	164.30	9	19.35	.....	26	71	205.40
Thorsby, Village	12	122	409.65	30	73.45	.....	10	152	498.10
Tofield, Municipal Hospital District	12	1,726	4,384.00	302	634.90	.....	799	2,028	5,738.00
Turner Valley, Municipal Hospital District	12	3,228	8,004.00	693	1,420.95	.....	.....	3,921	9,424.95
Trochu, Municipal Hospital District	12	1,733	3,812.60	479	814.30	.....	.....	2,212	4,626.90
Three Hills, Municipal Hospital District	12	1,639	4,169.35	337	667.85	.....	.....	1,976	4,837.20
Two Hills, Municipal Hospital District	12	2,816	7,195.10	869	1,805.65	.....	.....	3,685	9,000.75
Vegreville, Municipal Hospital District	12	6,230	17,643.90	2,807	6,454.90	.....	.....	9,037	24,098.80
Vermilion, Municipal Hospital District	12	4,578	11,565.15	574	1,160.30	.....	2,151	5,152	14,338.70
*Viking, Municipal Hospital District	12	4,776	12,139.80	1,460	2,944.15	.....	2,942	6,236	17,290.45
Vulcan, Municipal Hospital District	12	3,884	9,896.00	1,143	2,369.55	.....	.....	5,027	12,265.55
Wainwright, Municipal Hospital District	12	4,089	10,472.25	952	1,934.00	.....	.....	5,041	12,406.25
*Westlock, Town	12	395	967.55	116	217.00	.....	.....	511	1,184.55

Table 12—Continued

70c PER DIEM GRANT	No. of Participating Months	Age 16 Years and Over		Age Under 16 Years		Special Services†		Total	
		Days	Amount	Days	Amount	Days	Amount	Days	Amount
			\$		\$		\$		\$
Westlock, Municipal District .....	12	8,343	\$ 21,226.65	2,406	\$ 4,813.20	.....	\$ .....	10,749	\$ 26,039.85
Wetaskiwin, City .....	12	1,770	4,585.35	431	898.45	1,015	913.50	2,201	6,397.30
Wetaskiwin, Municipal District .....	12	3,337	8,597.45	817	1,700.35	1,583	1,424.70	4,154	11,722.50
Willingdon, Municipal Hospital District .....	12	1,788	4,561.20	948	1,975.55	.....	.....	2,736	6,536.75
<b>Total</b> .....		536,023	\$1,556,873.85	148,896	\$ 350,837.81	108,549	\$ 131,889.00	684,919	\$2,039,600.66
*Plus settlement on behalf of Contract Holders where contracts were sold for more than \$8.00 per year:									
Forestburg, Village .....	.....	.....	\$ .....	.....	.....	.....	\$ .....	.....	\$ 153.30
Galahad, Village .....	.....	.....	.....	.....	.....	.....	.....	.....	9.00
Hughenden, Municipal Hospital District .....	.....	.....	.....	.....	.....	.....	.....	.....	204.00
Killam, Village .....	.....	.....	.....	.....	.....	.....	.....	.....	82.80
Macleod, Municipal Hospital District .....	.....	.....	.....	.....	.....	.....	.....	.....	935.70
Stettler, Municipal Hospital District .....	.....	.....	.....	.....	.....	.....	.....	.....	1,698.73
St. Paul, Municipal Hospital District .....	.....	.....	.....	.....	.....	.....	.....	.....	241.60
Viking, Municipal Hospital District .....	.....	.....	.....	.....	.....	.....	.....	.....	322.40
Westlock, Town .....	.....	.....	.....	.....	.....	.....	.....	.....	10.20
Wetaskiwin, Municipal District .....	.....	.....	.....	.....	.....	.....	.....	.....	638.60
<b>GRAND TOTAL</b> .....		536,023	\$1,556,873.85	148,896	\$ 350,837.81	108,549	\$ 131,889.00	684,919	\$2,043,896.99

†In effect for not more than 6 months of the year.

### Maternity Hospitalization Programme

The Alberta maternity hospitalization programme is administered under the Authority of the Maternity Hospitalization Act, which provides the following for women who are residents of the Province or whose husbands are residents of the Province: (a) hospital care for the infant, and for the mother, in a public ward, up to a maximum of twelve days for any one confinement, in an Alberta Hospital; (b) a grant to any woman who is confined in a hospital outside the Province who resides in an area where an Alberta hospital is not available. In addition, to the foregoing a grant of \$40.00 may be paid to a woman who provides for her own maternity services in her home.

Of all live births in the Province in 1953, 96.0% occurred in approved hospitals. The Province expended \$1,955,989.95 for maternity hospitalization and \$4,880.00 to 122 mothers who were confined at home. For maternity hospitalization the Province pays the hospital the standard ward rate plus a certain amount per case for the provision of routine maternity services.

The per case payment varies according to the class of hospital, and is as follows:

Group A Hospital .....	\$18.00 per case discharged
Group B Hospital .....	\$13.00 per case discharged
Group C Hospital .....	\$11.00 per case discharged
Group D Hospital .....	\$ 9.00 per case discharged
Group E Hospital .....	\$ 7.00 per case discharged

The above rates came into effect March 1st, 1953. The details of mounts paid to individual hospitals may be found in the Section "Alberta Approved Hospitals."

### Hospitalization and Treatment Services Programme for Provincial Pension Groups

The programme of health care for the Provincial Pension Group is administered under the authority of the Hospitalization and Treatment Services Act. The Pension Group includes the following:

- (a) recipients of assistance under the Old Age Assistance Act, and dependents.
- (b) recipients of an allowance under the Mothers Allowance Act, and dependents.
- (c) recipients of an allowance under the Supplementary Allowance Act, and dependents.
- (d) recipients of a pension under the Widows Pension Act, and dependents.
- (e) recipients of Old Age Security, with an income not exceeding \$1,000.00 a year if single, or \$1,500.00 a year if married, including the Old Age Security Pension.

The health services provided include hospitalization for persons requiring active treatment care, medical services, dental services, optical services and other treatment services recommended by a physician and approved by the Director of Medical Services.

At December 31st, 1953, the Pension Group comprised the following:

	Recipients	Spouses	Dependent Children	Total
Old Age Assistance .....	4,853	876	194	5,923
Mothers Allowance .....	1,548	.....	3,775	5,323
Supplementary Allowance for Old Age Security (A) .....	18,176	1,860	249	20,285
For Blind Pension .....	374	104	117	595
Widows Pensions .....	632	.....	2	634
Old Age Security (B) .....	181	.....	.....	181
<b>TOTAL</b> .....	<b>25,764</b>	<b>2,840</b>	<b>4,337</b>	<b>32,941</b>

The average number in the group for the year was 32,595. Expenditures on behalf of the group were as follows:

Hospitalization .....	\$1,688,243.45
Medical .....	488,343.25
Dental .....	123,385.04
Optical and Optometric .....	62,975.82
Other treatment services .....	2,053.00
<b>TOTAL</b> .....	<b>\$2,365,000.56</b>

Average expenditure per capita in the group was \$72.56.

#### 1. Hospitalization of Pension Group.

Where active treatment care is required, hospitalization includes standard ward care and all special hospital services provided by the hospital, with the following exceptions, for which the hospital may charge the patient: Cortisone or ACTH, Judet or Eicher heads, colostomy or ileostomy outfits, cortate or estrogen implants, heparin in all trade forms, and new drugs placed on the market subsequent to March 1st, 1953.

During 1953 hospitalization was provided for a total of 201,434 patients days, or an average of 6.2 days for every individual eligible for service. The following table shows the number of individuals hospitalized, compared with the number eligible for service.

	Average Eligible	Number Hospitalized	% of Eligible	Average Stay in Hospital
Old Age Group .....	26,348	12,468	47.3	16.2 days
Mothers Allowance .....	5,189	963	18.6	7.6 days
Blind Pension .....	645	284	44.0	14.4 days
Widows Allowance .....	575	206	35.8	12.2 days
	<b>32,757</b>	<b>13,921</b>	<b>42.5%</b>	<b>15.5 days</b>

For hospitalization of the pension group the Province pays the hospital the standard ward rate plus a daily payment for the first 20 days following admission to cover the cost of providing special hospital services.

The amount of this payment varies according to the class of hospital as follows:

Group A Hospital .....	\$2.50 per day up to 20 days
Group B Hospital .....	\$1.85 per day up to 20 days
Group C Hospital .....	\$1.70 per day up to 20 days
Group D Hospital .....	\$1.55 per day up to 20 days
Group E Hospital .....	\$1.25 per day up to 20 days

The above rates came into effect March 1st, 1953. The details of amounts paid to individual hospitals may be found in the section "Alberta Approved Hospitals".

## 2. Medical Care of Pension Group.

The Province pays the Alberta College of Physicians and Surgeons a per capita amount each month, based on the total number of recipients and dependents eligible for service, for the provision of complete medical care to those in the group. The per capita payment was \$1.25 per month. The total cost of this service to the Province in 1953 was \$488,343.25.

## 3. Dental Services for Pension Group.

The Province pays the Alberta Dental Association a per capita amount each month, based on the total number of recipients and dependents eligible for service, for the provision of dental services to the pension group. The per capita payment was increased from 26¼ to 33 1/3 cents per month, effective April 1st, 1953. The total cost of this service to the Province in 1953 was \$123,385.04. The dental services provided consist of routine dental care, one-half the cost of new dentures (excluding posterior bridge-work and orthodontia.)

The following table shows the number of claims for dental services as compared to the number eligible for such service.

UTILIZATION OF DENTAL SERVICES			
	Average Eligible	Number of Claims	As a % of Eligible
Old Age Group .....	26,348	3,001	11.4%
Mothers Allowance .....	5,189	2,085	40.2%
Blind Pension .....	645	155	24.0%
Widows Allowance .....	575	104	18.1%
<b>TOTAL</b> .....	<b>32,757</b>	<b>5,355</b>	<b>16.3%</b>

The high proportion of children in the Mothers Allowance Group accounts for the high rate of utilization of 40.2%.

## 4. Optical Services for the Pension Group.

Optical services provide for refraction and glasses on the recommendation of an eye specialist or an optometrist and on the approval of the Director of Medical Services.

Records for this particular service are kept on a fiscal year basis, and the following data pertains to 1953-54. A total of 5,096 accounts for glasses were approved and paid for, an expenditure of \$45,355.82. Of these, 3,969 refractions were made by optometrists, and the remainder were done by medical eye specialists. The total amount paid out for optometric service was \$17,620.00. Payment to the medical eye specialist is a part of the over-all medical programme, and no separate information is available for this phase of the programme.

## 5. Other Treatment Services for Pension Group.

Other treatment services may be provided on the recommendation of the patient's physician and the approval of the Director of Medical Services. Services provided include such things as physiotherapy, nursing services, chiropody, and chiropractic. The total amount expended for such services in the fiscal year 1953-54 was \$2,053.00.

### Alberta Municipal Hospital Districts

The Municipal Hospitals Act, passed in 1919, made provision for the establishment of Municipal Hospital Districts on the request of



a Municipal Council or the petition of the ratepayers in any particular area. The provisional board of such a municipal hospital district must draft a hospitalization scheme to provide standard ward care to ratepayers and non-ratepayer contract holders, with their dependents, at a direct cost to the patient of not more than \$1.00 per day, the balance of the cost of providing standard ward care to be provided through a hospital mill rate tax on all real property in the hospital district, plus assistance from Government grants. The scheme may also include provisions for the construction of a hospital, or authority to enter into an agreement with an existing hospital for the hospitalization of ratepayers and contract holders. The scheme subsequently must be approved by 65% of the ratepayers in order to be implemented. Election of a permanent board follows. Effective June, 1950, legislation was passed which provided for a province-wide Provincial-Municipal Hospitalization Programme for the benefit of persons not in Municipal Hospital Districts, as well as those within. Under this legislation the municipal hospital districts and the municipalities not in districts may be reimbursed by the Province 50% of the cost of providing standard ward hospital care.

More recent legislation, effective July 1st, 1953, expanded the programme to allow for the provision of special hospital services, with the Province reimbursing the Municipal Hospital District or municipality concerned 50%. For more details see the section on "Provincial-Municipal Hospitalization Programme".

There are 66 Municipal Hospital Districts in operation in the Province, with 52 of them operating their own hospital. One of these, namely Lloydminster, is located in Saskatchewan. The other 14 districts have hospitalization agreements with other local hospitals. Barrhead Municipal Hospital District No. 67 came into being during the year.

The total assessable acreage under the Municipal Hospital Plan on January 1st, 1954, was 32,460,215 acres, with an assessed value of \$423,449,239.00.

The total requisitions for all municipal hospitals this year was \$2,558,049.76, levied on an average mill rate tax of 6.083 mills. This you will note is an increase from last year's 5.66 mills.

TABLE No. 13—MUNICIPAL HOSPITAL DISTRICTS, 1953

MHD No.	Cost Per Patient Day, Inc. Int. and Dep.	Cost Per Patient Day, Ecl. Int. and Dep.	Minimum Tax	Adults & Children Days, Plus 1/3 Newborn Days	Bed and Crib Capacity	Debenture Principal Outstanding
13 Athabasca	\$11.10	\$ 8.43	\$12.00	8,253	42	\$163,860.47
6 Bassano	9.29	8.80	8.00	5,693	26	
32 Beaverlodge	10.24	9.96	6.00	3,103	9	10,785.00
43 Bentley	15.57	11.80	8.00	2,341	16	35,200.00
50 Berwyn	8.07	6.54	10.00	4,093	21	34,000.00
28 Brooks	12.78	11.22	8.00	11,329	64	155,750.00
5 Cardston	12.50	12.06	8.00	7,391	24	
46 Cereal	14.00	12.96	6.00	2,009	9	4,485.00
24 Claresholm	8.24	7.65	10.00	11,265	42	37,890.00
22 Consort	11.62	9.51	6.00	4,250	22	55,700.00
39 Coronation	9.16	8.68	10.00	5,198	18	13,000.00
40 Crows Nest Pass	12.12	9.85	10.00	13,230	72	231,000.00
33 Didsbury	12.25	10.74	6.00	6,660	25	56,654.89
3 Drumheller	11.19	10.80	8.00	22,502	65	200,000.00
30 Eckville	9.95	7.88	10.00	6,797	29	52,087.16
18 Elk Point	8.22	6.56	10.00	12,839	51	126,000.00
44 Elnora	13.84	11.31	8.00	2,333	16	45,400.00
53 Empress	11.63	11.61	10.00	3,825	23	
59 Fairview	8.93	7.80	8.00	8,538	32	51,000.00
57 Glendon	13.75	11.68	10.00	2,862	8	48,100.00
14 Grande Prairie	8.43	7.61	10.00	23,503	79	55,000.00
9 Hanna	11.18	10.41	8.00	9,915	35	60,000.00
11 High River	9.69	8.60	6.00	11,966	44	72,000.00
16 Innisfail	10.36	9.65	6.00	8,842	28	
4 Islay	9.52	9.18	8.00	3,285	13	
54 Lacombe	10.43	9.36	8.00	14,254	50	94,000.00
25 Little Bow	18.58	18.58	6.00	2,530	14	
8 Lloydminster			9.00		92	
48 Macleod	14.05	13.35	10.00	5,004	14	7,500.00
29 Magrath	13.35	11.19	6.00	4,055	22	77,500.00
1 Mannville	10.36	9.86	8.00	3,941	15	
38 Mayerthorpe	13.50	11.90	12.00	7,626	20	80,951.92
23 Myrnam	15.82	14.94	10.00	3,429	13	468.35
26 Olds	9.84	8.95	8.00	9,847	31	74,903.67
35 Oyen	13.62	12.68	8.00	2,497	17	44,695.19
21 Peace River	9.99	9.04	8.00	12,543	37	49,000.00
37 Ponoka	12.65	10.03	10.00	10,180	48	184,413.35
12 Provost	13.76	11.28	8.00	6,615	26	95,000.00
31 Raymond	10.36	9.61	10.00	4,220	18	26,871.29
15 Red Deer	12.35	10.66	8.00	27,132	104	423,808.74
52 Rimbey	11.64	9.90	9.00	8,011	19	116,500.00
49 Rocky Mt. House	8.99	7.95	8.00	6,892	35	116,460.00
20 Stettler	10.53	9.74	16.00	18,956	56	118,500.00
27 Taber	10.37	9.22	6.00	12,425	37	310,185.53
45 Three Hills	18.04	14.65	8.00	3,907	25	81,350.00
47 Tofield	10.68	8.75	10.00	5,984	21	90,251.39
66 Turner Valley	11.43	11.22	8.00	6,086	13	10,000.00
42 Two Hills	11.19	9.67	10.00	6,365	25	81,500.00
2 Vermillion	8.54	7.83	6.00	8,559	37	
10 Viking	10.36	9.25	6.00	8,542	35	112,500.00
19 Vulcan	11.93	10.22	6.00	7,065	37	45,000.00
17 Wainwright	9.96	8.09	9.00	12,596	48	159,000.00

TABLE No. 14—MUNICIPAL HOSPITAL DISTRICTS 1953 REQUISITIONS

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Athabasca M.H.D. No. 13</b>					
M.D. No. 103	\$ 24,598.73	393,833	\$2,742,695.00	8.97	5,200
L.I.D. No. 107	24.13	597	2,390.00	8.97	73
L.I.D. No. 122	448.19	1,052	50,080.00	8.97	400
Athabasca	9,405.09		1,048,667.00	8.97	1,068
	<u>\$ 34,476.14</u>	<u>295,482</u>	<u>\$3,843,832.00</u>		<u>6,741</u>
<b>Bassano M.H.D. No. 6</b>					
County No. 2	\$ 3,698.00		\$ 906,455.00	4	316
County No. 4	4,890.00		1,198,730.00	4	2,054
M.D. No. 40	4,856.00		1,190,450.00	4	348
L.I.D. No. 41	602.00	40,794	147,690.00	4	85
S.A. No. 4	141.00	21,436	34,500.00	4	10
Bassano	1,703.00		417,505.00	4	625
Hussar	719.00		176,200.00	4	139
Rosemary	391.00		95,850.00	4	195
	<u>\$ 17,000.00</u>	<u>841,583</u>	<u>\$4,167,380.00</u>		<u>3,772</u>

## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Beaverlodge M.H.D. No. 32</b>					
County No. 1 .....	\$ 10,010.00		\$1,291,570.00	7.75	2,113
Beaverlodge .....	2,700.00		308,415.00	8.75	514
	<u>\$ 12,710.00</u>		<u>\$1,599,985.00</u>		<u>2,627</u>
<b>Bentley M.H.D. No. 43</b>					
M.D. No. 43 .....	\$ 14,327.00	112,633	\$1,364,510.00	10.5	1,298
County No. 3 .....	516.00	4,392	49,140.00	10.5	34
Bentley .....	4,360.00		396,430.00	11	439
	<u>\$ 19,203.00</u>	<u>117,025</u>	<u>\$1,810,080.00</u>		<u>1,771</u>
<b>Berwyn M.H.D. No. 50</b>					
M.D. No. 135 .....	\$ 7,434.00	153,032	\$1,486,879.00	5	1,149
L.I.D. No. 138 .....	750.00	33,002	150,050.00	5	211
L.I.D. No. 139 .....	533.00	22,200	106,670.00	5	194
Berwyn .....	1,543.00		220,475.00	7	345
Grimshaw .....	2,865.00		573,003.00	5	720
	<u>\$ 13,125.00</u>	<u>208,234</u>	<u>\$2,537,077.00</u>		<u>2,619</u>
<b>Boyle M.H.D. No. 61</b>					
M.D. No. 103 .....	\$ 5,500.00	136,663	\$1,159,650.00	4.74	2,517
L.I.D. No. 102 .....	225.00	11,641	44,655.00	5	184
	<u>\$ 5,725.00</u>	<u>148,304</u>	<u>\$1,204,305.00</u>		<u>2,701</u>
<b>Brooks M.H.D. No. 28</b>					
County No. 4 .....	\$ 24,056.00		\$3,007,084.00	8	6,985
S.A. No. 4 .....	1,063.00	57,040	132,895.00	8	100
L.I.D. No. 22 .....	133.00	6,223	16,680.00	8	20
Brooks .....	12,636.00		1,579,541.00	8	2,500
Duchess .....	1,134.00		141,750.00	8	210
Tilley .....	1,116.00		127,105.00	8	205
	<u>\$ 40,138.00</u>		<u>\$5,005,055.00</u>		<u>10,090</u>
<b>Calgary Rural M.H.D. No. 63</b>					
M.D. No. 31 .....	\$ 2,534.00	75,600	\$1,144,450.00	2.2	1,000
M.D. No. 32 .....	2,554.00	114,720	1,277,255.00	2	1,250
M.D. No. 40 .....	10,352.00	371,930	5,175,940.00	2	2,550
M.D. No. 43 .....	9,724.00	404,292	4,861,548.00	2	2,320
M.D. No. 44 .....	19,096.00	408,203	9,548,053.00	2	4,498
M.D. No. 45 .....	8,534.00	90,716	4,267,186.00	2	4,310
M.D. No. 48 .....	5,566.00	184,000	2,783,360.00	2	1,700
M.D. No. 49 .....	8,894.00	290,801	4,446,650.00	2	2,514
L.I.D. No. 46 .....	8,410.00	345,839	4,204,680.00	2	2,642
L.I.D. No. 50 .....	184.00	22,105	92,355.00	2	270
Gleichen .....	1,268.00	237	455,880.00	2.78	475
Strathmore .....	1,440.00	991	457,258.00	3.15	700
Acme .....	770.00	160	272,794.00	2.82	275
Airdrie .....	694.00	240	247,090.00	2.81	265
Beiseker .....	976.00	254	366,268.00	2.67	325
Cluny .....	430.00	145	138,673.00	3.10	202
Cochrane .....	1,088.00	640	345,412.00	3.15	530
Crossfield .....	1,182.00	204	423,812.00	2.79	446
Irricana .....	404.00	470	134,510.00	3.00	180
Rockyford .....	632.00	96	224,465.00	2.81	246
Standard .....	558.00	329	189,815.00	2.94	237
	<u>\$ 85,290.00</u>	<u>2,311,972</u>	<u>\$41,057,444.00</u>		<u>28,660</u>
<b>Cardston M.H.D. No. 5</b>					
M.D. No. 6 .....	\$ 25,302.00	600,000	\$4,217,120.00	6	3,319
M.D. No. 5 .....	5,705.00	300,000	950,850.00	6	500
Cardston .....	9,614.00		1,602,336.00	6	2,487
	<u>\$ 40,621.00</u>	<u>900,000</u>	<u>\$6,770,306.00</u>		<u>6,306</u>
<b>Castor M.H.D. No. 41</b>					
M.D. No. 53 .....	\$ 6,383.00	344,600	\$2,553,200.00	2.5	1,750
M.D. 54 .....	818.00	30,584	327,000.00	2.5	193
Castor .....	1,703.00		681,135.00	2.5	850
Halkirk .....	266.00		106,545.00	2.5	150
	<u>\$ 9,170.00</u>	<u>375,184</u>	<u>\$3,667,880.00</u>		<u>2,943</u>

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Cereal M.H.D. No. 46</b>					
S.A. No. 3 .....	\$ 12,340.00	685,573	\$1,366,991.00	9	869
Cereal .....	845.00	60	93,905.00	9	135
	<u>\$ 13,185.00</u>	<u>685,573</u>	<u>\$1,460,896.00</u>		<u>1,004</u>
<b>Claresholm M.H.D. No. 24</b>					
M.D. No. 26 .....	\$ 19,808.00	336,846	\$5,659,330.00	3.5	2,500
Claresholm .....	6,933.00		1,980,860.00	3.5	2,750
Stabely .....	1,231.00		351,619.00	3.5	400
	<u>\$ 27,972.00</u>	<u>336,846</u>	<u>\$7,991,809.00</u>		<u>5,650</u>
<b>Consort M.H.D. No. 22</b>					
S.A. No. 3 .....	\$ 16,550.00	768,932	\$2,383,955.00	7	1,947
Consort .....	1,950.00	600	279,501.00	7	396
	<u>\$ 18,500.00</u>	<u>769,532</u>	<u>\$2,663,456.00</u>		<u>2,343</u>
<b>Coronation M.H.D. No. 39</b>					
M.D. No. 53 .....	\$ 8,350.00	360,000	\$2,089,410.00	4	1,550
S.A. No. 2 and 3 .....	2,550.00	233,619	640,880.00	4	700
Coronation .....	2,900.00		652,750.00	4.5	800
	<u>\$ 13,800.00</u>	<u>593,619</u>	<u>\$3,383,040.00</u>		<u>3,050</u>
<b>Crows Nest Pass M.H.D. No. 40</b>					
L.I.D. No. 10 .....	\$ 43,173.00	46,364	\$5,343,275.00	8.08	4,830
Coleman .....	9,115.00		1,128,215.00	8.08	1,961
Blairmore .....	13,663.00		1,691,027.00	8.08	1,933
Frank .....	1,427.00		176,659.00	8.08	339
	<u>\$ 67,380.00</u>	<u>46,364</u>	<u>\$8,339,176.00</u>		<u>9,063</u>
<b>Daysland M.H.D. No. 58</b>					
M.D. No. 63 .....	\$ 10,011.00	250,243	\$3,337,190.00	3	2,926
Daysland .....	1,073.00		357,609.00	3	475
	<u>\$ 11,048.00</u>	<u>250,243</u>	<u>\$3,694,799.00</u>		<u>3,401</u>
<b>Delburne M.H.D. No. 62</b>					
M. D. No. 55 .....	\$ 5,950.00	124,840	\$1,288,450.00	4.68	1,400
Delburne .....	1,550.00		335,723.00	4.68	450
	<u>\$ 7,500.00</u>	<u>124,840</u>	<u>\$1,624,173.00</u>		<u>1,850</u>
<b>Didsbury M.H.D. No. 33</b>					
M.D. No. 49 .....	\$ 33,900.00	424,212	\$5,092,160.00	7	3,700
L.I.D. No. 50 .....	1,300.00	43,341	196,485.00	7	330
Didsbury .....	8,900.00	902	1,261,541.00	7.5	1,176
	<u>\$ 44,100.00</u>	<u>468,455</u>	<u>\$6,550,186.00</u>		<u>5,206</u>
<b>Drumheller M.H.D. No. 3</b>					
M.D. No. 43 .....	\$ 9,170.00	143,906	\$1,585,223.00	5.5	900
M.D. No. 47 .....	32,690.00	387,439	5,820,135.00	5.5	2,500
M.D. No. 48 .....	17,500.00	19,280	3,085,547.00	5.5	2,990
L.I.D. No. 41 .....	820.00	44,526	141,390.00	5.5	59
L.I.D. No. 42 .....	29,530.00	45,394	3,800,005.00	5.5	6,500
S.A. No. 2 .....	890.00	21,743	115,400.00	5.5	154
Drumheller .....	16,860.00	230	2,181,325.00	7.5	2,574
Munson .....	440.00	160	103,248.00	3	95
Morrin .....	790.00	12	171,760.00	3	220
Rumsey .....	410.00	29	103,210.00	3	121
Delia .....	1,310.00	240	304,778.00	3	265
Carbon .....	1,240.00	170	239,090.00	3	387
	<u>\$111,650.00</u>	<u>663,129</u>	<u>\$17,651,111.00</u>		<u>16,765</u>
<b>Eckville M.H.D. No. 30</b>					
M.D. No. 55 .....	\$ 8,260.00	72,076	\$1,061,830.00	7.78	1,037
M.D. No. 57 .....	3,791.00	68,731	487,240.00	7.78	1,080
M.D. No. 64 .....	8,352.00	77,842	1,073,420.00	7.78	1,010
L.I.D. No. 65 .....	5,099.00	64,365	655,340.00	7.78	932
Eckville .....	2,968.00	80	358,528.00	8.28	379
	<u>\$ 28,470.00</u>	<u>283,094</u>	<u>\$3,636,358.00</u>		<u>4,438</u>

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Elk Point M.H.D. No. 18</b>					
M.D. No. 86 .....	\$ 12,389.00	177,282	\$1,238,900.00	10	3,200
M.D. No. 88 .....	1,629.00	32,346	162,975.00	10	150
M.D. No. 81 .....	2,403.00	29,469	240,210.00	10	540
M.D. No. 71 .....	11,580.00	134,102	1,158,070.00	10	1,900
L.I.D. No. 85 .....	310.00	5,655	31,085.00	10	75
Elk Point .....	4,077.00	195	407,707.00	10	400
	<u>\$ 32,388.00</u>	<u>379,049</u>	<u>\$3,238,947.00</u>		<u>6,265</u>
<b>Elnora M.H.D. No. 44</b>					
M.D. No. 55 .....	\$ 12,154.00	131,000	\$1,215,454.00	10	1,301
M.D. No. 48 .....	4,245.00	36,000	424,515.00	10	308
Elnora .....	2,254.00	160	205,880.00	11	240
	<u>\$ 18,653.00</u>	<u>167,160</u>	<u>\$1,845,849.00</u>		<u>1,849</u>
<b>Empress M.H.D. No. 53</b>					
M.D. No. 34 .....	\$ 7,173.00	132,315	\$ 735,690.00	9.75	475
S.A. No. 3 .....	328.00	8,493	33,660.00	9.75	50
S.A. No. 2 .....	8,114.00	83,643	842,475.00	9.75	488
L.I.D. No. 21 .....	945.00	20,512	96,890.00	9.75	125
Empress .....	2,969.00	320	304,545.00	9.75	475
	<u>\$ 19,529.00</u>	<u>245,283</u>	<u>\$2,013,260.00</u>		<u>1,613</u>
<b>Fairview M.H.D. No. 59</b>					
M.D. No. 136 .....	\$ 10,540.80	207,664	\$2,342,403.00	4.5	2,300
L.I.D. No. 139 .....	5,782.75	205,053	1,285,062.00	4.5	1,927
Fairview .....	5,674.00	221	945,673.00	6	1,200
Hines Creek .....	1,178.20	345	235,640.00	5	114
	<u>\$ 23,175.75</u>	<u>413,283</u>	<u>\$4,808,778.00</u>		<u>5,541</u>
<b>Glendon M.H.D. No. 57</b>					
M.D. No. 88 .....	\$ 12,553.00	68,822	\$ 570,590.00	22	1,600
L.I.D. No. 101 .....	6,840.00	83,197	310,910.00	22	1,241
	<u>\$ 19,393.00</u>	<u>152,019</u>	<u>\$ 881,500.00</u>		<u>2,841</u>
<b>Grande Prairie M.H.D. No. 14</b>					
County No. 1 .....	\$ 30,364.00	690,320	\$6,747,763.00	4.5	7,123
L.I.D. 111, 126, 132, 134 .....	11,821.00	282,158	2,626,975.00	4.5	3,527
Grande Prairie .....	15,296.00	.....	3,399,141.00	4.5	4,000
Wembley .....	913.00	.....	202,905.00	4.5	275
Sexsmith .....	11,618.00	.....	359,574.00	4.5	350
Hythe .....	1,739.00	.....	386,575.00	4.5	350
	<u>\$ 61,753.00</u>	<u>972,307</u>	<u>\$13,722,935.00</u>		<u>15,625</u>
<b>Hanna M.H.D. No. 9</b>					
M.D. No. 47 .....	\$ 5,039.96	77,486	\$ 704,400.00	8.57	500
M.D. No. 54 .....	3,964.39	38,754	462,340.00	8.57	338
S.A. No. 2 .....	31,910.24	1,336,502	3,721,475.00	8.57	3,350
Hanna .....	18,813.18	454	2,194,055.00	8.57	2,200
Craigmyle .....	1,035.73	75	120,790.00	8.57	135
	<u>\$ 61,763.50</u>	<u>1,453,271</u>	<u>\$7,203,060.00</u>		<u>6,523</u>
<b>High River M.H.D. No. 11</b>					
County No. 2 .....	\$ 1,456.00	22,225	\$ 485,440.00	3	175
M.D. No. 31 .....	29,724.00	574,748	9,907,780.00	3	3,800
M.D. No. 26 .....	2,232.00	54,874	743,650.00	3	125
M.D. No. 32 .....	9,516.00	104,119	3,172,660.00	3	1,400
M.D. No. 27 .....	290.00	15,660	97,040.00	3	27
High River .....	6,564.00	.....	2,188,715.00	3	2,006
Nanton .....	2,928.00	.....	975,776.00	3	1,250
Blackie .....	584.00	.....	194,350.00	3	250
Cayley .....	400.00	.....	134,630.00	3	150
	<u>\$ 53,694.00</u>	<u>771,626</u>	<u>\$17,900,041.00</u>		<u>9,183</u>
<b>Hughenden M.H.D. No. 51</b>					
M.D. No. 52 .....	\$ 4,345.16	658,636	\$1,781,720.00	3	1,290
Hughenden .....	478.80	.....	159,610.00	3	214
Czar .....	390.40	.....	130,160.00	3	170
	<u>\$ 6,214.36</u>	<u>658,636</u>	<u>\$2,071,490.00</u>		<u>1,674</u>

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Innisfail M.H.D. No. 16</b>					
M.D. No. 55 .....	\$ 26,266.00	421,550	\$5,907,475.00	4.5	6,150
M.D. No. 57 .....	900.00	33,280	207,710.00	4.5	544
M.D. No. 56 .....	396.00	21,438	87,970.00	4.5	184
Innisfail .....	3,622.00	398	804,857.00	4.5	1,417
Bowden .....	780.00	40	173,254.00	4.5	277
	<u>\$ 31,964.00</u>	<u>476,706</u>	<u>\$7,181,266.00</u>		<u>8,388</u>
<b>Irma M.H.D. No. 55</b>					
M.D. No. 61 .....	\$ 3,319.00	105,096	\$1,106,360.00	3	746
Irma .....	945.00		315,000.00	3	369
	<u>\$ 4,264.00</u>	<u>105,096</u>	<u>\$1,421,360.00</u>		<u>1,115</u>
<b>Islay M.H.D. No. 4</b>					
M.D. No. 71 .....	\$ 16,000.00	283,785	\$3,272,460.00	4.8	2,548
	<u>\$ 16,000.00</u>	<u>283,785</u>	<u>\$3,272,460.00</u>	<u>4.8</u>	<u>2,548</u>
<b>Lacombe M.H.D. No. 54</b>					
M.D. No. 64 .....	\$ 33,626.00	441,600	\$6,113,890.00	5.5	7,390
County No. 3 .....	306.00	5,325	55,560.00	5.5	65
Lacombe .....	17,032.00	640	2,792,130.00	6.1	2,350
Clive .....	1,332.00		242,264.00	5.5	350
Blackfalds .....	590.00		107,349.00	5.5	135
	<u>\$ 52,886.00</u>	<u>447,565</u>	<u>\$9,311,193.00</u>		<u>10,290</u>
<b>Lethbridge M.H.D. No. 65</b>					
M.D. No. 25 .....	\$ 49,482.15	500,000	\$ 8,998,400.00	5.5	10,000
M.D. No. 5 .....	3,517.35	71,524	639,515.00	5.5	500
M.D. No. 4 .....	33,642.12	676,299	6,115,900.00	5.5	3,462
M.D. No. 2 .....	4,091.61	217,360	743,575.00	5.5	770
S.A. No. 4 .....	8,446.42	386,154	1,533,822.00	5.5	1,155
Lethbridge .....	130,285.46		23,687,760.00	5.5	24,000
Coaldale .....	3,062.73		557,610.00	5.5	624
Barons .....	2,129.55		389,430.00	5.5	290
Nobleford .....	1,866.35		338,427.00	5.5	275
Warner .....	2,751.67		500,200.00	5.5	340
	<u>\$239,275.41</u>	<u>1,851,337</u>	<u>\$43,504,639.00</u>		<u>41,416</u>
<b>Little Bow M.H.D. No. 25</b>					
M.D. No. 25 .....	\$ 2,522.00		\$ 420,390.00	6	
Medical .....	1,682.00			4	
County No. 2 .....	10,642.00	166,431	1,773,670.00	6	1,050
Medical .....	7,094.00			4	
S.A. No. 4 .....	9.00	789	1,522.00	6	10
Medical .....	6.00			4	
Champion .....	1,796.00		299,331.00	6	380
Medical .....	1,197.00			4	
Carmangay .....	1,532.00		255,383.00	6	225
Medical .....	1,022.00			4	
	<u>\$ 27,502.00</u>	<u>167,220</u>	<u>\$2,750,296.00</u>		<u>1,665</u>
<b>Lloydminster M.H.D. No. 8</b>					
M.D. No. 71 .....	\$ 32,000.00	523,040	\$8,043,670.00	4.71	5,268
Lloydminster .....	7,608.65		1,615,350.00	4.71	1,982
Marwayne .....	1,303.90		276,810.00	4.71	300
	<u>\$ 46,800.00</u>	<u>523,040</u>	<u>\$9,935,830.00</u>		<u>7,540</u>
<b>Macleod M.H.D. No. 48</b>					
M.D. No. 16 .....	\$ 15,433.66	438,692	\$3,416,870.00	4.52	2,300
Ft. Macleod .....	7,839.88	4,311	1,780,386.00	4.4	2,200
	<u>\$ 23,273.54</u>	<u>443,003</u>	<u>\$5,197,256.00</u>		<u>4,500</u>
<b>Magrath M.H.D. No. 29</b>					
M.D. No. 5 .....	\$ 26,892.84	261,097	\$3,187,945.00		2,800
Magrath .....	7,098.01	1,300	841,454.00		1,400
	<u>\$ 33,990.85</u>	<u>262,397</u>	<u>\$4,029,399.00</u>		<u>4,200</u>

## DEPARTMENT OF PUBLIC HEALTH

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Mannville M.H.D. No. 1</b>					
M.D. No. 72 .....	\$ 15,585.78	278,014	\$2,597,630.00	6	2,032
Free Hospitalization .....	1,295.56			6	
Mannville .....	2,992.18	240	498,697.00	6	526
Minburn .....	985.14	102	164,190.00	6	204
	<u>\$ 20,858.66</u>	<u>278,356</u>	<u>\$3,260,517.00</u>		<u>2,762</u>
<b>Mayerthorpe M.H.D. No. 38</b>					
M.D. No. 92 .....	\$ 26,653.00	242,400	\$1,665,799.00	16	2,750
L.I.D. No. 109 .....	2,297.00	30,736	143,530.00	16	220
Mayerthorpe .....	5,275.00	115	329,669.00	16	500
	<u>\$ 34,225.00</u>	<u>273,251</u>	<u>\$2,138,998.00</u>		<u>3,470</u>
<b>Myrnam M.H.D. No. 23</b>					
M.D. No. 81 .....	\$ 14,715.00	165,292	\$1,635,100.00	9	2,260
Medical .....	6,540.00			4	
M.D. No. 86 .....	270.00	8,505	29,960.00	9	100
Medical .....	119.00			4	
Myrnam .....	3,378.00		375,433.00	9	375
Medical .....	1,501.00			4	
	<u>\$ 26,523.00</u>	<u>173,797</u>	<u>\$2,040,493.00</u>		<u>2,735</u>
<b>Olds M.H.D. No. 26</b>					
M.D. No. 49 .....	\$ 19,110.00	276,180	\$3,822,005.00	5	4,350
M.D. No. 48 .....	3,130.00	7,680	626,183.00	5	400
L.I.D. No. 50 .....	955.00	33,119	190,755.00	5	300
Olds .....	7,990.00	608	1,597,920.00	5	1,605
Sundre .....	980.00	280	196,193.00	5	283
	<u>\$ 32,165.00</u>	<u>318,867</u>	<u>\$6,433,056.00</u>		<u>6,940</u>
<b>Oyen M.H.D. No. 35</b>					
M.D. No. 34 .....	\$ 1,564.00	55,849	\$ 229,970.00	6.8	160
S.A. No. 3 .....	10,963.00	652,221	1,612,148.00	6.8	1,666
Oyen .....	2,665.00	217	391,870.00	6.8	550
	<u>\$ 15,192.00</u>	<u>708,277</u>	<u>\$2,233,988.00</u>		<u>2,376</u>
<b>Peace River M.H.D. No. 21</b>					
M.D. No. 135 .....	\$ 3,517.00	22,954	\$ 293,100.00	12	450
M.D. No. 130 .....	696.00	11,007	57,975.00	12	383
L.I.D. No. 131 .....	11,010.00	162,980	936,255.00	12	1,617
L.I.D. No. 138 .....	2,833.00	53,640	236,135.00	12	444
Peace River .....	17,042.00		1,401,350.00	12	1,672
	<u>\$ 35,098.00</u>	<u>250,581</u>	<u>\$2,924,815.00</u>		<u>4,566</u>
<b>Ponoka M.H.D. No. 37</b>					
M.D. No. 3 .....	\$ 34,398.00	365,799	\$4,358,115.00	8	5,781
M.D. No. 63 .....	52.00	680	6,600.00		
Ponoka .....	20,622.00	1,399	2,612,743.00	8	2,983
	<u>\$ 55,072.00</u>	<u>367,878</u>	<u>\$6,977,458.00</u>		<u>8,764</u>
<b>Provost M.H.D. No. 12</b>					
M.D. No. 52 .....	\$ 28,459.00	349,481	\$3,162,120.00	9	1,950
M.D. No. 61 .....	2,359.00	46,975	262,100.00	9	284
S.A. No. 3 .....	4,890.00	84,909	543,313.00	9	600
Provost .....	6,001.00		666,847.00	9	671
	<u>\$ 41,709.00</u>	<u>481,365</u>	<u>\$4,634,380.00</u>		<u>3,505</u>
<b>Raymond M.H.D. No. 31</b>					
M.D. No. 5 .....	\$ 10,600.00	188,240	\$3,300,355.00	3.21	2,088
Raymond .....	5,200.00		1,379,458.00	3.77	2,279
Stirling .....	810.00		163,395.00	4.96	520
	<u>\$ 16,610.00</u>	<u>188,240</u>	<u>\$4,843,208.00</u>		<u>4,887</u>

TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Red Deer M.H.D. No. 15</b>					
M.D. No. 55 .....	\$ 46,336.00	255,284	\$3,791,816.00	12.22	4,000
M.D. No. 64 .....	10,021.00	64,376	820,040.00	12.22	1,000
Red Deer .....	73,164.00	2,132	5,987,180.00	12.22	8,000
	<u>\$129,521.00</u>	<u>321,792</u>	<u>\$10,599,036.00</u>		<u>13,000</u>
<b>Rimbey M.H.D. No. 52</b>					
County No. 3 .....	\$ 25,620.00	124,800	\$2,135,078.00	12	3,100
M.D. No. 64 .....	1,627.00	14,400	135,560.00	12	.....
L.I.D. No. 68 .....	81.24	16,045	6,770.00	12	.....
Rimbey .....	8,395.72	245	645,825.00	13	757
L.I.D. No. 65 .....	794.40	8,466	66,200.00	12	.....
	<u>\$ 36,518.36</u>	<u>164,036</u>	<u>\$2,989,433.00</u>		<u>3,875</u>
<b>Rocky Mountain House M.H.D. No. 49</b>					
M.D. No. 57 .....	\$ 4,125.00	68,551	\$ 412,630.00	10	1,000
M.D. No. 65 .....	15,995.00	220,492	1,599,555.00	10	3,000
Township 41-5-5 .....	490.00		(Taken into hospital district in 1952 after requisitions were submitted)		
Rocky Mountain House .....	8,575.00	165	815,600.00	10.5	1,200
Caroline .....	1,250.00	65	125,191.00	10	200
	<u>\$ 30,435.00</u>	<u>289,273</u>	<u>\$2,952,976.00</u>		<u>5,400</u>
<b>Spirit River M.H.D. No. 60</b>					
M.D. No. 133 .....	\$ 6,381.00	135,520	\$1,276,215.00	5	1,820
L.I.D. No. 132 .....	2,846.00	92,397	569,350.00	5	850
L.I.D. No. 134 .....	5,826.00	197,737	1,165,375.00	5	2,000
Spirit River .....	2,085.00		417,015.00	5	750
Rycroft .....	1,251.00		250,375.00	5	400
	<u>\$ 18,389.00</u>	<u>425,654</u>	<u>\$3,678,330.00</u>		<u>5,820</u>
<b>Stettler M.H.D. No. 20</b>					
M.D. No. 54 .....	\$ 46,790.00	797,487	\$8,756,394.00	5.3	5,542
M.D. No. 63 .....	3,208.00	74,127	600,290.00	5.3	950
Stettler .....	13,160.00		2,462,700.00	5.3	2,421
Big Valley .....	1,363.00		255,110.00	5.3	307
Donalda .....	850.00		159,257.00	5.3	246
Gadsby .....	629.00		117,581.00	5.3	98
Botha .....	300.00		56,285.00	5.3	96
	<u>\$ 66,300.00</u>	<u>871,614</u>	<u>\$12,407,617.00</u>		<u>9,660</u>
<b>St. Paul M.H.D. No. 36</b>					
M.D. No. 86 .....	\$ 23,172.00	376,462	\$3,292,310.00	7.03	6,249
St. Paul .....	8,828.00		1,202,435.00	8.2	1,407
	<u>\$ 33,000.00</u>	<u>376,462</u>	<u>\$4,694,745.00</u>		<u>7,656</u>
<b>Taber M.H.D. No. 27</b>					
M.D. No. 14 .....	\$ 16,661.00	406,425	\$3,029,423.00	5.5	3,375
M.D. No. 2 .....	310.00	12,066	56,480.00	5.5	16
M.D. No. 4 .....	395.00	12,568	71,930.00	5.5	12
Taber .....	31,928.00		5,805,236.00	5.5	3,700
Grassy Lake .....	795.00		114,600.00	5.5	150
	<u>\$ 50,089.00</u>	<u>431,059</u>	<u>\$9,107,669.00</u>		<u>7,253</u>
<b>Three Hills M.H.D. No. 45</b>					
M.D. No. 48 .....	\$ 31,004.00	239,380	\$4,010,810.00	7.73	3,139
Three Hills .....	8,096.00	211	1,047,373.00	7.73	1,026
	<u>\$ 39,100.00</u>	<u>239,591</u>	<u>\$5,058,183.00</u>		<u>4,165</u>
<b>Tofield M.H.D. No. 47</b>					
M.D. No. 73 .....	\$ 17,000.00	166,502	\$2,128,422.00	7.127	2,040
Tofield .....	3,500.00		677,830.00	7.127	700
	<u>\$ 20,500.00</u>	<u>166,502</u>	<u>\$2,806,252.00</u>		<u>2,740</u>



TABLE No. 14—Continued

Contributing Units	Requisitions	Acreage	Assessed Value	Mill Rate	Population
<b>Trochu M.H.D. No. 56</b>					
M.D. No. 48 .....	6,660.00	156,582	\$2,220,026.00	3	1,400
M.D. No. 55 .....	271.00	2,180	97,070.00	3	110
Trochu .....	2,094.00	54	697,816.00	3	630
	<u>\$ 9,025.00</u>	<u>158,816</u>	<u>\$3,014,912.00</u>		<u>2,140</u>
<b>Turner Valley M.H.D. No. 66</b>					
M.D. No. 32 .....	\$ 20,360.04	633,600	\$4,847,630.00	4.2	1,877
Turner Valley .....	1,369.22		326,005.00	4.2	719
Black Diamond .....	2,889.81		690,430.00	4.2	1,154
	<u>\$ 24,629.07</u>	<u>633,600</u>	<u>\$5,864,065.00</u>	<u>4.2</u>	<u>3,750</u>
<b>Two Hills M.H.D. No. 42</b>					
M.D. No. 81 .....	\$ 28,848.00	202,525	\$2,060,650.00	14	3,300
M.D. No. 86 .....	3,510.00	30,047	250,730.00	14	600
Two Hills .....	7,032.00	87	502,376.00	14	625
	<u>\$ 39,390.00</u>	<u>232,659</u>	<u>\$2,813,756.00</u>		<u>4,525</u>
<b>Vegreville M.H.D. No. 34</b>					
M.D. No. 81 .....	\$ 9,832.00	239,745	\$3,933,060.00	2.5	3,280
M.D. No. 73 .....	4,069.00	125,038	1,627,763.00	2.5	1,277
M.D. No. 72 .....	265.00		106,180.00	2.5	
Vegreville .....	5,480.00	1,280	2,191,833.00	2.5	2,327
Lavoy .....	336.00	40	134,575.00	2.5	118
	<u>\$ 19,982.00</u>	<u>366,103</u>	<u>\$7,993,411.00</u>		<u>7,002</u>
<b>Vermilion M.H.D. No. 2</b>					
M.D. No. 81 .....	\$ 2,044.00	42,837	\$ 423,395.00	4.8	670
M.D. No. 72 .....	6,119.00	125,821	1,266,980.00	4.8	1,000
M.D. No. 71 .....	13,616.00	243,412	2,819,120.00	4.8	3,300
Vermilion .....	10,173.00	1,222	1,908,800.00	5.3	2,000
Derwent .....	1,012.00	34	209,563.00	4.8	270
	<u>\$ 32,964.00</u>	<u>413,326</u>	<u>\$6,627,858.00</u>		<u>7,240</u>
<b>Viking M.H.D. No. 10</b>					
M.D. No. 72 .....	\$ 20,210.00	178,773	\$1,726,170.00	11.71	1,300
M.D. No. 73 .....	16,870.00	164,736	1,439,920.00	11.71	1,410
M. D. No. 62 .....	11,145.00	106,254	951,130.00	11.71	700
Viking .....	7,775.00	216	663,930.00	11.71	725
	<u>\$ 56,000.00</u>	<u>449,979</u>	<u>\$4,781,150.00</u>		<u>4,135</u>
<b>Vulcan M.H.D. No. 19</b>					
County No. 2 .....	\$ 29,905.00	552,237	\$7,611,025.00	3.929	3,400
M.D. No. 26 .....	6,100.00	1,451	15,620.00	3.929	40
S.A. No. 4 .....	1,289.00	51,362	328,145.00	3.929	455
Vulcan .....	3,745.00		953,100.00	3.929	1,200
	<u>\$ 35,000.00</u>	<u>605,050</u>	<u>\$8,907,890.00</u>		<u>5,095</u>
<b>Wainwright M.H.D. No. 17</b>					
M.D. No. 61 .....	\$ 28,327.00	638,322	\$4,358,000.00	6.5	6,484
M.D. No. 72 .....	444.66	8,278	68,410.00	6.5	80
M.D. No. 71 .....	74.74	1,977	11,502.00	6.5	
Wainwright .....	11,324.50	640	2,059,000.00	5.5	2,200
	<u>\$ 40,170.90</u>	<u>649,217</u>	<u>\$6,496,912.00</u>		<u>8,764</u>
<b>Willingdon M.H.D. No. 64</b>					
M.D. No. 81 .....	\$ 6,887.00	128,705	\$1,721,655.00	4	2,050
Willingdon .....	1,458.00		364,535.00	4	500
Hairy Hill .....	695.00		173,775.00	4	250
	<u>\$ 9,040.00</u>	<u>128,705</u>	<u>\$2,259,965.00</u>		<u>2,800</u>

**Poliomyelitis Hospitalization Programme**

Effective April 1st, 1953, hospitalization benefits for poliomyelitis patients were expanded to include care for the acute period of the disease in addition to the chronic or convalescent period. These benefits are available only if the hospital has entered into an agreement with the Province to provide such care, at the following schedule of rates:

During the 14-day isolation period for cases diagnosed as acute polio.

Class of Hospital	Patient Pays Per Day	For patients requiring ordinary bed care only.	Province pays per day. For tracheotomy cases requiring bed care only.	For all Respirator Cases
A .....	\$2.00	\$10.25 & 70c	\$30.00 & 70c	\$40.00 & 70c
B .....	\$1.80	\$ 8.30 & 70c	\$30.00 & 70c	\$40.00 & 70c
C .....	\$1.60	\$ 7.10 & 70c	\$30.00 & 70c	\$40.00 & 70c
D .....	\$1.50	\$ 6.80 & 70c	\$30.00 & 70c	\$40.00 & 70c
E .....	\$1.30	\$ 5.90 & 70c	\$30.00 & 70c	\$40.00 & 70c

During the 14-day acute stage the patient is responsible for any medical care.

Following the 14-day isolation period the Province pays only for those cases which show some degree of paralysis, at the following schedule of rates:

Class of Hospital	(a) Patient Pays	Provincial Payment Per Day		
		Patients Requiring Bed Care Only	Extra Payment For Those In Respirators	*(b) For Medical Care
A .....	No Charge	\$10.25 & 70c	\$15.00	60c
B .....	No Charge	\$ 8.30 & 70c	\$15.00	60c
C .....	No Charge	\$ 7.10 & 70c	\$15.00	60c
D .....	No Charge	\$ 6.80 & 70c	\$15.00	60c
E .....	No Charge	\$ 5.90 & 70c	\$15.00	60c

(a) Both the above schedules pertain to standard ward care. If a patient requests private or semi-private accommodation he is responsible for the difference between that and standard ward care.

(b) This item is a daily payment for medical care of poliomyelitis cases in hospital and is paid through the hospital concerned to the practitioners caring for the cases. Surgical operations and anaesthetic services are paid for in addition, and payments are made directly to the practitioner concerned.

Isolation (14 days) .....	11,704	\$150,135.85
Post Isolation .....	58,647	\$549,883.15
	<u>70,351</u>	<u>\$700,019.00</u>

Medical, surgical, medical supervision, etc. payments, in addition to hospital payments, amounted to \$78,147.50.

**Nurses Training Programme**

Under the authority of The Hospitalization and Treatment Services Act, the Province may pay to a general hospital that operates a school of nursing a sum not exceeding \$300.00 for each nurse who has trained in and graduated from its school of nursing, and a sum not exceeding \$100.00 to a general hospital for each nurse graduated from the school of nursing of a provincial mental hospital and who received, prior to graduation, approximately two years training from the school of nursing of the general hospital.

Under this programme in 1953 the Province extended \$63,800.00 on behalf of 212 graduates at \$300.00 and to graduates at \$100.00. Since this legislation did not come into effect until April 1st, 1953, the grant above was not paid on behalf of nurses who graduated in

the first three months of the year. Altogether there were 394 nurses graduated from the eleven schools of nursing operated by general hospitals in the Province.

#### School of Nursing Aides, Calgary, Alberta

In 1946 a school was established in Calgary for the training of Nursing Aides to help alleviate the shortage of nurses. Since that time the school has trained 1,217 women. The number of aides newly certified in 1953 was 204, compared with 216 in 1952.

The number of nursing aides employed in Alberta numbered 585 as of October. In addition 59 were employed outside of Alberta.

Those working within the Province were distributed between general hospitals, sanatoria, mental hospitals, Indian hospitals, and private homes.

#### Hospital Construction

The following general hospitals completed additions in the calendar year 1953, for a total net increase in capacity of 702 beds and 63 bassinets:

	Net Increase	
	Beds	Bassinets
Athabasca, Municipal .....	4	....
Brooks, Municipal .....	33	6
Calgary, General .....	391	....
Edmonton, General .....	166	44
Elk Point, Municipal .....	25	3
Ponoka, Municipal .....	22	1
Provost, Municipal .....	13	1
Rocky Mountain House, Municipal .....	13	3
Viking, Municipal .....	21	5
Wetaskiwin, Community .....	14	....

Data regarding hospital construction projects are recorded on a fiscal year basis. During 1953-54 the total amount expended by the Province for hospital construction was \$661,600.25, of which \$66,396.94 was paid by The Department of Public Works on behalf of P.M.I. Ponoka. New projects started in 1953-54 were as follows:

- Camrose Rosehaven (No. 1).
- Edmonton Lutheran Convalescent Hospital.
- Edmonton Misericordia.
- Galahad St. Joseph's.
- Stettler Chronic Hospital.

#### Control of Operative Procedures in Hospital

In all cases where death occurs in hospital within thirty days following operation, a full report plus the patient's chart must be forwarded to this Division for review. Subsequently where death has occurred within 72 hours the patient's chart is forwarded to the College of Physicians and Surgeons for review and analysis.

This Division also reviews a certain proportion of the case records in instances where a curretage has been performed.

The charts were reviewed for 304 such cases in 1953.

## Nursing Aides

FRANCES J. FERGUSON, R.N., *Registrar Consultant*

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"The School for Nursing Aides" has been in operation in Calgary since 1954. It is jointly supported by Dominion and Provincial Governments. "The Act to provide for the Licensing of Nursing Aides" was passed in Provincial Legislature in March, 1947. A new training school has been provided and was formally opened October 30, 1952.

*Purpose.* Designed to suit those who are not able to meet the entrance requirements for "Nursing" and yet have a desire to nurse the sick for hire.

*Entrance Requirments.* Grade IX Certificate, 17½ years of age at time of entrance; physically fit and with good references, medical examination to be done by a doctor of the applicant's choice and at the applicant's expense. Smallpox vaccination must have been done within three years of entrance or repeated if possible. Inoculations for typhoid and diphtheria given after enrollment.

*Classes Enrolled.* Every five weeks. The dates for 1953 and 1954 are December 7, 1953, January 11, February 15, March 22, April 26, May 31, July 5, August 9, September 13, October 18, November 22, December 27, 1954.

*Allowances.* Are given to the students by the Government. Students may receive \$8.75—\$19.50 per week depending upon the experience and/or responsibilities of the applicant. Transportation is supplied to and from the hospital at time of going for period of hospital experience under supervision. During hospital experience, full maintenance is supplied by the hospital and a deduction of \$25.00 per month is made from the allowance.

Trainees who wish the protection may have "Blue Cross" membership by having fee deducted from school payroll.

In case of accident on duty during training, the student is protected by "Workman's Compensation".

*Uniforms.* Supplied and laundered by the school or hospital. Students supply their own shoes and hose.

*Tuition.* None to be paid.

*Equipment Needed.* Clothes so that the student is able to dress for the weather. There are a few special articles needed such as name tapes, bandage scissors, text books, etc. Full details available upon request.

*Course Outline.* Length of course is 40 weeks divided into 19 weeks of instruction, 20 weeks of supervised experience at the hospitals and one week of final review at school. Classes at the school are 6 hours per day for 5 days per week. Your hospital experience is arranged for by the school.

*Subjects to be studied.* Nursing Ethics, Personal Care and Hygiene, Anatomy and Physiology, First Aid, Bandaging, Care of Mother and Child, Child Care and Development, Community Health

and Communicable Disease, Common Diseases, Health and Recreation, Nursing Procedures, Diet in Disease.

Upon successful completion of the course, a certificate, a cap and a "Nursing Aide" pin are presented from the Department of Public Health and the Certified Nursing Aide becomes eligible to receive an annual license to work as an "Alberta Nursing Aide".

Recent indications are that the demand for trained Nursing Aides is great and it would appear to be several years before we will be able to meet the demand.

*Statistics.* Re: The School effective October, 1953.

Total Certified Nursing Aides, January, 1946 to date, 1,139. 1946—10, 1947—41, 1948—160, 1949—117, 1950—159, 1951—257, 1952—216, 1953—178 to date. Certified Nursing Aides are employed in 83 hospitals in Alberta.

## Division of Arthritis Services

R. K. THOMSON, M.D., *Director*

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The year 1953 saw the Division of Arthritis transferred from Department of Public Welfare to Department of Public Health on April 1st. It also saw the continuation of the Clinics' accepting patients up to the age of twenty-five years. The anticipated increase in number of patients due to raising the age limit has not been experienced.

There has been an increase of fourteen patients coming under the direct supervision of the Calgary Clinic, which increases their total to sixty-three Rheumatoid Arthritis cases. In the Edmonton Clinic there were only sixteen new cases of Rheumatoid Arthritis admitted during the year 1953, bringing the total under treatment to sixty-five. This gives an overall total of one hundred and twenty-eight patients under active treatment for Rheumatoid Arthritis, in the Province. It might be indicated here that approximately fifty per cent of the patients who are referred to the Clinic for consultation by the family physician, turn out to be Rheumatoid Arthritis.

While there is a substantial increase in the number of patients, there is a corresponding decrease in the actual hospital days. This shows 322 for Edmonton and 329 hospital days for Calgary, a total of 651 hospital days for the Province. This lowered number of hospital days is attributable to an increase in care of the patients by their family physicians on an outpatient level.

Physiotherapy treatments in particular can often be given to outpatients and a total of 830 such treatments were given during the year. This number indicates treatments given by trained physiotherapists and does not take into account the instruction given in the Clinics or in hospitals by the physician.

Gold injections and injections into the joints, such as Hydrocortone, are mainly administered in the doctor's office or the Clinic. There were a total of 397 Clinic or office visits and on these occasions 203 injections of gold or Hydrocortone were given.

The prime value of the Clinics has been in the education of patients and consultation with their doctors regarding the best method of treating and living with Rheumatoid Arthritis. Physiotherapy has been the next most useful adjunct, with hospital care where necessary. While the newer preparations such as Cortisone (known as Compound E), Hydrocortone (known as Compound F) and ACTH have been used, they are not used in all cases. Due to substantial decrease in the price of these preparations, their use, where indicated, does not constitute a financial strain.

Because of the resultant saving, a number of preparations are now bought in bulk and are distributed from the Edmonton Clinic on authority of the Director. These substances are: (1) Gold, for intramuscular injection; (2) Cortisone (Compound E); (3) Hydrocortone (both oral tablets and injectible form); (4) ACTH; (5) Butazolidin tablets; and (6) newer hormone preparations such as Meticorten.

## STATISTICAL COMPILATION OF CASES TREATED IN 1953

	Edmonton	Calgary	Total
Initial Examinations made .....	33	14	47
Repeat Examinations made .....	104	40	144
Rheumatoid Arthritis cases in 1953 (new) ....	16	12	28
Total Rheumatoid Arthritis cases under Division .....	65	63	128
Hospital Days .....	322	329	651
Physiotherapy treatment (both Clinics) .....			830
Injections (both Clinics) .....			203
Office Visits (both Clinics) .....			397
<b>Total Treatment Days January 1st to December 31st, 1953 .....</b>			<b>1,878</b>
	<b>Hospital days .....</b>	<b>651</b>	
	<b>Physiotherapy .....</b>	<b>830</b>	
	<b>Office visits .....</b>	<b>397</b>	
		<b>1,878</b>	

## Division of Cerebral Palsy Clinics

F. G. DAY, M.D., *Director*

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During the past twelve months the Cerebral Palsy Rehabilitation Programmes and Examination Clinics have continued both in Calgary and in Edmonton. Their purpose has remained one of diagnosis and treatment of the cerebral palsied throughout the entire Province. We have a useful adjunct to this function, of course, which has been the differential diagnosis of other crippling diseases in children and the allocation of these cases to where they can best receive adequate treatment. The treatment programme has been expanded in an attempt to assist more parents to treat their own children at home, particularly in the very younger age group, and consequently we have been able to give more assistance to a larger number of cases than in previous years.

The Calgary Clinic under the direction of Dr. T. Richardson has operated a weekly diagnostic clinic, and a daily in-patient treatment clinic. During the year we have elected to farm out the making of braces for the Calgary Cerebral Palsy Centre at the Calgary Artificial Limb Factory. This, I think has been a distinct advantage since an attempt to have braces fitted at Edmonton when the patient was at Calgary proved very impractical.

The location of the Clinic at Calgary in the down town area leaves little opportunity for the expansion of some of the ancillary services. However, it is expected that this will be corrected in the near future.

In Edmonton the Clinic has had an extremely successful year. We have had no changes in staff indicating that they are well satisfied with their job, and that they are getting a good deal of satisfaction out of it. I would like to state though that the physiotherapist's salary still remains lower, and also the salary of the occupational therapist than they could get in any other Hospital in the City, particularly since the polio makes these two people now so very much in demand.

The bracemaker has given his notice effective December 31st, 1953, but has agreed to continue at the Clinic working two days per week until June 30th, 1954. We have been successful in obtaining another well qualified bracemaker, who will be taking over this job as an assistant bracemaker until June 30th, and from June 30th on will take over the bracemaking entirely. He has had 13 year's experience, and appears extremely capable. The net result of this readjustment is that we are going to have to confine our braceshop workings to Cerebral Palsy alone, and from all indications we will just about be able to cope with them.

The physiotherapist was loaned in November to look after polio at the Misericordia Hospital and was away for approximately four months. The Occupational Therapist has been replaced by a qualified Physiot, that is a combination of physio and occupational therapist, giving a more versatile coverage. The alteration in the



brace shop programme has made it possible to hire an additional physiotherapist.

The position formerly occupied by a nursing aide is now supplied by a maid since the higher type of training was found unnecessary.

I would particularly like to commend the Nursing Supervisor at Edmonton Cerebral Palsy Clinic who has done a wonderful job in coordination of not only the Edmonton Cerebral Palsy Programme, but in the Cerebral Palsy Programme in all of Alberta.

#### STATISTICAL SUMMARY

Cases on the Register	Edmonton	Calgary	Total
Cases receiving in-patient therapy .....	81	40	121
Cases on home management .....	77	.....	77
Physiotherapy Treatments .....	2,260	946	3,206
Occupational Therapy .....	2,596	522	3,118
Speech Therapy .....	1,512	852	2,364
Attending School at Clinic .....	17	15	32
Patients Examined .....	397	148	545
For Diagnosis .....	71	24	95
Review Cases .....	326	124	450
Admitted to Clinic .....	46	40	86
New Patients .....	46	34	.....
Re-admissions .....	.....	6	6
Results from Treatment:			
Little improvement .....	.....	4	4
Moderate improvement .....	.....	15	15
Marked improvement .....	.....	13	13
Others present for too short a time for valid assessment.			

#### EDMONTON BRACE SHOP

	Cerebral Palsy	Polio
Long Leg Braces .....	21	15
Below Knee Braces .....	3	12
Back Braces .....	1	9
Arm Braces .....	3	.....
Abduction Splints .....	.....	9
Night Splints .....	14	.....
Arch Supports .....	.....	3
Shoe Corrections .....	31	.....
Twisters .....	2	.....
Miscellaneous .....	.....	4
Minor Adjustments .....	22	.....

#### School Report.

The general aim of the Special Class for cerebral palsied children is to prepare them for, and guide them toward future participation in regular classroom activities.

The average enrollment for the past twelve months has been seventeen pupils per month. The aggregate attendance was 2,152 and 246 extra treatments once or twice a week, totalling 2,398.

During the 1952-53 terms, two pupils completed Grade I. Six pupils who were prepared for Grade I are continuing in Grade I this year, one in regular school and five at the Special Class.

At present 22 pupils are enrolled for daily instruction and eight from regular school are receiving remedial instruction once or twice a week.

There are five in Grade I, two in Grade II and one in Grade III. The others are being assisted in readiness for Grade I

In teaching the latter, and most grade I pupils, individual differences are so great that group work does not raise the academic level. Beneficial intersocialization is accomplished in the playroom, the play school, and in the clinic as a whole as well as in the Special Class.

The Reception Centre, which is maintained by the Southside Kiwanis Club of Edmonton, and supervised by a housekeeper continues to provide the noon meal for the children attending the Clinic.

In this Centre a Kindergarten Class is being held in the afternoon for twelve children with the assistance of volunteers from various organizations. This enables the staff of the Clinic to check on additional cases, and it also provides socialization for those children who are waiting their turn for in-patient treatment in the Clinic.

#### *Transportation*

The Northern Alberta Crippled Children's Fund has recently donated two new specially designed buses. These are certainly an improvement over the old cars. It is much easier to get the patients into them, and out of them, and we can carry a heavier load which means, of course, that we do not have to make as many trips and the patients are at the Clinic for a longer period of time. A second driver has been obtained by the Kiwanis Club, and this too has assisted us in increasing our operations. The Cerebral Palsy Association has built a garage adjoining the Clinic to house the two vehicles. We feel therefore that our transportation difficulties are steadily decreasing.

#### *Lectures*

Cerebral Palsy orientation has been given to 60 Student Nurses and 21 Public Health Nurses on their health field trips.

Forty teachers from the summer session of the University of Alberta, and 10 Student teachers have also received similar instructions, and by the end of the year 56 3rd year Medical Students will have passed through the Clinic for observation periods and instruction.

Demonstrations and lectures were given to the 4th year Medical Students at the University.

The staff of the Clinic have shown films to organizations and parents, and have furthered the public education on Cerebral Palsy.

It is extremely advantageous, of course, to see that the Nurses and the Medical Students are being given sufficient instruction in Cerebral Palsy, so that they will at least be able to recognize this disease and forward the cases to the Clinic for treatment in the future.

In this disease it is impossible for any one to put down in black and white what progress has been made. We have reached the stage in the Edmonton Cerebral Palsy Clinic where we are not treating any cases where we do not feel we are obtaining sufficient results to make expenditure of time and energy worthwhile. Therefore it is safe to assume that all of the cases which were under treatment during the past year have shown improvement. This, of course, is varied from some cases where we think the improvement has been both remarkable and rather dramatic to those who have just shown sufficient to warrant us continuing on with therapy.

## Blood Transfusion Service

CANADIAN RED CROSS SOCIETY

D. I. BUCHANAN, M.D., *Director*

*(In Cooperation with the Department of Public Health)*

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In retrospect, most of us in this province look back on 1953 as the year in which poliomyelitis reached particularly heavy epidemic proportions. Regarding the use of gamma globulin in Alberta, we are advised that the Public Health authorities issued 48,000 ccs. (or some 9,600 five cc. ampules) of this blood product for poliomyelitis contacts in the second half of 1953, this amount not including any used in May or the first half of the year when there was a sharp outbreak in the Whitehorse area.

In terms of donor blood, the contacts in an epidemic of similar magnitude would require—in the course of a complete year—in the neighbourhood of 15,000 bottles of whole blood, that is, approximately 30% of the total donations obtained in 1953.

Since the use of whole blood for transfusion purposes remains the chief concern of the Blood Transfusion Service, it will be seen that the objective of a 25% increase in voluntary blood donations is not unreasonably large, and during the last two months of 1953, when this project was announced, blood donations increased to 980 a week in November, and to the highest level yet reached of 4,436, or better than 1,100 bottles a week in December 1953, for the province as a whole.

To collect eleven hundred bottles of blood per week in Alberta is a herculean task: it means that a great strain is being placed on both voluntary and whole-time staff, and that the preparation and sterilization of equipment, in addition to that required for hospital use, are a very severe drain on both our resources and personnel.

To ease this to some extent, it is agreed that more voluntary workers are urgently needed for the preparation of equipment and progress along this line has been made.

To our volunteer workers at all clinics and to our new volunteers making up a part of our much needed equipment, we offer our sincere thanks.

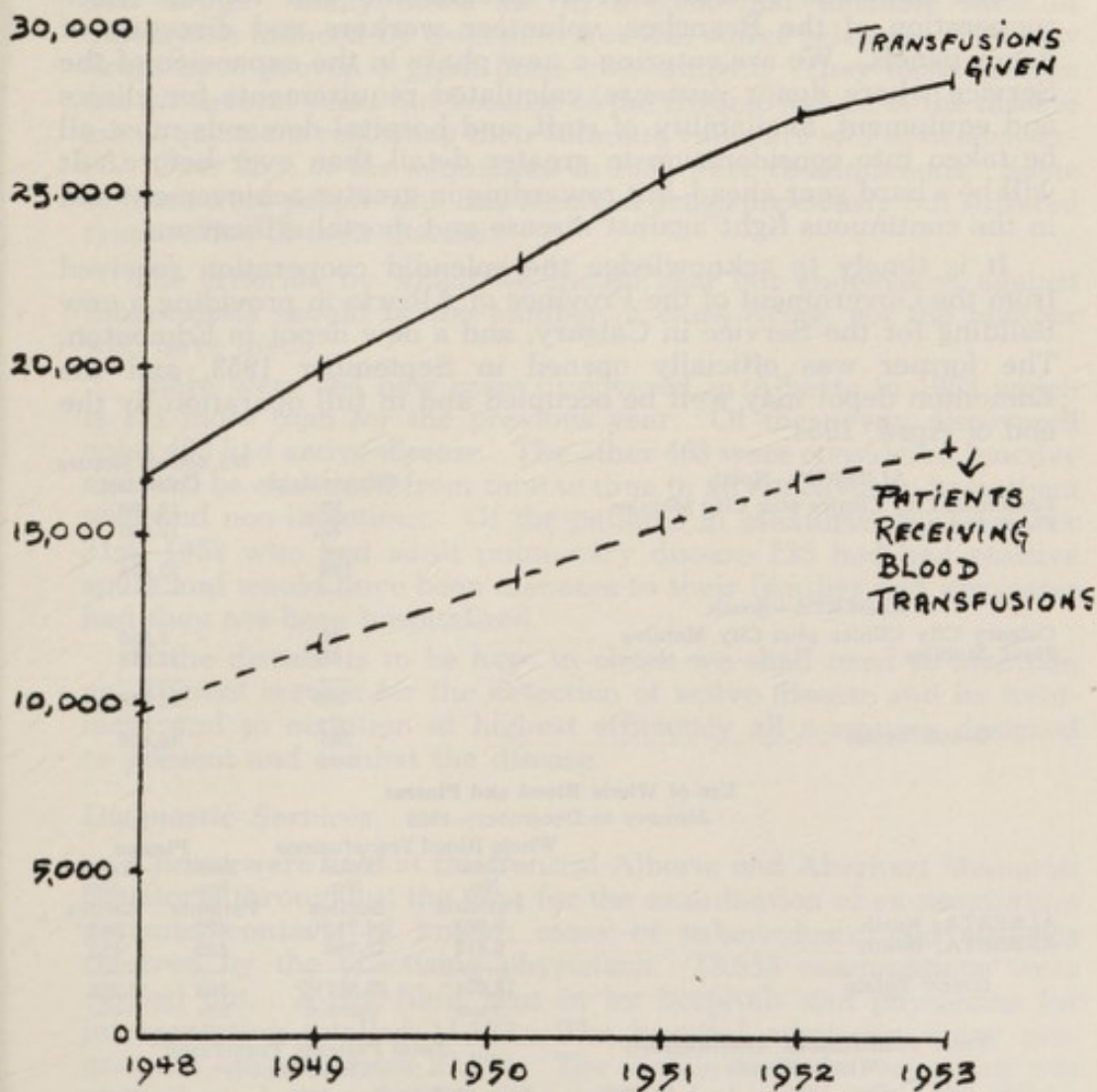
It has been stated above that our prime concern is the provision of blood for all hospitals for transfusion purposes. Of the 46,426 bottles collected in 1953, 29,507½ were used for whole blood transfusions. In the northern sections of the province, in particular, 73% of the total blood collected by the Edmonton depot was administered as transfusions, consequently of 685 plasma pools shipped to the Connaught Laboratories, Toronto, southern Alberta provided a major portion of 398 plasma pools, with a balance of 287 from the north during the year.

In November and December, when the new project became established an additional 686 bottles of blood were shipped directly to the Connaught Laboratories by air express.

The overall programme of providing blood for hospitals and for plasma fractionation, will depend, in 1954, on not only the available donors, but also and directly on the immediate availability of all types of sterile equipment, and on the continued help of a great number of voluntary workers.

It is important that we bear in mind that the number of patients receiving transfusions is steadily rising, and that the total patients receiving blood transfusions in 1953 was, for example, 89% more than the total patients receiving blood transfusions in 1948. (Graph I).

WHOLE BLOOD TRANSFUSIONS ADMINISTERED IN ALBERTA  
AND ADJOINING TERRITORIES THROUGHOUT THE YEARS  
1948 TO 1953 INCLUSIVE



Since this Service was established in Alberta towards the end of 1947, nearly 150,000 five hundred cc. blood transfusions have been administered to patients in this province (Table II), and it is estimated that the Society has saved, in terms of dollars, over \$3,000,000 to hospital patients, if one takes into account (a) the transfusions given, (b) the plasma administered, and (c) the free Rh investigation service for maternity cases. Most of us know of individuals whose lives have been saved and prolonged by the timely administration of such blood, and in consequence the B.T.S. has the full support of the public, and stands high in the acclaim of the medical profession.

We are fortunate in having completed a year that has been free of serious transfusion reactions due to whole blood. The techniques employed require constant safeguards, and the Service must keep pace with new developments in research. The steady expansion of hospitals throughout the province places a growing responsibility on the regular technical staff and the staff of all departments. To all, the medical directors offer their deep appreciation and thanks for a job well done.

The demands of our current programme call for the close cooperation of the Branches, volunteer workers and directors of donor panels. We are entering a new phase in the expansion of the Service where donor response, calculated requirements for clinics and equipment, availability of staff, and hospital demands must all be taken into consideration in greater detail than ever before. It will be a hard year ahead, but rewarding in greater achievement and in the continuous fight against disease and mortal afflictions.

It is timely to acknowledge the splendid cooperation received from the Government of the Province of Alberta in providing a new building for the Service in Calgary, and a new depot in Edmonton. The former was officially opened in September 1953, and the Edmonton depot may well be occupied and in full operation by the end of April, 1954.

	Clinics Held	No. 500 cc. Bottles Collected
ALBERTA—North		
Edmonton City Clinics plus City Mobiles .....	57	10,492
Field Mobiles .....	72	13,006
	<u>129</u>	<u>23,498</u>
ALBERTA—South		
Calgary City Clinics plus City Mobiles .....	69	7,850
Field Mobiles .....	87	15,078
	<u>156</u>	<u>22,928</u>
Grand Totals .....	<u>285</u>	<u>46,426</u>

**Use of Whole Blood and Plasma**  
January to December—1953

	Whole Blood Transfusions		Plasma	
	Total No. Patients	Total No. Bottles	Total No. Patients	Total No. Bottles
ALBERTA, North .....	9,262	16,711½	427	863
ALBERTA, South .....	8,812	12,796	239	433
Grand Totals .....	<u>18,074</u>	<u>29,507½</u>	<u>666</u>	<u>1,296</u>

Total Transfusions Administered (Whole Blood)		Total Patients Transfused (Whole Blood)	
July 1947 to Dec. 1952 .....	120,339	July 1947 to Dec. 1952 .....	69,564
Jan. 1953 to Dec. 1953 .....	29,507½	Jan. 1953 to Dec. 1953 .....	18,074
	<u>149,846½</u>		<u>87,638</u>

## Division of Tuberculosis Control

G. R. DAVISON, M.D., *Director*

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The objective of this Division continues to be the control and eventual eradication of tuberculosis. By control is meant that the transmission of disease be held permanently below a point at which a given number of infection-spreading cases can give rise to an equal number of infection-spreading cases to carry on the succession. We feel that in Alberta this point has been reached as is indicated by our continually falling death rate. (1948—31.6; 1949—24.2; 1950—19.3; 1951—15.5; 1952—12.9; 1953—6.8).

This happy state of affairs must not give rise to complacency. Many persons, still suffering from tuberculosis, would have been dead but for the recent advances in treatment made possible by the new drugs. Many more are in a somewhat unstable state of quiescence induced by treatment but will suffer relapses. The new drugs have proven a great boon to treatment. They have been in use for several years but because of the chronic nature of the disease many questions regarding their ultimate value are still to be answered. Over 25% of the admissions in 1953 were re-admissions. Some of these were people who had received drugs previously but suffered reactivation of their disease.

The criterion by which we should gear our endeavours against tuberculosis should be the number of cases living, not the number who have died.

There were 866 new cases discovered in Alberta in 1953 which is 131 more than for the previous year. Of the newly discovered cases 403 had active disease. The other 463 were considered inactive and will be examined from time to time in an endeavor to keep them well and non-infectious. Of the patients in sanatoria on December 31st, 1953 who had adult pulmonary disease 238 had had positive sputa and would have been menaces to their families and associates had they not been hospitalized.

If the disease is to be kept in check we shall need to maintain an efficient service for the detection of active disease and its treatment and to maintain at highest efficiency all measures designed to prevent and combat the disease.

### *Diagnostic Services.*

Clinics were held at the Central Alberta and Aberhart Memorial Sanatoria throughout the year for the examination of ex-sanatorium patients, contacts of known cases of tuberculosis, and suspects referred by the practising physicians. 13,555 examinations were carried out. X-ray films sent in by hospitals and physicians for interpretation totalled 11,873. The hospital admission x-ray programme accounted for 27,274. The mobile x-ray survey work was carried on by one unit in the areas of the province where the greatest hazard exists. It operated a little over six months and 39,275 films were taken.

By these various procedures diagnostic services were extended to 91,977.

Classification of 866 new cases of tuberculosis (excluding Indians):

Active pulmonary .....	315
Inactive pulmonary .....	447
Active non-pulmonary .....	88
Inactive non-pulmonary .....	16

In collaboration with the Health Units a programme of tuberculin skin testing all the Grade one pupils in these areas was embarked upon at the beginning of the fall school term. It is too soon to assess the value of this project as a case finding procedure.

#### *Indian Health Services.*

A very happy close liaison exists between the Indian Health Services of the Federal Department of National Health and Welfare and the Provincial Tuberculosis Division. The X-raying of provincial responsibilities during the Indian Health Services surveys of the Indians in the north of the province is greatly appreciated.

#### *Treatment Services.*

The Central Alberta Sanatorium and the Aberhart Memorial Sanatorium operated to capacity for most of the year. By early fall the waiting list had dwindled in Edmonton and disappeared at Calgary. From present indications there are sufficient sanatorium beds to meet the need for at least the foreseeable future.

Sanatorium care was provided for 1,298 cases. Of these 653 were admitted during the year. There were 189 re-admissions. Some of the latter had previously left hospital against advice. Bed rest continues to be the basic treatment with the addition of the anti-microbial drugs and surgery.

As a result of lengthening the time of the administration of drugs the average stay in hospital has also increased to eleven months for those who were in hospital over thirty-one days. Some patients continue on drug treatment for some time after discharge to out-patient strength.

#### *Training of Nurses.*

The shortage of nurses is still acute regardless of the effort of sanatorium authorities to meet the problem. Courses in tuberculosis nursing were given to affiliates from practically all the nursing schools of the province. It is the concensus that these courses are of inestimable value to the participants. At Central Alberta Sanatorium the six-month post-graduate course for nurses has been continued. Student nursing aides also receive part of their training at the sanatoria.

#### *Educational Programme.*

Instruction to all school grades and commercial classes is given by well qualified teachers. The main objective of the classes is to carry on the education of those who were attending school at the time of admission so that they will not lose school time. In this way they will have as good standing for their age on return to school as the other pupils. Teaching of some along certain lines with a view to their rehabilitation takes a very important place in the work also.

Occupational therapy is also an important adjunct to treatment. It is looked upon as educational rather than diversional and sometimes is the basis for rehabilitation of the patient on discharge from hospital.

Rehabilitation is closely connected with the educational programme. The rehabilitation officers of the Alberta Tuberculosis Association at the sanatoria work very closely with the school teachers and occupational therapists. The educational, occupational and rehabilitation programmes are fully appreciated by everyone concerned and have proven their worth many times.

#### *Building Programme.*

The opening of staff quarters for men at the Central Alberta Sanatorium in 1953 filled a long-felt need. The building is well appointed and much appreciated by the staff. The Department of Public Works are to be highly commended on this achievement. Two residences for medical men at Central Alberta Sanatorium are nearing completion. The laundry extension was completed and put into use, thereby terminating the necessity for two overlapping shifts of laundrymen. The old unsafe elevator in Infirmary One was replaced. The movement of patients was thereby much facilitated.

The Aberhart Memorial Sanatorium is living up to expectations. If it were being planned again some minor changes would be made.

#### *Acknowledgment.*

Grateful acknowledgment is made to everyone who has made possible the satisfactory operation of the Tuberculosis Division and Sanatoria. Throughout the year many private individuals, societies and associations have contributed to both the physical and mental well-being of the patients. On behalf of the patients and hospital staffs we extend our sincere thanks and appreciation.

#### DIAGNOSTIC CLINIC REPORT

Place	No. of Sessions	New Cases Tuberculosis		New Number Exams.	Number Review Exams.	Total
		Pul.	Non-Pul.			
<b>STATIONARY CLINICS:</b>						
Central Alberta Sanatorium .....	100	39	8	1442	2547	3989
Aberhart Memorial Sanatorium .....	102	77	12	1652	2756	4408
Calgary .....	49	.....	.....	112	175	287
Camrose .....	4	1	.....	21	100	121
Drumheller .....	12	.....	.....	55	93	148
Lethbridge .....	11	3	.....	213	386	599
Medicine Hat .....	11	4	.....	81	153	234
Red Deer .....	6	.....	.....	145	210	355
Vegreville .....	4	.....	.....	16	52	68
<b>Total</b> .....	<b>310</b>	<b>124</b>	<b>20</b>	<b>3737</b>	<b>6472</b>	<b>10209</b>
<b>OTHER CLINICS</b>						
Eckville .....	8	1	.....	30	44	74
Stettler .....	3	.....	.....	5	12	17
*Miscellaneous .....	.....	91	7	1058	1032	2090
	11	92	7	1093	1088	2181
<b>Total All Clinics</b> .....	<b>321</b>	<b>216</b>	<b>27</b>	<b>4830</b>	<b>7560</b>	<b>12390</b>

In addition to the above 243 newly discovered cases of active tuberculosis there were also discovered 336 cases of inactive tuberculosis.

\*Films sent in from various points and paid for by the Division.



## TUBERCULIN TESTING AND X-RAY SURVEYS

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

	No. Tuberculin Tested	No. X-rayed
Student Nursing Aides .....	635	472
Provincial Laboratory Staff .....	7	81
Red Cross Blood Transfusion Service Staff ...	21	33
Victorian Order of Nurses .....	..	11
Canadian Industries Ltd. ....	3	5
Health Units (Leduc-Strathcona, Sturgeon, Stony Plain-Lac Ste. Anne) .....	.....	88
Eastwood High School and Follow-up of Families .....	470	34
University Freshman, Edmonton .....	986	91
Medical Students .....	.....	382
Faculty of Education, Calgary .....	198	11
Pincher Creek and Fort Macleod grade one Surveys .....	100	6
Metropolitan Life Insurance Co. ....	15	25
Raymond Mental Hospital .....	163	.....
Public Health Nurses .....	.....	.....
Hospital admission films sent to Sanatorium for interpretation .....	2	13
		6,310
	2,600	7,762

Total number known to have been given service 9,700 i.e. number rayed plus number tuberculin tested but not rayed.

## MOBILE UNIT SURVEYS

Number x-rayed .....	39,275
Probable tuberculosis active .....	21 (5 previously discovered)
Probable tuberculosis inactive .....	286 (121 previously discovered)
Further examination requested .....	470
Non tuberculous chest condition .....	365
Pleurisy active .....	1
Pleurisy inactive .....	182
No disease .....	37,904

## SUMMARY—CLINICS, AND SURVEYS

	Total Number Examinations
Stationary Clinics .....	10,209
Other Clinics .....	2,181
Surveys (All types) .....	9,700
Mobile Unit .....	39,275
Indians, Whites and Half Breeds (work done by Department of National Health and Welfare) .....	16,809
<b>TOTAL</b> .....	<b>78,174</b>

## SOURCES OF DISCOVERY OF NEW CASES OF TUBERCULOSIS

(Indians excluded)

	1952	%	1953	%
Clinics .....	563	76.8	574*	66.3
Referred for admission by family physicians .....	138	18.8	170†	19.6
Surveys (All types) .....	3	.4	3	.3
Referred by Department of Veterans' Affairs .....	8	1.0	70†	8.1
Provincial Laboratory .....	10	1.4	30	3.5
Hospital admission films .....	7	.9	2	.2
Other sources .....	6	.8	12	1.4
Sanatorium staff .....	0	.....	5	.6
	735		866	

\*These 574 were referred to Tuberculosis Clinics for the following reasons:

Referred by own doctor .....	319
Follow-up of Mobile Unit Survey .....	102
Follow-up of Hospital Admission Films .....	21
Contacts .....	79
Immigrants .....	53

†4 of these 170 admissions were referred for treatment as a result of Mobile Unit Survey. Those 4 were not referred to Clinic before admission. This means that actually 485 new cases were discovered by referral from family physician; 109 were the result of the Mobile Surveys; 21 the result of the Hospital Admission X-ray Program and 79 were found because of follow-up of contacts.

‡The increase in the number of cases found by D.V.A. is due to the fact that previous to 1953 the report of examinations by the Out-Patient Department of the D.V.A. to the Tuberculosis Division was not complete and therefore quite a number of cases previously diagnosed by the D.V.A., but never counted on Division records, were entered on our files in 1953.

CLASSIFICATION OF NEW CASES OF ACTIVE AND INACTIVE  
PULMONARY TUBERCULOSIS (excluding Indians)

Minimal .....	384
Moderately advanced .....	155
Far advanced .....	78
Primary .....	82
Tuberculous pleurisy with effusion and evidence of previous pleurisy .....	63
	762
Number newly discovered cases active tuberculosis .....	403
Number newly discovered cases inactive tuberculosis .....	463
Number cases reactivated .....	73
Number non residents diagnosed as having tuberculosis .....	59 (including 41 immigrants)
Number of known contacts of newly discovered cases of tuberculosis .....	2,445
Number of known contacts examined .....	1,913 78.7%

BCG VACCINATIONS (Number reported to TUBERCULOSIS DIVISION)

Nurses (a) Graduates .....	6
(b) Students .....	208
(c) Other Nursing Personnel .....	11
Other hospital personnel .....	44
Medical students .....	44
Contacts (a) Newborn .....	
(b) Others .....	20
Indians and Eskimos .....	102
Others .....	2
	437

INSTITUTIONAL REPORTS

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Other
Patients under treatment January 1, 1953 .....	234	277	1
Patients admitted during 1953 .....	272	372	0
Patients transferred in .....	5	4	0
Total treated .....	511	653	1
Patients discharged and died .....	283	377	1
Patients transferred out .....	4	5	0
Total discharged .....	287	382	0
Patients under treatment December 31, 1953 .....	224	271	0
Number patients under treatment January 1, 1953 .....			512
Number of Admissions 1953 .....			644
Total treated .....			1,156

DIAGNOSIS OF PATIENT ADMISSIONS

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium
Non-tuberculous .....	25	4
For diagnosis .....	13	23
Pleural effusion .....	10	17
Tuberculosis inactive .....	21	12
Primary tuberculosis .....	10	26
Non-Pulmonary tuberculosis:		
Peritonitis .....	1	5
Bone .....	6	24
Renal, genitourinary .....	7	18
Adenitis .....	10	16
Endometritis .....	3	3
Addison's disease .....	4	4
Abscess .....	1	3
Pelvic .....	3	...
Lupus .....	1	2
Meningitis .....	1	4
Pulmonary tuberculosis active:		
Minimal .....	38	19
Moderately advanced .....	54	103
Far advanced .....	69	81
Miliary .....	1	6
	272	372

INSTITUTIONAL REPORTS

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
Number with positive sputum on admission ..	101	146	247
Number negative on admission .....	171	226	397
Number negative on admission, positive later ..	1	10	11
Number readmissions during 1953 .....	82	107	189
Number both admitted and readmitted during 1953 .....	5	21	26
Number of patient days .....	86,713	103,956	190,669
Number patients days in other provinces under reciprocal agreement .....			3,030
Number of institutional patient days provided for non residents under reciprocity .....			4,722

## OPERATING ROOM REPORT

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
<b>THORACOPLASTY:</b>			
Number stages .....	49	18	67
Number of 1st stages .....	18	18	36
Number of revisions .....	1	1	1
Number of cases .....	23	18	41
Pneumonectomy .....	1	12	13
Lobectomy .....	6	24	30
Segmental Resection .....	2	6	8
Upper Lobe Resection .....	.....	6	6
Upper Lobe Resection and Phrenic Crush .....	.....	1	1
Plombage .....	.....	6	6
Pneumolysis .....	1	15	16
Phrenic Crush .....	8	5	13
Bronchoscopic Examinations .....	.....	5	5
Thorascopy .....	20	72	92
Aspirations—chest .....	101	55	156
Orthopedic Operations .....	11	14	25
Spinal Punctures .....	46	120	166
Other .....	156	140	296

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Outside Points	Total
<b>SUMMARY PNEUMOTHORAX CASES:</b>				
Under treatment January 1, 1953 .....	40	124	32	196
Number of new cases during 1953 .....	9	21	.....	30
No. cases under treatment on admission .....	2	10	11	23
	<u>51</u>	<u>155</u>	<u>43</u>	<u>249</u>
Number cases discontinued .....	28	59	12	89
Number cases transferred out of Alberta .....	4	6	1	11
Number transferred to other sections of Division .....	2	13	2	17
	<u>34</u>	<u>78</u>	<u>15</u>	<u>127</u>
Number under treatment December 31, 1953 .....	17	77	28	122
Unsuccessfully attempted .....	3	.....	.....	3
Refills:				
Resident .....	320	878	.....	1,198
Out-patient .....	643	2,264	474	3,381
	<u>963</u>	<u>3,142</u>	<u>474</u>	<u>4,579</u>

Patients received pneumothorax refills at the following outside points: Banff, Beaverlodge, Camrose, Elk Point, Ft. Vermilion, High Prairie, Lamont, Lac La Biche, Nordegg, Red Deer, St. Paul, Vermilion Wainwright, Westlock, Bonnyville.

<b>SUMMARY PNEUMOPERITONEUM CASES:</b>				
Under treatment January 1, 1953 .....	61	91	5	157
Number of new cases during year .....	60	60	.....	120
Number under treatment on admission .....	4	4	11	19
	<u>125</u>	<u>155</u>	<u>16</u>	<u>296</u>
Number discontinued .....	53	55	1	109
Number transferred out of the province .....	3	5	.....	8
Transferred to other sections of the Division .....	9	12	2	23
	<u>65</u>	<u>72</u>	<u>3</u>	<u>140</u>
Number under treatment December 31, 1953 .....	60	83	13	156
Number of refills:				
Resident .....	2,991	1,909	.....	4,900
Out-patient .....	449	1,377	246	2,072
	<u>3,440</u>	<u>3,286</u>	<u>246</u>	<u>6,972</u>

Patients received pneumoperitoneum refills at the following outside points: Drumheller, Elk Point, Hanna, High Prairie, Lac La Biche, Lethbridge, Medicine Hat, Mannville, Westlock.

## LABORATORY REPORT

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
<b>SPUTUM EXAMINATIONS:</b>			
Positive .....	908	785	1,693
Negative .....	2,827	2,778	5,605
<b>URINE EXAMINATIONS:</b>			
	2,811	10,952	13,763
<b>BLOOD EXAMINATIONS:</b>			
Blood Counts .....	1,416	3,119	4,535
Sedimentation Rate .....	2,182	2,701	4,883
Blood Sugar .....	76	843	919
<b>MISCELLANEOUS:</b>			
Pleural fluid .....	18	16	34
Spinal fluid .....	64	549	613
Gastric analysis .....	90	23	113
Culture .....	750	1,074	1,824
Guinea pig inoculation .....	432	749	1,181
Other .....	743	895	1,638
<b>TOTAL</b> .....	<b>2,097</b>	<b>3,306</b>	<b>5,403</b>
<b>WASSERMAN REPORT:</b>			
Positive .....	6	15	21
Negative .....	243	332	575
<b>TOTAL</b> .....	<b>249</b>	<b>347</b>	<b>596</b>

## DENTAL REPORT

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
Number of patients .....	332	288	620
Number of treatments .....	107	534	641
Number prophylactic treatments .....	81	14	95
Number of fillings .....	308	275	583
Number of extractions .....	140	224	364
Number new dentures and repairs .....	23	32	55

## X-RAY DEPARTMENT REPORT

	Central Alberta Sanatorium		Aberhart Memorial Sanatorium		Total		Grand Total
	In Pt.	Out Pt.	In Pt.	Out Pt.	In	Out	
<b>RADIOGRAPHS MADE:</b>							
Chest—Large .....	1,237	960	2,122	662	3,359	1,622	4,981
Miniature .....	777	3,648		6,011	777	9,663	10,436
Extremities .....	30	8	98	51	128	59	187
Shoulder .....	13	7	2	4	15	11	26
Skull .....	2	1	5		7	1	8
Pelvis .....	40	6	66	28	106	34	140
Spine .....	80	35	117	58	197	93	290
Abdomen .....	12		20		32		32
G.I.T. .....	12		18	4	30	4	34
Barium Enema .....	3		3		6		6
Intravenous Pyelogram .....	14		25	8	39	8	47
Retrograde Pyelogram .....	8		11		19		19
Sinogram .....			15	1	15	1	16
Bronchogram .....	3		80	7	83	7	90
Ordograph .....	16		95	9	111	9	120
Dental .....	32	1	166		198	1	199
Ribs .....	2		1	3	3	3	6
Sinuses .....	1	1	2	3	3	4	7
K.U.B. .....	4				4		4
Gall Bladder .....	1		1		2		2
	<b>2,287</b>	<b>4,667</b>	<b>2,847</b>	<b>6,849</b>	<b>5,134</b>	<b>11,516</b>	<b>16,650</b>
Fluoroscopic examinations .....	3,519	1,204	3,175	3,583	6,694	4,787	11,481
Films sent in for interpretation .....		6,615		6,964			13,579
Basal Metabolism Rate .....		10		34			44
Cardiograph .....		24		49			73
Audiogram .....		4					4

## CLASSIFICATION OF 661 DISCHARGED PATIENTS:

	Residence			On Discharge					
	On Admission	31 days or less	Over 31 days	In.	A6.	A3.	A1.	Au.	D.
1. For Diagnosis .....	57	42	15	.....	.....	.....	.....	.....	.....
2. Primary Tuberculosis .....	43	5	38	5	1	29	8	.....	.....
3. Reinfection type pulmonary tuberculosis clinical:									
Minimal .....	48	2	46	4	1	34	8	.....	1
Moderately advanced .....	74	12	62	17	5	33	17	1	1
Far advanced .....	18	3	15	5	3	5	3	1	1
4. Reinfection type pulmonary tuberculosis positive:									
Minimal .....	15	.....	15	.....	.....	11	4	.....	.....
Moderately advanced .....	113	.....	113	2	3	73	29	1	5
Far advanced .....	143	13	130	.....	11	73	45	4	10
Miliary .....	5	1	4	.....	.....	3	.....	.....	2
5. Tuberculosis pleurisy .....	37	5	32	4	1	22	7	2	1
6. Non-pulmonary tuberculosis:									
Adenitis .....	22	5	17	5	.....	1	15	.....	.....
Genito-urinary, renal, etc. ....	26	6	20	9	.....	1	10	4	2
Bone .....	39	2	37	19	.....	2	14	1	.....
Lupus .....	4	1	3	2	.....	.....	2	.....	.....
Endometritis .....	6	.....	6	1	.....	1	4	.....	.....
Abscess .....	2	.....	2	.....	.....	.....	2	.....	.....
Peritonitis .....	5	.....	5	2	.....	.....	3	.....	.....
Addison's disease .....	1	1	.....	.....	.....	.....	1	.....	.....
Pelvic .....	2	.....	2	.....	.....	1	1	.....	.....
Meningitis .....	1	1	.....	.....	.....	.....	.....	.....	1
Total active tuberculosis .....	604	57	547	75	25	289	173	14	24
Total treated .....	.....	.....	562	63	23	286	160	2	13
Total untreated .....	.....	99	.....	12	2	3	13	12	11
Grand Total .....	661	99	562	75	25	289	173	14	24

**Explanation of abbreviations and terms used:** The standard classification is that of the National Tuberculosis Association. Minimal, Moderately Advanced, and Far Advanced refer to anatomical extent of disease; In.—inactive; A6.—arrested 6 months; A3.—arrested 3 months; A1.—active improved; AU. active unimproved; D.—died.

**N.B.** 4 cases considered tuberculosis on admission were found to be non tuberculous and therefore do not show in discharge classifications noted above.

## CLASSIFICATION ON ADMISSION OF 661 DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
For diagnosis .....	37	20	57
Primary tuberculosis .....	11	32	43
Pulmonary tuberculosis .....	173	243	416
Tuberculous pleurisy .....	15	22	37
Non-pulmonary tuberculosis .....	47	61	108
Total .....	283	378	661

## CLASSIFICATION ON DISCHARGE OF TREATED CASES OF ACTIVE TUBERCULOSIS AND TUBERCULOUS PLEURISY

On Admission:	Number	On Discharge		
		Improved	Unimproved	Died
Minimal .....	61	59	1	1
Moderately Advanced .....	175	173	.....	2
Far advanced .....	145	139	.....	6
Primary .....	38	38	.....	.....
Miliary .....	4	3	.....	1
Non-Pulmonary Tuberculosis .....	92	89	1	2
Tuberculous Pleurisy .....	32	31	.....	1
Total .....	543	532	2	13

## RESIDENCE DISCHARGED PATIENTS

## SUMMARY:

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
Cities .....	146	172	318
Towns .....	29	28	57
Villages .....	4	11	15
Municipal Districts .....	40	68	108
Local Improvement Districts .....	48	90	138
Special Areas Board .....	3	.....	3
Non Resident .....	13	9	22
Total .....	283	378	661

## SEX OF DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
Male .....	160	186	346
Female .....	123	192	315
Total .....	283	378	661

## AGE ON ADMISSION:

From 1-9 .....	15	41	56
From 10-14 .....	12	25	37
From 15-19 .....	12	39	51
From 20-29 .....	78	113	191
From 30-39 .....	79	62	141
From 40-49 .....	36	45	81
From 50-59 .....	22	26	48
From 60-69 .....	22	19	41
70 and over .....	7	8	15
Total .....	283	378	661

## SOCIAL STATUS OF DISCHARGED PATIENTS:

Single .....	106	192	298
Married .....	162	168	330
Divorced .....	2	...	2
Widowed .....	9	11	20
Separated .....	4	7	11
Total .....	283	378	661

## RESIDENCE IN ALBERTA:

Born in Alberta .....	116	232	348
1 year or less .....	20	10	30
1-5 years .....	34	32	66
6-9 years .....	16	9	25
10-14 years .....	17	7	24
15-19 years .....	7	9	16
20-30 years .....	33	35	68
30 years or more .....	40	44	84
Total .....	283	378	661

## LENGTH OF STAY IN SANATORIUM OF 661 DISCHARGED PATIENTS:

	Central Alberta Sanatorium	Aberhart Memorial Sanatorium	Total
<b>DEATHS:</b>			
Number in Sanatorium under 31 days .....	3	9	12
Number patient days .....	49	113	162
Average patient days .....	16.3	12.6	13.5
Number in Sanatorium 31 or more days .....	7	6	13
Number patient days .....	6,496	3,906	10,302
Average number patient days .....	928	651	792.5
<b>DISCHARGES:</b>			
Number in Sanatorium under 31 days .....	43	44	87
Number patient days .....	557	737	1,294
Average number patient days .....	13	16.8	14.9
Number in Sanatorium 31 or more days .....	230	319	549
Number of patient days .....	76,626	104,560	181,186
Average number of patient days .....	333.2	324.6	330
Total number deaths and discharges .....	283	378	661
Total number patients days .....	83,728	109,316	193,044
Average number patient days .....	295.9	289.2	293.6
No. non-pulmonary admissions(individual) .....	49	65	114
No. non-pulmonary patient days (calendar) .....	12,266	14,472	27,738

## Division of Mental Health

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

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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, Red Deer.
- Rosehaven, Camrose.

The total patient population in the various Institutions of this Division on January the 1st, 1953, was 3,791—(males 2,226; females 1,565). The total patient population in the Institutions on December 31st, 1954, was 4,033—(males 2,442; females 1,611). This represents a total gain of patients of 242—(males 196; females 46). The Provincial Mental Hospital, Ponoka, admitted 684 patients (males 384; females 300). This was 10 less than the previous year. The Provincial Mental Institute, Edmonton, admitted 510 patients—(males 302; females 208). This was 183 more than the previous year. This was exclusive of 112 patients remanded to the Institute from the Courts for observation. The Provincial Training School, Red Deer, admitted 83 children—(boys 60; girls 23). During the year there were 204 transfers among the various Institutions. A total of 53 patients—(39 men; 14 women)—were transferred to Rosehaven, and 41 men from St. Joseph's Hospital in Edmonton were admitted to Rosehaven. There was a total of 191 deaths—(males 127; females 64)—in all the Institutions combined. The commonest causes of death were those referable to the circulatory and respiratory systems. There were 7 deaths from Pulmonary Tuberculosis. Pneumonia was the commonest respiratory cause of death.

The Building Construction Programme for the various Institutions continued during the year. In addition, a site was cleared on the property of the Provincial Training School, Red Deer, but remote from the Training School, for the ultimate construction of an Institution to accommodate some 1,500 Adult Defectives. At the Provincial Mental Hospital, Ponoka, a new Men's Ward and a Mechanics' and Carpenter Shop neared completion. At the Provincial Mental Institute, Edmonton, a new and modern Administration Building was opened. Work continued on a new Reception Unit for this Institution. At the Provincial Training School in Red Deer, a new School House consisting of eight class-rooms was opened, and an extension to the Laundry was completed. One new Ward for 75 children neared completion. Work was commenced on a Male Staff Residence and a Ward for High-Grade boys. At

Rosehaven a newly completed 90-bed Ward was opened. Construction on a similar Unit was also commenced.

Active Treatment Programmes continued in the various Institutions. Details concerning these are contained in the individual reports of these Institutions.

Staff Training Programmes were carried out as before in the Provincial Mental Hospital, Ponoka, the Provincial Mental Institute, Edmonton, and the Provincial Training School, Red Deer. Some 40 Staff members—(20 men and 20 women)—graduated in the various Courses. At the Provincial Mental Hospital, Ponoka, three Registered Nurses received their Diplomas in an eight-months' Post-Graduate Course. Some 50 affiliating Nursing Students from various Alberta General Hospitals received instruction. A two-weeks' orientation Course for Instructors of Nurses from the various Alberta General Hospitals was also conducted and proved worthwhile.

The services of the Provincial Guidance Clinics were continued throughout the year. Clinics were held at some 50 to 60 key points in the Province. The caseload of the Clinics increased. The Clinic Staffs participated also in many Public Education activities, including group discussions, institutes, workshops, lectures, talks and radio work. Of particular interest was the work which the Calgary Guidance Clinics did in connection with a group of women patients who were discharged from the Provincial Mental Hospital, Ponoka.

Nine meetings of the Eugenics Board were held during the year. Five were held at the Provincial Mental Hospital, Ponoka; four at the Provincial Training School, Red Deer. A total of 81 cases was presented for the Board's consideration—(43 males; 38 females). Fifty-one operations (male 21; females 30) were performed during the year. The total number of cases operated upon to December 31st, 1953, was 1,374—(males 539; females 835). All operations, with the exception of one, were performed at the Provincial Mental Hospital, Ponoka, by the duly appointed Honorary Surgeons, assisted by the Medical Staff of the same Hospital.

TABULATED SUMMARY—INSTITUTIONS—MOVEMENT OF PATIENTS

	Patients in Hospital Dec. 31st, 1952			Admissions			Discharges			Deaths			Patients in Hospital Dec. 31st 1953		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Ponoka .....	910	633	1543	384	300	684	249	257	506	50	21	71	958	631	1589
Oliver .....	948	394	1342	302	208	510	217	131	348	44	20	64	996	437	1433
Red Deer .....	220	205	425	60	23	83	5	15	20	7	2	9	265	211	476
Claresholm .....	99	99	198	2	2	4	3	3	6	2	2	4	99	99	198
Raymond .....	133	133	266	5	5	10	.....	.....	.....	6	6	12	135	135	270
Rosehaven .....	148	101	249	*41	.....	.....	.....	.....	.....	26	13	39	203	98	301
Totals .....	2226	1565	3791	787	538	1325	471	406	877	127	64	191	2422	1611	4033

\*Admitted to Rosehaven from St. Joseph's Hospital, Edmonton.

TRANSFERS "IN" AND "OUT" OF INSTITUTION

		M. F. T.				M. F. T.		
		M.	F.	T.		M.	F.	T.
Ponoka .....	Transfers in	20	18	38	Transfers out .....	55	32	87
Oliver .....	Transfers in	7	.....	7	Transfers out .....	5	1	6
Red Deer .....	Transfers in	.....	.....	.....	Transfers out .....	3	.....	3
Claresholm .....	Transfers in	.....	3	3	Transfers out .....	.....	1	1
Raymond .....	Transfers in	.....	4	4	Transfers out .....	.....	1	1
Rosehaven .....	Transfers in	39	14	53	Transfers out .....	.....	1	1
Total .....	Transfers in	66	39	105	Total Transfers out	63	36	96



TABLATED SUMMARY—INSTITUTIONS—DEATHS—1953

Disease	P.M.H., Ponoka		P.M.I., Oliver		P.T.S., Red Deer		Rosehaven		Claresholm		Raymond		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Tuberculosis of Respiratory System	1	1	4	1	5	1	1	2	2	2	2	2	17	10
3. Syphilis and Sequelae	3	3	18	10	28	1	1	2	1	1	2	2	39	23
18. Neoplasms Malignant	2	2	10	1	11	4	1	5	15	9	24	1	41	13
19. Neoplasms Benign	1	1	1	1	2	1	1	1	1	1	1	1	2	2
20. Diabetes Mellitus	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22. Vascular Diseases of Central Nervous System	9	2	11	5	3	8	1	2	2	2	4	2	17	10
26. Arteriosclerotic and Degenerative Heart Disease	14	8	22	18	10	28	1	1	6	2	2	2	39	23
27. Other Disease of Heart	12	1	13	10	1	11	4	1	15	9	24	1	41	13
31. Pneumonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32. Bronchitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33. Ulcer of Stomach and Duodenum	2	2	2	1	2	1	1	1	1	1	1	1	2	2
35. Intestinal Obstruction and Hernia	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36. Gastritis, Duodenitis, Enteritis	1	2	3	1	1	1	2	2	2	2	4	1	4	6
37. Cirrhosis of Liver	2	4	6	1	1	1	1	1	1	1	1	1	3	4
38. Nephritis and Nephrosis	2	2	2	1	1	1	1	1	1	1	1	1	3	4
45. Senility	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46. All Other Diseases	2	4	6	1	1	1	1	1	1	1	1	1	3	4
49. Suicide and Self-Inflicted Injury	2	2	2	1	1	1	1	1	1	1	1	1	2	2
<b>TOTALS</b>	<b>50</b>	<b>21</b>	<b>71</b>	<b>44</b>	<b>20</b>	<b>64</b>	<b>7</b>	<b>2</b>	<b>9</b>	<b>26</b>	<b>13</b>	<b>39</b>	<b>127</b>	<b>64</b>

## PROVINCIAL MENTAL HOSPITAL, PONOKA

T. C. MICHIE, M.D., *Medical Superintendent**Patient Population Changes.*

The resident patient population on January 1st, 1953 was one thousand, five hundred and forty-three (1,543), of whom nine hundred and ten (910) were male and six hundred and thirty-three (633) female. There were in residence on December 31st, 1953, one thousand, five hundred and eighty-nine (1,589) patients, of whom nine hundred and fifty-eight (958) were male and six hundred and thirty-one (631) female. This was an overall increase of forty-six (46). The details are as set forth in Table 1.

*Admission of Patients.*

Six hundred and eighty-four (684) patients were admitted. This figure is exclusive of transfers from other Provincial Mental Institutions, and represents a decrease of ten (10) from the previous year. Three hundred and eighty-four (384) were men, and three hundred (300) women. Those admitted by voluntary application, numbered one hundred and forty (140); by Medical Certificates, one hundred and sixty-nine (169), and by Warrant, three hundred and fifty-six (356). Three (3) were admitted under "The Mental Defectives Act". Thirty-eight (38) patients were transferred to this Hospital from other Provincial Mental Institutions. There were no significant changes noted in the various diagnostic categories. There was a relative increase in the number of Voluntary and Certified cases, and a corresponding decrease in those admitted by Warrant.

*Separation of Patients.*

The number of patients discharged totalled five hundred and six (506), and of those two hundred and forty-nine (249) were men, and two hundred and fifty-seven (257) women. This was a decrease of thirty-six (36) as compared to 1952. Eighty-seven (87) patients were transferred to other Provincial Mental Institutions, of whom forty-two (42) were admitted to "Rosehaven". Seventy-one (71) patients died, most of whom were of advanced years.

*Accidents and Elopements.*

Twenty-five (25) patients suffered from fractures, eight (8) being men, and seventeen (17) women.

There were two (2) suicidal deaths.

A small number of patients left the Hospital without permission. The majority of these patients returned or were brought back by relatives or the Royal Canadian Mounted Police.

*General Health.*

The general health of the patients was excellent, and there were no epidemics. All newly admitted patients were carefully examined to detect the possible presence of Tuberculosis. A close check was also made of the general patient population to reveal any evidence of Tuberculosis. If a diagnosis of Tuberculosis was established in any individual, the patient was promptly transferred to the Unit at Oliver for the treatment of Tuberculosis.

*Clinical Work.*

Every effort was made to have procedures in keeping with accepted standards. The laboratory services were greatly improved. Insulin-shock and Electroshock were used extensively with good results. A small number of patients had Lobotomy operations, and the results were encouraging. The increase in Medical Staff made it possible to utilize group psychotherapy much more extensively.

*Occupational Therapy.*

Occupational Therapy was extensively utilized, and practically all newly admitted patients attended formal classes. Patients from the Continued Treatment Wards either attended classes, or engaged in Occupational Therapy projects on the wards. The Library and Canteen were operated by this Department and gave satisfactory service.

*Recreational Therapy and Physical Training.*

There was a gradual expansion in the services provided by these Departments to the patients. The greater part of the patient population benefitted to some degree by participation in the varied program. Every effort was made to keep this in accordance with the needs of the group involved.

*Religious Services.*

The services were continued, as in previous years, and proved very satisfactory. The Visiting Clergymen showed deep understanding of the patients' needs.

*Social Services.*

This Department continued to function with one Worker. Her time was spent alternately between work in the Hospital and in the field. A number of former patients were organized by her in Calgary, as an after-care group, in cooperation with the personnel of the Provincial Guidance Clinic there. The results have been encouraging.

*Dental Services.*

This service was continued with a full-time Dentist. The program of examination and treatment of patients gave excellent results. The regular Annual Visit was made by the Dentist to "Clareholm" and "Raymond".

*X-Ray Services.*

This Department operated with efficiency and provided very satisfactory service for diagnostic procedures. All chest plates were referred to The Baker Memorial Sanatorium, Calgary for reading, as in previous years. The utmost cooperation was shown by the Medical Staff of that Institution with the Medical Staff of this Hospital.

*Laboratory Services.*

There was a marked increase in the diagnostic facilities available during the year. The recently purchased equipment was all put into operation. This Department was supervised by a qualified Pathologist and a well trained Technician. A great deal of time was saved in obtaining laboratory results, there being no delay as

in former year when material was sent to the Provincial Laboratory, Edmonton for testing.

#### *School of Nurses.*

The teaching program was continued essentially unchanged. There were three (3) qualified Instructors, assisted by the professional personnel of the Hospital. Forty-two (42) students received instruction in the four year Course in General and Psychiatric Nursing, and thirty-seven (37) male attendants enrolled in the three year Course in Psychiatric Nursing. Fifty (50) affiliating student nurses from the Archer Memorial Hospital, Lamont, The Calgary General Hospital, Calgary; The Galt Hospital, Lethbridge; The Medicine Hat General Hospital, Medicine Hat; and The St. Joseph's General Hospital, Vegreville, also received instruction. Each student nurse spent eight weeks in residence at this Hospital. Four (4) Nurses completed the four year Course in General and Psychiatric Nursing. Three (3) Registered Nurses completed the eight month Course in Psychiatric Nursing and received their Diplomas. Six (6) men received Certificates in Psychiatric Nursing. Twelve (12) Registered Nurses commenced their training in the fall class. Ward Aides were given a short indoctrination course. Nineteen (19) students in Public Health Nursing from The University of Alberta spent two weeks at this Hospital, as part of their field work.

A two weeks' Orientation Course in the Psychiatric Aspects of Nursing was conducted at this Hospital in June. Seventeen (17) Instructors of Nursing from the Various General Hospitals in Alberta attended, and it was felt the effort put forth was worthwhile.

#### *Visitors.*

Arrangements for the visiting of patients by relatives and friends were the same as in previous years. Facilities for visiting were improved on several wards, and more privacy was afforded. Hon. Dr. W. W. Cross, the Minister of Health, and Dr. A. Somerville, the Deputy Minister of Health visited on a number of occasions. Dr. Randall R. MacLean, Director of the Division of Mental Health made frequent inspections of the Hospital.

The annual inspection of the Hospital was carried out by the "Visiting Board". This was done with the usual thoroughness. Any criticism offered was accompanied by helpful advice. The Board received suggestions and complaints from the Staff and Patients, and these were given sympathetic consideration.

#### *The Eugenics Board.*

Five (5) Meetings were held by the Board at this Hospital during 1953. Forty-eight (48) Patients were presented to the Board, of whom twenty-two (22) were men, and twenty-six (26) women. Fifty (50) Operations were performed for sexual sterilization, twenty-one (21) being on male and twenty-nine (29) on female Patients.

#### *Maintenance and Fire Protection.*

Buildings were maintained in a good state of repair. Regular practices were held by the Fire Brigade, and official recognition was given to the efficiency of the Volunteer Fire Fighters who man the equipment.

*New Buildings and Improvements.*

A Men's Dormitory was constructed and named "Dawn View". This was not quite ready for occupancy at the end of the year. A general program was instituted to move and relocate a number of shops at the rear of the Hospital. Construction was commenced on a combined Mechanics' and Carpenters' Work Shop.

*Business Office.*

There was smooth and efficient operation in this Department. The Business Manager assumed direct responsibility for the operation of the Farm and Ancillary Services.

*Provincial Mental Hospital Farm.*

The grain and hay crops were satisfactory, but the oats were of a rather poor quality. The turnip crop was a failure due to hail. The yield from the poultry farm was excellent, but only fair from the dairy herd.

*Ancillary Services.*

These various departments, including the Laundry, Linen Room, Print Shop, Sewing Room, Shoe Shop, and Tailor Shop effectively served the needs of the Hospital.

*The Department of Public Works.*

This Department, under the Chief Engineer, effectively met the requirements in regard to heat, water supply and sewage removal. Electrical equipment was well maintained, and an extensive program of re-wiring of all the Hospital buildings was undertaken. All electrical current supplied to the Hospital will be alternating in type when the work is completed.

*Conclusion.*

The administration policy of the Hospital was essentially as in recent years. The admission and discharge rate were similar to 1952. The Staff was maintained at practically full strength.

Those responsible for the Hospital administration were appreciative of the cooperation shown by the Staff, and for the help and direction given by the senior officers of The Department of Health.

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PROVINCIAL AUXILIARY MENTAL HOSPITAL,  
CLARESHOLM

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*Movement of Patients.*

In residence on January 1st, 1953 there were 99 patients. On December 31st, 1953 there were 100 patients in Residence. There was one patient on Leave of Absence.

There were two admissions during the year, one voluntary admission and one under The Mental Defectives Act.

Three patients were transferred to this hospital from the Provincial Mental Hospital, Ponoka.

Three patients were discharged. One patient was transferred to the Provincial Mental Hospital, Ponoka, for special psychiatric attention.

There were two deaths during the year due to cardio-vascular diseases.

#### *Accidents and Elopements.*

There were no elopements or accidents during the year.

#### *General Health.*

The general health of the patients was good during the year. Emergency X-ray and laboratory tests were done at the Claresholm Municipal Hospital. All patients and staff were X-Rayed by the Mobile X-Ray Unit in October. Tuberculin tests were done on staff and patients and staff received Typhoid vaccine.

#### *Occupational Department.*

This department maintained its usual good work. Approximately thirty patients do occupational work under the supervision of the Occupational Department.

A sale of work was held in December and many favourable comments were made on the work.

During the winter months the more deteriorated patients who are usually idle are encouraged to knit, crochet and some of the defective patients are given colouring books, crayons, sewing cards and modelling clay. These patients are supervised in the day room by one of the ward aides.

During the summer months a group of twenty patients is taken out to the garden under the supervision of one of the ward aides. The patients enjoy this greatly.

#### *Recreational Activities.*

The United Church Choir visited the hospital at Christmas and Easter and this music is always enjoyed by the patients.

Between fifty and sixty patients go to the local theatre twice each month to see the current pictures.

The usual parties, sports days, bingo parties and dances are enjoyed.

When the weather permits during the winter over fifty patients go for walks and twenty-five or thirty go on parole. In the summer months all the patients are taken out on the lawn.

#### *Beauty Parlour.*

This room which was equipped by the funds from the Federal Health Grant is very popular and many of the patients look forward to their weekly shampoo and wave on Saturday.

#### *Religious Services.*

The local clergymen conduct services each Sunday afternoon. These services are appreciated by many of the patients.

#### *Dentistry.*

As in previous years Dr. Palmer from the Provincial Mental Hospital visited this hospital and examined all patients with teeth and gave the necessary dental care. Emergency dental work was done by the local dentists.

#### *Fire Protection.*

The hospital has been visited by the fire inspector during the year and the fire fighting equipment checked. Fire drills are held.

*Buildings.*

Repairs to the buildings and furniture were carried out by the maintenance staff. The necessary re-decorating was done.

*Gardens and Grounds.*

The lawns and flower gardens were well kept during the summer.

The vegetable crop was not as abundant as usual due to heavy rains and flooding during the early summer.

*Visitors.*

The hospital has been visited by Dr. R. R. MacLean, Director, Division of Mental Health, and his help and advice are greatly appreciated.

The Eugenics Board acting as a visiting board made rounds of the hospital and grounds.

Relatives and friends visited the patients during the year.

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## PROVINCIAL AUXILIARY MENTAL HOSPITAL, RAYMOND

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*Movement of Patients.*

On January 1st, 1953 there were one hundred and thirty-three patients in residence. There were four transfers received from other Mental Hospitals and five new admissions. The departures were one patient transfer to another Mental Hospital and six deaths leaving in residence December 31st, 1953—one hundred and thirty-five patients.

*Accidents and Elopements.*

There were no elopements. There were no accidents causing broken bones or any disability.

*General Health.*

Two minor surgical operations were necessary. One patient required a Haemorrhoidectomy and one patient had Pterygia removed from both eyes.

*Occupational Therapy.*

There is a separate Occupational Parlor for all kinds of needlecraft. Other forms of occupation are found in the wards, kitchen, laundry, nurses' home and garden.

*Library.*

Books are added to the patients' library monthly. Magazines are subscribed to and many of the towns people bring quantities of back numbers, supplying most of the magazines now in print.

*Religious Services.*

Both Catholic and Protestant Services are held at the hospital once monthly and the two Clergymen preside at patients' funerals when required to do so.

*Recreation and Entertainment.*

Those patients able to walk the distance are taken to the local theatre twice monthly. Special holidays are celebrated with a

concert, a dance or a party. Picnics are held on the lawns in summer and a "Sports Day" in July. The wards are equipped with radio and piano.

#### *Staff Changes.*

Staff changes did not involve any senior positions and caused no inconvenience.

#### *Visitors.*

Periodic inspections were made by members of the Department of Public Health, Public Works, Fire Department, Electrical and Boiler Inspectors. The Eugenics Board acting as an advisory inspection board made their annual visit.

#### *Gardens and Grounds.*

Vegetable crop raised was sufficient for winter requirements. No constructive work was done on the grounds.

#### *Conclusion.*

The hospital capacity has been maintained throughout the year and the general health of the patients has been satisfactory.

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### PROVINCIAL MENTAL INSTITUTE, EDMONTON

A. D. MACPHERSON, M.D., *Medical Superintendent*

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#### *Patient Population Changes.*

On December 31st, 1953 there were in residence 996 male patients and 437 female patients. On leave or otherwise absent were 34 male and 30 female patients. The total patient population on register at the end of the year 1953 was 1,030 male patients and 467 female patients. This gives a grand total of 1,497 patients, a gain of 99 over the previous year.

During the year there were 517 admissions inclusive of "Transfers In". In addition 112 cases were remanded by the authorities for observation and examination. Five juveniles were admitted through the Department of Child Welfare and Juvenile Offenders Branch. This gives a total of 634 admissions for the year.

There were 348 discharges, 6 transfers to other mental hospitals and 64 deaths (36 autopsies).

#### *General Health.*

This has been good. There were no serious epidemics. T.A.B. immunization was carried out on all new admissions and all new staff, and booster doses were given where required. Chest X-rays were done on all new admissions and new staff and an annual check was carried out on all patients and staff.

#### *Accidents.*

There were no serious injuries and no accidental deaths.

#### *Treatment of Patients.*

Electro Shock Therapy was given to 313 patients, and Insulin Shock Therapy to 246 patients. Combined Electro Shock and



Insulin Shock were given in many cases. Hydrotherapy was given where indicated but not as extensively as previously. Periodic supporting treatments, mostly Electro Shock, were given in a considerable number of cases.

Group therapy was continued and was found helpful in other types of patients.

The total number of Electro Shock treatments was 6,125 and of Insulin Shock treatments was 5,661.

*Occupational Therapy:* This department has been more active than ever. In addition to a full-time program in the Occupational Therapy workshop, additional sessions are held in the T.B. Pavilion and on some of the female wards. The average attendance was 120 patients daily. Nearly all patients receiving Insulin and Shock treatments attended this department at the same time.

*Social Service:* The Social Service Worker has continued to be very busy, not only in the investigation of new patients, but we have been able to have him give more of his time to the discharge patients' rehabilitation and to the field of public relations.

*Recreational Activities:* The activities of this department have been increased. Our full-time daily schedule has been maintained and the amount of activity on the wards has been increased. The D.V.A. has continued to provide us with shows and dance orchestras and we have had a generous allotment of tickets to all the major sport events in the city.

*Library:* We were able to make considerable additions to this during the year, and also to establish a smaller library in the T.B. Pavilion. The management of the Library is under the control of the Social Worker.

*Beauty Parlor:* This is operating on a full-time basis and is very useful.

*Religious Services:* The Anglican and United Churches have provided services on alternate Sundays. The Lutheran Church has assigned Rev. E. O. Walker to this work and Mr. Walker has been a great help to us. He holds a service every Sunday which all Protestant denominations attend, in addition, he visits the hospital several times weekly. Jewish organizations continue to visit the Jewish patients once a month. The Ukrainian Women's organization send comforts and reading material. The Roman Catholic services were increased from once a month to a weekly basis.

*X-ray-Department:* This department continues to increase each year. A total of 4,060 examinations were made during the year. This is an increase of 30% over last year. In addition short-wave diathermy treatments were carried out.

*Electroencephalograph:* A total of 278 E.E.G.'s were done and 48 E.C.G.'s. The technician, also worked part time at Ponoka.

*Laboratory:* A total of 10,276 examinations were carried out during the year. This is an increase of 45% over the previous year.

*Surgical Service:* Most of the major operations are done in our own operating room. The only work referred to the University Hospital were the orthopaedic cases which we are not equipped to

handle. Minor surgery and fracture work was, as usual, carried out by our own staff. Nothing of unusual interest in the surgical field occurred during the year except that we did have 7 appendectomies. These are the first appendectomies here for a considerable time.

*Dental Department:* A total of 2,834 treatments were carried out during the year. All types of dental work were done and all patients in the hospital were examined during the year, and treatments were carried out where necessary. Clinics were held here for dental students from the University. Dr. Scott also did the dental work for Rosehaven.

#### *Training School.*

A total of 11 women and 10 men graduated in Psychiatric Nursing in 1953, completing the 3-year course. There were also 121 students in the various years of the 3-year course.

Clinics and demonstrations were given to the graduating classes from all the city hospitals during the year.

#### *Department of Building and Maintenance.*

Maintenance work has been kept up very well during the year. The new Administration Building was opened in the fall. This has meant a great increase in the office facilities and has helped the work enormously. In addition, the classrooms in the basement of the Administration Building have facilitated the teaching program.

An extensive redecoration program was carried out in the older buildings during the year. The work of the maintenance branch continues at its high level.

#### *Fire Protection.*

Fire practices were held at frequent, regular intervals. Inspections were held by the Fire Marshall's Branch.

#### *Farm.*

Farm operations were very successful. The health of the dairy herd has remained good. The grain crop was excellent and was completely harvested.

#### *Garden.*

The yield was above average. The vegetables kept very well in storage and, except for certain minor items, we will have enough vegetables to maintain us until the new crop comes in. In addition, surplus vegetables were sent to both the Aberhart Memorial Sanitorium and to Rosehaven, Camrose.

#### *Laundry.*

New equipment was added during the year. This department continues to be very busy.

#### *Tailor Shop.*

This department has also been very busy. Their work is of great value to the hospital.

#### *Shoe Shop.*

Although small, this department does a lot of valuable work.

*Sewing Room.*

This department is concerned mostly with alterations and repairs. It is very valuable and efficient.

*Dietary Department.*

More equipment was added to the kitchen. This department continues to function at a very high level.

*Police Court.*

We continued to act in a consulting capacity for both the City Police and the R.C.M.P. The liaison with both remains good. Although this work takes up a considerable amount of time, we think it is justified by its value to the community and to the Courts.

*Business Office.*

This office has continued to function in its usual efficient manner. The staff situation is good.

*Medical Records Office.*

The work of this department is done very efficiently and the present stenographic staff is of high caliber.

*Staff.*

The staff situation on the male side has remained good. On the female side, for the first time, we have been able to keep our establishment filled. There is still difficulty in getting R.N.'s.

*Visitors.*

During the year we were visited at regular intervals by Dr. Cross and Dr. MacLean. These visits are always very helpful.

The Visiting Board carried out its annual inspection in the fall and their visit was very enjoyable.

*Public Relations.*

Both the Social Worker and the Superintendent addressed various organizations in the city on the work of the hospital and various problems in the psychiatric field. It is felt that these contacts are very valuable.

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PROVINCIAL TRAINING SCHOOL, RED DEER

L. J. LE VANN, M.D., *Medical Superintendent*

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*In Residence, Admissions, Discharges, Deaths.*

There has been an increase in population at the School from 425 to 476. This includes the admission of 83, of which 60 were male and 23 female. The majority of these admissions were of Imbecile category. Discharges totalled 20, who were found jobs by our Social Worker. Of these Discharges 5 were male, and 15 female. Three (male) were transferred, one to the Provincial Mental Hospital and two to the Provincial Mental Institute. There was a total of 9 deaths, 7 male and 2 female.

*Applications for Admission.*

There were 79 applications for admission to the School during 1953, the majority of whom were of the permanent custodial type.

This year's applications showed some increase, so that despite the admissions of 83 patients this year the waiting list still contains 449 patients. It is hoped to substantially reduce this waiting list during the early months of the new year with the opening up of two new dormitories and additional beds which have been provided in the Infirmary Ward by approximately 200 admissions.

#### *Eugenics Board Visits, Sterilizations, etc.*

The Eugenics Board visited the Training School on four occasions, and a total of 33 presentations were made to the Eugenics Board. Of that number, in conformity with the Eugenics Board recommendations, 28 have already been sterilized, 13 male and 15 female.

#### *Health of Trainees and Staff.*

The health of both trainees and staff members has been good. In order to minimize the incidence of poliomyelitis, during the summer months the visiting of parents and relatives to the trainees and the acceptance of new admissions to the School was curtailed for four months. Despite the epidemic incidence of poliomyelitis in the Province there was not a single case in the Provincial Training School.

Routine immunization of Typhoid, Diphtheria and Whooping-cough was carried out on all trainees, and all staff members were inoculated against typhoid and paratyphoid. All staff members were also examined for Tuberculosis by Mantoux tests and X-Rays under the aegis of the T.B. prevention services.

#### *Dental Care.*

The Dentist spends two full mornings per week at the School for dental inspections and carries out prophylactic and therapeutic work on the trainees at the School. On this basis it is possible to see that every child has a complete dental check at least once every six months.

#### *Training Programme for Nurses and Attendants.*

The training programme for nurses and attendants has proved to be very satisfactory. In addition to the regular three years nursing programme, there is a short course provided for all new nursing and attendant staff, which is of an orientation type, and enables new staff to have preliminary training in the work which they will be required to carry out. Whereas, during 1953, the third year students have numbered only seven, the size of the second class will guarantee at least a Graduating class of fifteen for the coming year.

Graduating Exercises were held in May of 1953, at which there were eight Graduates. Visitors included the Honourable Dr. W. W. Cross, Minister of Health, the Honourable David Ure, Minister of Agriculture, Dr. A. Somerville, Deputy Minister of Health, Mr. F. D. Shaw, M.P., and Dr. Randall R. MacLean, Director, Division of Mental Health. The exercises were followed by a supper.

#### *Training Programme for Trainees.*

The training programme for the trainees continues to show beneficial results and is reflected in the comparatively high discharge rate at the School. Open wards for the High Grade Trainees is encouraged as much as possible, and this undoubtedly results in

greater feelings of confidence in the children, as well as a diminution in the need for disciplinary measures.

*Academic Training and Sense Training:* The completion of a new school house has greatly facilitated the academic training of the trainees in all respects, and there is undoubtedly better morale amongst the teaching staff in being able to work in a modern, well ventilated school house, with its associated amenities.

*Recreation:* The Recreation Hall is now available for the majority of the trainee population, and in the evenings for the staff members. A Christmas Concert was held in the Recreation Hall on 22nd December, which was attended by nearly 500 of the population of Red Deer.

*Occupational Therapy:* This department continues to function at a high level of efficiency, and to further increase the interest and skills of the Occupational Therapists additional training has been made possible for them by being able to attend the Ponoka Mental Hospital to learn further methods and skills which might be made applicable to the Training School.

*Vocational and Pre-Vocational Training:* A Shoe Repair Shop has been opened at the Training School, and several male trainees are now attending this department regularly and are showing marked proficiency at this work.

The various wards and work departments, such as Kitchen, Dining Room, Laundry, continue to provide the trainees with work experience, in order to develop proper community work habits for them.

*Guidance:* Guidance interviews continue to be carried out for the trainees who show behavioural or personality disorders by the Social Worker, Educational Psychologist, and other senior staff members.

#### *Social Work Service.*

This is proving a great benefit to the School in effecting discharges and paroles for the high grade trainees. In addition to the job placements which go through the Social Worker's department, there are numerous visits to the trainees once they are placed to ensure that they are still looked after at their jobs, and that they are happy and contented, also visits to prospective employers.

#### *Extra School Activities.*

There has been a marked increase in the Guidance Clinic activities in Red Deer, associated with the completion of the Guidance Clinic team. The preponderance of work has required the addition of one half day being utilized exclusively for children, where intensive play therapy work has been carried out.

In addition, facilities are now available at the Municipal Hospital so that early cases of Psychosis, as well as Psychoneurotic disorders, can be treated with both Insulin and Electro-convulsant Therapy.

There have been numerous talks given by members of the staff at Rocky Mountain House, Innisfail, Red Deer and outlying districts, to community Clubs and Organizations, also several radio broadcasts.

Many of the local Clubs who have "adopted" children at the School, still continue to provide them with pocket money and visits to their homes.

#### *New Construction.*

New Ward for High Grade Boys has been commenced. New Ward for lower Grade children should be ready for occupancy in 1954. The roads on the School ground have been paved. New School House (8 rooms) has been completed. New Male Staff Quarters commenced. Expansion for Laundry and Sewing Room completed.

#### *Farm and Garden Produce.*

The farm has continued its efficient level of operation. There were some 270 tons of vegetables produced by the farm, which contributed largely to the good and varied diet for both trainees and staff. For the first time in several years it is anticipated that the potato crop will be sufficient to furnish the needs of the School until the new crop becomes available. There has been a diminution of some 30 acres of farm land which has been taken over for the creation of an adult Institution.

The dairy herd has continued to improve, due to the acquisition of a pure-bred bull, and the less desirable cattle have been replaced. The herd has now come under the Accreditation Herd plan, and it is anticipated that at the end of the next two years the herd will be fully accredited.

The School has also applied for Selective Registration, and this is likely to be forthcoming.

#### *Farm Instruction.*

This continues, as it has in previous years, under the direction of a Graduate of Agriculture, and the farm boys are receiving a good training in routine farm tasks and chores, and some of the Higher Grade boys are actually receiving training in the maintenance and running of farm machinery, such as tractors, combines, and other farm equipment.

#### *Laundry and Sewing Room.*

Due to the increase of low grade population both these departments are working at near capacity level. There is little doubt that in order to keep the custodial type of patient clean and free of skin disease and bed sores, approximately 15 lbs. of linen per day must be utilized for these patients, and this puts considerable strain on both the Laundry and the Sewing Room.

There has been a total of 10,154 articles manufactured in the Sewing Room during 1953, and a total of 116,754 repairs executed.

#### *Kitchen and Dining Room.*

These two departments are continuing to function well. Both staff and trainees are receiving a varied, attractively prepared and nourishing diet.

#### *Acknowledgements.*

The Medical Superintendent would like at this time to thank both the Senior and Junior Staff at this School for the help and co-

operation which they have extended to him, and for the care they have given to the trainee population.

The School is also indebted to the Hon. Dr. W. W. Cross, Minister of Health, and to Dr. Randale R. MacLean, Director, Division of Mental Health, for the valuable help and understanding which they have shown towards the School and its efforts, and there is little doubt that a great measure of the success which the School has achieved has been largely attributable to the co-operation received from them.

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## ROSEHAVEN, CAMROSE

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### *Movement of Residents.*

On January 1st, 1953, the resident population at Rosehaven numbered 249, of which 148 were men and 101 were women. The total number in residence on December 31st, 1953 was 301, 203 men and 98 women, an increase of 50 during the year.

Admissions to Rosehaven during the year numbered 108, 42 from Provincial Mental Hospital, Ponoka; 11 from Provincial Mental Institute, Edmonton, and 41 from St. Joseph's Hospital, Edmonton. 14 returned from Leave of Absence.

Separations numbered 56 throughout the year; 39 of these attributable to death and 17 to Leave of Absence. One resident remained on leave at December 31st, 1953.

Admissions were sent from mental hospitals as beds became available. Forty-one residents from St. Joseph's Hospital were sent in November and accommodated in a new 90-bed unit completed at that time.

Deaths were due to degenerative causes.

### *Accidents and Elopements.*

During the year a number of residents had accidents caused either by falls or interference from other residents. Fourteen of the accidents required actual medical attention, 10 resulted in fractures, 4 in lacerations requiring sutures. Numerous other accidents resulted in extensive contusions or abrasions. There were ten incidents of residents leaving the grounds without permission. In three cases police assistance was required but in the others, the residents were returned by staff members.

### *General Health.*

The general health of the residents is considered good in view of the age group of these individuals. An increasing number required nursing care and a type of influenza reached epidemic proportions during a month of the year. There is a progressive mental and physical decline apparent in the majority of the residents. An average of 31 residents required infirmary care each month and each averaged 13:5 days in bed. There were 28 residents admitted to St. Mary's Hospital from Rosehaven for either surgical, orthopedical or diagnostic care. Outpatient work done at St. Mary's has increased considerably and totalled 134 laboratory tests, 24 X-Rays and 4 other diagnostic tests.

Medical attention was supplied by a member of the Smith Clinic of Camrose when the need arose.

Dental examination and care was carried out during the year by a dentist from Provincial Mental Institute, Edmonton.

#### *Occupational Therapy.*

There has not been an organized occupational therapy service at Rosehaven. However, individuals were encouraged to do handiwork.

A group of 10 or 20 male residents assist with garden work during the summer months.

Twenty-five individuals assisted in various departments or with light housekeeping duties.

#### *Religious Service.*

Weekly Protestant services were held during the year and arranged by the Camrose Ministerial Association. Roman Catholic services were held several times during the year.

#### *Recreation.*

Walking parties or lawn groups were taken out each day weather permitting. Several parties were held during the year for residents.

#### *Buildings.*

A new 90-bed unit was completed and ready for occupancy in November. Excavation and commencement of a second like unit was begun.

#### *Gardens and Grounds.*

Gardens and grounds show little change. Some landscaping was done but excavation for new buildings hampered any extensive work. The vegetable garden produced a small amount of fresh vegetables in season.

#### *Staff.*

Only a few changes took place during the year. Four staff members resigned and were replaced.

The services of an additional registered nurse were procured. Additional attendants were required for the new unit as well as staff in other departments.

Health of staff was satisfactory.

#### *Visitors.*

The minister of Public Health and Deputy Minister visited during the year.

Visits were made to Rosehaven by the Director of Mental Health at intervals throughout the year.

The Eugenics Board, as a visiting committee, made its yearly visit.



## Guidance Clinics

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The Provincial Guidance Clinics functioned in the regular manner throughout 1953. The Clinic Centres visited corresponded with those of the previous year. The over-all number of new cases for the year showed a significant increase. The Calgary Clinic obtained the services of a competent Psychiatrist which resulted in resumption of full activities. The Edmonton Clinic functioned fully. A Clinic team from the Provincial Mental Hospital, Ponoka, held Clinics not only in Ponoka, but in Rimbey, Stettler, and Castor. Members of the Staff of the Provincial Training School at Red Deer operated the Guidance Clinic in that City.

A considerable number of talks, addresses and group discussions were participated in by members of all the various Clinic Staffs. A very large majority of the new cases examined in the Clinics as a whole were between the ages of zero to 19, indicating that cases are being referred at an early age. This would seem to be a hopeful sign since the aim of the Guidance Clinic work is chiefly preventive.

### PROVINCIAL GUIDANCE CLINICS, NORTHERN ZONE

The Northern Zone, with permanent headquarters in Edmonton, had a busy Clinic year in 1953. A total of 767 new cases, made up of 500 males and 267 females, and 241 re-registered cases were examined. This shows an increase of 23 new and 11 re-registered cases over 1952. The total work load was 6,202, and an increase of 491 work periods over the previous year. The number of cases carried in treatment has increased. Treatment on the whole has had gratifying results, with few cases in which improvement was not observed. Nearly all the cases carried in treatment have been from the Edmonton area, with the treatment periods at the headquarters location. The general distribution of cases by age group remains substantially the same as in previous years, with 80.4% of new cases in the 5 to 19 years range. The largest single group in the age distribution was that from 5 to 9 years, showing 39.6% of all new cases. 35.1% of new cases were referred from schools; 23.6% from community agencies; 19% from private physicians; 14.3% attended voluntarily; and the remainder were from all other sources. During the year there were 157 periods given to educational activity in the community by members of the Clinic staff. Many of these periods were spent in addressing community groups, such as Home and School meetings. The decrease in educational activity is due to revised demonstration time for Public Health Nurses.

#### *City of Edmonton.*

New cases examined numbered 474, and there were 185 cases re-registered during the year. The total work load was 4,931, an increase of 620 periods over 1952.

#### *Barrhead-Westlock.*

Clinics at Barrhead dealt with 17 new and 3 re-registered cases. The work load was 73. No Clinics were held at Westlock.

*Camrose-Wetaskiwin.*

Clinics at Wetaskiwin examined 21 new cases, and 7 re-registered cases, with a work load of 104. There were no Clinics held at Camrose.

*Holden-Wainwright.*

At these two points 23 new cases were seen and 7 re-registered cases. The work load was 103 periods.

*Athabasca-Lac La Biche.*

No clinics were held at Lac La Biche in 1953. There were 23 new cases and 4 re-registered cases seen at Athabasca with a work load of 89.

*Bonyville-St. Paul-Two Hills.*

Total new cases examined at these three points was 44, and 5 re-registered cases. Work load was 160.

*Vegreville-Vermilion.*

Fifty-five new cases were seen in these areas and 17 re-registered cases. The total work load was 285.

*Peace River-Grande Prairie.*

There were 105 new cases and 13 re-registered cases examined. The total work load was 457. The Clinic visited this district twice, for two weeks on each occasion, once in the spring and once in the fall. Because of very inclement weather Clinics at two points had to be cancelled on the spring trip.

### PONOKA DISTRICT GUIDANCE CLINIC

The clinics in this district were, as previously, served by members of the Provincial Mental Hospital staff. Clinics were scheduled approximately every other month at Ponoka, Rimbey, Stettler and Castor. Twenty-five new and nine re-registered cases were examined, with a total work load of 147. This is a decrease from 1952. Thirty-nine per cent of the cases were referred by schools, 21% by community agencies, 21% by private doctors, and the remainder by various other sources.

*Ponoka-Rimbey.*

One clinic was held at Ponoka, and one at Rimbey. Several additional cases were examined at the Hospital by various members of the Provincial Mental Hospital staff. Sixteen new and 17 re-registered cases were seen, with a work load of 53.

*Castor.*

Two clinics were held at Castor. Seven new and three re-registered cases were seen, making a work load of 39.

*Stettler.*

Two clinics were held at Stettler. Five new and three re-registered cases were examined. The work load was 55.

## RED DEER GUIDANCE CLINIC

The Red Deer Guidance Clinic operated as a complete team during the year of 1953. Clinics during the early part of the year were held at the rate of two afternoons per week and towards the end of the year, as the children's work load increased, it was necessary to include one additional half day for child Play-Therapy sessions.

During the year, the Clinic team took part in many parent-teacher association meetings and radio broadcasts. The work load for the Clinic shows a marked increase compared with the same period of 1952, when the Clinic team was incomplete. There was a total of 98 sessions held during the year. There were 103 new patients seen and 33 patients continued as a carry-on from the previous year. In co-operation with the Medical Clinics at Red Deer, there was a total of 38 electro-convulsant-therapy treatments and four patients were given courses in modified insulin therapy.

Whereas in previous years there was a high preponderance of adult psychoneurotic cases being seen, this year showed a marked increase in the number of children referrals, both from medical practitioners and schools. These were principally cases associated with behavioural difficulties and childhood psychoneurosis. The total number of patient interviews was 347.

## PROVINCIAL GUIDANCE CLINICS SOUTHERN ZONE

There have been many changes in the staff at the Calgary Provincial Guidance Clinic during 1953. The services of a full-time Psychiatrist were available from March to September and since that time, on a part-time basis. There is the addition of another Psychologist to the staff in June, 1953.

The outside Clinic trips have been somewhat changed. The main Clinic trip each month is the Lethbridge-Medicine Hat trip which, every second month, also includes Cardston. These three centres present an appreciable number of referrals each month. It has been found possible to do this work using three days, by giving the Psychologist and Social Worker more responsibility in handling the school work, while the Psychiatrist spends most of his time with the adult psychiatric referrals. Brooks has been included in the Medicine Hat Clinic. Visits will continue to be made to Drumheller, High River and Claresholm.

It is noted that the case load has increased very appreciably during 1953 to a figure of 5,725, in comparison to 1952, when the work load was 3,322. The number of new cases examined at Calgary during the year increased from 242 to 366. It is to be noted that Calgary, as in past years, represents the largest service extended by the Clinic. During the year of 1953 there was a considerable increase in the number of psychotic and psychoneurotic patients examined by the Clinic. There was also a larger percentage in the number of patients seen in the adult group over age twenty-five. This represents the increased work carried out by the Clinic with adult patients.

The emphasis on the work in the City of Calgary is on therapy with disturbed children and adults. The work carried out on the Clinic trips to other points, by necessity, is mainly in the field of diagnosis and advice.

*City of Calgary.*

The total work load for the year was 4,630. This figure, in general, represents helpful work with new and old cases and contacts with relatives.

*Lethbridge.*

Ten trips to Lethbridge were made during 1953. Seventy-six new cases were examined and 26 re-registered cases were seen, with a total work load of 336.

*Medicine Hat.*

Ten trips were carried out to Medicine Hat, with the Brooks cases being examined at that location. There were 82 new cases and 24 re-registered ones.

*Claresholm-High River.*

High River was visited three times and Claresholm once. There were 27 new cases at High River and six at Claresholm, with re-registered cases numbering eight at High River and one at Claresholm.

*Cardston.*

Cardston was visited four times, with a total of 30 new cases and three re-registered, the total work load being 14.

*Didsbury.*

Four visits were made to this location, with 20 new cases and six re-registered cases.

One Clinic was carried out at Vulcan, also one at Drumheller and one at Cochrane during the year.

TABLE 1  
SUMMARY OF NEW AND RE-REGISTERED CASES EXAMINED, TREATMENT PERIOD, INTERVIEWS, PSYCHOLOGICAL EXAMINATIONS, AND TOTAL WORK LOAD OF CLINICS

Clinic Districts	New Cases			Re-registered Cases			Distribution of Work				Total Work Load
	M.	F.	T.	M.	F.	T.	Pat.	Col.	Gen.	P.E.	
Edmonton and District ..	500	267	767	139	102	241	1798	2288	1214	902	6202
Calgary and District ..	346	276	622	102	84	186	2352	2018	794	561	5725
Ponoka and Red Deer District	69	62	131	26	16	42	382	174	47	91	694
Totals .....	915	605	1520	267	202	469	4532	4480	2055	1554	12621

## NOTES:

Total new cases examined since the Clinics opened in 1929 is now 14,630.

Edmonton and District includes all the area served from Wetaskiwin north. This is the Northern Zone. It includes Clinics in the Peace River-Grande Prairie area, and such points as Athabasca, Barrhead, Bonnyville, Holden, Lac La Biche, St. Paul, Two Hills, Vegreville, Vermilion, Wainwright and Wetaskiwin.

Calgary and District includes the areas served from Didsbury south. This is the Southern Zone. It includes Clinics held at such points as Cardston, Claresholm, Didsbury, Drumheller, High River, Lethbridge, Medicine Hat.

Ponoka and Red Deer District includes the area from Didsbury on the south to Wetaskiwin on the north. This is the Central Zone. It includes Clinics at such points as Castor, Ponoka, Stettler, Rimbely, Red Deer and Rocky Mountain House.

Re-registered cases are those that have been examined previously at a Clinic, and are seen again for further consultation or treatment.

Pat.—Patient contacts including treatment periods.

Col.—Collateral, or contacts with a patient's parents, or relatives, or with others closely interested.

Gen.—General contacts regarding Clinic activities and work, including those with other Agencies and Community Services.

P.E.—Psychological examinations and tests.

Total Work Load—This includes patient interviews and treatment periods interviews with parents and relatives, interviews with other Agencies, concerning patients or Clinic work, and psychological examinations by Clinic Staff members. It includes as well talks, addresses and teaching periods by Staff Members.

## The Eugenics Board

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

The Eugenics Board of the Province of Alberta held nine meetings during the year of 1953. All of these meetings were held at the Provincial Mental Hospital, Ponoka, and the Provincial Training School, Red Deer.

### *Cases Presented.*

The Board considered 81 cases. There were 43 male and 38 female cases, the majority of which were passed subject to the consent of the patient or parent or guardian, or to both patient and parent or guardian.

Of the 81 cases passed by the Board during the year, 41 had been first examined at a Provincial Guidance Clinic, although some of these had been institutionalized before presentation. This group of 41 cases was made up of 23 males and 18 females.

### *Operations.*

Operations were performed on 51 cases during the year, 21 being male and 30 female. All of these operations were performed at the Provincial Mental Hospital, Ponoka, with the exception of one case which was operated upon at the University of Alberta Hospital, Edmonton, at the request of the parents.

The surgical operations mentioned above were performed by the Surgical Consultants Dr. J. W. Richardson, of Calgary, or Dr. J. Ross Vant, of Edmonton.

Dr. W. R. Fraser was official substitute for Dr. E. R. Selby at the meeting held at the Provincial Mental Hospital, Ponoka, on October 2nd, 1953.

As in previous years the Eugenics Board wishes to express its sincere appreciation and thanks to the Director, Division of Mental Health, to the Medical Superintendents and their respective Staffs, and the Guidance Clinics for their cooperation in connection with the work of the Eugenics Board.

### CASES PRESENTED AND PASSED (To 31st December, 1953)

	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
1951	34	48	82	1343	1414	2757
1952	21	36	57	1364	1450	2814
1953	21	38	81	1407	1488	2895

**OPERATIONS ONLY**  
(To 31st December, 1953)

	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 .....	122	151	273	368	549	917
1944 .....	13	27	40	381	576	957
1945 .....	18	29	47	399	605	1004
1946 .....	24	31	55	423	636	1059
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
1951 .....	16	41	57	512	787	1299
1952 .....	6	18	24	518	805	1323
1953 .....	21	30	51	539	835	1374

CHAPTER I  
THE EARLY PERIOD

1492	Columbus discovers America	1492-1500
1500	Pizarro discovers Peru	1500-1510
1513	De Soto discovers Florida	1510-1520
1542	Escobedo discovers New Mexico	1520-1530
1565	Ponce de Leon discovers Florida	1530-1540
1571	Magellan discovers the Philippines	1540-1550
1585	Roanoke colony established	1550-1560
1607	Jamestown colony established	1560-1570
1620	Mayflower colony established	1570-1580
1630	Massachusetts Bay colony established	1580-1590
1675	King Philip's War	1590-1600
1703	Yamhill massacre	1600-1610
1733	Georgia colony established	1610-1620
1763	Seven Years' War ends	1620-1630
1776	Declaration of Independence	1630-1640
1781	Yorktown surrender	1640-1650
1789	Constitution adopted	1650-1660
1791	Bill of Rights adopted	1660-1670
1796	Madison becomes president	1670-1680
1800	Washington becomes president	1680-1690
1803	Louisiana Purchase	1690-1700
1820	Missouri Compromise	1700-1710
1845	Texas Annexation	1710-1720
1850	Compromise of 1850	1720-1730
1861	Secession begins	1730-1740
1865	War ends	1740-1750
1877	Compromise of 1877	1750-1760
1896	Plessy vs. Ferguson	1760-1770
1904	Spanish-American War	1770-1780
1914	World War I begins	1780-1790
1918	War ends	1790-1800
1929	Stock market crash	1800-1810
1933	New Deal begins	1810-1820
1945	World War II ends	1820-1830
1954	Brown vs. Board of Education	1830-1840
1963	John F. Kennedy assassinated	1840-1850
1968	Richard Nixon becomes president	1850-1860
1974	Nixon resigns	1860-1870
1981	Iranian hostage crisis	1870-1880
1989	End of Cold War	1880-1890
1991	Gulf War	1890-1900
1993	Clinton becomes president	1900-1910
1997	Nixon's pardon	1910-1920
2001	9/11 attacks	1920-1930
2009	Obama becomes president	1930-1940
2017	Trump becomes president	1940-1950
2021	January 6th insurrection	1950-1960
2022	Russia invades Ukraine	1960-1970
2023	COVID-19 pandemic	1970-1980

The early period of American history is marked by the discovery of the continent by Christopher Columbus in 1492. This event led to the establishment of various colonies, including Jamestown in 1607 and the Mayflower colony in 1620. The period also saw the growth of the plantation system and the beginning of the struggle for independence from British rule.

The American Revolution (1775-1783) was a pivotal moment in the nation's history, leading to the Declaration of Independence in 1776 and the adoption of the Constitution in 1787. The war established the United States as a sovereign nation and set the course for its future development.

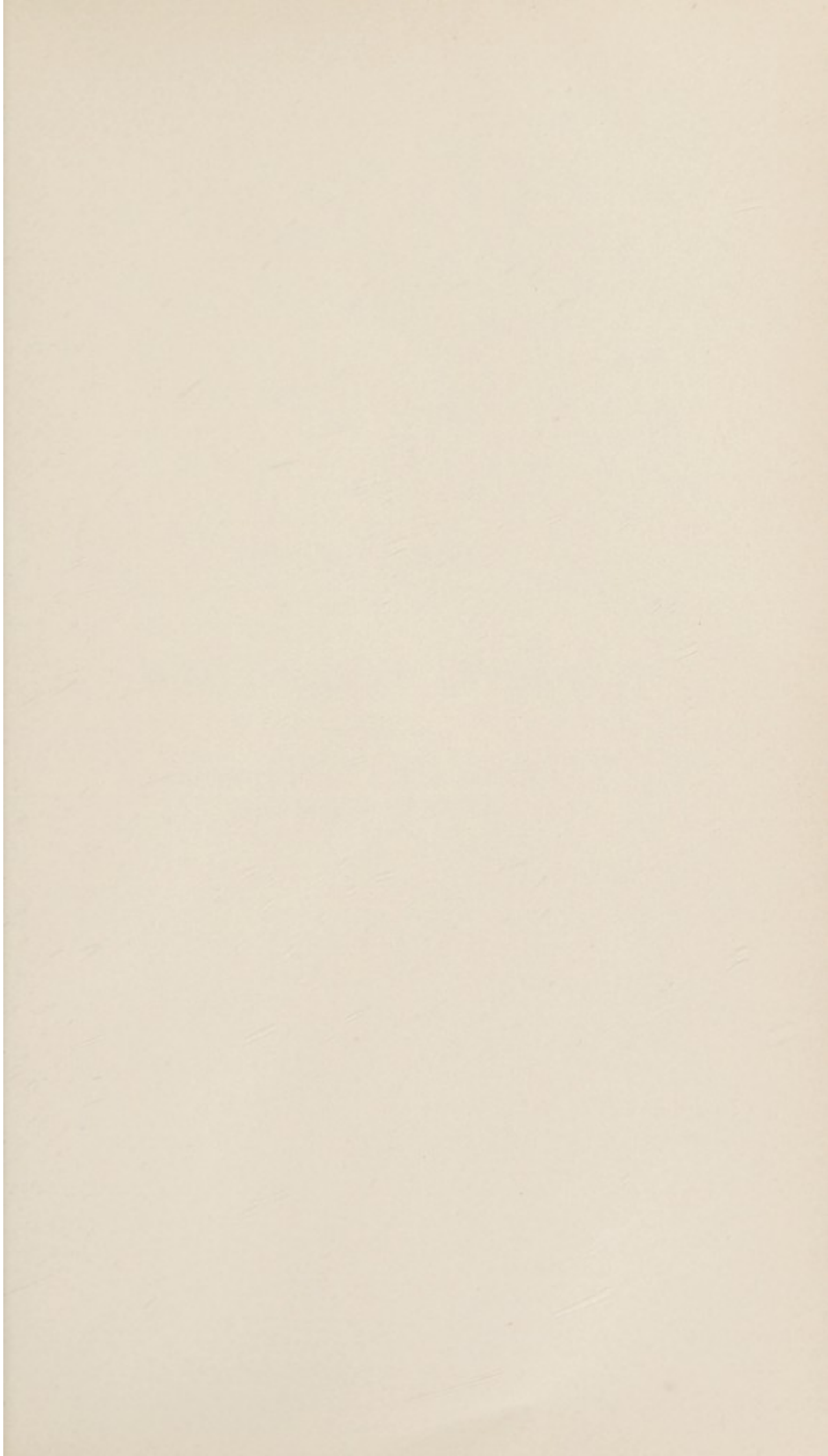
The early 19th century was a period of westward expansion and territorial acquisition. The Louisiana Purchase in 1803 and the Texas Annexation in 1845 significantly increased the size of the United States. This period also saw the beginning of the sectional crisis that would eventually lead to the Civil War.

The Civil War (1861-1865) was a defining conflict in American history, fought over the issue of slavery. The war resulted in the abolition of slavery and the preservation of the Union. It also led to the Reconstruction era and the passage of the Reconstruction Amendments to the Constitution.

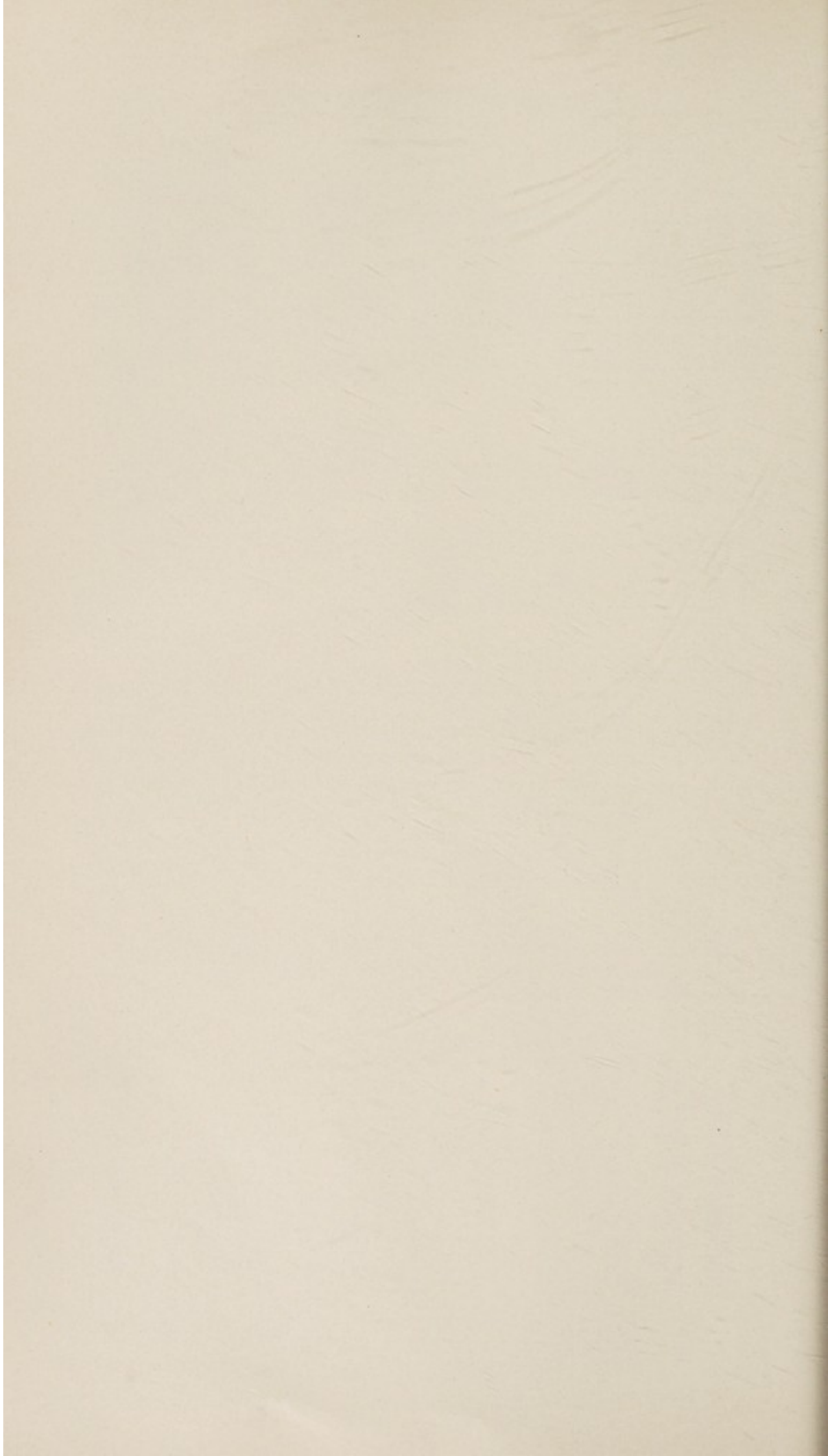
The late 19th and early 20th centuries were characterized by industrialization, urbanization, and the rise of the Progressive Movement. This period saw significant social and economic changes, as well as the emergence of new political movements and leaders.

The 20th century was a time of global conflict and rapid technological advancement. World War I (1914-1918) and World War II (1939-1945) shaped the modern world. The Cold War (1945-1991) followed, leading to the end of the Soviet Union and the emergence of a new global order.

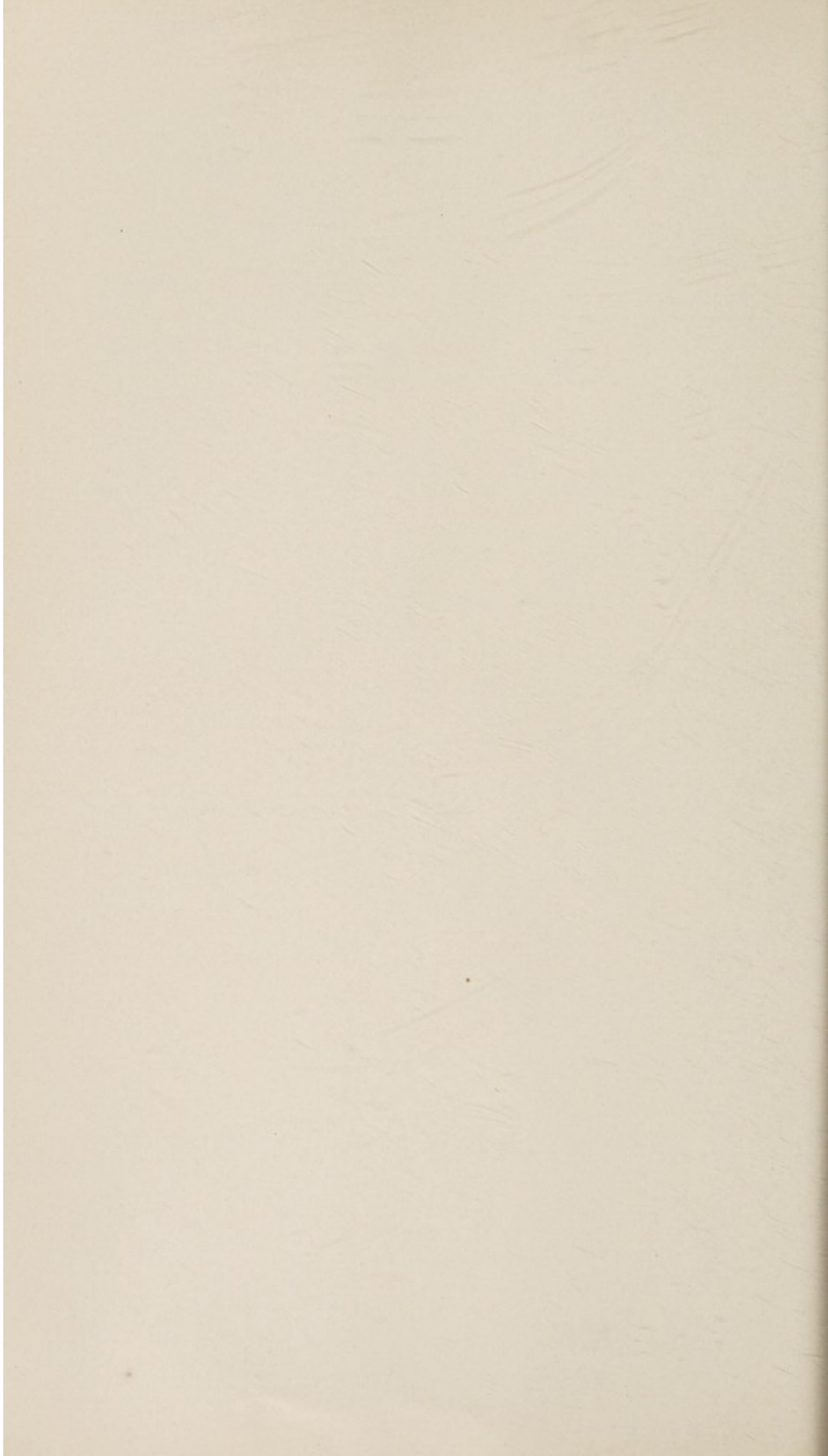
The late 20th and early 21st centuries have been marked by significant social, economic, and technological changes. The end of the Cold War, the rise of the Internet, and the challenges posed by climate change and global terrorism are among the defining features of this period.











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OF THE

Vital Statistics Division

OF THE

DEPARTMENT OF PUBLIC HEALTH  
PROVINCE OF ALBERTA

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# Vital Statistics Division

(ARTHUR PACKFORD, Deputy Registrar General)

This is the Forty-ninth Annual Report of the Vital Statistics Division of the Department of Public Health and is for the year 1953. The new set of tables, which were adopted for uniform use by all the Provinces for their 1952 reports, have been very satisfactory and will continue to be used for this and subsequent reports.

## POPULATION

The population of the Province for 1953 has been estimated by the Dominion Bureau of Statistics as 1,002,000. All rates in this report are therefore based on that figure. The table on page eight shows the population by census divisions, municipalities, towns and villages for the census years 1941 and 1951.

## BIRTHS

The number of children born to residents of the Province numbered 31,376. This was 2,271 more than the previous year, the birth rate of 31.3 being the highest in Canada with the exception of Newfoundland and the highest ever recorded for the province. Of the total births, 16,169 were males and 15,207 were females, the ratio being 1,063 males to each 1,000 females. Twenty-nine thousand four hundred and seventy-five of these children were born in hospitals. Multiple births comprised 318 sets of twins and four sets of triplets. Illegitimate births numbered 1,559, the rate being 4.8 per cent of all live births.

The births of Indian children numbered 1,495. Of these, 797 were treaty Indians.

The number of births to residents of the four large cities were as follows: Edmonton, 6,529; Calgary, 4,285; Lethbridge, 797, and Medicine Hat, 438. The total number of births in these cities were: Edmonton, 9,260; Calgary, 5,803; Lethbridge, 1,353, and Medicine Hat, 724.

There were 902 legal adoptions in the Province and 70 Alberta-born children were adopted elsewhere. One thousand and sixty delayed registrations of birth were completed. There were 407 legal changes of surname recorded and 479 changes of Christian names were filed. The births of 80 children were legitimated by the subsequent marriage of the parents.

The following table shows the birth rate for Canada, the provinces and certain other countries for 1953:

BIRTH RATES			
Canada .....	28.2	Australia .....	22.9
Newfoundland .....	33.4	New Zealand .....	24.1
Prince Edward Island .....	25.8	United States .....	24.7
Nova Scotia .....	27.6	Denmark .....	17.7
New Brunswick .....	30.7	Finland .....	21.8
Quebec .....	30.2	France .....	18.6
Ontario .....	26.5	Italy .....	17.5
Manitoba .....	26.3	Netherlands .....	21.8
Saskatchewan .....	27.5	Austria .....	14.5
Alberta .....	31.3	Norway .....	18.9
British Columbia .....	25.8	Portugal .....	23.4
England and Wales .....	15.5	Spain .....	20.6
Scotland .....	17.8	Sweden .....	15.4
Northern Ireland .....	20.9	Switzerland .....	17.0
Eire .....	21.4		



## DIVORCES

There were 603 final decrees of divorce granted during the year, 27 less than the previous year but one less than the average for the five preceding years. One decree of nullity was also granted.

## MARRIAGES

Marriages registered during the year numbered 10,126, being 612 more than the previous year and 928 more than the average for the preceding five years, the rate being 10.1 per 1,000 population, the highest marriage rate in Canada. Four hundred and fifty-six of the bridegrooms were under 20 years of age and 23 were 75 years or over; 369 were widowers and 506 were divorced; 2,981 of the brides were under 20 years of age and eight were 75 years or over. Four hundred and eighty-three of the brides were widows and 484 were divorced. The number of marriages in the four large cities were as follows: Edmonton, 2,876; Calgary, 2,091; Lethbridge, 402, and Medicine Hat, 288. The marriage rates for Canada, the provinces and certain other countries was as follows:

## MARRIAGE RATES

Canada .....	8.9	Australia .....	8.0
Newfoundland .....	7.2	New Zealand .....	8.4
Prince Edward Island .....	6.1	United States .....	9.9
Nova Scotia .....	8.1	Denmark .....	7.7
New Brunswick .....	7.9	Finland .....	7.7
Quebec .....	8.4	France .....	7.1
Ontario .....	9.4	Italy .....	7.1
Manitoba .....	9.0	Netherlands .....	8.2
Saskatchewan .....	8.3	Austria .....	7.8
Alberta .....	10.1	Norway .....	7.9
British Columbia .....	9.2	Portugal .....	7.8
England and Wales .....	7.8	Spain .....	7.6
Scotland .....	8.0	Sweden .....	7.3
Northern Ireland .....	6.8	Switzerland .....	7.6
Eire .....	5.3		

## DEATHS

The deaths of 7,646 residents of the Province were registered during the year, of which 313 were Indians. Of these deaths, 4,786 were males and 2,860 were females. There were 301 more deaths than in the previous year, the death rate being 7.6 per 1,000 population, the same rate as the two preceding years. Six hundred and ninety-nine males and 516 females were 80 years of age or over. The number of deaths of residents of the four larger cities were as follows: Edmonton, 1,354; Calgary, 1,324; Lethbridge, 208, and Medicine Hat, 179. The actual number of deaths which occurred in these cities were as follows: Edmonton, 1,871; Calgary, 1,529; Lethbridge, 271, and Medicine Hat, 202. The chief cause of death, diseases of the heart, accounted for 2,274 deaths, slightly higher than the previous year's total of 2,247, the rate being 227.0 per 100,000 population.

Death from all forms of cancer numbered 1,129 and the rate was 112.7. The polio epidemic caused 108 deaths, and one death was classified to the late effects of acute poliomyelitis. The polio epidemic of the previous year caused 79 deaths.

There was again a very considerable decrease in deaths from tuberculosis. Deaths from tuberculosis, all forms, numbered 68. Of these, 25 were Indians. Pulmonary tuberculosis caused 47 deaths and of these 14 were Indians, the rate being 6.8 per 100,000 population, the lowest in Canada with the exception of Ontario.

There were 33 deaths from influenza and 324 from pneumonia. Violent and accidental deaths totalled 739, comprising motor vehicle

accidents, 263; other transport accidents, 42; accidental poisoning, 31; accidental falls, 76; accidents caused by machinery, 31; accidents caused by fire and explosion of combustible materials, 57; accidents caused by hot substances, corrosive liquid, steam and radiation, 5; accidents caused by firearms, 18; accidental drowning, 42; all other accidental causes, 92; suicides, 72, and homicides, 16.

The death rates for Canada, the provinces and certain other countries are as follows:

## DEATH RATES

Canada .....	8.6	Australia .....	9.0
Newfoundland .....	7.1	New Zealand .....	8.8
Prince Edward Island .....	8.7	United States .....	9.6
Nova Scotia .....	8.8	Denmark .....	9.0
New Brunswick .....	8.7	Finland .....	9.6
Quebec .....	8.1	France .....	12.8
Ontario .....	9.2	Italy .....	10.0
Manitoba .....	8.7	Netherlands .....	7.7
Saskatchewan .....	7.8	Austria .....	11.9
Alberta .....	7.6	Norway .....	8.3
British Columbia .....	9.9	Portugal .....	11.3
England and Wales .....	11.4	Spain .....	9.7
Scotland .....	11.5	Sweden .....	9.7
Northern Ireland .....	10.7	Switzerland .....	10.6
Eire .....	11.8		

## MATERNAL DEATHS

Deaths from puerperal causes numbered 21, as compared to 15 for each of the two previous years, the rate per 1,000 live births being 0.7.

## MATERNAL DEATH RATES PER 1,000 LIVE BIRTHS

Canada .....	0.8	Ontario .....	0.5
Newfoundland .....	1.5	Manitoba .....	0.8
Prince Edward Island .....	0.7	Saskatchewan .....	0.5
Nova Scotia .....	0.8	Alberta .....	0.7
New Brunswick .....	1.0	British Columbia .....	0.6
Quebec .....	1.1		

## INFANT DEATHS

The deaths of children under one year numbered 930. Of this number, 520 were males and 410 were females. Two hundred and eighty-seven of these children were under one day old, 484 were under one week, and 570 were under the age of one month. The infantile death rate was 30 per 1,000 live births, the same rate as the previous year.

## INFANT MORTALITY RATES PER 1,000 LIVE BIRTHS

Canada .....	35	Eire .....	39
Newfoundland .....	47	Australia .....	24 (1952)
Prince Edward Island .....	28	New Zealand .....	20
Nova Scotia .....	32	United States .....	29 (1952)
New Brunswick .....	45	Denmark .....	29 (1952)
Quebec .....	45	Finland .....	34
Ontario .....	28	France .....	38
Manitoba .....	35	Italy .....	59
Saskatchewan .....	34	Netherlands .....	22
Alberta .....	30	Austria .....	51 (1952)
British Columbia .....	27	Portugal .....	96
England and Wales .....	27	Spain .....	60
Scotland .....	31	Sweden .....	19
Northern Ireland .....	38		

Stillbirths registered during the year numbered 476, seventy-seven more than the previous year. Of these, 268 were males and 208 were females, the rate being 15.2 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 1951 and 1941 division population figures.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNI-  
CIPALITIES FOR CENSUS YEARS, 1941 AND 1951

Division and Subdivision	Total		Division and Subdivision	Total	
	1951	1941		1951	1941
<b>ALBERTA</b> .....	939,501	796,169	<b>Division No. 2—Continued:</b>		
Rural .....	451,313	489,583	Villages:		
Urban .....	488,188	306,586	Coaldale .....	806	290
<b>Division No. 1</b> .....	35,879	29,595	Cowley .....	119	125
Rural .....	14,033	16,408	Frank .....	239	204
1. I.D. ....	250	370	Stirling .....	520	437
2. Burlington .....	2,186	3,084	<b>Division No. 3</b> .....	17,132	15,518
4. Warner .....	3,445	3,617	Rural .....	12,001	12,151
11. I.D. ....	2,251	3,312	21. I.D. ....	1,605	2,412
13. Bow Island .....	1,740	2,435	22. I.D. ....	702	637
14. Eureka .....	3,909	3,323	23. I.D. ....	1,459	1,359
25. Barons (pt.) .....	252	267	28. Newell (pt.) .....	6,310	5,475
Urban .....	21,846	13,187	34. Acadia (pt.) .....	19	9
Cities:			Army Experimental		
Medicine Hat .....	16,364	10,571	Range .....	394	309
Towns:			Berry Creek-Sullivan		
Bow Island .....	653	291	Lake Area (pt.) .....	598	752
Irvine .....	224	240	Bow West Area (pt.) .....	700	867
Taber .....	3,042	1,331	Vulcan No. 2 (pt.) .....	214	331
Villages:			Urban .....	5,131	3,367
Burdett .....	118	123	Towns:		
Foremost .....	375	.....	Bassano .....	624	582
Grassy Lake .....	167	.....	Brooks .....	1,648	888
Milk River .....	481	335	Redcliff .....	1,538	1,111
Warner .....	422	296	Villages:		
<b>Division No. 2</b> .....	71,480	58,563	Duchess .....	258	149
Rural .....	31,618	29,725	Empress .....	411	341
5. Sugar City .....	5,038	4,749	Enchant .....	.....	76
6. Cochrane .....	3,475	4,233	Jenner .....	.....	27
8. I.D. ....	39	2	Tilley .....	259	193
9. Pincher Creek .....	3,149	3,363	Vauxhall .....	393	.....
10. I.D. ....	4,828	4,149	<b>Division No. 4</b> .....	28,984	29,383
16. Bright .....	2,231	2,427	Rural .....	19,124	22,315
25. Barons (pt.) .....	8,843	6,693	25. Barons (pt.) .....	3,866	3,920
26. Argyle (pt.) .....	1,139	1,516	26. Argyle (pt.) .....	1,602	1,803
27. I.D. (pt.) .....	83	162	27. I.D. (pt.) .....	33	107
Waterton Lakes Nat. Prk.	238	269	31. Highwood .....	4,916	4,921
Indian Reserves .....	2,555	2,162	32. Turner Valley (pt.) .....	4,088	6,175
Urban .....	39,862	28,838	33. I.D. ....	31	28
Cities:			Bow West Area (pt.) .....	524	766
Lethbridge .....	22,947	14,612	Vulcan No. 2 (pt.) .....	3,850	4,595
Towns:			Indian Reserves .....	164	.....
Blairmore .....	1,933	1,731	Urban .....	9,860	7,068
Cardston .....	2,487	1,864	Towns:		
Claresholm .....	1,608	1,265	High River .....	1,888	1,430
Coleman .....	1,961	1,870	Nanton .....	934	718
Granum .....	327	238	Okotoks .....	767	591
Macleod .....	1,860	1,912	Stavelly .....	327	273
Magrath .....	1,320	1,207	Vulcan .....	1,040	732
Pincher Creek .....	1,456	994			
Raymond .....	2,279	2,089			

## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1951—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1951	1941		1951	1941
<b>Division No. 4—Continued:</b>			<b>Division No. 6—Continued:</b>		
Villages:			Villages—Continued:		
Arrowwood	222	251	Standard	237	212
Barons	369	233	Swalwell		114
Black Diamond	1,154	890	Trochu	630	480
Blackie	224	223			
Carmangay	285	229	<b>Division No. 7</b>	<b>32,334</b>	<b>33,285</b>
Cayley	139	133	Rural	22,612	26,116
Champion	378	320	52. Provost	3,610	4,716
Lomond	153	129	53. Paintearth	3,073	4,160
Milo	141	129	61. Wainwright (pt.)	3,583	4,755
Nobleford	255	111	62. Flagstaff	6,129	7,804
Picture Butte	865		73. Beaver (pt.)	1,235	1,518
Turner Valley	719	676	Berry Creek-Sullivan		
			Lake Area (pt.)	101	147
<b>Division No. 5</b>	<b>16,129</b>	<b>18,926</b>	Sounding Creek-Neutral		
Rural	12,328	15,560	Hills Area (pt.)	2,173	3,012
34. Acadia (pt.)	686	739	Buffalo Nat. Park 6	2,708	4
42. I.D. (pt.)	2,642	2,353	Urban	9,722	7,169
47. Starland	2,472	3,289	Towns:		
Berry Creek-Sullivan			Castor	798	625
Lake Area (pt.)	3,252	4,658	Coronation	738	581
Sounding Creek-Neutral			Hardisty	536	457
Hills Area (pt.)	3,186	4,521	Wainwright	1,996	980
Urban	3,891	3,366	Villages:		
Towns:			Alliance	281	233
Hanna	2,027	1,622	Cadogan		99
Villages:			Chauvin	340	343
Cereal	135	142	Consort	396	265
Chinook	116	142	Czar	123	139
Craigmyle	136	186	Edgerton	309	258
Delia	278	315	Forestburg	443	231
Morrin	226	216	Galshad	198	145
Munson	78	139	Hughenden	218	164
Oyen	433	326	Irma	369	273
Rumsey	110	90	Killam	465	347
Youngstown	352	188	Lougheed	186	195
			Monitor		82
<b>Division No. 6</b>	<b>195,352</b>	<b>146,990</b>	Provost	676	518
Rural	50,436	46,679	Sedgewick	485	320
28. Newell (pt.)	671	668	Strome	276	233
32. Turner Valley (pt.)	67	84	Veteran	206	190
40. Bow Valley	2,941	3,462	Viking	683	491
41. I.D.	155	212			
42. I.D. (pt.)	4,292	4,011	<b>Division No. 8</b>	<b>73,997</b>	<b>67,630</b>
43. Serviceberry	3,091	3,706	Rural	43,965	49,293
44. Conrich	5,509	4,273	54. Stettler	6,007	7,167
45. Springbank	5,014	3,241	55. Red Deer (pt.)	6,753	7,792
46. I.D.	6,364	3,598	63. Camrose	10,895	12,236
48. Kneehill	7,263	8,135	64. Lacombe (pt.)	6,307	6,583
49. Mountain View	8,933	9,800	66. Ponoka (pt.)	5,850	6,448
50. I.D.	1,067	1,085	73. Beaver (pt.)	383	562
51. Banff Nat. Park	2,856	2,545	74. Wetaskiwin (pt.)	6,216	7,263
Indian Reserves	2,213	1,859	Indian Reserves	1,554	1,242
Urban	144,916	100,311	Urban	30,032	18,337
Cities:			Cities:		
Calgary	129,060	88,904	Red Deer	7,575	2,924
Drumheller	2,601	2,748	Wetaskiwin	3,824	2,318
Towns:			Towns:		
Didsbury	1,180	892	Camrose	4,131	2,598
Gleichen	430	435	Daysland	475	438
Olds	1,617	1,337	Innisfail	1,417	1,223
Strathmore	704	560	Lacombe	2,277	1,603
Three Hills	1,026	706	Ponoka	2,574	1,306
Villages:			Stettler	2,442	1,295
Acme	275	285	Villages:		
Airdrie	267	191	Alix	461	360
Beiseker	325	240	Bashaw	603	494
Bowness	2,922		Bawlf	236	227
Carbon	374	409	Big Valley	307	291
Carstairs	468	371	Bittern Lake	25	50
Cluny	202	138	Blackfalds	154	113
Cochrane	530	298	Botha	98	111
Crossfield	443	409	Clive	241	224
Forest Lawn	1,079	899	Delburne	395	308
Hussar	120	116	Donalda	318	206
Irricana	180	172	Edberg	188	152
Langdon		95	Elnora	211	195
Rockyford	246	201	Erskine		172
Rosebud		99	Ferintosh	205	169

## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1951—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1951	1941		1951	1941
<b>Division No. 8—Continued:</b>			<b>Division No. 11—Continued:</b>		
Villages—Continued:			Rural—Continued:		
Gadsby	128	141	90. Sturgeon (pt.)	6,365	5,115
Gull Lake	32	21	91. Morinville (pt.)	3,307	3,542
Halkirk	148	118	93. Lac Ste. Anne (pt.)	4,999	5,654
Ma-Me?O Beach	98	.....	Elk Island Nat. Park	55	50
Millet	402	325	Indian Reserves	1,014	997
Mirror	635	570	Urban	180,495	99,793
New Norway	258	169	Cities:		
Ohaton	.....	53	Edmonton	159,631	93,817
Penhold	174	183	Towns:		
<b>Division No. 9</b>	<b>31,627</b>	<b>32,232</b>	Beverly	2,159	981
Rural	27,306	29,045	Devon	842	.....
55. Red Deer (pt.)	5,653	5,735	Fort Saskatchewan	1,076	903
56. Waterloo	1,237	1,402	Jasper Place	9,139	.....
57. Raven	2,366	2,254	Leduc	1,842	871
58. I.D.	66	94	Morinville	892	580
64. Lacombe (pt.)	2,482	2,670	St. Albert	1,129	697
65. I.D.	4,145	4,307	Stony Plain	878	566
66. Ponoka (pt.)	3,163	3,576	Tofield	692	551
68. I.D.	226	257	Villages:		
69. I.D.	1,223	1,234	Alberta Beach	79	59
76. I.D. (pt.)	3,398	3,877	Calmar	944	.....
79. I.D. (pt.)	1,166	2,017	Hay Lakes	231	154
80. Jasper Nat. Park	1,899	1,622	Lakeview	15	.....
Indian Reserves	282	.....	Onoway	189	156
Urban	4,321	3,187	Sangudo	269	173
Towns:			Seba Beach	103	84
Rimbey	757	410	Thorsby	385	.....
Rocky Mtn. House	1,147	800	Wabamun	.....	201
Sylvan Lake	985	805	<b>Division No. 12</b>	<b>17,704</b>	<b>17,431</b>
Villages:			Rural	14,907	15,497
Bentley	439	279	77. I.D.	1,325	1,821
Bowden	277	234	78. I.D.	1,511	1,875
Eckville	379	135	79. I.D. (pt.)	2,826	1,862
North Red Deer	.....	524	93. Lac Ste. Anne (pt.)	2,208	2,484
Sundre	337	.....	94. Pembina	2,688	3,462
<b>Division No. 10</b>	<b>50,016</b>	<b>58,807</b>	95. I.D.	2,561	2,560
Rural	37,780	49,982	96. I.D.	299	85
61. Wainwright (pt.)	269	425	108. I.D. (pt.)	114	106
71. Vermillion River (pt.)	9,817	11,869	109. I.D. (pt.)	1,343	1,209
72. Minburn	5,909	7,052	110. I.D. (pt.)	32	33
73. Beaver (pt.)	3,032	3,683	111. I.D. (pt.)	.....	.....
81. Eagle	10,094	14,483	Urban	2,833	1,934
82. Lamont	8,569	12,740	Towns:		
Urban	12,236	8,825	Edson	1,956	1,499
Towns:			Villages:		
Lloydminster (pt.)	1,706	572	Entwistle	.....	218
Mundare	596	756	Mayerthorpe	472	217
Vegreville	2,223	1,696	Wildwood	405	.....
Villages:			<b>Division No. 13</b>	<b>30,152</b>	<b>33,172</b>
Andrew	625	326	Rural	26,775	30,805
Bruderheim	387	237	71. Vermillion River (pt.)	434	587
Chipman	180	240	85. I.D.	289	512
Derwent	283	171	86. St. Paul	8,941	10,122
Hairy Hill	205	.....	87. Bonnyville	1,474	1,867
Holden	504	361	88. Glendon	1,547	1,965
Innisfree	287	253	89. Smoky Lake (pt.)	3,282	4,837
Islay	.....	132	101. I.D.	5,601	6,259
Kitscoty	235	234	102. I.D. (pt.)	2,791	2,745
Lamont	637	438	103. I.D. (pt.)	23	52
Lavoy	122	178	Indian Reserves	2,393	1,859
Mannville	528	396	Towns:		
Minburn	186	289	Bonnyville	1,139	603
Myrnam	388	216	St. Paul	1,407	1,018
Ranfury	.....	129	Villages:		
Ryley	406	323	Bellis	.....	128
Two Hills	525	210	Elk Point	453	311
Willingdon	281	420	Vilna	378	311
<b>Division No. 11</b>	<b>226,199</b>	<b>149,193</b>	<b>Division No. 14</b>	<b>46,791</b>	<b>47,899</b>
Rural	45,704	49,400	Rural	39,254	44,526
73. Beaver (pt.)	2,439	2,997	89. Smoky Lake (pt.)	6,775	9,884
74. Wetaskiwin (pt.)	56	39	90. Sturgeon (pt.)	2,430	3,166
75. Leduc	11,108	12,741	91. Morinville (pt.)	2,504	2,838
76. I.D. (pt.)	1,458	1,479	92. Westlock	9,797	10,469
83. Strathcona	6,982	6,725	93. Lac Ste. Anne (pt.)	2,629	3,006
84. Stony Plain	7,921	10,061	102. I.D. (pt.)	2,619	2,639

## POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES FOR CENSUS YEARS, 1941 AND 1951—Continued

Division and Subdivision	Total		Division and Subdivision	Total	
	1951	1941		1951	1941
<b>Division No. 14—Continued:</b>			<b>Division No. 16</b>	<b>32,439</b>	<b>30,349</b>
Rural—Continued:			Rural	25,631	26,349
103. Athabasca	7,799	7,922	133. Spirit River	1,406	1,828
107. I.D.	3,112	3,166	134. I.D.	2,568	2,372
108. I.D. (pt.)	1,072	1,088	135. Peace	1,741	2,003
122. I.D.	469	348	136. Fairview	2,031	2,326
Indian Reserves	48	.....	138. I.D. (pt.)	1,663	1,610
Urban	7,537	3,373	139. I.D.	3,007	2,740
Towns:			Grande Prairie No. 1	10,198	11,181
Athabasca	1,068	578	Indian Reserves	101	161
Barrhead	1,243	399	Urban	6,808	4,000
Lac La Biche	905	517	Towns:		
Redwater	1,306	.....	Fairview	929	432
Westlock	1,111	590	Grande Prairie	2,664	1,724
Villages:			Villages:		
Clyde	219	160	Beaverlodge	514	331
Legal	523	462	Berwyn	288	206
Radway	184	.....	Clairmont	.....	102
Smoky Lake	491	430	Grimshaw	564	169
Thorhild	248	.....	Hythe	342	247
Waskatenau	239	237	Rycroft	372	.....
<b>Division No. 15</b>	<b>21,663</b>	<b>17,484</b>	Sexsmith	331	325
Rural	16,963	16,020	Spirit River	553	276
108. I.D. (pt.)	771	917	Wembley	251	188
109. I.D. (pt.)	170	160	<b>Division No. 17</b>	<b>11,587</b>	<b>9,712</b>
110. I.D. (pt.)	41	75	Rural	10,966	9,712
111. I.D. (pt.)	313	267	102. I.D. (pt.)	.....	3
123. I.D.	.....	15	121. I.D. (pt.)	310	224
124. I.D.	2,934	2,545	128. I.D.	593	365
125. I.D.	3,150	3,044	129. I.D.	502	335
126. I.D.	2,138	1,687	131. I.D. (pt.)	179	51
130. I.D.	4,195	4,327	137. I.D.	124	45
131. I.D. (pt.)	2,185	1,829	138. I.D. (pt.)	2,547	1,970
Indian Reserves	1,066	1,154	143. I.D.	1,158	2,316
Urban	4,700	1,464	144. I.D.	115	37
Towns:			145. I.D.	158	90
High Prairie	1,141	.....	146. I.D.	754	279
McLennan	1,074	.....	147. I.D.	1,589	1,378
Peace River	1,672	873	148. I.D.	.....	12
Villages:			149. I.D.	39	67
Falher	575	244	Wood Buffalo Nat. Park	36	42
Grouard	.....	347	Indian Reserves	2,862	2,507
Kinuso	238	.....	Urban	621	.....
111. I.D. (pt.)	11	18	Towns:		
132. I.D.	2,905	2,110	McMurray	621	.....

TABLE 1—GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS, ALBERTA, 1953

CENSUS DIVISIONS	LIVE BIRTHS				Live births in hospital	Illegitimate births	Stillbirths	Marriages	Total deaths	Hospital deaths	Infant deaths	Neonatal deaths	Maternal deaths
	Total	Male	Female										
ALBERTA	31,376	16,169	15,207		29,475	1,559	476	10,126	7,646	4,927	930	570	21
Division No. 1	1,089	561	528		1,023	28	17	404	303	166	27	20	1
Division No. 2	2,340	1,219	1,121		2,060	103	44	801	574	364	60	37	4
Division No. 3	529	259	270		447	10	6	106	118	81	15	11	
Division No. 4	989	535	454		952	28	18	175	246	152	29	22	
Division No. 5	393	207	186		347	7	3	85	127	76	12	10	
Division No. 6	6,456	3,322	3,134		6,372	343	97	2,534	1,833	1,219	200	129	6
Division No. 7	919	477	442		781	24	13	252	286	154	23	15	
Division No. 8	2,311	1,166	1,145		2,140	80	35	735	651	407	62	43	1
Division No. 9	824	426	398		642	46	13	174	208	134	25	15	
Division No. 10	1,216	603	613		1,174	32	13	433	323	229	39	22	
Division No. 11	8,840	4,559	4,281		8,779	454	136	3,304	1,809	1,289	207	139	3
Division No. 12	586	301	285		546	31	5	95	110	73	21	16	
Division No. 13	1,058	548	510		969	73	17	229	195	123	34	16	
Division No. 14	1,355	706	649		1,298	54	26	298	341	210	40	18	
Division No. 15	938	486	452		789	129	11	151	167	85	55	28	
Division No. 16	1,106	582	524		944	47	14	286	273	143	49	25	2
Division No. 17	427	212	215		212	70	8	64	82	22	32	4	1

TABLE 2—GENERAL SUMMARY OF VITAL STATISTICS FOR INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1953

CITY, TOWN OR VILLAGE	LIVE BIRTHS			Live births in hospital	Illegitimate births	Stillbirths	Marriages	Total deaths	Hospital deaths	Infant deaths	Neonatal deaths	Maternal deaths	
	Total	Male	Female										
Athabasca	54	27	27	54	4	1	25	13	6	2	1		
Barrhead	59	29	30	59	5		19	16	11	1	1		
Beverly	127	67	60	127	8	1	9	12	9	1	1		
Black Diamond	25	16	9	25			15	9	6				
Blairmore	49	24	25	49		1	23	11	8		1		
Bonnyville	78	48	30	77	4	3	23	13	10	1			
Bowness	163	77	86	161	5	2	21	22	9	1			
Brooks	87	36	51	58	3	1	41	20	12	3	3	2	

Calgary	4,285	2,212	2,073	4,283	223	67	2,091	1,324	900	135	99	3
Camrose	155	73	82	155	2	2	83	64	34	5	4	
Cardston	86	42	44	53	2	2	113	20	8	3	1	
Clareholm	115	61	54	114	1	2	27	25	18	2	1	
Coleman	86	44	42	85	2	4	22	30	15	1	2	
Didsbury	41	20	21	39	2	1	31	22	21	2	2	
Drumheller	147	83	64	144	8	3	73	37	24	1	1	
Edmonton	6,529	3,352	3,177	6,524	357	95	2,876	1,354	1,000	152	112	2
Edson	116	56	60	115	9	2	51	21	18	6	6	
Forest Lawn	86	44	42	85	2	2	6	14	3	3	1	
Fort Saskatchewan	51	19	32	51	3	4	23	11	7	1	1	
Grande Prairie	198	99	99	170	8	1	99	50	28	9	5	
Hanna	52	27	25	50	5	1	42	25	19	3	3	
High Prairie	76	39	37	74	8	1	27	13	7	3	3	
High River	69	41	28	68	1	2	45	17	21	4	1	
Innisfail	49	25	24	49	2	2	11	31	21	3	1	
Jasper Place	453	236	217	451	17	9	19	29	17	3	1	
Lacombe	78	45	33	77	1	1	60	41	30	6	3	
Leduc	106	46	60	105	1	1	50	19	15	1	1	
Lethbridge	797	435	362	795	27	13	402	208	148	18	11	2
Lloydminster	96	46	50	95	5	1	99	11	7	2	2	
Macleod	83	36	47	75	35	1	35	30	21	3	2	
Magrath	31	22	9	21	2	1	16	7	6	4	4	
McLennan	48	27	21	46	8	8	17	12	8	4	4	
Medicine Hat	438	221	217	438	14	8	288	179	113	9	6	1
Olds	66	33	33	66	3	1	45	17	12	2	2	
Peace River	120	71	49	108	12	3	44	13	9	2	1	
Pincher Creek	50	25	23	48	7	1	17	22	15	3	2	
Ponoka	122	54	68	122	5	3	63	40	30	6	4	
Raymond	86	37	49	65	1	1	26	27	18	7	4	
Redcliff	35	14	21	35	1	1	12	10	8	1	1	
Red Deer	349	176	173	348	12	6	168	77	46	8	8	
Redwater	78	44	34	77	4	4	8	8	6	2	2	
Rocky Mountain House	73	38	35	47	3	2	28	15	10	5	5	
St. Albert	35	16	19	34	4	2	10	36	11	3	1	
St. Paul	84	45	39	84	7	1	55	21	11	2	2	
Stettler	144	74	70	142	7	1	60	43	30	7	6	
Taber	141	63	78	129	8	3	75	37	9	6	4	
Three Hills	63	34	29	61	1	1	16	16	13	2	1	
Vegreville	65	32	33	64	3	3	67	24	19	3	1	
Vermilion	76	38	38	76	3	2	42	20	18	2	2	
Vulcan	40	21	19	39	1	2	12	15	8	2	2	
Wainwright	112	51	61	90	6	1	42	31	20	7	4	
Westlock	59	32	27	59	3	1	31	17	12	3	1	
Wetaskiwin	153	85	68	146	2	4	79	68	43	7	6	



TABLE 3—DEATHS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, 1953

PLACE OF OCCURRENCE	Total (occurrence)	PLACE OF RESIDENCE														
		Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	U.S.A.	Other	
<b>TOTAL (residence)</b>	128,419	2,733	926	5,808	4,637	34,469	45,242	7,015	6,687	7,646	12,218	116	245	616	61	
Newfoundland	2,751	2,716		4	3		3									
Prince Edward Island	917		903	1	1	4	1				1			18	7	
Nova Scotia	5,820	8	8	5,743	19	5	7							22	6	
New Brunswick	4,718		4	10	4,532	84	11			1	2			70	8	
Quebec	34,303	5	5	14	32	33,996	121	5	2	6	2	2		96	4	
Ontario	45,497	4	4	17	13	306	44,739	40	28	12	15			304	12	
Manitoba	7,059			1		3	52	6,888	58	9	15	1		25	15	
Saskatchewan	6,593			1					6,490	41	11	1		12	2	
Alberta	7,682			3	1	2	13	23		56	11	1		19	1	
British Columbia	12,181			1	3	3	16	13	18	37	56	4	8	43	4	
Yukon	116					1	1	1			12,037	1	1	1	8	
Northwest Territories	230									3	5	107		1		
United States	552		2	13	33	65	264	35	35	31	74		226			

TABLE 4—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1953

CENSUS DIVISIONS	TOTAL DEATHS				DEATHS IN HOSPITALS			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere
<b>ALBERTA</b> .....	<b>7,682</b>	<b>7,646</b>	<b>176</b>	<b>140</b>	<b>4,948</b>	<b>4,927</b>	<b>105</b>	<b>84</b>
Division No. 1 .....	284	303	35	54	148	166	21	39
Division No. 2 .....	604	574	83	53	388	364	65	41
Division No. 3 .....	106	118	23	35	62	81	12	31
Division No. 4 .....	187	246	18	77	89	152	4	67
Division No. 5 .....	86	127	8	49	38	76	2	40
Division No. 6 .....	1,939	1,833	234	128	1,306	1,219	175	88
Division No. 7 .....	232	286	12	66	108	154	5	51
Division No. 8 .....	722	651	176	105	466	407	143	84
Division No. 9 .....	154	208	31	85	77	134	15	72
Division No. 10 .....	265	323	27	85	173	229	11	67
Division No. 11 .....	2,118	1,809	450	141	1,629	1,289	408	68
Division No. 12 .....	71	110	17	56	28	73	7	52
Division No. 13 .....	157	195	10	48	92	123	6	37
Division No. 14 .....	277	341	31	95	144	210	19	85
Division No. 15 .....	143	167	10	34	62	85	6	29
Division No. 16 .....	262	273	22	33	125	143	8	26
Division No. 17 .....	75	82	9	16	13	22	1	10

TABLE 5—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE FOR URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1953

CITY, TOWN OR VILLAGE	TOTAL DEATHS				DEATHS IN HOSPITALS			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere
Athabasca	31	13	18	...	18	6	12	...
Barrhead	35	16	21	2	31	11	21	1
Beverly	2	12	...	10	...	9	...	9
Black Diamond	3	9	...	6	...	6	...	6
Blairmore	3	11	1	9	...	8	...	8
Bonnyville	21	13	12	4	15	10	9	4
Bowness	9	22	...	13	...	9	...	9
Brooks	41	20	24	3	34	12	24	2
Calgary	1,529	1,324	297	92	1,092	900	246	54
Camrose	139	64	89	14	92	34	66	8
Cardston	30	20	13	3	12	8	6	2
Claresholm	40	25	19	4	31	18	17	4
Coleman	13	30	1	18	...	15	...	15
Didsbury	25	22	9	6	17	12	9	4
Drumheller	67	37	41	11	53	24	38	9
Edmonton	1,871	1,354	660	143	1,562	1,000	628	64
Edson	29	21	16	8	25	18	15	8
Forest Lawn	5	14	1	10	...	9	...	9
Fort Saskatchewan	4	11	...	7	...	...	...	7
Grande Prairie	81	50	39	8	52	28	29	5
Hanna	35	25	15	5	28	19	12	3
High Prairie	47	13	37	3	29	7	25	3
High River	51	31	26	6	42	21	25	4
Innisfail	39	17	24	2	30	11	20	1
Jasper Place	11	29	2	20	...	17	...	17
Lacombe	54	41	23	10	43	30	19	6
Leduc	1	19	...	18	...	15	...	15
Lethbridge	271	208	91	28	211	148	84	21
Lloydminster	2	11	...	9	...	7	...	7
Macleod	31	30	7	6	21	21	5	5
Magrath	8	7	3	2	5	6	1	2
McLennan	29	12	19	2	19	8	13	2
Medicine Hat	202	179	38	15	142	113	36	7
Olds	43	17	32	6	39	12	30	3
Peace River	20	13	10	3	14	9	8	3
Pincher Creek	26	22	10	6	18	15	8	5
Ponoka	107	40	81	14	95	30	77	12
Raymond	27	27	8	8	20	18	8	6
Redcliff	1	10	...	9	...	8	...	8
Red Deer	96	77	40	21	73	46	37	10
Redwater	4	8	2	6	...	6	...	6
Rocky Mountain House	24	15	15	6	20	10	15	5
St. Albert	25	36	...	11	...	11	...	11
St. Paul	34	21	19	6	29	11	19	1
Stettler	64	43	27	6	50	30	24	4
Taber	39	37	14	12	6	9	4	7
Three Hills	22	16	11	5	20	13	11	4
Vegreville	39	24	16	1	32	19	14	1
Vermilion	30	20	14	4	28	18	13	3
Vulcan	21	15	9	3	12	8	6	2
Wainwright	43	31	19	7	29	20	14	5
Westlock	61	17	48	4	54	12	46	4
Wetaskiwin	88	68	35	15	61	43	30	12

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1953

CAUSE OF DEATH (Intermediate List)	Total	Census Divisions																
		Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 11	Div. 12	Div. 13	Div. 14	Div. 15	Div. 16	Div. 17
<b>ALL CAUSES</b>	7646	303	574	118	246	127	1833	286	651	208	323	1809	110	195	341	167	273	82
Male	4786	193	350	76	154	86	1151	193	398	130	186	1138	77	121	216	102	169	46
Female	2860	110	224	42	92	41	682	93	253	78	137	671	33	74	125	65	104	36
<b>I. Infective and Parasitic Diseases</b>	255	6	10	2	8	3	58	11	23	5	5	65	4	11	14	10	5	15
Male	165	4	8	1	7	2	38	6	14	3	4	44	3	5	10	5	4	7
Female	90	2	2	1	1	1	20	5	9	2	1	21	1	6	4	5	1	8
A 1 Tuberculosis of respiratory system	37	2	1		1		5	1	2	1	1	14		3	1	2	1	2
Female	14						5		1			3		3				2
A 2 Tuberculosis of meninges and central nervous system	4						1					1						
Female	5						1					1						
A 3 Tuberculosis of intestines, peritoneum and mesenteric glands	1								1									
Female	3								1									
A 5 Tuberculosis, all other forms	4								1			1						
Female	4								1			1						
A 6 Congenital syphilis	1																	
Female	1																	
A 9 General paralysis of insane	6		2				2				2					1		
Female	6		2				2				2					1		
A 10 All other syphilis	8		1				2		1		2							
Female	8		1				2		1		2							
A 12 Typhoid fever	1						1											
Female	1						1											
A 17 Scarlet fever	2										1							
Female	1										1							
A 18 Streptococcal sore throat	2						2											
Female	2						2											
A 19 Erysipelas	1				1													
Female	1				1													
A 20 Septicaemia and pyaemia	10		1		1		1		1		5							
Female	6										4							
A 21 Diphtheria	2										1					1		
Female	2										1					1		
A 22 Whooping cough	4						1				1					2		1
Female	4						1				1					2		1
A 23 Meningococcal infections	3		1				1				2					1		1
Female	1																	
A 28 Acute poliomyelitis	73	2	1	1	4	2	24	5	9	1	1	16	2		5			1
Female	35	1	2		1	1	9	3	5	2		8			1			

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	Total	CENSUS DIVISIONS																		
		Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 11	Div. 12	Div. 13	Div. 14	Div. 15	Div. 16	Div. 17		
<b>A 30</b> Late effects of acute poliomyelitis and acute infectious encephalitis	1																			
A 32 Measles	2																			1
A 34 Infectious hepatitis	6																			2
A 43 All other diseases classified as infective and parasitic	1																			1
	7																			2
	3																			1
<b>II. Neoplasms</b>	1150	45	86	25	38	18	287	34	96	37	53	275	19	29	54	16	35	16	3	3
A 44 Malignant neoplasm of buccal cavity and pharynx	8																			
A 45 Malignant neoplasm oesophagus	4																			
A 46 Malignant neoplasm of stomach	8																			
A 47 Malignant neoplasm of intestine, except rectum	5																			
A 48 Malignant neoplasm of rectum	136	4	7	5	1	1	31	7	13	4	7	34	3	5	10	1	3	1	1	1
A 49 Malignant neoplasm of larynx	58	2	4	2	2	1	13	5	5	3	2	10	3	3	3	1	1	1	1	1
A 50 Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	55	1	4	1	1	1	17	1	4	5	3	14	1	1	3	1	1	1	1	1
A 51 Malignant neoplasm of breast	32	2	3	2	1	4	12	2	5	2	2	14	1	1	2	1	1	1	1	1
A 52 Malignant neoplasm of cervix uteri	14	1	2				10	2	4	1		7	2	2	1					
A 53 Malignant neoplasm of other and unspecified parts of uterus	3						2		3			3			1					
A 54 Malignant neoplasm of prostate	101	6	4	3	4	1	21	5	7	5	2	28	5	1	5	1	4	1	4	4
A 55 Malignant neoplasm of skin	23	1	1	1	1	1	4	4	4	3	1	7	1	1	1	1	2	2	2	2
	88	1	10	3	3		31	2	7	3	2	16	2	2						
	28	1	1		2		12		2		1	6		1	2					
	17		1				3		1	2	1	7			2					
	69	2	3	2	4		12	1	6	1	8	16	3	4	4	1	2			
	10				1		5					2			1					
	7	1			1		3					2			1					



## VITAL STATISTICS BRANCH

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	Total	Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 11	Div. 12	Div. 13	Div. 14	Div. 15	Div. 16	Div. 17	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
A 73 Epilepsy	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 77 Otitis media and mastoiditis	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 78 All other diseases of the nervous system and sense organs	33	2	1	1	1	1	8	3	1	3	1	9	2	2	1	1	1	1	1
	16	1	1	2	1	3	3	2	4	4	1	9	1	1	1	1	1	1	1
<b>VII. Diseases of the Circulatory System</b>																			
A 79 Rheumatic fever	17	1	1	1	1	1	1	5	2	2	2	5	1	1	1	1	1	1	1
A 80 Chronic rheumatic heart disease	63	2	5	2	2	2	15	4	6	1	4	15	2	2	3	1	1	1	1
A 81 Arteriosclerotic and degenerative heart disease	1262	62	90	22	50	22	335	49	105	30	45	10	14	26	63	21	35	2	2
A 82 Other diseases of heart	103	5	10	5	25	4	153	20	38	7	29	14	7	12	22	7	7	1	1
A 83 Hypertension with heart disease	89	2	9	1	3	3	23	5	4	2	4	23	1	4	4	1	4	1	1
A 84 Hypertension without mention of heart	25	2	2	1	2	3	16	3	8	6	9	15	2	2	9	1	5	1	1
A 85 Diseases of arteries	31	1	2	1	1	1	3	6	4	3	6	9	2	2	1	1	2	2	2
A 86 Other diseases of circulatory system	60	6	6	1	1	4	17	3	9	2	2	25	3	2	2	1	1	1	1
	13	1	1	1	2	3	19	1	3	3	1	19	1	1	1	1	2	2	2
	15	1	1	1	1	1	3	1	1	1	1	3	1	1	1	1	3	3	3
<b>VIII. Diseases of the Respiratory System</b>																			
A 87 Acute upper respiratory infections	481	12	34	4	16	8	115	13	29	14	19	99	5	24	34	21	11	23	8
A 88 Influenza	299	8	17	3	11	5	75	11	20	8	5	62	4	16	20	14	9	11	7
A 89 Lobar pneumonia	182	4	17	1	5	3	40	2	9	6	14	37	1	8	14	7	2	12	1
A 90 Bronchopneumonia	7	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	21	2	5	1	1	1	5	3	2	1	1	1	1	1	1	1	1	1	1
	35	1	5	1	2	1	11	1	1	1	3	7	2	2	3	2	2	2	2
	16	1	1	1	1	1	4	3	8	1	1	3	2	1	6	7	4	1	1
	108	4	5	1	3	2	25	3	8	1	1	30	1	6	6	7	4	1	2
	82	2	4	1	2	2	20	1	3	3	9	19	1	5	2	6	1	1	2





TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	Total	Census Divisions																	
		Div. 1	Div. 2	Div. 3	Div. 4	Div. 5	Div. 6	Div. 7	Div. 8	Div. 9	Div. 10	Div. 11	Div. 12	Div. 13	Div. 14	Div. 15	Div. 16	Div. 17	
A111 Calculi of urinary system .....	2					1	1												
Female .....	2					1	1												
A112 Hyperplasia of prostate .....	48	3	1	1	1	2	15	4	1	3	2	9	2	1	2	1			
A114 Other diseases of genito-urinary system .....	10	1	1	1	1	1	1	1	1			4			1				
Female .....	5		2				1		1			1							
<b>XI. Deliveries and Complications of Pregnancy, Childbirth and the Puerperium</b>	21	1	4				6		1		1	3		1	1		2	1	
A115 Sepsis of pregnancy, childbirth and the puerperium .....	2		1				1												
A116 Toxaemias of pregnancy and the puerperium .....	7	1	1				1			1	2			1					
A117 Haemorrhage of pregnancy and childbirth .....	4													1				1	1
A118 Abortion without mention of sepsis or toxæmia .....	1						1												
A119 Abortion with sepsis .....	2		1									1							
A120 Other complications of pregnancy, childbirth and the puerperium .....	5						3		1									1	
<b>XII, XIII. Diseases of the Skin and Musculoskeletal System</b>	34	4	2	1			9		2	2	1	8		1	1		3		
A122 Arthritis and spondylitis .....	15	1	1				4		1	2		4		1	1		2		
Female .....	19	3	1	1			5		1	1		4		1	1		1		
A123 Muscular rheumatism and rheumatism, unspecified .....	8						2		1	1		2					1		
Female .....	10	3	1				2					3			1				
A126 All other diseases of skin and musculoskeletal system .....	6						1					2							
Female .....	9		1	1			3		1			1		1				1	
<b>XIV. Congenital Malformations</b>	157	4	18	1	5	1	33	3	8	8	8	47	4	3	3	1	6	4	
A127 Spina bifida and meningocele .....	78	1	8	1	1	1	19	3	5	3	7	18	2	1	2		2	4	
Female .....	79	3	10		4		14		5	1	29	2	2	1	1		4		
A128 Congenital malformations of circulatory system .....	8	1			1		2			1	1	1			1				
Female .....	10		1		1		2				2			1	1		1		
Male .....	31	4			1	1	6	1	2		10	2		1	1		1		4
Female .....	33		5		1		6		2	2	1	12			1		2		





TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1953

CAUSE OF DEATH (Intermediate List)		Total	Calgary	Edmonton	Jasper Place	Lethbridge	Medicine Hat	Red Deer
<b>ALL CAUSES</b>	<b>Total</b>	3171	1324	1354	29	208	179	77
	Male	1984	826	856	17	134	109	42
	Female	1187	498	498	12	74	70	35
<b>I. Infective and Parasitic Diseases</b>	<b>Total</b>	94	35	44	4	5	3	3
	Male	65	23	33	2	4	2	1
	Female	29	12	11	2	1	1	2
A 1 Tuberculosis of the respiratory system	Male	16	3	12			1	
	Female	5	3	1	1			
A 5 Tuberculosis, all other forms	Male							
	Female	2			1			1
A 9 General paralysis of insane	Male	3	1			2		
	Female							
A 10 All other syphilis	Male	4	1	2				1
	Female	1	1					
A 17 Scarlet fever	Male	1		1				
	Female	1						
A 18 Streptococcal sore throat	Male	1	1					
	Female							
A 20 Septicaemia and pyaemia	Male	5		4		1		
	Female							
A 21 Diphtheria	Male	1		1				
	Female							
A 23 Meningococcal infections	Male	2		2				
	Female							
A 28 Acute poliomyelitis	Male	29	16	11	1		1	
	Female	16	7	6		1	1	1
A 32 Measles	Male							
	Female	1		1				
A 34 Infectious hepatitis	Male							
	Female	1	1					
A 43 All other diseases classified as infective and parasitic	Male	3	1		1	1		
	Female	2		2				
<b>II. Neoplasms</b>	<b>Total</b>	518	229	221		31	29	8
	Male	292	132	124		17	13	6
	Female	226	97	97		14	16	2
A 44 Malignant neoplasm of buccal cavity and pharynx	Male	4	3	1				
	Female	2						
A 45 Malignant neoplasm of oesophagus	Male	5	3	1		1		
	Female	4	1	1		1	1	
A 46 Malignant neoplasm of stomach	Male	55	23	26		3	2	1
	Female	20	9	8		3		
A 47 Malignant neoplasm of intestine, except rectum	Male	26	13	11		1	1	
	Female	22	10	9		1	1	1
A 48 Malignant neoplasm of rectum	Male	17	8	6			2	1
	Female	6	2	3		1		
A 49 Malignant neoplasm of larynx	Male	2		2				
	Female							
A 50 Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male	49	19	23		3	4	
	Female	11	3	7			1	
A 51 Malignant neoplasm of breast	Male							
	Female	44	25	15		3	1	
A 52 Malignant neoplasm of cervix uteri	Female	17	11	6				
A 53 Malignant neoplasm of other and unspecified parts of uterus	Female	9	2	7				
A 54 Malignant neoplasm of prostate	Male	25	9	12		1	1	2
A 55 Malignant neoplasm of skin	Male	6	5	1				
	Female	4	3	1				
A 56 Malignant neoplasm of bone and connective tissue	Male	3	3					
	Female	2	2					
A 57 Malignant neoplasm of all other and unspecified sites	Male	64	33	22		5	3	1
	Female	60	20	25		5	9	1
A 58 Leukaemia and aleukaemia	Male	17	7	9		1		
	Female	15	6	8			1	
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	Male	17	6	8		2		1
	Female	5		3			2	

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)		Total	Calgary	Edmonton	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A 60	Benign neoplasms and neoplasms of unspecified nature	Male Female	2 5	2 3	2 2			
<b>III, IV. Allergic Disorders and Endocrine Metabolic and Blood Diseases</b>		<b>Total</b>	<b>63</b>	<b>21</b>	<b>31</b>	<b>6</b>	<b>3</b>	<b>2</b>
		Male	34	10	15	5	2	2
		Female	29	11	16	1	1	
A 63	Diabetes mellitus	Male Female	22 14	6 4	10 8	5 1	1 1	
A 64	Avitaminosis and other deficiency states	Male Female	2 2		2 2			
A 65	Anaemias	Male Female	5 4	1 3	2 1		1 1	
A 66	Allergic disorders; all other endocrine, metabolic and blood diseases	Male Female	7 9	3 4	3 5			1
<b>V. Mental, Psychoneurotic, and Personality Disorders</b>		<b>Total</b>	<b>10</b>	<b>6</b>	<b>4</b>			
		Male	7	4	3			
		Female	3	2	1			
A 67	Psychoses	Male Female	2 1	1	1 1			
A 68	Psychoneuroses and disorders of personality	Male Female	4 1	2 1	2 1			
A 69	Mental deficiency	Male Female	1 1	1 1				
<b>VI. Diseases of the Nervous System and Sense Organs</b>		<b>Total</b>	<b>390</b>	<b>154</b>	<b>160</b>	<b>5</b>	<b>27</b>	<b>28</b>
		Male	222	88	95	3	14	16
		Female	168	66	65	2	13	10
A 70	Vascular lesions affecting central nervous system	Male Female	195 159	77 63	84 62	2 2	13 11	13 10
A 71	Nonmeningococcal meningitis	Male Female	5 1	2	2 1			1
A 72	Multiple sclerosis	Male Female	3 3	2	1 3			
A 73	Epilepsy	Male Female	3 1		3 1			
A 77	Otitis media and mastoiditis	Male Female	2 1	2			1	
A 78	All other diseases of the nervous system and sense organs	Male Female	17 3	7 1	6	1	1 1	2
<b>VII. Diseases of the Circulatory System</b>		<b>Total</b>	<b>1129</b>	<b>490</b>	<b>463</b>	<b>12</b>	<b>69</b>	<b>74</b>
		Male	744	321	306	9	52	47
		Female	385	169	157	3	17	27
A 79	Rheumatic fever	Male Female	7 1	4	3 1			
A 80	Chronic rheumatic heart disease	Male Female	24 20	12 11	10 6	1	1	2
A 81	Arteriosclerotic and degenerative heart disease	Male Female	572 261	255 118	230 109	8 1	37 10	33 17
A 82	Other diseases of heart	Male Female	45 23	18 8	19 8		4 2	4 2
A 83	Hypertension with heart disease	Male Female	42 32	18 15	15 12	1 1	6 3	2 1
A 84	Hypertension without mention of heart	Male Female	11 10		8 4	1 1	2 2	
A 85	Diseases of arteries	Male Female	40 34	13 13	19 15	3	5	1
A 86	Other diseases of circulatory system	Male Female	3 4	1 2	2 2			
<b>VIII. Diseases of the Respiratory System</b>		<b>Total</b>	<b>153</b>	<b>59</b>	<b>66</b>	<b>3</b>	<b>12</b>	<b>7</b>
		Male	102	39	47	7	5	4
		Female	51	20	19	3	5	2
A 87	Acute upper respiratory infections	Male Female	1 2		1 2			
A 88	Influenza	Male Female	5 6	2	2 1	3		
A 89	Lobar pneumonia	Male Female	13 3	6 2	6 1		2 1	1



TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)		Total	Calgary	Edmonton	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A126	All other diseases of skin and musculoskeletal system	Male Female	2 4	3 1	1 1	1 1	1 1	1 1
<b>XIV. Congenital Malformations</b>		<b>Total</b>	<b>70</b>	<b>24</b>	<b>38</b>	<b>4</b>	<b>2</b>	<b>2</b>
		Male	35	15	16	2	1	1
		Female	35	9	22	2	1	1
A127	Spina bifida and meningocele	Male Female	4 3	2 1	1 2	1 1	1 1	1 1
A128	Congenital malformations of circulatory system	Male Female	15 15	5 5	9 8	1 1	1 1	1 1
A129	All other congenital malformations	Male Female	16 17	8 3	6 12	1 1	1 1	1 1
<b>XV. Certain Diseases of Early Infancy</b>		<b>Total</b>	<b>201</b>	<b>81</b>	<b>99</b>	<b>1</b>	<b>9</b>	<b>5</b>
		Male	117	48	55	5	5	4
		Female	84	33	44	1	4	2
A130	Birth injuries	Male Female	25 14	13 7	11 7	1 1	1 1	1 1
A131	Postnatal asphyxia and atelectasis	Male Female	31 22	10 5	16 15	2 2	2 1	1 1
A132	Infections of the newborn	Male Female	10 7	3 3	6 4	1 1	1 1	1 1
A133	Haemolytic disease of new born	Male Female	4 3	1 1	4 1	1 1	1 1	1 1
A134	All other defined diseases of early infancy	Male Female	9 3	6 3	2 3	1 1	1 1	1 1
A135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	Male Female	38 35	16 17	16 14	2 2	2 2	2 2
<b>XVI. Symptoms, Senility and Ill-Defined Conditions</b>		<b>Total</b>	<b>48</b>	<b>13</b>	<b>27</b>	<b>1</b>	<b>5</b>	<b>2</b>
		Male	29	8	18	2	2	1
		Female	19	5	9	1	3	1
A136	Senility without mention of psychosis	Male Female	4 3	1 2	2 1	1 1	1 1	1 1
A137	Ill-defined and unknown causes	Male Female	25 16	7 3	16 8	2 1	2 3	1 1
<b>EXVII. Accidents, Poisonings and Violence (Classification According to External Cause)</b>		<b>Total</b>	<b>252</b>	<b>86</b>	<b>121</b>	<b>3</b>	<b>18</b>	<b>13</b>
		Male	194	64	94	3	14	11
		Female	58	22	27	4	2	3
AE138	Motor vehicle accidents	Male Female	79 22	26 8	40 10	3 2	3 2	4 2
AE139	Other transport accidents	Male Female	11 1	5 1	3 4	1 1	1 1	1 1
AE140	Accidental poisoning	Male Female	8 2	2 1	4 1	1 1	1 1	2 1
AE141	Accidental falls	Male Female	23 16	8 5	9 9	5 1	1 1	1 1
AE142	Accident caused by machinery	Male Female	5 5	2 2	3 3	1 1	1 1	1 1
AE143	Accidents caused by fire and explosion of combustible material	Male Female	5 6	1 2	3 3	1 1	1 1	1 1
AE144	Accident caused by hot substance, corrosive hot liquid, steam, and radiation	Male Female	1 4	1 4	1 1	1 1	1 1	1 1
AE145	Accidents caused by firearms	Male Female	4 4	4 4	1 1	1 1	1 1	1 1
AE146	Accidental drowning and submersion	Male Female	10 1	1 1	6 1	1 1	2 1	1 1
AE147	All other accidental causes	Male Female	24 3	8 2	12 1	2 1	1 1	1 1
AE148	Suicide and self-inflicted injury	Male Female	20 4	5 1	11 2	1 1	2 1	1 1
AE149	Homicide and injury purposely inflicted by other persons (not in war)	Male Female	5 2	2 2	3 2	1 1	1 1	1 1

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)		Total	Calgary	Edmonton	Jasper Place	Lethbridge	Medicine Hat	Red Deer
<b>NXVII. Accidents, Poisonings and Violence (Classification according to Nature of Injury)</b>		<b>Total</b>	<b>252</b>	<b>86</b>	<b>121</b>	<b>3</b>	<b>18</b>	<b>13</b>
	<b>Male</b>	<b>194</b>	<b>64</b>	<b>94</b>	<b>3</b>	<b>14</b>	<b>11</b>	<b>8</b>
	<b>Female</b>	<b>58</b>	<b>22</b>	<b>27</b>	<b>...</b>	<b>4</b>	<b>2</b>	<b>3</b>
AN138	Fracture of skull .....	Male	51	17	28	...	4	1
		Female	10	5	3	...	1	1
AN139	Fracture of spine and trunk .....	Male	13	5	5	...	1	2
		Female	4	...	4	...	...	...
AN140	Fracture of limbs .....	Male	9	4	5	...	...	...
		Female	16	6	8	...	1	1
AN143	Head injury (excluding fracture) .....	Male	22	4	12	...	2	4
		Female	5	3	1	...	...	1
AN144	Internal injury of chest, abdomen, and pelvis	Male	39	15	15	3	3	1
		Female	4	1	2	...	1	...
AN145	Laceration and open wounds .....	Male	6	5	1	...	...	...
		Female	3	...	2	...	1	...
AN147	Effects of foreign body entering through orifice	Male	5	1	4	...	...	...
		Female	3	2	1	...	...	...
AN148	Burns .....	Male	4	1	2	...	1	...
		Female	6	2	3	...	...	1
AN149	Effects of poisons .....	Male	12	3	5	...	...	1
		Female	4	2	1	...	...	1
AN150	All other and unspecified effects of external causes .....	Male	33	9	17	...	3	4
		Female	3	1	2	...	...	...







TABLE 8—DEATHS, BY CAUSE AND SEX, BY AGE, IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	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+ years
A 58 Leukaemia and aleukaemia	Male 43		2		2	1	9					1	4	2	3	2	2	2	2	7	3	1	1	
	Female 26	2				2	1				1	1				4	3	1	1	8	3			
A 59 Lymphosarcoma and other neoplasm of lymphatic and haematopoietic system	Male 30					1	3			2		3		1	3	2	3	5	2	4				
	Female 18					1	1									2	2	3	5	2	4			
A 60 Benign neoplasm and neoplasms of unspecified nature	Male 10													3	1	2	2	1	2	2	1		1	
	Female 11					1	1				1	1	1	1	1	1	2	1	1	1				
<b>III., IV.—Allergic Disorders and Endocrine, Metabolic and Blood Diseases</b>	<b>Total</b>	<b>190</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>15</b>	<b>20</b>	<b>20</b>	<b>33</b>	<b>25</b>	<b>20</b>	<b>11</b>	
A 62 Thyrotoxicosis with or without goitre	Male 1																							
	Female 5													1	1	1	1	1	1	1				
A 63 Diabetes mellitus	Male 52					1	1	1	1	1	2	1	2	2	2	4	7	10	8	5	2			
	Female 47										2	1	1	1	4	5	6	10	7	3	4			
A 64 Avitaminosis and other deficiency states	Male 1																							
	Female 3																							
A 65 Anaemias	Male 14																							
	Female 6																							
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	Male 33	2	1	1	1	1	1	1	1	1	1	2	2	2	3	1	3	6	1	3	2	6	2	2
	Female 28	3	1																					
<b>V.—Mental, Psychoneurotic, and Personality Disorders</b>	<b>Total</b>	<b>26</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	
	Male 12	2																						
	Female 8	2																						
A 67 Psychoses	Male 4																							
	Female 1																							
A 68 Psychoneuroses and disorders of personality	Male 6																							
	Female 3																							
A 69 Mental deficiency	Male 2																							
	Female 4	2																						
<b>VI.—Diseases of the Nervous System and Sense Organs</b>	<b>Total</b>	<b>942</b>	<b>15</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>9</b>	<b>17</b>	<b>14</b>	<b>37</b>	<b>46</b>	<b>84</b>	<b>117</b>	<b>177</b>	<b>159</b>	<b>134</b>	<b>97</b>	<b>48</b>	<b>49</b>	
	Male 528	8	3	3	2	1	2	3	4	8	7	8	7	15	22	44	72	99	93	81	48	48	48	48
	Female 414	7			2	1	1	1	1	2	2	9	7	22	24	40	45	78	66	53	49	48	49	



TABLE 8—DEATHS, BY CAUSE AND SEX, BY AGE, IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	AGES														Total									
	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+ years	Not stated
A 93 Bronchitis, chronic and unqualified	2													1	1	3	2	2	2	2	2	2	3	3
A 94 Hypertrophy of tonsils and adenoids	1			2															1	1	1	1	1	1
A 95 Empyema and abscess of lung						1																		
A 96 Pleurisy		1	1																					
A 97 All other respiratory diseases	3	1		1						1		2	1	1	1	5	3	8	5	9	7	1	7	3
	17	5																						
<b>Total</b>	19	5																						
Male	10	3																						
Female	9	2		2								2	1	1	1	5	3	8	5	9	7	1	7	3
<b>Total</b>	306	40	6	2	2	4	4	8	7	7	21	18	12	25	26	49	36	19	11					
IX.—Diseases of the Digestive System	181	23	3	1	3	3	4	4	2	4	16	12	11	15	13	31	19	9	5					
Male	125	17	3	1	2	1	1	4	5	3	5	6	1	10	13	18	17	10	6					
Female	56	6	2	2	2	2	2	4	4	4	4	4	4	4	4	13	19	9	5					
A 98 Diseases of teeth and supporting structures	1					1																		
A 99 Ulcer of stomach	2	1	1																					
A100 Ulcer of duodenum	9															4	2	5	3					
A101 Gastritis and duodenitis	5									1						1	1	1	1					
A102 Appendicitis	1																							
A103 Intestinal obstruction and hernia	11		1			3	2	1																
A104 Gastro-enteritis and colitis, except diarrhoea of the new-born	4				1	1										2	1	4	6	5	5	1		
Male	30	3			1	1										2	1	4	6	5	5	1		
Female	25	3														2	1	3	3	2	2	3	4	
A105 Cirrhosis of liver	28	19	2																					
Male	19	10	1																					
Female	33	14	1																					
A106 Cholelithiasis and cholecystitis	19																							
Male	19																							
Female	24																							
A107 Other diseases of digestive system	28	1																						
Male	24																							
Female	18	3	1																					
<b>Total</b>	187	2			1	6	1	2	6	7	7	14	17	16	32	21	20	24						
Male	132	1			1	4	1	2	2	3	3	9	10	12	26	18	16	19						
Female	55	1				2	1	4	4	4	4	5	5	7	6	3	4	5						
<b>Total</b>	187	2			1	6	1	2	6	7	7	14	17	16	32	21	20	24						
Male	132	1			1	4	1	2	2	3	3	9	10	12	26	18	16	19						
Female	55	1				2	1	4	4	4	4	5	5	7	6	3	4	5						













































TABLE 9—DEATHS, BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, AND MONTH OF DEATH, IN ALBERTA, 1953—Continued

CAUSE OF DEATH (Intermediate List)	Total	Under 15 yrs.	Marital Status												Residual	MONTHS											
			Single			Married			Widowed			January	February	March		April	May	June	July	August	September	October	November	December			
			Age			Age			Age																		
			15-24	25-44	45-64	15-24	25-44	45-64	15-24	25-44	45-64														65+	65+	45-64
A 58 Leukaemia and aleukaemia	43	13	1	1	1	6	9	10	3	4	3	4	3	4	2	2	1	2	2	2	6	5	5				
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	26	6	1	1	1	1	5	7	2	4	1	1	2	3	4	1	2	2	2	2	3	4	1				
A 60 Benign neoplasms and neoplasms of unspecified nature	30	5	1	1	1	4	9	6	1	3	4	2	3	5	4	2	3	3	3	3	3	5	4				
	18	1	1	1	1	3	5	6	1	2	2	1	2	3	1	1	3	1	1	1	3	3	1				
	10	2	2	2	2	1	2	2	1	2	2	2	2	2	2	2	2	2	1	1	2	1	1				
	11	2	1	1	1	2	2	2	1	2	2	2	2	2	2	2	2	1	1	1	2	1	1				
<b>III, IV. Allergic Disorders and Endocrine Metabolic and Blood Diseases</b>	190	14	1	3	7	13	35	61	1	6	43	1	16	19	25	18	20	12	10	14	10	17	21	8			
A 62 Thyrototoxicosis with or without goitre	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
A 63 Diabetes mellitus	52	1	2	4	1	3	9	19	1	12	4	3	7	6	4	1	5	4	1	5	4	6	5	2			
A 64 Avitaminosis and other deficiency states	47	1	1	1	3	8	15	5	14	4	7	6	4	4	3	2	2	2	3	4	3	4	6	2			
A 65 Anaemias	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	14	1	1	1	1	1	1	3	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
	6	1	1	1	1	1	1	3	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
	33	5	1	1	1	5	10	10	1	4	1	5	1	6	1	3	3	5	1	3	3	5	1	2			
	28	5	1	1	1	5	5	6	6	6	6	4	5	5	5	1	2	1	2	1	3	1	1	1			
<b>V. Mental, Psychoneurotic, and Personality Disorders</b>	20	5	1	3	2	2	2	2	1	1	1	2	3	2	1	1	1	1	1	1	3	3	3	3			
A 67 Psychoses	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
A 68 Psychoneuroses and disorders of personality	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
A 69 Mental deficiency	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
<b>VI. Diseases of the Nervous System and Sense Organs</b>	942	27	6	10	27	79	3	29	131	331	2	22	287	8	74	82	85	75	79	74	79	90	56	81	84		
	528	16	6	7	21	65	1	17	61	219	5	103	7	39	35	52	47	40	41	47	50	27	49	54			
	414	11	3	6	14	2	12	70	112	2	17	164	1	35	47	33	28	39	33	32	40	29	32	30			











TABLE 10—INFANT DEATHS AND HOSPITAL INFANT DEATHS, BY OCCURRENCE AND RESIDENCE, FOR CENSUS DIVISIONS, ALBERTA, 1953

CENSUS DIVISIONS	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere
ALBERTA .....	932	930	10	8	706	704	9	7
Division No. 1 .....	26	27	6	7	15	16	3	4
Division No. 2 .....	63	60	6	3	48	48	3	3
Division No. 3 .....	13	15	2	4	11	11	2	2
Division No. 4 .....	23	29	...	6	12	18	...	6
Division No. 5 .....	6	12	...	6	6	12	...	6
Division No. 6 .....	208	200	17	9	181	170	17	6
Division No. 7 .....	25	23	3	1	15	15	1	1
Division No. 8 .....	66	62	10	6	51	51	5	5
Division No. 9 .....	16	25	3	12	9	18	1	10
Division No. 10 .....	33	39	4	10	28	32	2	6
Division No. 11 .....	235	207	39	11	212	181	37	6
Division No. 12 .....	18	21	4	7	14	19	2	7
Division No. 13 .....	32	34	1	3	24	25	1	2
Division No. 14 .....	37	40	5	8	23	25	4	6
Division No. 15 .....	52	55	1	4	25	28	1	4
Division No. 16 .....	45	49	...	4	25	29	...	4
Division No. 17 .....	34	32	3	1	7	6	1	...

TABLE 11—INFANT DEATHS AND HOSPITAL INFANT DEATHS, BY OCCURRENCE AND RESIDENCE, FOR URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1953

CITY, TOWN OR VILLAGE	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, residence elsewhere	Total by occurrence	Total by residence	By occurrence, occurrence elsewhere	By residence, occurrence elsewhere
Athabasca	5	2	3	...	3	1	2	...
Barrhead	3	1	2	...	3	1	2	...
Beverly	1	1	...	1	1	1	...	1
Black Diamond	...	...	...	...	...	...	...	...
Blairmore	...	1	...	1	...	1	...	1
Bonnyville	4	1	3	...	3	...	3	...
Bowness	...	3	...	3	...	2	...	2
Brooks	9	3	6	...	9	3	6	...
Calgary	166	135	36	5	149	119	34	4
Camrose	8	5	3	...	4	3	1	...
Cardston	6	3	3	...	4	3	1	...
Claresholm	1	2	...	1	...	1	...	1
Coleman	...	1	...	1	...	1	...	1
Didsbury	3	2	2	1	3	2	2	1
Drumheller	7	1	6	...	7	1	6	...
Edmonton	227	152	79	4	212	137	77	2
Edson	13	6	7	...	13	6	7	...
Forest Lawn	1	3	...	2	...	2	...	2
Fort Saskatchewan	...	1	...	1	...	1	...	1
Grande Prairie	13	9	5	1	8	6	3	1
Hanna	4	3	1	...	4	3	1	...
High Prairie	22	3	19	...	13	1	12	...
High River	8	4	4	...	7	3	4	...
Innisfail	...	...	...	...	...	...	...	...
Jasper Place	...	3	...	3	...	3	...	3
Lacombe	7	6	3	2	6	5	2	1
Leduc	1	1	...	1	...	1	...	1
Lethbridge	27	18	9	...	25	17	8	...
Lloydminster	...	2	...	2	...	2	...	2
Macleod	2	3	...	1	2	3	...	1
Magrath	1	...	1	...	...	...	...	...
McLennan	12	4	8	...	10	4	6	...
Medicine Hat	18	9	9	...	14	7	7	...
Olds	7	2	5	...	7	2	5	...
Peace River	5	2	3	...	2	...	2	...
Pincher Creek	4	3	2	1	4	3	2	1
Ponoka	5	6	1	2	4	6	...	2
Raymond	6	7	...	1	1	2	...	1
Redcliff	1	1	...	1	...	...	...	...
Red Deer	12	8	6	2	11	8	5	2
Redwater	...	2	...	2	...	2	...	2
Rocky Mountain House	4	5	...	1	4	4	...	...
St. Albert	...	...	...	...	...	...	...	...
St. Paul	10	2	8	...	10	2	8	...
Stettler	11	7	5	1	10	6	5	1
Taber	4	6	2	4	1	2	1	2
Three Hills	4	2	2	...	4	2	2	...
Vegreville	5	3	2	...	4	3	1	...
Vermilion	4	2	2	...	4	2	2	...
Vulcan	4	2	2	...	2	1	1	...
Wainwright	8	7	2	1	4	5	...	1
Westlock	8	...	8	...	8	...	8	...
Wetaskiwin	14	7	7	...	13	7	6	...











TABLE 13—CAUSES OF INFANT DEATHS, BY SEX AND CALENDAR MONTH OF DEATH, FOR ALBERTA, 1953

List No. Int.	SELECTED CAUSES	Total under 1 year		MONTH OF DEATH																								
		Total	Male	Female	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.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
930	ALL CAUSES	520	410	51	46	39	37	53	35	42	39	45	37	41	29	40	30	34	35	37	29	55	35	46	23	37	35	
001-019	Tuberculosis, all forms	5	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	
020-029	Syphilis	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	
045-048	Dysentery, all forms											1																
050	Scarlet fever																											
052	Erisipelas																											
055	Diphtheria																											
056	Whooping cough	9	3	6	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
057	Meningococcal infections	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
085	Measles	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
204	Leukaemia and aleukaemia																											
140-203, 205	Malignant neoplasm and other neoplasms of lymphatic and haemotopoietic tissues.	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
210-229	Benign neoplasms	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
273	Diseases of thymus gland	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
325	Mental deficiency	8	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
340	Meningitis (nonmeningococcal)	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
391, 392	Otitis media	10	5	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
470-475	Acute upper respiratory infection	5	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
480-483	Influenza	121	69	52	8	7	6	9	5	8	6	5	1	6	3	4	2	6	2	4	3	8	5	7	2	4	6	
490-493	Pneumonia (four weeks and over)	7	4	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
500-502	Bronchitis	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
543	Gastritis and duodenitis	29	19	10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
560-570	Hernia and intestinal obstruction	119	58	61	2	5	5	3	6	7	6	9	7	4	4	3	9	4	3	8	7	8	7	4	3	4	5	
571	Gastro-enteritis and colitis	87	54	33	9	4	2	7	5	1	3	4	5	3	2	2	5	2	1	2	7	3	4	1	4	4		
572	Chronic enteritis and ulcerative colitis	46	27	19	6	3	1	4	2	1	3	4	2	1	1	2	2	1	1	3	2	4	2	2	1	1		
760, 761	Congenital malformations	41	27	14	3	1	1	3	3	1	2	1	1	1	2	1	3	2	1	4	3	1	2	2	1	3		
762	Injury at birth— —without mention of immaturity —with immaturity	126	78	48	5	6	4	4	7	5	6	4	5	5	9	3	6	1	4	7	4	4	10	3	9	4		
763	Postnatal asphyxia and atelectasis— —without mention of immaturity —with immaturity	36	19	17	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
763	Pneumonia of newborn— —without mention of immaturity —with immaturity	29	16	13	3	3	1	5	3	4	4	3	3	7	1	1	4	1	4	5	3	3	3	8	1	6		
763	Pneumonia of newborn— —without mention of immaturity —with immaturity	18	10	8	3	4	1	5	3	4	4	3	2	1	1	2	2	1	4	5	3	3	3	8	1	6		
763	Pneumonia of newborn— —without mention of immaturity —with immaturity	11	6	5	1	1	1	2	1	1	1	1	1	1	1	2	2	1	4	5	1	1	1	1	1	2		



## VITAL STATISTICS BRANCH

TABLE 14—DEATHS AT ALL AGES, ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1953

List Abbrev.	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.....	1,462	78	10	61	54	692	267	70	58	51	121
B 2	010-019	Tuberculosis, other forms.....	348	33	3	11	15	348	44	19	29	17	17
B 3	020-029	Syphilis and its sequelae.....	283	3	2	11	7	100	76	16	26	16	26
B 4	040	Typhoid fever.....	11	.....	.....	1	1	7	2	.....	.....	1	.....
B 5	043	Cholera.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 6	045-048	Dysentery, all forms.....	32	.....	.....	1	2	16	7	4	.....	.....	1
B 7	050-051	Scarlet fever, and streptococcal sore throat.....	42	2	1	3	1	18	5	2	3	5	2
B 8	055	Diphtheria.....	15	1	.....	1	.....	8	.....	.....	.....	3	2
B 9	056	Whooping cough.....	134	9	.....	6	7	69	12	6	6	12	7
B 10	057	Meningococcal infections.....	99	3	.....	2	4	40	23	7	8	4	8
B 11	058	Plague.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 12	080	Acute poliomyelitis.....	481	11	1	6	5	33	124	91	72	108	30
B 13	084	Smallpox.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 14	085	Measles.....	140	5	.....	2	4	48	36	12	8	8	17
B 15	100-108	Typhus and other rickettsial diseases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
B 16	110-117	Malaria.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 17	030,039,041,042, 044,049,052-054, 059-074,081-083, 086-096,120-138 140-205	All other diseases classified as infective and parasitic.....	367	13	4	18	16	108	105	24	23	30	26
B 18	(140-200,202 203,205) (201) (204) 210-239 260 290-293 330-334 340 400-402 410-416 420-422 430-434 440-443 444-447 480-483 490-493 500-502	Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues..... Cancer, excluding Hodgkin's disease, leukaemia and aleukaemia..... Hodgkin's disease..... Leukaemia and aleukaemia..... Benign and unspecified neoplasms..... Diabetes mellitus..... Anaemias..... Vascular lesions affecting central nervous system..... Nonmeningococcal meningitis..... Rheumatic fever..... Chronic rheumatic heart disease..... Arteriosclerosis and degenerative heart disease..... Other diseases of heart..... Hypertension with heart disease..... Hypertension without mention of heart..... Influenza..... Pneumonia..... Bronchitis.....	19,120	371	153	961	635	5,042	6,782	1,101	1,031	1,129	1,915
B 19			18,151	354	150	927	607	4,832	6,423	1,035	965	1,047	1,811
B 20			192	9	.....	7	1	42	75	15	10	13	20
B 21			777	8	3	27	27	168	284	51	56	69	84
B 22			366	8	4	20	16	95	119	23	25	21	35
B 23			1,619	16	5	62	57	522	569	84	77	99	128
B 24			.....	.....	.....	26	14	117	124	25	26	20	30
B 25			14,107	273	117	783	478	2,644	6,092	823	748	851	1,298
B 26			254	11	2	7	13	134	55	16	16	13	13
B 27			.....	.....	.....	9	10	116	56	12	8	21	17
B 28			1,592	42	13	76	29	401	553	91	95	122	170
B 29			33,274	313	228	1,361	1,086	6,901	14,411	1,806	1,648	1,807	3,713
B 30			1,994	65	9	116	89	625	459	140	152	167	172
B 31			4,445	77	27	266	203	1,450	1,452	207	178	178	386
B 32			1,068	29	10	61	50	404	269	53	54	56	82
B 33			1,176	55	22	52	34	557	285	41	63	33	34
B 34			4,695	142	41	179	229	1,152	1,507	305	290	324	436
B 35			541	20	7	27	15	124	174	41	31	33	69

B33	540-541	Ulcer of stomach and duodenum	753	8	5	25	28	173	276	59	35	48	96
B34	550-553	Appendicitis	224	4	3	9	10	87	65	5	16	15	10
B35	560-561,570	Intestinal obstruction and hernia	775	10	5	36	23	237	237	46	41	55	85
B36	543,571,572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	1,219	36	13	34	59	485	317	71	100	49	55
B37	581	Cirrhosis of liver	726	8	.....	26	14	211	270	35	29	47	86
B38	590-594	Nephritis and nephrosis	2,616	32	20	95	87	1,454	535	84	86	108	115
B39	610	Hyperplasia of prostate	596	14	6	23	28	134	221	27	38	48	57
B40	640-652,660, 670-689	Complications of pregnancy, childbirth and the puerperium	324	19	2	14	16	136	69	16	13	21	18
B41	750-759	Congenital malformations	2,586	68	15	114	106	913	801	106	122	157	184
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	2,736	68	7	100	121	927	848	141	127	213	184
B43	763-768	Infections of the newborn	774	28	3	38	42	392	134	35	37	37	28
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	3,975	159	17	155	168	1,522	1,053	206	224	243	228
B45	780-795	Senility without mention of psychosis, ill-defined and unknown causes	1,881	273	34	116	201	513	299	114	79	144	108
B46	Residual	All other diseases	10,085	250	77	457	352	3,143	3,092	576	549	593	996
BE47	E810-E835 (E810-E825) (E830-E835)	Motor vehicle accidents	2,121	26	14	132	125	969	1,084	115	161	263	232
BE48	E800-E802, E840-E962	Traffic accidents	3,053	25	14	129	117	963	1,053	113	158	254	227
BE49	E963, E970-E979	Non-traffic accidents	68	1	.....	3	8	6	31	2	3	9	5
BE50	E964, E965, E980-E999	All other accidents	5,521	132	37	267	163	1,363	1,858	279	277	388	757
		Suicide and self-inflicted injury	1,052	9	5	33	18	187	406	73	51	72	198
		Homicide and operations of war	176	3	1	6	2	48	69	8	6	16	17
		All causes	127,381	2,733	926	5,808	4,637	34,469	45,242	7,015	6,687	7,646	12,218



Table 15—DEATH RATES PER 100,000 POPULATION AT ALL AGES, ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF CAUSES, BY PROVINCES, 1953

Abbrev. List	Int. List No.	Detailed List	CAUSE OF DEATH										
			Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
B 1	001-008	Tuberculosis of respiratory system	9.9	20.4	9.4	9.2	10.1	16.2	5.5	8.7	6.7	5.1	9.8
B 2	010-019	Tuberculosis, other forms	2.4	8.6	2.3	1.7	2.8	3.6	0.9	2.3	3.4	1.7	2.0
B 3	020-029	Syphilis and its sequelae	1.9	0.8	1.9	1.7	1.3	2.3	1.6	2.0	3.0	1.6	2.1
B 4	040	Typhoid fever	2.1	.....	.....	.....	0.2	0.2	3	.....	0.1	.....	.....
B 5	043	Cholera	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 6	045-048	Dysentery, all forms	0.2	.....	0.9	0.2	0.4	0.4	0.1	0.5	.....	0.1	0.1
B 7	050-051	Scarlet fever, and streptococcal sore throat	0.3	0.5	0.9	0.5	0.2	0.4	0.1	0.2	0.3	0.5	0.2
B 8	055	Diphtheria	0.1	0.3	.....	0.2	.....	0.2	.....	.....	.....	0.3	0.2
B 9	056	Whooping cough	0.9	2.3	.....	0.9	1.3	1.6	0.2	0.7	0.7	1.2	0.6
B 10	057	Meningococcal infections	0.7	0.8	.....	0.3	0.7	0.9	0.5	0.9	0.4	0.4	0.7
B 11	058	Plague	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 12	080	Acute poliomyelitis	3.3	2.9	0.9	0.9	0.9	0.8	2.5	11.2	8.4	10.8	2.4
B 13	084	Smallpox	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B 14	085	Measles	0.9	1.3	.....	0.3	0.7	1.1	0.7	1.5	0.9	0.8	1.4
B 15	100-108	Typhus and other rickettsial diseases	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.1
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	2.5	3.4	3.8	2.7	3.0	2.5	2.1	3.0	2.7	3.0	2.1
B 18	140-205 (140-200,202 203,205) (201) (204) 210-239 260 290-293 330-334 340 400-402 410-416 420-422 430-434 440-443 444-447 480-483 490-493 500-502	Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues Cancer, excluding Hodgkin's disease, leukaemia and aleukaemia Hodgkin's disease Leukaemia and aleukaemia Benign and unspecified neoplasms Diabetes mellitus Anaemias Vascular lesions affecting central nervous system Nonmeningococcal meningitis Rheumatic fever Chronic rheumatic heart disease Arteriosclerotic and degenerative heart disease Other diseases of heart Hypertension with heart disease Hypertension without mention of heart Influenza Pneumonia Bronchitis	129.6	96.9	144.3	144.9	118.5	118.1	138.5	136.1	119.7	112.7	155.7
B 19			123.0	92.4	141.5	139.8	113.2	113.2	131.2	127.9	112.1	104.5	147.2
B 20			1.3	2.3	.....	1.1	0.2	1.0	1.5	1.9	1.2	1.3	1.6
B 21			5.3	2.1	2.8	4.1	5.0	3.9	5.8	6.3	6.5	6.9	6.8
B 22			2.5	2.1	3.8	3.0	3.0	2.2	2.4	2.8	2.9	2.1	2.8
B 23			11.0	4.2	4.7	9.4	10.6	12.2	11.6	10.4	8.9	9.9	10.4
B 24			2.6	0.5	0.9	3.9	2.6	2.7	2.5	3.1	3.0	2.0	2.4
B 25			95.6	71.3	110.4	118.1	89.2	61.9	124.4	101.7	86.9	84.9	105.5
B 26			1.9	2.9	1.9	1.1	2.4	3.1	1.1	2.0	1.9	1.3	1.1
B 27			1.7	1.0	0.9	1.4	1.9	2.7	1.1	1.5	0.9	1.4	1.4
B 28			10.8	11.0	12.3	11.5	5.4	9.4	11.3	11.2	11.0	12.2	13.8
B 29			225.3	81.7	215.1	205.3	202.6	161.7	294.3	223.2	191.4	180.3	301.9
B 30			13.5	17.0	8.5	17.5	16.6	14.6	9.4	17.3	17.7	16.7	14.0
B 31			30.1	20.1	25.5	40.1	37.9	34.0	29.7	25.6	23.1	17.8	31.4
B 32			7.2	7.6	9.4	9.2	9.3	7.6	5.5	6.6	6.3	5.6	6.7
B 33			8.0	14.4	20.8	7.8	6.3	13.0	5.8	5.1	7.3	3.8	2.8
B 34			31.2	37.1	38.7	27.0	42.7	27.0	30.8	37.7	33.7	32.3	35.4
B 35			3.7	5.2	6.6	4.1	2.8	2.9	3.6	5.1	3.6	3.3	5.6

B33	540-541	Ulcer of stomach and duodenum	5.1	2.1	4.7	3.8	5.2	4.1	5.6	7.3	4.1	4.8	7.8
B34	550-553	Appendicitis	1.5	1.0	2.8	1.4	1.9	2.0	1.3	0.6	1.9	1.5	0.8
B35	560-561.570	Intestinal obstruction and hernia	5.3	2.6	4.7	5.4	4.3	5.6	4.8	5.7	4.8	5.5	6.9
B36	543.571.572	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	8.3	9.4	12.3	5.1	11.0	11.4	6.5	8.8	11.6	4.9	4.5
B37	581	Cirrhosis of liver	4.9	2.1	3.9	3.9	2.6	4.9	5.5	4.3	3.4	4.7	7.0
B38	590-594	Nephritis and nephrosis	17.7	8.4	18.9	14.3	16.2	34.1	10.9	10.4	10.0	10.8	9.3
B39	610	Hyperplasia of prostate	4.0	3.7	5.7	3.5	5.2	3.1	4.5	3.3	4.4	4.8	4.6
B40	640-652, 660, 670-689	Complications of pregnancy, childbirth and the puerperium	2.2	5.0	1.9	2.1	3.0	3.2	1.4	2.0	1.5	2.1	1.5
B41	750-759	Congenital malformations	17.5	17.8	14.2	17.2	19.8	21.4	16.4	13.1	14.2	15.7	15.0
B42	760-762	Birth injuries, postnatal asphyxia and atelectasis	18.5	17.8	6.6	15.1	22.6	21.7	17.3	17.4	14.8	21.3	15.0
B43	763-768	Infections of the newborn	5.2	7.3	2.8	5.7	7.8	9.2	2.7	4.3	4.3	3.7	2.3
B44	769-776	Other diseases peculiar to early infancy and immaturity unqualified	26.9	41.5	16.0	23.4	31.3	35.7	21.5	25.5	26.0	24.3	18.5
B45	780-795	Senility without mention of psychosis, ill-defined and unknown causes	12.7	71.3	32.1	17.5	37.5	12.0	6.1	14.1	9.2	14.4	8.8
B46	Residual	All other diseases	68.3	65.3	72.6	68.9	65.7	73.6	63.1	71.2	63.8	59.2	81.0
BE47	E810-E835 (E810-E825 E830-E835)	Motor vehicle accidents	21.2	6.8	13.2	19.9	23.3	22.7	22.1	14.2	18.7	26.2	18.9
BE48	E800-E802 E840-E862	Traffic accidents	20.7	6.5	13.2	19.5	21.8	22.6	21.5	14.0	18.4	25.3	18.5
		Non-traffic accidents	0.5	0.3	.....	0.5	1.5	0.1	0.6	0.2	0.3	0.9	0.4
		All other accidents	37.4	34.5	34.9	40.3	30.4	31.9	37.9	34.5	32.2	38.7	61.5
BE49	E963, E970-E979	Suicide and self-inflicted injury	7.1	2.3	4.7	5.0	3.4	4.4	8.3	9.0	5.9	7.2	16.1
BE50	E964, E965, E980-E999	Homicide and operations of war	1.2	0.8	0.9	0.9	0.4	1.1	1.4	1.0	0.7	1.6	1.4
		All causes	863.2	713.6	873.6	876.0	865.1	807.4	923.9	867.1	776.7	763.1	993.3

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TABLE 16—CERTAIN CAUSES OF DEATH, BY NUMBERS AND RATES FOR EACH YEAR OF THE LAST DECENNIAL PERIOD

CAUSE OF DEATH	1953		1952		1951		1950		1949		1948		1947		1946		1945		1944	
	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population	Number of Deaths	Rate per 100,000 population
Diseases of the heart.....	2274	227	2247	231	2113	224	2046	228	2033	1896	224	1756	1721	214	1663	199	1534	186		
Cancer.....	1129	112	1072	110	1065	113	997	110	957	975	115	878	860	107	830	100	781	84		
Diseases of the arteries.....	148	14	136	14	129	13	133	14	128	28	3	117	102	12	138	16	121	14		
Violent deaths (suicides excepted).....	667	66	589	60	568	60	573	64	596	593	70	484	456	56	472	57	484	59		
Pneumonia (all forms).....	324	32	298	30	341	36	275	30	376	362	42	374	362	45	369	44	379	46		
Pulmonary tuberculosis.....	51	5	91	9	119	12	137	15	155	200	23	215	233	29	200	25	229	27		
Influenza.....	33	3	47	4	114	12	26	2	41	36	4	72	89	11	58	7	128	15		
Nephritis.....	108	10	74	7	88	9	90	10	217	219	25	197	215	26	255	31	257	31		
Appendicitis.....	15	1	15	1	18	1	22	2	23	34	4	36	46	5	42	5	54	6		
Suicides.....	72	7	94	9	86	9	82	9	80	84	9	67	100	12	76	9	57	7		
Cerebral haemorrhage.....	851	84	727	74	756	80	693	77	666	568	67	523	503	62	513	62	454	55		
Diabetes mellitus.....	99	9	104	10	89	9	91	10	156	134	15	119	119	14	143	17	120	14		
Diarrhoea and enteritis.....	47	4	77	7	60	7	69	7	63	93	10	106	128	15	87	10	120	14		
Puerperal causes.....	21	2	15	1	15	1	19	2	25	29	3	22	32	4	48	5	31	3		
Whooping cough.....	12	1	8	1	7	1	3	1	5	11	1	9	19	2	43	5	42	5		
Scarlet fever.....	5	.....	2	.....	6	.....	11	.....	1	10	.....	7	1	.....	1	.....	9	.....		
Diphtheria.....	3	.....	1	.....	1	.....	1	.....	12	10	.....	7	.....	.....	.....	.....	9	.....		
Typhoid and paratyphoid.....	1	.....	2	.....	.....	.....	1	.....	19	.....	.....	3	.....	.....	.....	.....	2	.....		
Measles.....	8	.....	7	.....	12	.....	8	.....	7	.....	.....	21	.....	.....	.....	.....	6	.....		
Poliomyelitis.....	108	10	79	8	2	.....	8	.....	9	28	3	7	8	.....	.....	.....	10	.....		



































TABLE 20A—LIVE BIRTHS OF INDIANS BY MONTH, 1953 (ALL INDIANS), ALBERTA

January.....	113
February.....	143
March.....	140
April.....	134
May.....	144
June.....	112
July.....	121
August.....	115
September.....	115
October.....	115
November.....	130
December.....	113
TOTAL.....	1,495

TABLE 20B—BIRTHS OF INDIANS, BY MONTHS, 1953 (TREATY INDIANS), ALBERTA

January.....	58
February.....	84
March.....	84
April.....	65
May.....	74
June.....	66
July.....	60
August.....	57
September.....	60
October.....	69
November.....	70
December.....	50
TOTAL.....	797

TABLE 21A—LEGITIMATE AND ILLEGITIMATE LIVE BIRTHS OF INDIANS  
IN ALBERTA, 1953 (ALL INDIANS)

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Alberta.....	1495	774	721	1018	512	506	477	262	215

TABLE 21B—LEGITIMATE AND ILLEGITIMATE BIRTHS OF TREATY INDIANS  
IN ALBERTA, 1953

Alberta.....	797	401	396	552	267	285	245	134	111
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TABLE 22—BIRTHS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, 1953

PLACE OF OCCURRENCE	Total occurrence	PLACE OF RESIDENCE													
		Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	U.S.A.	Other
<b>Total (residence)</b>	<b>418,426</b>	<b>12,797</b>	<b>2,737</b>	<b>18,276</b>	<b>16,458</b>	<b>128,719</b>	<b>129,771</b>	<b>21,242</b>	<b>23,703</b>	<b>31,376</b>	<b>31,746</b>	<b>380</b>	<b>571</b>	<b>628</b>	<b>22</b>
Newfoundland	12,775	12,761	.....	.....	1	1	2	1	.....	.....	1	.....	1	7	.....
Prince Edward Island	2,696	.....	3	.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....
Nova Scotia	18,302	22	14	18,191	37	9	16	3	.....	.....	4	.....	.....	6	.....
New Brunswick	16,722	.....	20	16,176	325	25	25	2	1	2	2	.....	.....	137	1
Quebec	127,693	3	4	7	68	127,327	216	5	1	3	6	.....	.....	47	6
Ontario	130,807	9	10	42	24	1,028	129,277	42	19	20	26	.....	3	295	12
Manitoba	21,483	.....	.....	1	1	3	81	21,076	205	23	10	.....	3	80	.....
Saskatchewan	23,731	.....	.....	.....	.....	1	15	64	23,366	258	9	.....	2	16	.....
Alberta	31,272	.....	.....	1	.....	1	8	8	91	31,016	115	3	17	11	.....
British Columbia	392	.....	.....	.....	.....	2	7	7	13	39	31,511	3	1	29	3
Yukon	547	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	374	.....	.....	.....
Northwest Territories	391	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	544	.....	.....
United States	.....	2	.....	.....	149	21	122	34	6	13	44	.....	.....	.....	.....

TABLE 23—LIVE BIRTHS AND LIVE BIRTHS IN HOSPITAL BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1953

CENSUS DIVISIONS	TOTAL BIRTHS				BIRTHS IN HOSPITAL			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere
<b>ALBERTA</b> .....	<b>31,272</b>	<b>31,376</b>	<b>256</b>	<b>360</b>	<b>29,363</b>	<b>29,475</b>	<b>243</b>	<b>355</b>
Division No. 1.....	1,112	1,089	242	219	1,040	1,023	233	216
Division No. 2.....	2,699	2,340	416	57	2,416	2,060	411	55
Division No. 3.....	372	529	68	225	290	447	62	219
Division No. 4.....	530	989	21	480	493	952	19	478
Division No. 5.....	227	393	19	185	189	347	17	175
Division No. 6.....	6,970	6,456	681	167	6,890	6,372	674	156
Division No. 7.....	922	919	70	67	777	781	61	65
Division No. 8.....	2,466	2,311	313	158	2,264	2,140	274	150
Division No. 9.....	588	824	47	283	437	642	41	246
Division No. 10.....	936	1,216	93	373	892	1,174	89	371
Division No. 11.....	9,434	8,840	856	262	9,386	8,779	854	247
Division No. 12.....	478	586	59	167	427	546	47	166
Division No. 13.....	996	1,058	71	133	908	969	68	129
Division No. 14.....	1,198	1,355	135	292	1,140	1,298	130	288
Division No. 15.....	870	938	72	140	714	789	58	133
Division No. 16.....	1,121	1,106	116	101	951	944	102	95
Division No. 17.....	353	427	13	87	149	212	11	74

TABLE 24 — LIVE BIRTHS AND HOSPITAL LIVE BIRTHS, BY OCCURRENCE AND RESIDENCE, FOR URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1953

CITY, TOWN OR VILLAGE	TOTAL LIVE BIRTHS				LIVE BIRTHS IN HOSPITALS			
	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere	Total by occurrence	Total by residence	By occurrence, residence elsewhere	By residence, occurrence elsewhere
Athabasca	228	54	179	5	224	54	175	5
Barrhead	211	59	164	12	209	59	162	12
Beverly	.....	127	.....	127	.....	127	.....	127
Black Diamond	.....	25	.....	25	.....	25	.....	25
Blairmore	3	49	3	49	2	49	2	49
Bonnyville	224	78	156	10	222	77	155	10
Bowness	2	163	.....	161	.....	161	.....	161
Brooks	228	87	146	5	160	58	106	4
Calgary	5,803	4,285	1,599	81	5,802	4,283	1,599	80
Camrose	401	155	251	5	398	155	248	5
Cardston	199	86	117	4	127	53	78	4
Claresholm	184	115	79	10	183	114	79	10
Coleman	2	86	.....	84	1	85	.....	84
Didsbury	126	41	99	14	125	39	99	13
Drumheller	364	147	232	15	351	144	221	14
Edmonton	9,260	6,529	2,814	83	9,258	6,524	2,813	79
Edson	237	116	132	11	236	115	131	10
Forest Lawn	1	86	.....	85	.....	85	.....	85
Fort Saskatchewan	.....	51	.....	51	.....	51	.....	51
Grande Prairie	367	198	181	12	319	170	160	11
Hanna	153	52	107	6	150	50	106	6
High Prairie	323	76	251	4	316	74	246	4
High River	273	69	207	3	272	68	207	3
Innisfail	146	49	106	9	63	22	50	9
Jasper Place	1	453	.....	452	.....	451	.....	451
Lacombe	264	78	187	1	263	77	187	1
Leduc	.....	106	.....	106	.....	105	.....	105
Lethbridge	1,353	797	579	23	1,353	795	579	21
Lloydminster	1	96	.....	95	.....	95	.....	95
Macleod	71	83	14	26	61	75	11	25
Magrath	60	31	32	3	45	21	26	2
McLennan	233	48	193	8	228	46	189	7
Medicine Hat	724	438	297	11	724	438	297	11
Olds	205	66	149	10	205	66	149	10
Peace River	197	120	84	7	170	108	69	7
Pincher Creek	129	50	83	4	124	48	80	4
Ponoka	209	122	94	7	208	122	93	7
Raymond	131	86	57	12	109	65	54	10
Redcliff	.....	35	.....	35	.....	35	.....	35
Red Deer	569	349	234	14	569	348	234	13
Redwater	.....	78	.....	78	.....	77	.....	77
Rocky Mtn. House	117	73	59	15	66	47	34	15
St. Albert	1	35	.....	34	.....	34	.....	34
St. Paul	283	84	214	15	282	84	213	15
Stettler	316	144	179	7	315	142	179	6
Taber	340	141	214	15	316	129	202	15
Three Hills	122	63	66	7	121	61	65	5
Vegreville	209	65	148	4	208	64	148	4
Vermilion	187	76	113	2	185	76	111	2
Vulcan	122	40	92	10	117	39	88	10
Wainwright	240	112	133	5	199	90	113	4
Westlock	306	59	255	8	306	59	255	8
Wetaskiwin	364	153	228	17	350	146	221	17

TABLE 25—LIVE BIRTHS BY MONTH IN ALBERTA, 1953

January	2,401
February	2,375
March	2,652
April	2,639
May	2,783
June	2,748
July	2,720
August	2,663
September	2,729
October	2,520
November	2,575
December	2,571
TOTAL	31,376

TABLE 26—LIVE BIRTHS FOR CENSUS DIVISIONS, BY TYPE OF ATTENDANCE,  
ALBERTA, 1953

CENSUS DIVISIONS	TOTAL	ATTENDED BY			
		Physician	Nurse	Midwife	Unattended and not stated
<b>ALBERTA</b> .....	<b>31,376</b>	<b>30,554</b>	<b>242</b>	<b>155</b>	<b>425</b>
Division No. 1 .....	1,089	1,050	8	22	9
Division No. 2 .....	2,340	2,235	47	40	18
Division No. 3 .....	529	526	1	.....	2
Division No. 4 .....	989	966	.....	10	13
Division No. 5 .....	393	392	.....	.....	1
Division No. 6 .....	6,456	6,357	62	7	30
Division No. 7 .....	919	911	1	3	4
Division No. 8 .....	2,311	2,251	20	11	29
Division No. 9 .....	824	805	2	1	16
Division No. 10 .....	1,216	1,208	1	.....	7
Division No. 11 .....	8,840	8,801	5	1	33
Division No. 12 .....	586	571	2	1	12
Division No. 13 .....	1,058	999	1	9	49
Division No. 14 .....	1,355	1,317	9	1	28
Division No. 15 .....	938	847	26	11	54
Division No. 16 .....	1,106	1,081	7	5	13
Division No. 17 .....	427	237	50	33	107

TABLE 27—LIVE BIRTHS IN INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER BY TYPE OF ATTENDANCE, ALBERTA, 1953

CITY, TOWN OR VILLAGE	TOTAL	ATTENDED BY			
		Physician	Nurse	Midwife	Unattended and not stated
Athabasca.....	54	54	.....	.....	.....
Barrhead.....	59	59	.....	.....	.....
Beverly.....	127	127	.....	.....	.....
Black Diamond.....	25	25	.....	.....	.....
Blairmore.....	49	49	.....	.....	.....
Bonnyville.....	78	78	.....	.....	.....
Bowness.....	163	163	.....	.....	.....
Brooks.....	87	87	.....	.....	.....
Calgary.....	4,285	4,284	.....	.....	1
Camrose.....	155	155	.....	.....	.....
Cardston.....	86	86	.....	.....	.....
Claresholm.....	115	115	.....	.....	.....
Coleman.....	86	86	.....	.....	.....
Didsbury.....	41	41	.....	.....	.....
Drumheller.....	147	147	.....	.....	.....
Edmonton.....	6,529	6,527	1	.....	1
Edson.....	116	116	.....	.....	.....
Forest Lawn.....	86	86	.....	.....	.....
Fort Saskatchewan.....	51	51	.....	.....	.....
Grande Prairie.....	198	198	.....	.....	.....
Hanna.....	52	52	.....	.....	.....
High Prairie.....	76	76	.....	.....	.....
High River.....	69	69	.....	.....	.....
Innisfail.....	49	49	.....	.....	.....
Jasper Place.....	453	453	.....	.....	.....
Lacombe.....	78	78	.....	.....	.....
Leduc.....	106	105	.....	.....	1
Lethbridge.....	797	797	.....	.....	.....
Lloydminster.....	96	95	.....	.....	1
Macleod.....	83	81	.....	.....	2
Magrath.....	31	29	.....	.....	2
McLennan.....	48	46	.....	.....	2
Medicine Hat.....	438	438	.....	.....	.....
Olds.....	66	66	.....	.....	.....
Peace River.....	120	120	.....	.....	.....
Pincher Creek.....	50	50	.....	.....	.....
Ponoka.....	122	122	.....	.....	.....
Raymond.....	86	85	.....	1	.....
Redcliff.....	35	35	.....	.....	.....
Red Deer.....	349	349	.....	.....	.....
Redwater.....	78	78	.....	.....	.....
Rocky Mountain House.....	73	72	.....	.....	1
St. Albert.....	35	35	.....	.....	.....
St. Paul.....	84	84	.....	.....	.....
Stettler.....	144	144	.....	.....	.....
Taber.....	141	139	.....	.....	2
Three Hills.....	63	63	.....	.....	.....
Vegreville.....	65	65	.....	.....	.....
Vermilion.....	76	76	.....	.....	.....
Vulcan.....	40	40	.....	.....	.....
Wainwright.....	112	112	.....	.....	.....
Westlock.....	59	59	.....	.....	.....
Wetaskiwin.....	153	153	.....	.....	.....



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TABLE 28—LIVE BIRTHS BY AGES OF PARENTS, ALBERTA, 1953

AGE OF MOTHER (Years)	AGE OF FATHER (Years)											Total born to married mothers	Born to unmarried mothers	Born to all mothers			
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over				Not stated		
12																	
13																	1
14		1															2
15	1	3	3		1												8
16	7	34	12	1	1												55
17	46	142	41	9	1												239
18	42	385	142	21	5												595
19	42	520	297	63	15			2									939
20	17	769	507	117	23	5	2							1	1,441	148	1,589
21	13	789	678	194	43	8	6								1,731	125	1,856
22	3	724	808	254	50	25	4	4							1,872	99	1,971
23	1	567	1,110	308	96	20	3	3	1	1				3	2,113	112	2,225
24	2	372	1,017	443	107	24	12	2						1	1,980	71	2,051
25	1	215	1,035	491	138	33	10	4	1						1,928	83	2,011
26		110	894	612	186	47	11	2	2						1,864	51	1,915
27		58	729	686	222	62	15	5	1				1	2	1,811	54	1,865
28	1	42	560	683	271	71	29	12	1				1	2	1,673	50	1,723
29		19	409	721	333	98	39	9	2	1				1	1,632	35	1,667
30		18	248	710	343	120	33	6		2					1,480	37	1,517
31		12	129	600	381	131	47	20	3	3				1	1,327	33	1,360
32		3	83	500	393	176	53	20	6	2					1,236	19	1,255
33		6	61	375	437	188	53	23	2	4	2				1,151	21	1,172
34			23	242	361	184	55	21	3	4	1				894	14	908
35		1	14	128	310	178	76	22	3	2	1	1			736	13	749
36			7	77	277	196	80	23	6	1	2	2			671	14	685
37			6	45	213	177	81	27	4	1	3				557	16	573
38		1	4	34	147	187	91	34	6	1	5	1			511	9	520
39		1	2	24	119	162	92	18	6	4				2	430	9	439
40				17	55	127	77	29	9	4	1				319	14	333
41		1	2	5	21	79	57	21	6	4	2				198	6	204
42				3	18	55	53	22	8	2	6				167	9	176
43		1			11	20	46	17	3	2	1				101	1	102
44				1	4	11	25	13	4	2	3				63	1	64
45			1	1	2	5	17	11	6	1	3				47	2	49
46							7	8	2	1					18	1	19
47						3	4	3	1						11	1	12
48								3	3	1					7		7
49								1							1		1
50 and over								2							2		2
Not stated		2	1			1			1					3	8	2	10
<b>Total fathers</b>	<b>176</b>	<b>4,796</b>	<b>8,853</b>	<b>7,365</b>	<b>4,584</b>	<b>2,393</b>	<b>1,078</b>	<b>387</b>	<b>90</b>	<b>43</b>	<b>32</b>	<b>20</b>	<b>29,817</b>	<b>1,559</b>	<b>31,376</b>		

TABLE 29—LIVE BIRTHS, BY AGE OF MOTHER AND BIRTH ORDER, ALBERTA, 1953

AGE OF MOTHER	TOTAL	ORDER OF BIRTH OF CHILD																		
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	22nd	Not stated
12																				
13	1	1																		
14	3	3																		
15	20	20																		
16	107	102	5																	
17	345	307	35	2	1															
18	770	636	124	8	2															
19	1,100	804	249	39	8															
20	1,589	957	503	110	16	2	1													
21	1,856	995	620	192	42	6														1
22	1,971	937	671	260	80	17	4	1		1										1
23	2,225	874	775	397	132	39	5	2												1
24	2,051	648	732	412	176	64	17			2										
25	2,011	583	672	453	186	80	26	5	5	1										
26	1,915	429	695	424	217	84	50	11	3	1	1									
27	1,865	362	628	432	245	120	59	15	3	1										
28	1,723	294	519	430	254	119	52	33	15	3	2	2								
29	1,667	218	434	439	291	134	76	30	36	7	2									
30	1,517	193	367	423	248	139	71	40	23	8	4			1						
31	1,360	154	281	386	248	144	74	34	20	11	4	2	1		1					
32	1,255	121	271	333	222	137	74	43	20	17	12	4	1							
33	1,172	128	223	270	197	145	83	52	40	21	8	3	2							
34	908	69	144	234	162	118	79	38	28	18	11	5	1	1						
35	749	60	116	162	159	96	49	36	25	18	11	9	7	1						
36	685	40	112	137	135	69	56	45	28	23	14	15	6	4			1			
37	573	39	72	129	93	77	52	36	28	16	11	8	6	3	1	2				
38	520	43	76	92	72	74	62	27	16	20	16	10	5	5	1	1				
39	439	15	45	90	75	65	35	26	14	21	13	8	12	12	3	4			1	
40	333	23	29	54	46	47	40	16	20	15	10	10	8	7	4	1	2	1		
41	204	17	17	22	36	27	17	16	10	9	10	6	7	4	1	3	1		1	
42	176	10	16	18	26	19	19	15	11	10	9	7	3	5	3	3	1	1		
43	102	1	9	17	15	18	7		5	12	5	4	5	2	1			1		
44	64	2	3	2	7	6	11	4	7	1	3	6	4	3	1	4				
45	49	3	7	2	1	5	3	2	4	3	5	4	2	5		3				
46	19	1		2	1	2	1	1		1	1	1	2	3		2	1			
47	12			1	3	1				2	2			1	1	1				
48	7					1	2	1			2				1					
49	1											1								
50 and over	2				2															
Not stated	10	2	2		2		1													3
<b>TOTAL</b>	<b>31,376</b>	<b>9,091</b>	<b>8,452</b>	<b>5,972</b>	<b>3,400</b>	<b>1,855</b>	<b>1,026</b>	<b>529</b>	<b>361</b>	<b>242</b>	<b>156</b>	<b>104</b>	<b>73</b>	<b>57</b>	<b>17</b>	<b>25</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>5</b>

TABLE 30—MULTIPLE BIRTHS, BY AGE OF MOTHER, ALBERTA, 1953

AGE OF MOTHER (Years)	Total Children Born	SINGLE		SETS OF TWINS			SETS OF TRIPLETS			
		Liveborn	Stillborn	Both Liveborn	Both Stillborn	1 Liveborn, 1 Stillborn	3 Liveborn	3 Stillborn	2 Liveborn, 1 Stillborn	1 Liveborn, 2 Stillborn
TOTAL.....	31,852	30,703	447	318	3	18	4		3	1
12.....										
13.....	1	1								
14.....	4	3	1							
15.....	20	20								
16.....	109	107	2							
17.....	352	343	7	1						
18.....	783	759	12	5		1				
19.....	1,122	1,090	21	3		1	1			
20.....	1,609	1,580	17	4	1	1				
21.....	1,879	1,829	22	13		1				
22.....	1,987	1,943	16	14						
23.....	2,242	2,186	16	19		1				
24.....	2,073	2,003	22	24						
25.....	2,037	1,971	25	18		1	1			
26.....	1,943	1,871	26	21		2				
27.....	1,890	1,817	23	23		2				
28.....	1,749	1,693	24	13			1			1
29.....	1,694	1,612	26	27		1				
30.....	1,541	1,474	22	20		1			1	
31.....	1,379	1,332	17	14	1					
32.....	1,277	1,226	20	13		1			1	
33.....	1,194	1,139	21	16		1				
34.....	921	880	13	14						
35.....	763	726	14	10			1			
36.....	700	660	11	10		3			1	
37.....	589	559	16	7						
38.....	537	504	15	8	1					
39.....	451	421	12	9						
40.....	335	325	2	4						
41.....	215	198	11	3						
42.....	180	173	3	1		1				
43.....	106	100	4	1						
44.....	65	64	1							
45.....	50	47	1	1						
46.....	19	19								
47.....	15	12	3							
48.....	7	7								
49.....	1	1								
50 and over.....	2			1						
Not stated.....	11	8	1	1						

TABLE 31—MARRIAGES, BY MONTH OF MARRIAGE, IN ALBERTA, 1953

January.....	477
February.....	509
March.....	437
April.....	809
May.....	773
June.....	1,194
July.....	1,191
August.....	1,050
September.....	861
October.....	1,089
November.....	979
December.....	757
TOTAL.....	10,126



TABLE 33—MARRIAGES, MARITAL STATUS OF BRIDEGROOM BY STATUS OF BRIDE, ALBERTA, 1953

TOTAL MARRIAGES	MARRIAGES BETWEEN								
	Bachelors and			Widowers and			Divorced Men and		
	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women
10,126	8,705	232	314	134	191	44	320	60	126

TABLE 34—MARRIAGES, MARITAL STATUS BY AGE OF BRIDEGROOMS, ALBERTA, 1953

AGES	TOTAL	Bachelors	Widowers	Divorced Men
<b>TOTAL</b>	<b>10,126</b>	<b>9,251</b>	<b>369</b>	<b>506</b>
Under 20 years	456	456	....	....
20-24 years	4,580	4,561	2	17
25-29 years	2,787	2,683	14	90
30-34 years	994	865	22	107
35-39 years	470	328	32	110
40-44 years	252	146	31	75
45-49 years	209	109	45	55
50-54 years	120	55	35	30
55-59 years	77	22	45	10
60-64 years	68	12	49	7
65-69 years	65	11	49	5
70-74 years	25	1	24	....
75+ years	21	....	21	....
Not stated	2	2	....	....

TABLE 35—MARRIAGES, MARITAL STATUS BY AGE OF BRIDE, ALBERTA, 1953

AGES	TOTAL	Spinsters	Widows	Divorced Women
<b>TOTAL</b>	<b>10,126</b>	<b>9,159</b>	<b>483</b>	<b>484</b>
Under 20 years	2,981	2,977	3	1
20-24 years	4,345	4,269	19	57
25-29 years	1,385	1,221	44	120
30-34 years	576	413	55	108
35-39 years	302	157	56	89
40-44 years	200	69	66	65
45-49 years	116	31	61	24
50-54 years	71	10	47	14
55-59 years	51	8	39	4
60-64 years	46	3	41	2
65-69 years	26	1	25	....
70-74 years	19	....	19	....
75+ years	7	....	7	....
Not stated	1	....	1	....

TABLE 35—MARRIAGES, BIRTHPLACE OF GROOM BY BIRTHPLACE OF BRIDE, ALBERTA, 1953

BIRTHPLACE OF GROOM	BIRTHPLACE OF BRIDE																	
	TOTAL GROOMS	Canada																
		TOTAL	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other and province unspecified	British Isles and possessions	Europe	Asia	United States	Other
<b>CANADA</b> .....	8026	7582	1	7	38	18	45	165	225	1133	5747	193	10	156	185	96	7	...
Newfoundland.....	12	9	.....	.....	.....	.....	.....	1	.....	.....	7	1	.....	2	1	.....	.....	.....
Prince Edward Island.....	23	19	.....	2	.....	.....	.....	.....	1	2	14	.....	.....	1	1	2	.....	.....
Nova Scotia.....	79	72	.....	3	2	1	1	6	17	40	40	2	.....	3	3	1	.....	.....
New Brunswick.....	41	40	.....	4	1	3	3	4	23	2	.....	.....	.....	1	.....	.....	.....	.....
Quebec.....	127	118	.....	1	1	3	14	4	5	12	72	4	2	6	2	1	.....	.....
Ontario.....	420	375	.....	1	5	2	5	49	13	63	221	14	2	23	11	11	.....	.....
Manitoba.....	372	336	.....	3	1	1	7	46	58	214	6	.....	.....	8	17	11	.....	.....
Saskatchewan.....	1313	1248	1	13	1	8	22	46	389	736	31	1	19	32	10	4	.....	.....
Alberta.....	5389	5124	.....	3	13	5	13	71	99	545	4273	97	5	88	116	58	3	.....
British Columbia.....	248	239	.....	.....	.....	.....	2	7	6	42	146	36	.....	5	2	2	.....	.....
Other and province unspecified.....	2	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
British Isles and possessions.....	379	245	.....	1	1	1	2	18	12	38	163	9	.....	103	12	19	.....	.....
Europe.....	1338	481	1	1	5	1	7	8	17	64	371	6	.....	29	814	1	13	.....
Asia.....	21	6	.....	.....	.....	.....	.....	.....	.....	1	3	2	.....	3	3	9	.....	.....
United States.....	355	205	.....	2	1	2	9	9	39	183	5	.....	.....	13	19	73	.....	.....
Other.....	6	3	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	2	.....	.....
Unspecified.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
<b>TOTAL</b> .....	10,126	8567	2	9	46	21	56	200	263	1277	6467	216	10	304	1034	10	202	9







TABLE 37—STILLBIRTHS, BY SEX AND PERIOD OF GESTATION, ALBERTA, 1953

PERIOD OF GESTATION	Male	Female
28 weeks	23	10
29 weeks	6	4
30 weeks	13	14
31 weeks	.....	2
32 weeks	16	13
33 weeks	3	6
34 weeks	12	12
35 weeks	10	8
36 weeks	24	18
37 weeks	16	9
38 weeks	34	27
39 weeks	14	10
40 weeks	79	53
41 weeks	12	15
42 weeks	.....	.....
43 weeks	1	2
44 weeks	1	.....
45 weeks	.....	.....
46 weeks	.....	.....
47 weeks	.....	.....
48 weeks	.....	.....
49 weeks	1	.....
Not stated	3	5
<b>TOTAL</b>	<b>268</b>	<b>208</b>

TABLE 38—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	1929	1.042	2.71
1906	1.094	2.07	1930	1.027	3.21
1907	1.075	2.96	1931	1.075	3.25
1908	1.077	2.73	1932	1.052	3.08
1909	1.086	2.59	1933	1.053	3.01
1910	1.065	2.69	1934	1.032	3.04
1911	1.103	2.43	1935	1.055	2.81
1912	1.084	2.43	1936	1.049	2.57
1913	1.053	2.67	1937	1.019	2.38
1914	1.081	3.30	1938	1.046	2.70
1915	1.000	3.74	1939	1.046	2.85
1916	1.063	3.29	1940	1.033	2.79
1917	1.061	3.25	1941	1.054	2.71
1918	1.069	1.88	1942	1.058	3.02
1919	1.074	2.56	1943	1.041	2.96
1920	1.055	2.92	1944	1.060	3.06
1921	1.055	3.32	1945	1.061	3.08
1922	1.034	3.06	1946	1.036	3.36
1923	1.072	3.13	1947	1.061	3.76
1924	1.036	2.97	1948	1.049	3.44
1925	1.036	2.97	1949	1.051	3.52
1926	1.053	2.80	1950	1.052	3.74
1927	1.065	2.94	1951	1.039	3.76
1928	1.064	2.75	1952	1.058	3.95
			1953	1.063	4.10

TABLE 39—DIVORCES AND NULLITIES, BY JUDICIAL DISTRICTS, FOR THE YEAR 1953, ALBERTA

Judicial Districts	Divorces			Nullities		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton .....	308	123	185	1	1	....
Calgary .....	238	83	155	....	....	....
Lethbridge .....	22	10	12	....	....	....
Medicine Hat .....	12	2	10	....	....	....
Peace River .....	4	4	....	....	....	....
Grande Prairie .....	....	....	....	....	....	....
Hanna .....	2	....	2	....	....	....
Red Deer .....	9	4	5	....	....	....
Drumheller .....	....	....	....	....	....	....
Fort Macleod .....	3	1	2	....	....	....
Wetaskiwin .....	5	1	4	....	....	....
<b>TOTAL</b> .....	<b>603</b>	<b>228</b>	<b>375</b>	<b>1</b>	<b>1</b>	....

## 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
1951 .....	255	334	589
1952 .....	239	391	630
1953 .....	228	375	603

TABLE 40—POPULATION, BIRTHS, MARRIAGES, DEATHS, AND RATES FOR THE YEARS 1905-1953

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	4,111	187	6.77	114	7.36	90.00	.....	13.04
1906	236,000	3,003	20.05	4,784	1,927	8.08	1,091	6.68	100.27	6.33	13.36
1907	266,000	4,732	22.45	7,611	2,032	7.63	1,578	8.22	126.57	6.02	14.22
1908	301,000	6,897	22.91	8,066	2,384	7.92	2,662	8.81	.....	.....	14.07
1909	336,000	8,321	24.49	9,574	3,086	9.18	3,526	10.49	129.49	8.63	14.00
1910	374,000	8,813	23.56	10,867	3,630	9.70	3,618	9.67	134.46	9.75	13.88
1911	400,000	10,284	25.71	12,717	4,429	11.07	4,232	10.58	124.75	8.26	15.13
1912	429,000	11,871	28.47	14,630	5,053	12.12	4,432	10.63	120.47	7.07	17.84
1913	459,000	13,685	30.75	16,386	4,623	10.39	4,417	9.32	100.54	6.13	21.43
1914	480,000	13,452	28.90	15,880	4,202	9.06	3,588	7.73	87.9	5.79	21.26
1915	496,000	13,331	27.87	15,545	4,230	8.53	4,058	8.18	90.5	7.20	18.69
1916	508,000	13,576	27.01	15,655	4,270	8.54	4,047	8.09	87.30	6.48	18.92
1917	522,000	14,890	25.72	16,954	4,048	6.98	7,924	13.86	107.10	5.51	11.86
1918	522,000	14,890	23.95	16,264	4,718	7.90	5,507	9.33	110.30	6.44	14.62
1919	522,000	16,565	26.72	18,907	5,110	8.24	5,675	9.15	93.70	8.38	17.57
1920	588,000	16,414	27.89	18,197	4,661	7.92	4,940	8.39	85.65	7.24	19.50
1921	592,000	16,163	26.44	17,419	4,272	6.99	5,281	8.62	91.93	6.68	17.83
1922	593,000	15,153	25.75	17,164	4,177	6.09	4,843	8.06	90.54	5.50	18.75
1923	597,000	14,598	24.74	15,603	4,160	7.50	4,907	8.30	82.40	6.18	16.42
1924	602,000	15,014	25.02	15,857	4,363	7.27	4,717	7.86	72.90	5.76	16.16
1925	608,000	14,455	23.79	15,462	4,498	7.40	5,156	8.49	81.63	5.82	15.31
1926	623,000	14,897	24.03	15,617	4,707	7.58	5,059	8.16	74.51	6.38	15.87
1927	658,000	15,692	24.79	16,502	5,776	9.12	5,699	9.00	76.50	6.75	15.79
1928	684,000	16,924	26.19	17,689	6,004	9.29	6,239	9.65	77.40	7.26	16.54
1929	708,000	17,649	26.74	18,484	5,334	8.08	5,396	8.33	63.57	6.46	18.41
1930	732,000	17,252	23.57	18,333	5,142	7.02	5,302	7.24	69.38	5.04	16.32
1931	740,000	16,990	22.96	17,844	5,054	6.83	5,521	7.46	58.68	3.76	15.50
1932	748,000	16,123	21.33	17,088	5,389	7.10	5,346	7.07	59.90	4.43	14.24
1933	756,000	16,236	21.10	17,055	6,053	7.87	5,337	6.93	54.89	4.99	14.01
1934	770,000	16,183	21.0	17,008	6,010	7.7	5,729	7.3	57.8	4.2	14.0
1935	772,782	15,786	20.4	17,145	6,020	7.8	6,147	8.0	60.0	5.8	12.5
1936	778,000	15,903	20.4	16,512	6,345	8.2	6,147	8.0	63.0	4.9	12.4
1937	783,000	15,891	20.3	16,498	6,973	8.9	5,871	7.5	51.0	4.3	12.8
1938	789,000	16,470	20.9	16,921	7,838	9.9	5,789	7.3	46.0	3.5	13.6
1939	790,000	17,359	21.8	17,730	8,782	11.8	6,203	7.8	48.0	3.9	14.1
1940	796,169	17,308	21.7	17,592	8,470	10.7	6,385	8.0	51.0	3.6	13.7
1941	805,000	18,317	22.7	18,537	9,034	11.2	6,091	7.5	38.0	2.3	15.2
1942	792,000	19,290	24.3	19,495	7,771	9.8	7,345	7.6	30.0	0.5	22.4
1943	818,000	19,373	23.7	19,490	7,299	9.8	6,524	8.2	42.0	2.7	16.1

1945	826,000	19,339	24.1	20,072	7,310	8.9	6,320	7.7	46.0	1.6	16.0
1946	803,330	22,184	27.6	22,293	9,478	8.8	6,454	7.8	43.0	2.4	16.2
1947	822,000	24,631	30.0	24,707	8,797	11.8	6,601	8.2	42.5	1.4	19.3
1948	846,000	24,075	28.5	24,049	8,844	10.7	6,543	8.0	37.0	.9	22.0
1949	871,000	24,935	28.7	24,959	9,037	10.5	6,987	8.0	39.0	1.2	20.2
1950	895,000	25,625	28.7	25,670	9,294	10.4	7,083	8.2	33.0	1.0	20.5
1951	939,501	27,003	28.7	27,038	9,305	10.4	6,856	7.7	32.0	0.7	21.0
1952	970,000	29,106	30.0	29,038	9,514	10.1	7,646	7.6	30.0	0.7	23.7
1953	1,002,000	31,376	31.3	.....	10,126	9.9	7,167	7.6	33.0	0.6	21.1

No.	Name	Age
1	John Smith	25
2	James Brown	30
3	William Jones	35
4	Thomas White	40
5	Richard Black	45
6	Robert Grey	50
7	Henry Green	55
8	George King	60
9	Edward Lee	65
10	Charles Hall	70
11	Samuel Adams	75
12	Benjamin Franklin	80
13	John Hancock	85
14	Thomas Jefferson	90
15	George Washington	95



