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Province of Saskatchewan

ANNUAL REPORT

Of The

DEPARTMENT OF PUBLIC HEALTH

For the Calendar Year



1946



REGINA: PRINTED BY THOS. H. MCCONIGA, KING'S PRINTER 1948





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DEPARTMENT OF PUBLIC HEALTH, REGINA, March 20th, 1948.

To His Honour,

R. J. M. PARKER,

Lieutenant Governor of Saskatchewan.

MAY IT PLEASE YOUR HONOUR,-

I beg to present herewith for your consideration the annual report of the Department of Public Health for the calendar year 1946.

Respectfully submitted,

T. C. Douglas,

Minister of Public Health.

DEPARTMENT OF PUBLIC HEALTH, REGINA, March 20, 1948.

HONOURABLE T. C. DOUGLAS,

Minister of Public Health.

Sir:-

I have the honour to forward herewith the annual report of the Department of Public Health for the calendar year 1946.

Respectfully submitted,

C.F.W. HAMES, M.D., D.P.H., Deputy Minister. Digitized by the Internet Archive in 2019 with funding from Wellcome Library

Organization

Minister of Public Health
Deputy Minister and Registrar General
Executive Assistant to the Deputy MinisterG. C. Darby.
Director, Division of Nursing Services
Director, Division of Sanitation
Director, Division of Communicable Disease and
Division of Venereal Disease Control
Director, Division of Health Education
Acting Director, Division of Industrial HygieneG. W. Rogers, M.A.
Director, Division of Vital Statistics
Director, Division of Laboratories
Director, Division of Physical FitnessJ. B. Kirkpatrick, Ed.D.
Director, Division of Medical ServicesA. J. McDougal, M.D.
Provincial Nutritionist Miss H. J. Oddie, B.H.Sc.
Pilot and Supervisor of Air Ambulance ServiceD. K. Malcolm.
Chief Clerk

Mental Hygiene

Commissioner of Mental Services
Superintendent, Saskatchewan Mental Hospital,
North Battleford, Saskatchewan
Superintendent, Saskatchewan Mental Hospital
Weyburn, Saskatchewan
Superintendent, Saskatchewan Training School,
Weyburn, Saskatchewan
Director, Psychopathic Ward, ReginaJ. J. A. McLurg, M.D.

Saskatchewan Cancer Commission

C. F. W. Hames, M.D. D.P.H.

Chan man	***************************************	
Secretary		A. J. McDougal, M.D.
Members-		
	F. C. Cronkite, M.A., L.L.B.,	, K.C. A. C. Scott, M.D.
	H. D. Dalgleish, M.D.	C. H. Fisher.
	Mrs. J. J. F. MacIsaac	F. G. Butterfield.
	A. W. Blair, M.D	Director of Cancer Services.
	T. A. Watson, M.D.	Director, Saskatoon Cancer Clinic

Acts Administered

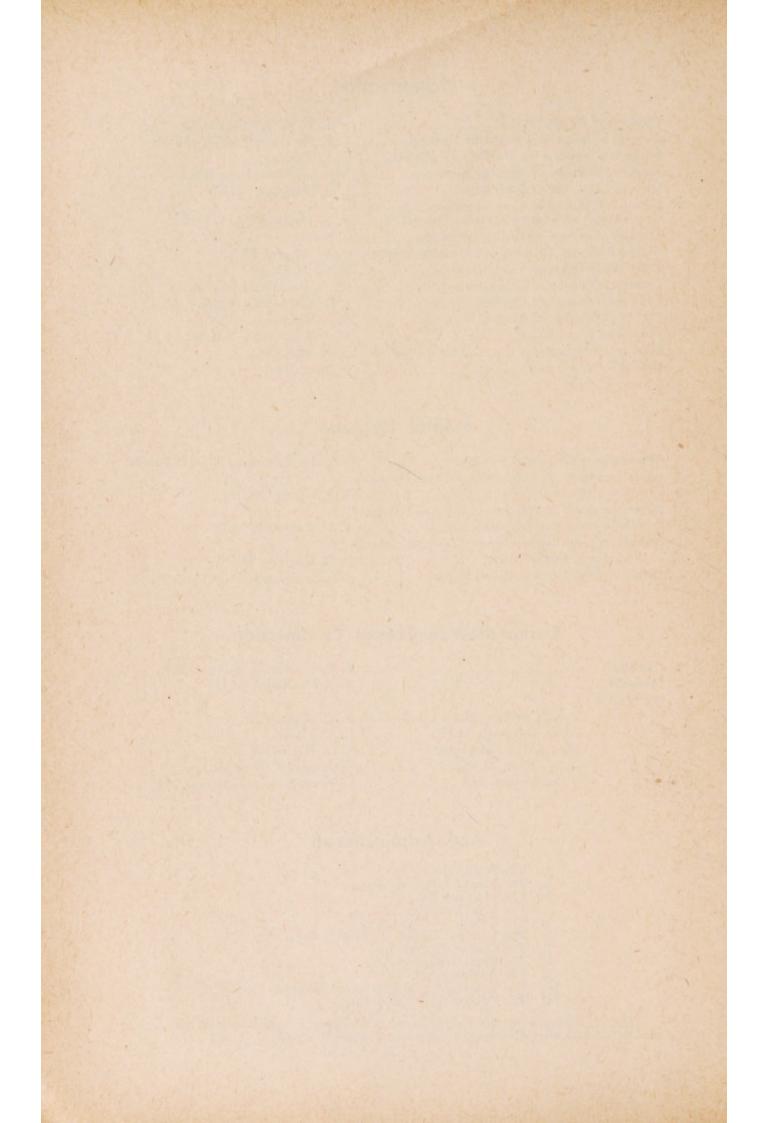
- The Public Health Act. The Mental Hygiene Act.
- 3. The Marriage Act.

Chairman

- 4. The Vital Statistics Act.
 5. The Change of Name Act.
 6. The Venereal Disease Prevention Act.
 7. The Change Control Act.
 8. The Physical Pitch

- 8. The Physical Fitness Act.
 9. The Anatomy Act.
 10. The Tuberculosis Sanatoria and Hospitals Act.
 11. The University Hospital Act.

The organization of the Health Services Planning Commission and the Acts administered by that Commission appear in a separate report.



Legislation: Statutes of 1946

The Health Services Act, The Saskatchewan Hospitalization Act, The Mutual Medical and Hospital Benefit Associations Act, The Hospital Standards Act and The Union Hospital Act were, before the end of 1946, placed under the administration of the Health Services Planning Commission, independent of the Department of Public Health.

The Cancer Control Act: The Saskatchewan Cancer Commission is increased from not more than five members to not more than seven members exclusive of the Director of Cancer Services and the Directors of Cancer Clinics. With this increased membership the power to appoint an advisory committee in addition is rescinded.

The Marriage Act: Several small amendments of a routine nature were made to this Act. In one of these the requirement of the previous Act to the effect that the declaration required to be delivered seven days before issuance of a marriage licence where one of the parties applying could not appear before the issuer, was changed so that such declarations may be delivered at any time before the licence is issued. A further amendment provides that where one parent of a minor is a patient in a mental institution, the other parent or guardian can consent to the marriage of the minor.

The Mental Hygiene Act: The effect of this amendment is to change the title of the officer of the department formerly known as the "Bursar" to that of "Business Manager", and to increase considerably that officer's responsibility by making him responsible for the proper issuance of all requisitions and orders and the certification of all accounts and vouchers in the mental hospital. Formerly his responsibilities did not expressly include these matters.

The Public Health Act: The main feature of this Act is to provide for the authority of the Regional Board as the Regional Board of Health, and also for the authority of the Regional Medical Health Officer as Medical Health Officer, over all the municipalities within a health region, unless the Minister directs otherwise. Another feature is to allow certain employees of the Department, certified by the Deputy Minister to be capable of performing vaccination or inoculation, to carry out such procedures. The sections of the Act dealing with full time health regions have been repealed, new legislation in this respect having been incorporated in The Health Services Act, 1946.

The Tuberculosis Sanatoria and Hospitals Act: An amendment provides that for 1946 and 1947 the apportionment of the net estimated expenditure shall be subject to adjustment in rural municipalities where a re-assessment by the Sask-atchewan Assessment Commission was or is made in 1945 or 1946 on the basis of the re-assessment.

The Venereal Disease Prevention Act: This is a consolidation of the previous Acts together with some very important amendments. No physician, medical health officer or other person shall issue a certificate of freedom from venereal disease, or provide to any person other than the Department, a physician or clinic, a report or copy thereof indicating freedom from venereal disease. Where a person is under arrest or in custody charged with certain offences under the Criminal Code or under any statute of Saskatchewan or any bylaw or regulation made under the authority thereof, the Medical Health Officer, Gaol physician or Minister may cause such person to undergo such physical examination as is necessary or as is provided by the regulations in order to ascertain whether or not such person is infected with venereal disease. If a person is under arrest or in custody or is found to be infected, he may be detained in custody until cured or until he has received a degree of treatment considered adequate by the attending physician, notwithstanding the fact that he may be entitled to be released. If a person refuses or neglects to be examined, the Minister or Medical Health Officer may apply to the Magistrate for an order compelling such person to do so. If the Magistrate makes an order requiring the person to submit to the examination, such person may be apprehended by a police officer and held in custody until the examination has been made and the release of such person is authorized by the Magistrate.

The Act further provides that where the Minister or Medical Health Officer is satisfied that persons are contacting venereal disease from persons met in any dance halls, restaurants, hotels, lodging houses or other premises of a public nature, he may close these premises as a menace to the health of the community. Where an order is made to close dance halls, etc., any licence issued by any authority in the Province with respect to the premises affected shall become automatically suspended and remain suspended for the period during which the premises are ordered to be closed. The Act provides that where a person is not satisfied with the order made, he may appeal to the Minister and the Minister's decision shall be final.

The section dealing with the penalty for disclosing information under this Act has been amended by providing that on summary conviction the person is liable to a fine of not less than \$50.00 nor more than \$200.00.

The Vital Statistics Act: Prior to this amendment no search of the record of an illegitimate child could be made except on the written consent of the Commissioner of Child Protection. By virtue of the amendment this was changed, and now no certificate from the registration of an adopted child shall be issed which would disclose the natural parents, nor any certificate issued from the registration of an illegitimate child which would disclose the illegitimacy except to officers of the Crown for use in their official duties or to a person authorized by the Minister of Social Welfare or to a person possessing an order of a district court judge to that effect. Other amendments made are of a minor nature.

REGULATIONS PASSED IN 1946

Regulations Respecting milk and certain milk products.

Regulations governing cemeteries, care of dead and transportation of Corpses.

Regulations for the prevention, notification and control of Communicable Disease.

Regulations Governing the control and operation of Ambulances.

DIVISION OF PUBLIC HEALTH NURSING

DR. C. F. W. HAMES,

Deputy Minister of Public Health,

Regina, Saskatchewan.

SIR:

One of the interesting activities of the Division of Public Health Nursing during the past year was the organization of Health Regions with the consequent reorganization of staff. It was impossible to provide a full quota of public health nurses for each Region. However, the staff in each case has been increased considerably during the past months.

Every effort was made to continue nursing services in districts outside of Regions. For very short periods during the year, one or two districts were without this service because of the lack of personnel. However, with the beginning of the new year, no district will be without the service.

At present the staff consists of fifty-six staff nurses and one supervisor. Eighteen staff nurses hold the diploma in Public Health Nursing. Twenty-six nurses are situated in Regions. Two nurses are employed on a part-time basis.

During the year, thirty-three new nurses were appointed to the staff. Of this number, seventeen have been assigned to Health Regions. Six of the new nurses are returned Nursing Sisters, four have the university degree in nursing and four the diploma in Public Health Nursing.

There have been seven resignations during the year. Five of this number resigned to be married, two resigned to undertake work of a different type. One nurse transferred to the Department of Social Welfare.

Medical Health Officers at first preferred to have new nurses assigned to the Region staff, receive their orientation experience in the Region. Recently, however, requests have been received to have this training given by nurses working in districts. Eight, only, of the newly appointed nurses received introductory training with Regions. Therefore, twenty-five nurses spent one month, each, with experienced nurses in the field. As only the nurses who have the course in Public Health are asked to give this training, those who are qualified made a large contribution this year in the preparation of staff.

Three members of the staff were granted leave of absence for the University year, 1945-46. These nurses returned to the province in July.

Two nurses with the public health course and several years of experience in the province, spent the year at Maternity Centre in New York City. Financial assistance for the last six months of the year was given through the Rockefeller Foundation. The Foundation also arranged a Travel Fellowship for these nurses which allowed for observation in Nurse Midwifery services in Maryland, Kentucky and New Mexico. These nurses have now returned to the province, one going immediately to take charge of the Nursing Home at Cumberland House.

At the present time, six nurses are on leave of absence for graduate study. Five of this number are taking the diploma course in Public Health Nursing at five different Canadian Universities. One nurse is taking the course in Nurse Midwifery at Maternity Centre, New York.

In May, a one day staff conference was held in Saskatoon.

In June, seven nurses attended a two week course in supervision given at the School of Nursing, Manitoba.

Through the generosity of the Rockefeller Foundation, the director was priveleged during the year to observe public health nursing services in Ontario, New York State, Tennessee, Michigan, Minnesota and Alberta. In September, the directors of nursing of the four western provinces met in Alberta for the first time to discuss common problems and their solutions. It is hoped that such conferences will be made possible more often in the future.

As in past years, staff nurses have given assistance in their districts with the work of the Anti-Tuberculosis League in the conduct of mass surveys. More and more responsibility has been given the nurses in connection with the preliminary

organization which is such an important part of the activity. Nurses have met municipal councils and organizations in the district. They have also made many home calls necessary to assure the completeness of the survey as well as visits necessary for recalls. In all, 245 nurses' days were given to this work.

Nurses in several points in the province assisted with the Nutrition Survey which was conducted in the province during the months of May and June.

At the request of the Department of Education, the supervisor assumed responsibility for the health services and classes in Health Education at the summer session at the Saskatoon Normal School. A request was received for similar assistance for the first six weeks of the fall session in each Normal School. This division was pleased to meet the requests.

The supervisor of this staff has had special training in the Kenny treatment of poliomyelitis. Because of the number of cases developing during the autumn months, it was necessary for the nurse to spend one month assisting in the clinic. This nurse has also made follow up visits to the homes of all poliomyelitis cases discharged from the Clinic during the past years.

A summary of the work for the months, January 1 to December 31 inclusive, is attached hereto.

SUMMARY

JANUARY 1—DECEMBER 31

1946

No. schools visited-824.

No. Pupils inspected—31,127.

No. health talks given in schools-1,230.

No. Health Centres-202.

Attendance-3,935.

No. Pre-School Health Conferences—11.

No. children examined by doctor-319.

Senior Home Nursing-

Groups

Classes

Attendance -592.

Junior Home Nursing-

Groups - 33.

Classes

Attendance —534.

No. homes visited—14,055.

Services represented—

Pre-natal-339.

Infant welfare-1,186.

Pre-school—4,206.

School-9,408.

Tuberculosis—59.

Trachoma-10.

Other communicable diseases—373.

Orthopedic—34.

Mental defectives-48.

Special-1,841.

Venereal Disease-2,717.

Official calls-

Dentists-133.

Medical health officers-1,235.

School officials—916. Municipal officials—850.

Women's organizations-649.

No. Nursing Homes inspected-66.

No. Meetings Addressed-307.

Cumberland House-

Nursing Service in Nursing Home-

Patients admitted—81.

No. hospital days-692.

ASSISTANCE WITH IMMUNIZATION

```
No. of schools—494.

Smallpox—7,708.

Scarlet Fever—

1st dose —5,030.
2nd dose —4,842.
3rd dose —4,870.
4th dose —4,808.
5th dose —4,274.
Completed—3,619.

Diphtheria—

1st dose —1,178.
3rd dose —1,178.
3rd dose —1,463.
Completed—1,673.

Whooping Cough—

1st dose — 465.
2nd dose — 786.
3rd dose — 608.
Completed—449.

Diphtheria and Whooping Cough Combined—

1st dose —2,731.
2nd dose —3,563.
3rd dose —3,316.
Completed—2,738.

Reinforcing doses—

Revaccination — 46.
Scarlet fever — 858.
Diphtheria —880.
Whooping Cough—102.
```

MATERNITY GRANTS

Number of grants authorized—356. Amount paid to mothers	1,780,00 2,557,00 16,00 8,00
Total 9	4 361 00

E. SMITH,
Director of Nursing Services.

DIVISION OF SANITATION

REGINA, SASK., February 7th, 1947

DR. C. F. W. HAMES,

Deputy Minister of Public Health,

Regina, Saskatchewan.

Sir:

The following report covers the work of the Division of Sanitation for the calendar year 1946.

The policy of providing engineering services for preliminary design of municipal waterworks and sewerage systems was continued. It is felt that when materials and labour become more obtainable, this work will lead to the installation of modern conveniences in some municipalities.

Preliminary investigations, reports and estimates were completed for the following municipalities:

Cabri Waterworks system.

Carnduff Waterworks and sewerage systems.

Foam Lake.. Waterworks and sewerage systems.

Hudson Bay

Junction Waterworks and sewerage systems.

Langenburg Drainage system.

Tisdale Waterworks and sewerage systems.
Watson Waterworks and sewerage systems.

The total estimated cost of the above named projects is over one-half million dollars.

In 1946 a large step was made towards compilation of complete composite plans of all existing waterworks and sewerage systems in the province. In addition a number of inspections were made to determine efficiencies and problems relative to each individual system. At the same time plans were checked for accuracy.

Municipal Waterworks:

In 1946, 16 approval certificates were issued for the extension or construction of waterworks systems to the total value of \$442,675.35.

Urban and Rural Water Supplies:

Opinions were given on 2,641 water samples submitted to the Department for analysis.

Sewerage and Sewage Disposal:

During the year 21 certificates were issued for the extension or construction of sewage disposal plants and sewerage systems representing \$508,550.95.

URBAN AND RURAL SANITATION

During the course of the year four full-time health regions were established. At the end of the year there were 9 sanitary officers and 2 sanitary officers in training in the health regions. There were 14 sanitary officers in this Division and 3 sanitary officers in training.

There were 16,691 inspections made during the year exclusive of health regions. These included inspections of water, milk and food supplies; hotels, restaurants and lodging houses; garbage collection and sewage disposal; communicable diseases; plumbing; camps; and investigations of various complaints.

Milk Supplies:

A veterinary surgeon was added to this staff in June and the supervision of milk pasteurizing and processing plants is under his care. This addition has helped materially in greater attention being given to the improvement inquality production. There were 163 visits made to plants during last year. A chief consideration was the finding of suitable laboratory outlets so that routine samples could be taken from all the plants in operation. This was accomplished, with the exception of three plants, which will have this service in 1947. A total of 1,967 samples of

milk were taken from pasteurization plants for analysis. These include 1,132 samples sent to the Regina laboratory, 480 to Saskatoon, 177 to Yorkton, 135 to North Battleford and 43 to Weyburn. This is approximately 400 over the previous year notwithstanding the fact that samples from the military services were discontinued early in the year.

There are now 14 municipalities having compulsory milk pasteurization bylaws. In addition to these urban centres where pasteurized milk only may be sold, there is considerable distribution of pasteurized milk in the adjoining districts. If it were not for the shortage of material and equipment, the total number of processing plants would have increased considerably during the year. At the end of the year there were 35 plants in operation, an increase of 3 over the previous year. In addition there are 5 plants which should commence operations in 1947.

There are 309 towns, villages and rural municipalities which have licensing bylaws for vendors and the compulsory testing of dairy cattle for tuberculosis. In addition the majority of these bylaws provide for the testing of cows for contagious bovine abortion. These bylaws are often not enforced due to the shortage of veterinary surgeons. The figure of 309 is a correction of the figure of 320 given last year and represents an increase of four over 1945.

Food Supplies:

Two thousand, six hundred butcher shops, slaughter houses and bakeries, where food is stored, processed or sold to the public, were inspected during this year.

Hotels, Boarding Houses and Restaurants:

In January this Division with the co-operation of the Division of Health Education launched a series of schools for food handlers in public eating establishments. Twenty-one schools were held in various urban centres including all the cities in the province, except Regina and Saskatoon. The course consisted of lectures and moving pictures in the sanitation of food handling, utensil washing and sterilization, food storage and refrigeration, food poisoning, etc. At the end of each course a brief examination was given, and certificates of attendance issued to all those completing the course. One of the major difficulties of a program of this nature, is the problem of reaching food handlers in the smaller centres. However, considerable interest was aroused, and a repetition of a course on a somewhat more comprehensive scale is indicated.

During the year 4,601 inspections were made.

Summer Resorts and Tourist Camps:

Twenty-nine inspections of summer resorts and nine of tourist camps were made during the year.

Lumber, Mine and Construction Camps:

There were 59 inspections under this heading with the majority being in connection with lumbering camps.

GENERAL

A total of 130 plumbing permits were issued. The value of permit fees was \$705.00, and 128 plumbing inspections were made by the sanitary officers.

Communicable Diseases:

The number of inspections made in connection with communicable diseases was 9.

Vital Statistics:

Inspections and investigations in connection with vital statistics records totalled 8.

Ice Permits:

Seventy-nine permits regarding the sanitary quality of ice harvested by individuals and companies were issued during the year.

Cemetery Sites:

There were 14 new cemeteries established during the year following the submission of satisfactory information regarding the topography and the environment of the areas. Slaughter Houses:

During the year 205 butcher slaughter house licences were issued and 76 beef ring slaughter house licences were also issued, making a total of 281. This is a decrease of 10 over the previous year. The total amount of fees collected was \$1,177.00.

Hydrocyanic Acid Fumigation:

Permits were issued to 6 fumigators authorizing them to use hydrocyanic acid gas.

Council and Public Meetings:

The district sanitary officers addressed a total of 63 meetings of municipal councils and other public bodies.

Summary of Inspections:

Water, milk and food supplies	7,614
Hotels, boarding houses and restaurants	4,601
Waste Disposal	1,206
Public places, schools, institutions, etc	112
Communicable Disease and Vital Statistics	17
Plumbing	128
Camps	- 59
Barber Shops.	591
Sundry & miscellaneous	2,363
Total	16,691

HOSPITAL CONSTRUCTION

During the year the engineering staff of the Division made 39 inspections in connection with sites for proposed hospitals, additions to hospitals, newly established hospitals, etc. In addition the sanitary officers made 25 inspections in regard to sites, plumbing and drainage.

During the year the Division prepared proposed sketch plans for 18 different municipalities. In addition 46 standard plans were sent out.

CORRESPONDENCE

During the year 6,765 letters were received and 10,431 were dispatched including circular letters and correspondence to and from the district sanitary officers.

Comparative figures last year were letters received 5,624 and those dispatched 8,544.

APPENDICES

Attached are four tables in connection with this report: Number 1 is in connection with waterworks; Number 2 sewerage and sewage disposal: Number 3 sanitary environment scores awarded urban municipalities and Number 4 inspections made by the district sanitary officers.

Respectfully submitted,

R. Ottem, Acting Director, Division of Sanitation.

TABLE No. 1-WATERWORKS

Date 1946		Municipality	Work Authorized	Amount	
Jan.	4	Saskatoon	Extension of waterworks system	\$51,000.00	
Jan.	9	Regina	Extension of waterworks system	20,000.00	
Mar.	25	Lloydminster	Extension of waterworks system	48,250.00	
April	25	Maple Creek	Replacement of a portion of the supply		
			line of the waterworks system	25,000.00	
May	7	Prince Albert	Extension of waterworks system	25,846.00	
May	7	Prince Albert	Extension of waterworks system	8,184.00	
May	17	Regina	Extension of waterworks system	40,870.00	
June	4	Bromhead	Water Supply	3,000.00	
June	4	Prince Albert	Extension of waterworks system	32,225.68	
June	5	Saskatoon	Extension of waterworks system	134,644.47	
June	11	Weyburn	Extension of waterworks system	9,283.75	
Aug.	27	Regina	Extension of waterworks system	18,210.00	
Sept.	10	Kamsack	Extension of waterworks system	8,800.00	
Sept.	10	Saskatoon	Extension of waterworks system	13,702.59	
Sept.	24	Nth. Battleford	Extension of waterworks system	3,000.00	
Nov.	7	Humboldt	Extension of water supply system	658.86	
			Total	\$442,675.35	

TABLE 2—SEWERAGE

Da 194		Municipality	Work authorized	Amount
Jan.	4	Regina	Extension of sewerage system	\$33,500.00
Jan.	4	Saskatoon	Extension of sewerage system	55,680.00
Mar.	25	Lloydminster	Extension of sewerage system	36,750.00
May	7	Prince Albert	Extension of sewerage system	15,000.00
May	7	Prince Albert	Extension of sewerage system	15,620.00
May	31	Regina	Extension of domestic sewer system	16,483.97
June	4	Prince Albert	Extension of sewerage system	26,729.55
Tune	5	Saskatoon	Extension of sewerage system	96,856.53
Tune	10	Regina	Extension of sanitary sewer	1,875.00
June	11	Weyburn	Extension of sewerage system	
Tune	26	Regina	Extension of sewerage system	535.00
July	2	Weyburn	Extension of storm sewer system	2,475.00
Aug.	27	Regina	Extension of domestic sewer system	5,656.00
Aug.	30	Nth. Battleford	Extension of sewerage system	4,500.00
Sept.	9	Swift Current	Extension of sewage treatment plant	111,000.00
Sept.	10	Kamsack	Extension of sewerage system	4,000.00
Sept.	10	Saskatoon	Extension of sewerage system	10,647.00
Sept.	11	Melfort	Construction of sewage treatment plant	50,000,00
Sept.	24	Nth. Battleford	Extension of sewerage system	2,000.00
Dec.	27	Regina	Construction of domestic sewer	7,567.00
Dec.	27	Regina	Construction of storm sewer	4,630.00

TABLE No. 3—1946 SCORES AWARDED URBAN MUNICIPALITIES

DISTRICT No. 3 DISTRICT No. 4 DISTRICT No. 5 No. 2 (CONT'D) (CONT'D) (CONT'D) Villages Villages Towns Towns Score Score Score Score Chamberlain..... 63 Gravelbourg..... 71 Margo..... 76 Hanley..... 82 Stockholm..... 75 Craven..... 63 Outlook..... 77 Assiniboia..... 64 Ogema..... 55 Dilke..... 63 Tantallon..... 75 Delisle...... 75 Duff......Killaly..... Findlater..... 63 Langham..... 75 Villages Nokomis...... 69 Limerick..... 79 73 Langenburg...... Rosthern..... 69 Asquith..... 63 Southey..... 62 Pelly...... 73 Fife Lake..... 74 Wilcox 61 Kendal 61 Bethune 60 Invermay..... 72 Rockglen..... 74 Vonda..... 63 Atwater..... Readlyn..... Lanigan..... 52 Otthon..... Bengough..... Willowbunch 70 Montmartre..... 60 Dafoe..... 70 Villages Mossbank...... 69 Penzance..... 60 Grayson..... 70 Leross..... Sedley...... 57 Belle Plain..... 56 Ponteix..... 65 Allan..... 86 Springside..... 70 Wood Mount-Manitou Pense..... 56 tain..... 65 Elfros...... 69 Beach..... 77 Lipton..... 50 Esterhazy..... 69 Verwood...... 63 Lucky Lake..... 76 Glentworth..... 60 Hyas..... 69 DISTRICT NO. 3A Semans...... 75 Mankota..... 60 Ituna..... 69 Liberty..... 74 Coronach..... 59 Fenwood...... 68 Towns Conquest..... Viceroy...... 59 Goodeve..... 68 Loreburn..... Lafleche..... 56 Hubbard...... 68 73 Broadview..... 72 Imperial..... Bateman..... 55 Raymore..... 68 Wapella..... 69 Kincaid...... 55 Colonsay..... 71 Stenen..... 68 Grenfell..... 67 Bladworth..... 70 Hodgeville...... 54 Dubuc..... 67 Wolseley. 67 Palmer..... 53 Dundurn..... 70 Norquay..... 67 Moosomin..... 67 Simpson..... 70 Meyronne..... 51 Bangor..... 66 Whitewood...... 58 Viscount..... 69 Willows..... 49 Lebret..... 66 Fleming..... 50 Preeceville..... 66 Ettington..... 48 Villages Ardill 47 Horizon 47 Plunkett..... 68 Glenavon..... 71 Stornoway..... 66 Drake..... 67 Vantage..... 43 Kipling..... 66 Beechy..... 66 Mazenod...... 34 Hudson Bay..... 65 Rocanville..... 63 Rose Valley 65 Meacham..... 66 DISTRICT No. 3 Kennedy...... 56 Laura...... 65 Willowbrook..... 65 Fairlight..... 54 Strongfield...... 65 Churchbridge.... 64 Towns Maryfield..... 53 Tate..... 65 Lintlaw..... 64 Wawota..... 53 Lumsden..... 83 Elstow..... 64 Sturgis..... 64 Summerberry.... 48 Indian Head..... 78 Kenaston..... 64 Togo...... 64 Welwyn..... 42 Balgonie..... 70 Aberdeen..... 63 Wroxton..... 64 Windthorst...... 41 Francis..... 67 Guernsey..... 62 Abernethy..... 63 Milestone..... 67 DISTRICT No. 4 Lestock...... 63 Jansen..... 61 Sintaluta..... 67 Arelee..... 60 Strasbourg...... 67 Towns Dunblane..... 60 Qu'Appelle..... 67 Hawarden..... 60 Waldron..... 62 Saltcoats..... 91 Čraik..... 66 Girvin..... 59 Calder..... 61 Kamsack..... 90 Yellow Grass.... 66 Macrorie..... 59 Theodore..... 61 Wadena..... 87 Leroy..... 58 Buchanan..... 60 Wynyard..... 87 Villages Vanscoy..... Bradwell..... 58 Porcupine Foam Lake...... 84 Regina Beach.... 84 56 Plain..... 60 Melville..... 81 North Regina.... 79 Duval...... 56 West Bend...... 59 Watson..... 81 Hague..... 56 Ft. Qu'Appelle.. 78 MacNutt..... 57 Lemberg..... 80 B-Say-Tah..... 74 Disley..... 70 Laird..... Kelvington...... 77 Wishart..... 57 Swanson..... Birsay..... Odessa..... 70 Edenwold..... 67 Dalmeny...... 55 Leslie..... 55 Earl Grey...... 67 Lumsden Beach 67 Glenside..... Villages Veregin..... 54 Elbow..... Insinger..... 52 Sask. Beach..... 67 Punnichy...... 89 Hepburn...... 54 DISTRICT No. 5 Vibank..... 67 Lockwood...... 51 Lang..... 66 Prud'homme..... Towns Waldheim..... 51 Holdfast 65 Balcarres..... 78 Kandahar.... Bulyea..... 64 Davidson..... 85 Bounty..... 51 Markinch..... 64 Zelma..... Kelliher..... 78 Watrous..... 84 Quinton..... 77 Aylesbury...... 63 Govan..... 82 Ardath..... 47

SCORES AWARDED URBAN MUNICIPALITIES—(Continued)

DISTRICT No.	6	DISTRICT No. 6 (CONT'D)	DISTRICT No. 7 (CONT'D)	DISTRICT No. 8 (CONT'D)
Towns		Villages	Villages	Villages
Sc	ore	Score	Score	Score
	90 88 86 86 86 87 77 76 77 77 77 76 76 75 75 73 73			
Elrose	. 70 . 70 . 70	Radisson 63 Villages	DISTRICT No. 8 Towns	Cudworth 65 Lake Lenore 65 Debden 63
Loverna Plato. Ruthilda Smiley Dodsland Druid Kyle. Glidden	. 69 . 69 . 69 . 68 . 68	Speers	Melfort	Parkside 63 Smeaton 62 Big River 59 Zenon Park 58 Love 56 Englefeld 55 Shell Lake 54

Table No. 4—Inspections by District Sanitary Officers for Calendar Year 1946

Total Inspections	283 1,199 1,001 2,265 1,035 1,956 2,848 1,914 1,761 2,429	16,691
Municipal Inspections	53 242 244 134 134 50 50 53 63 75	200
Municipal Officials Interviewed	90 246 281 376 180 392 480 589 335 378	3,347
Total Inspection Hours	1,311 383 868 1,137 1,137 778 1,123 706	7,722
Miscellaneous	111 95 466 267 45 97 158 74 55 265	1,113
Public & Council	122: 2188542:	63
Barber Shops	26 336 336 177 177 180 69 180 69 69 69 69	591
Vital Statistics	1 : : : : : : : =	00
Communicable Disease	1 1 0::: 5::	6
Waste Disposal shounds	68 119 196 196 134 139 138 138	1,206
Camps - Lumber, Mining, etc.	16 1 16 1 18 1 18 1 19 1 19 1 19 1 19 1	59
Plumbing Inspections	221447122	128
slatiqsoH	125236: 11: :	26
Licensed Premises	29 117 57 180 106 116 121 162 192	1,187
Restaurants	293 190 190 422 258 315 335 374 445	3,008
Boarding Houses	12 4 4 4 2 1 1 8 8 1 1 8 8 1 1 8 9 9 9 9 9 9 9 9 9	93
Hotels	34 155 155 181 126 157 165 165 230 230	1,500
Summer Resorts	11: 28: : 1:	29
Tourist Camps	: [64:44 : 6	6
Schools & Institutions	5: 4 56: 5: 3:	48
Food Supplies	40 218 173 173 427 167 361 256 354 354	2,500
Milk Supplies	20 101 77 155 138 305 202 202 169	1,735
Water Supplies	53 97 174 310 108 313 1,038 354 357 475	3,279
Districts	1 2 2 2 3 3 4 4 4 4 5 6 6 6 6 8 8 7	

DIVISION OF COMMUNICABLE DISEASE

REGINA, February 2, 1948.

C. F. W. Hames, Esq., M.D., D.P.H., Deputy Minister of Public Health, Regina, Saskatchewan.

Sir:

I hereby submit report of the Division of Communicable Disease for the calendar year 1946, including the following tables numbered I to X:

- I-The fluctuation of morbidity and mortality during 1945-1946.
- II-Monthly distribution of communicable disease morbidity.
- III-Diphtheria morbidity and mortality by age and sex groups.
- IV-Measles morbidity and mortality by age and sex groups.
- V-Whooping cough morbidity and mortality by age and sex groups.
- VI-Summary of communicable disease morbidity by age and sex groups,
- VII—Detailed distribution of communicable disease morbidity—by cities, towns, villages, rural municipaities and armed forces.
- VIII—Summary of distribution of communicable disease morbidity—by cities, towns, villages, rural municipalities and armed forces.
 - IX-Morbidity and mortality certain communicable diseases-1905-1946,
 - (A) Diphtheria and scarlet fever;
 - (B) Smallpox and whooping cough;
 - (C) Measles and mumps;
 - (D) Tuberculosis and typhoid—paratyphoid fevers;
 - (E) Influenza and chickenpox;
 - (F) Poliomyelitis and encephalitis (encephalomyelitis).
 - X-Vaccines and sera issued-1917-1946.

ROUTINE

	1945	1946
Letters received	4,922	5,817
Physicians' reports received	661	855
Armed Forces' reports	28	29
Memoranda received	438	432
Telegrams received	35	51
Letters dispatched	1,577	1,945
Memoranda dispatched	22	230
Circulars dispatched	1,488	1,220
Telegrams dispatched	19	66
Parcels of vaccines and sera, drugs, etc., dispatched	2,582	3,120
Parcels of forms, bulletins, regulations, etc., dispatched	1,463	270
Statistical reports—internal—dispatched	156	156
Statistical reports—external—dispatched	884	884
Undertakers' licences issued	45	37
Disinterment permits issued	61	76

Organization:

Dr. F. C. Middleton, Director of the Division of Communicable Disease retired 1st of April, 1946, and the direction of the Division was taken over by Dr. H. S. Doyle.

During 1946, Health Regions Nos. 1, 3, 6 and 14 were established and this made certain administrative changes necessary. In so far as the effect to the Division of Communicable Disease, these were: First—reporting of communicable diseases directly to the Regional Medical Health Officers who in turn, reported the diseases to the Division. This change was necessary as it was considered that the Regional Health Officer should be the first to know what was going on in his Region. Secondly, each Regional Office was established as a sub-depot for vaccines and sera in order to facilitate distribution of these materials in the Regions and to provide the Regional Health Officer with further contact with the preventative programme in his Region.

Reported Cases of Communicable Disease:

Nine thousand eight hundred and seventy two cases of communicable disease were reported to the Division during 1946 in comparison to 5,628 cases in 1945. This represented an increase of 4,244. It will be seen in Table I that this increase is made up mainly of measles and mumps which were epidemic during 1946.

Table I shows the incidence of the main communicable diseases in Saskatchewan giving the actual cases reported during 1945, the actual cases reported during 1946 together with the mortality figures for these diseases. It will be seen that the four diseases for which the Division recommends and promotes an immunization programme, the figures were well below the average annual incidence for these diseases, namely smallpox, diphtheria, whooping cough and scarlet fever.

Poliomyelitis:

The poliomyelitis clinic was operated during 1946 at St. Paul's Hospital, Saskatoon as in previous years. A total of 31 cases were treated in the polio clinic and 7 remained under treatment December 31st. Although the United States experienced the worst epidemic of infantile paralysis in a decade and Eastern Canada suffered heavily, Saskatchewan escaped very lightly with only 38 cases.

Regulations:

The Regulations for the Prevention, Notification and Control of Communicable Disease were amended and reprinted in October this year and published in booklet form. The amendments ended the useless practice of placarding for measles, mumps and chickenpox and the quarantine of contacts for measles and chickenpox. These amendments brought the Saskatchewan Regulations into line with modern public health knowledge and practice. The Division was assisted in this work by the fulltime health officers in Saskatchewan and the representative of the College of Physicians and Surgeons.

Surveys:

Two surveys were carried out under the auspices of this Division during the summer of 1946. The Rodent Plague Survey was conducted by two students of the University of Saskatchewan. They covered the Western Border and Southern Border of the Province collecting small animals and their parasites. For the first time, plague was discovered in two specimens of fleas collected on the Western Border. It is not considered that these findings indicate a serious threat to the population of Saskatchewan, but it does indicate that such surveys should be carried out from time to time to keep pace with the development of the disease in animals.

The second survey was the Encephalitis Research work being carried out by Dr. Rempel of the University of Saskatchewan. In this regard, the Division co-operated with the University of Saskatchewan and the Department of National Health and Welfare. While this survey did not conclusively prove the transmission of encephalitis by insect vectors, important contributions were made to the study of this disease.

Immunization:

Immunization was stressed during 1946 for smallpox, diphtheria, whooping cough and scarlet fever. In 1946 more materials were distributed for immunization than in any previous year with the exception of 1944. The Division collaborated with the Division of Health Education in promoting immunization throughout the year. During National Health Week—February of 1946 and during National Immunization Week in October, 1946 an intensive compaign was put on to promote immunization. The Division assisted in the preparation of materials for the radio, press, magazines and posters and other literature. Sufficient biological materials were distributed by the Division this year to immunize 50,499 people against diphtheria; 40,368 against whooping cough; 36,450 against scarlet fever and 68,020 against smallpox. The quantities distributed and the cost of these materials will be found in Table X; the various individual products being listed. Throughout this year in which measles was epidemic—2,310 treatment doses of measles antiserum were sent out. This serum was particularly recommended for the small infant as the greatest mortality from measles lies under two years of age.

Epidemiological Service:

Many requests were received by the Division for assistance in matters pertaining to communicable disease. Most of these requests were dealt with by correspondence but in some instances on-the-spot investigations were required. During 1946, visits were made to a number of communities for the purpose of assisting local authorities. Among these were—(1) Prince Albert—Outbreak of Food Poisoning. (2) Maple Creek—Typhoid Fever. (3) Neilburg—Septic Sore Throat. (4) Ft. Qu'Appelle—Outbreak of Scarlet Fever at the Indian School at Lebret. (5) Milden Sask.—Infant Diarrhoea. (6) R.M. 405—Typhoid Fever. The services of the Division were also requested by physicians to assist in the diagnosis of doubtful or atypical cases of communicable disease.

Respectfully submitted,

H. S. Doyle, M.D., D.P.H., Director.

Table I.-Morbidity and Mortality. Population Rates 1945-1946

1946 1945 1946 1946 1946 1945 1946		CASES	SHS	DEATHS	LHS	DEAT	HS PER	DEATHS PER 100 CASES		RAT	RATE PER 100,000 POPULATION	O POPUI	LATION		
1945 1946 1946 1946	arche penopuen			1			REPOR	red		MORB	IDITY		MORTALITY	TTY.	
1,677 1,445 1,45	EASES REPORTED	1945	1946	1945	1946	1945	1946	Increase or Decrease	1945	1946	Increase or Decrease	1945	1946	Increase or Decrease	
The same of the sa	s. Throat Throat Throat Saries Carrier Carrier	1,677 1,226 9516 9516 331 6614 164 164 172 172 173 173 174 174 175 175 175 175 175 175 175 175 175 175	1,445 1,445 2,386 2,386 1,42 1,42 1,436 1,42 1,436 1,4	111 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	14. 8. 23. 15. 23. 23. 23. 23. 23. 23. 23. 23. 23. 23	11.10 11.3 8.0 2.1 20.0 1.8 Increas Increas	Increase Decrease Increase Decrease Dec	198.5 8.7 145.1 112.5 39.4 39.4 72.7 15.7 19.6 19.6 ULATION	4004000000	Decrease Increase Increase Increase Decrease Decrease Increase Decrease Decrease Increase Inc	26 1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1	26.8 26.8 26.8 10.3 43.8 43.5 43.5	Increase Decrease Increase Increase Increase Decrease Decrease Increase Inc	

Table II—Monthly Distribution of Communicable Disease Morbidity, 1946

Total	1,445 38 34 34 38 4,235 111 111 122 33 33 33 4,235 33 33 33 33 33 33 33 33 33	9,872
Dec.	168 1,689 1,689 1,58	2,439
Nov.	126 111 1,336 1,336 3 363 3 363 1,336 1,336 1,336 1,336 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1,988
Oct.	88 11 12 13 13 14 15 17 18 18 18 19 19 19 19 19 19 19 19 19 19	692
Sept.	38 :	531
Aug.	46 46 46 47 47 48 49 49 49 49 49 49 49 49 49 49 49 49 49	-657
July	127 127 129 130 141 150 150 160 171 171 171 171 171 171 171 171 171 17	624
June	183 183 148 163 163 163 163 172 172 173 174 184 185 187 187 187 187 187 187 187 187 187 187	029
May	122 144 32 156 208 208 156 11 11 11 11	617
Apr.	16 16 16 16 16 16 16 16 16 16 16 16 16 1	489
Mar.	115 26 26 35 35 35 35 35 35 35 35 35 35 35 35 35	365
Feb.	129 144 15 17 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	330
Jan.	212 8 8 1 10 13 13 13 13 13 13 14 15 15 17 17 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	393
Cases Reported	Chickenpox. Conjunctivitis Diphtheria Carrier Encephalitis. Erysipelas. Impetigo Contagiosa Influenza Jaundice Malaria. Measles. Meningitis. Mumps. Paratyphoid Fever. Pheumonia. Poliomyelitis. Ringworm. Rubella. Scarlet Fever. Scarlet Fever. Scarlet Fever. Scarlet Fever. Scarlet Fever. Trachoma.	Totals

TABLE III—DIPHTHERIA—MORBIDITY AND MORTALITY BY AGE AND SEX GROUPS, 1946

Age Groups		Cases			Des	Deaths		Age Group Fatality	Percentag of Total	Percentage of Total	Rate per Popu	Rate per 100,000 Population
	Male	Male Female	N.S.	Total	Male	Female	Total	Percentages	Cases	Deaths	Cases	Deaths
Under 1 year										1	1	
1- 4 Years.	9	3		6	2		2	22.2	16.6	33.3	1.08	2.
5-14 Years	7	19		26	1	3	4	15.4	48.1	9.99	3.1	15.
15-19 Years	1	3		4					7.4		ıs	1
20 Years and Over	9	9		12			1		22.2	. !	1.4	
Age not stated	1	2	-	2			- 1		3.7		2	
Age-Sex not stated	- !		1	1					1.9	-	1.	-
Totals by Sex.	20	33	1	-	3	3 .	1			- !!		"
Totals		54				9						
										-		

Table IV-Measles. Morbidity and Mortality by Age and Sex Groups. 1946

		Cases			Des	Deaths		Age	Percentag of Total	Percentage of Total	Rate per 100,0 Population	Rate per 100,000 Population
Age Groups	Male	Male Female	N.S.	Total	Male	Female	Total	Percentages	Cases	Deaths	Cases	Deaths
Under 1 Year	45	36		81	11	7	18	22.2	1.9	32.1	7.6	2.2
1- 4 years	577	541		1,118	16	13	29	2.6	26.4	51.8	134.2	3.5
5-14 years	1,255	1,088		2,343	2	3	5	.2	55.3	8.9	281.4	9.
15-19 years	102	110	****	212		2	2	6.	5.1	3.6	25.4	.2
20 years and over	- 20	100		150	2		2	1.3	3.5	3.6	18.0	.2
Age not stated	40	22	****	62	***	****	****		1.5	-	7.4	-
Age-Sex not stated			269	269				1	6.3		32.3	
Totals by sex	2,069	1,897	269		31	25				1		
Totals		4,2	4,235			56						

TABLE V-WHOOPING COUGH MORBIDITY BY AGE AND SEX GROUPS, 1946

		Cases			Des	Deaths		Age	Perce of T	Percentage of Total	Rate per 100, Population	Rate per 100,000 Population
Age Groups	Male	Male Female	N.S.	Total	Male	Female	Total	Percentages	Cases	Deaths	Cases	Deaths
Under 1 year	9	4		10		1	1	10.0	9.6	50 0	1.2	1.
1- 4 years	12	14		26	1		, 1	3.8	25.0	50.0	3.1	1.
5-14 years	31	29		09	-				57.7		7.2	1
15-19 years	1	1	1	2					1.9		.2	
20 years and over		1		1					1.0		1.	1
Age not stated	5			22					4.8	1	9.	1
Age-sex not stated	****											
Totals by sex	55	49		!	1	1	i					
Totals		1	104			2						

	Morbidity	Percent- ages	14.5	.55					42.9	24.2		.38	95	20.	1.4				9.9	.28		1.2			-
		Totals	1,445	54	6.0	15	111	w 11	4,235	2,386	32	38	18	337	142	2		534	301	28	- 5	120	9,872		
1970	ution	Not stated	28	10		- 13	10		269	77	-	7	18	103	1-	1			-		1	9	581	-	
GROOFS	Distribution Totals	F	989	33	4-	00 }	3	2	1,897	1,170	20	18	23	37	70	2	-	219	15	17	-	12	4,355	9.872	
Dev o	Sex I	M	731	20	N 4	1	34	- "	2,069	1,139	1.0	20	33	197	72		-	315	20	112	7 -	102	4,936	Ī	
awa a	Age &	not stated	28	10	1 1		10		569	77			18	103	-	1 :					-	9		581	5.9
- Aug	not	T	6	2	1 1		7		22	17		1 1	-		2		:	7	-	4	1	-	89	6	6
KIIGIS	Age not stated	M	9	11			77	1	40	18				151	-		1		:	3		88	321	389	
MOM	Years	[II	34	9	2	7		-	100	194	20	2 2	-	• :	15	-	1	161	24	·w		9+	574	1	10
DISEASE MORBIDITY	20 Year and over	M	36	0	2	4	1		20	99	P	- 10			N -	1 :	-	282	17	4	7	-11-	563	1,137	=
	9 ars	[H	27	3.1	1	1	-		110	110				50	3	-	-	33	2		:	2	307	2	00
COMMUNICABLE	15-19 Years	M	17			-	: :		102	66	-		-	1 1	15		:	13	0 %	-		- 7	265	572	5.
COMM	5-14 Years	(II	391	19		100	20	-	1,088	702		-11	101	30	35	• ::		19	13	, w	-	300	2,382	82	15
KY OF	ye.	M	464	12	1 2	1 11	31	1	1,255	767		9	-	42	35			14	-	3		3.1	2,700	5,082	51
DOMMA	4 ars	(II	208	- 6	2	-	7		541	144		4	1	- 11	14		1	4	4			14	951	34	9.
I ABLE VI—SUMMARY OF	1-4 Years	M	176	9					577	152		- 4	18	300	15			4.	-			12	983	1,934	19.6
IABLE	Under 1 year	[24	17	11					36	3.6				1	-				-	2		4	73	1	00
	Under 1 year	M	32	5		-			45	- 4		7			-			2	-		-	9	104	177	1.8
		Disease	Chickenpox	Conjunctivitis	Diphtheria Carrier	Erysipelas	Impetigo ContagiosaInfluenza.	Jaundice	Measles	Mumps.	Paratyphoid Fever	Poliomyelitis.	Ringworm.	Scabies	Scarlet Fever	Smallpox	Tetanus. Trachoma		Tuberculosis, T.N.S.	Typhoid Fever	Lyphoid Carrier		Age Groups by Sex.	Age Group Totals	Age Group Percentages

TABLE VII-DETAILED DISTRIBUTION OF COMMUNICABLE DISEASE

MORBIDITY 1946.

CHICKENPOX-Total Cases 1,445.

Cities-1,213. Moose Jaw, 296; North Battleford, 41; Prince Albert, 61; Regina, 478; Saskatoon, 296; Swift Current, 3; Weyburn, 3; Yorkton 35.

Towns—45. Davidson, 2; Estevan, 4; Humboldt, 1; Meadow Lake, 2; Melfort, 10; Moosomin, 1; Morse, 2; Nipawin, 12; Nokomis, 2; Rosthern, 5; Strasbourg 1; Sutherland, 3.

Villages—90. Abbey, 1; Aberdeen, 1; Arborfield, 4; Birsay 4: Bladworth 1; Borden, 2; Climax, 2; Colonsay, 1; Hague, 12; Kelvington, 6; Kyle 3; LaFleche, 1; Lucky Lake, 4; Maidstone, 1; Maryfield, 28; Pennant, 1; Perdue 1; Primate 7; Tugaske, 1; Tuxford, 1; Viscount, 2; Willow Bunch, 5; Young, 1.

Rural Municipalities—93. No. 4, 1; 5, 1; 65, 3; 91, 11; 97, 1; 107, 1; 121, 2; 128, 1; 159, 1; 187, 1; 224, 1; 252, 1; 253, 1; 276, 1; 309, 1; 314, 7; 342, 4; 346, 5; 369, 7; 370, 1; 398, 2; 403, 5; 427, 1; 429, 2; 431, 3; 437, 8; 456, 4; 487, 1; 491, 15.

Indian Reserves—1.
Armed Forces—3.

CONJUNCTIVITIS-Total Cases 38.

Cities-32. Moose Jaw, 3; Prince Albert, 29.

Villages-4. Birsay, 2; Weldon, 2.

Rural Municipalities-2. No. 430, 1; 490, 1.

DIPHTHERIA-Total Cases 54.

Cities-14. Moose Jaw, 5; North Battleford, 1; Prince Albert, 2; Regina, 2; Saskatoon, 4.

Towns-17. Arcola, 2; Carlyle, 10; Kamsack, 1; Lloydminster, 1; Meadow Lake, 1; Melfort, 2.

Villages-5. Elbow, 1; Paynton, 1; Sheho, 1; White Fox, 1; Windthorst, 1.

Rural Municipalities—18. No. 4, 1; 63, 1; 65, 4; 137, 1; 186, 1; 368, 1; 399, 1; 430, 1; 437, 2; 459, 1; 471, 1; 550, 2; 588, 1.

DIPHTHERIA CARRIER-Total Cases 9.

Towns-4. Foam Lake, 4.

Villages-1. Young, 1.

Rural Municipalities-4. No. 65, 4.

ENCEPHALITIS-Total Cases 5.

Cities-2. Saskatoon, 2.

Villages-1. Simpson, 1.

Indian Reserves-2. Mistawasin, 1; Sandy Lake, 1.

ERYSIPELAS-Total Cases 15.

Cities-4. Regina, 1; Saskatoon, 3.

Towns-1. Lumsden, 1.

Villages-2. Bridegford, 1; Turtleford, 1.

Rural Municipalities—8. No. 67, 1; 189, 1; 219, 1; 282, 1; 374, 1; 403, 1; 437, 1; 501, 1.

IMPETIGO CONTAGIOSA-Total Cases 111.

Cities—53. Moose Jaw, 3; Prince Albert, 39; Saskatoon, 9; Weyburn, 2.

Towns-9. Arcola, 5; Humboldt, 1; Melville, 3.

Villages—8. Forget, 1; Lucky Lake, 3; Manor, 2; Redvers, 1; Viceroy, 1.

Rural Municipalities—38. No. 34, 5; 65, 17; 189, 1; 226, 2; 367, 1; 374, 3; 427, 3; 491, 5; 501, 1.

Indian Reserves-3.

INFLUENZA-Total Cases 19.

Villages—1. Chaplin, 1.

Rural Municipalities—12. No. 122, 1; 314, 10; 464, 1.

Indian Reserves—4.

Armed Forces—2.

JAUNDICE (INFECTIOUS)-Total Cases 3.

Cities-1. Prince Albert, 1.

Towns-2. Grenfell, 1; Humboldt, 1.

MALARIA-Total Cases 3.

Cities-2. Saskatoon 2.

Rural Municipalities-1. No. 34, 1.

MEASLES-Total Cases 4,235.

Cities-3,075. Moose Jaw, 828; North Battleford, 191; Prince Albert, 46; Regina, 1,813; Saskatoon, 145; Swift Current, 48; Weyburn, 2; Yorkton, 2.

Towns—266. Arcola, 2; Asquith, 1; Battleford, 1; Cabri, 2; Carnduff, 3; Caron, 3; Craik, 2; Davidson, 41; Estevan, 1; Foam Lake, 44; Gainsborough, 1; Hudson Bay Junction, 39; Humboldt, 1; Indian Head, 11; Kamsack, 43; Lumsden, 21; Meadow Lake, 5; Melville, 2; Moosomin, 2; Nokomis, 1; Rosthern, 2; Strasbourg, 33; Unity, 5.

Villages—232. Arborfield, 11; Big River, 7; Borden, 6; Briercrest, 1; Brownlee 2; Bulyea, 1; Cadillac, 3; Central Butte, 7; Coronach, 1; Cupar, 15; Dodsland, 1; Dundurn, 3; Dysart, 1; Fort Qu'Appelle, 2; Girvin, 2; Hague, 16; Hoey, 1; Keeler, 1; Kelvington, 4; Kincaid, 17; Kinistino, 3; Leask, 5; Lockwood, 1; Lucky Lake, 1; Maidstone, 25; Marquis, 1; Maryfield, 3; Meyronne, 14; Midale, 6; Milestone, 2; Montmartre, 1; Parkside, 13; Pennant, 2; Rockglen, 16; Semans, 2; Sheho, 3; Shellbrook, 4; Silton, 1; St. Walburg, 11; Stoughton, 8; Success, 1; Tuxford, 5; Wauchope, 1; West Bend, 1.

Rural Municipalities—656. No. 31, 1; 67, 1; 91, 9; 96, 6; 107, 2; 121, 2; 126, 4; 127, 1; 131, 4; 137, 1; 154, 3; 156, 3; 159, 4; 161, 9; 163, 7; 168, 1; 185, 12; 186, 1; 187, 7; 189, 5; 191, 1; 218, 2; 220, 13; 222, 1; 223, 1; 243, 4; 244, 1; 252, 12; 253, 20; 254, 1; 271, 1; 276, 22; 277, 11; 282, 4; 283, 1; 303, 2; 305, 1; 306, 9; 314, 6; 339, 1; 342, 3; 344, 13; 346, 2; 350, 2; 366, 8; 369, 1; 376, 2; 380, 1; 381, 10; 382, 1; 395, 6; 397, 1; 403, 7; 405, 1; 410, 3; 411, 1; 427, 10; 428, 7; 430, 4; 437, 15; 439, 1; 440, 10; 456, 19; 459, 16; 471, 15; 491, 1; 493, 2; 501, 34; 555, 1; 583, 2; 588, 2; 619, 1. Unorganized: Green Lake, 1; Ile a la Crosse, 186; LaLoche, 70.

Indian Reserves-5.

Armed Forces-1.

MENINGITIS-Total Cases 16.

Cities-7. North Battleford, 1; Regina, 3; Saskatoon, 3.

Towns-1. Tisdale, 1.

Villages-4. Viceroy, 1; Imperial, 1; Hague, 2.

Rural Municipalities-4. No. 136, 1; 253, 1; 374, 1; 394, 1.

Mumps-Total Cases 2,386.

Cities—1,948. Moose Jaw, 880; North Battleford, 13; Prince Albert, 229; Regina, 442; Saskatoon, 134; Swift Current, 7; Weyburn, 242; Yorkton, 1.

Towns—216. Cabri, 1; Carlyle, 76; Davidson, 47; Estevan, 1; Foam Lake, 1; Grenfell, 1; Humboldt, 2; Indian Head, 48; Kamsack, 1; Melfort, 12; Nipawin, 14; Rosthern, 11; Sutherland, 1.

Villages—55. Arborfield, 11; Balcarres, 1; Bradwell, 1; Bromhead, 2; Central Butte, 1; Creelman, 3; Dundurn, 1; Heward, 13; Kelliher, 1; Kisbey, 1; Maryfield, 7; Norquay, 2; Odessa, 2; Stoughton, 8; Wauchope, 1.

Rural Municipalities—164. No. 4, 1; 7, 4; 34, 1; 43, 1; 44, 1; 65, 21; 67, 40; 71, 1; 74, 1; 75, 3; 91, 10; 96, 1; 97, 1; 98, 2; 121, 1; 127, 3; 128, 1; 137, 4; 230, 1; 244, 2; 252, 10; 253, 9; 257, 1; 276, 1; 282, 3; 283, 1; 340, 2; 343, 1; 344, 1; 345, 1; 374, 2; 405, 1; 427, 2; 429, 11; 430, 1; 437, 4; 459, 1; 437, 4; 491, 6; 493, 1; 495, 1.

Armed Forces-3.

PNEUMONIA-Total Cases 22.

Cities-1. Saskatoon, 1.

Villages-9. Big River, 5; Central Butte, 1; Lucky Lake, 1; Viceroy, 2.

Rural Municipalities—12. No. 71, 5; 228, 1; 252, 1; 333, 1; 502, 1; 551, 2. Unorganized: Green Lake, 1.

Poliomyelitis—Total Cases 38.

Cities-4. Regina, 1; Saskatoon, 3.

Towns-8. Bredenbury, 1; Canora, 1; Hanley, 1; Kamsack, 2; Radville, 2; Rosetown, 1.

Villages—11. Central Butte, 1; Coronach, 3; Dodsland, 1; Dundurn, 1; Kisbey, 1; Laird, 1; Macoun, 1; Stalwart, 1; Wauchope, 1.

Rural Municipalities—15. No. 1, 2; 5, 1; 8, 1; 31, 4; 71, 1; 156, 1; 253, 1; 279, 1; 344, 1; 351, 1; 404, 1.

RINGWORM-Total Cases 18.

Villages-5. Hague, 5.

Rural Municipalities-13. No. 367, 1; 374, 1; 427, 7; 501, 4.

RUBELLA-Total Cases 55.

Cities-45. Moose Jaw, 9; Prince Albert, 5; Regina, 11; Saskatoon, 20.

Towns-6. Hudson Bay Junction, 6.

Villages-2. Kinley, 1; Viceroy, 1.

Rural Municipalities-2. No. 343, 1; 369, 1.

SCABIES-Total Cases 337.

Cities-88. Moose Jaw, 9; Prince Albert, 75; Saskatoon, 1; Weyburn, 2; Yorkton, 1.

Towns-1. Melville, 4.

Villages—28. Elrose, 3; Hague, 5; Lampman, 4; Lucky Lake, 2; Rockglen, 10; St. Walburg, 1; Torquay, 1; Viceroy, 2.

Rural Municipalities—66. No. 65, 21; 71, 10; 226, 2; 374, 8; 397, 10; 403, 2; 427, 5; 487, 4; 491, 3; 501, 1.

Armed Forces-151.

SCARLET FEVER—Total Cases 142.

Cities-67. Moose Jaw, 1; Prince Albert, 13; Regina, 19; Saskatoon, 31; Swift Current, 3.

Towns-13. Davidson, 1; Delisle, 1; Duck Lake, 1; Humboldt, 1; Lanigan, 1; Leader, 1; Macklin, 1; Meadow Lake, 1; Melfort, 1; Nipawin, 3; Shaunavon, 1.

Villages—15. Bradwell, 2; Ceylon, 2; Maidstone, 1; Norquay, 4; Pense, 1; Sheho, 3; Shellbrook, 1; Star City, 1.

Rural Municipalities—32. No. 3, 6; 42, 7; 71, 1; 96, 2; 226, 1; 227, 1; 261, 1; 314, 2; 344, 1; 372, 1; 394, 1; 400, 1; 403, 2; 411, 1; 471, 1; 487, 2; 491, 1.

Lebret Indian School—15.

SEPTIC SORE THROAT-Total Cases 3.

Cities-1. Saskatoon, 1.

Villages-1. Stoughton, 1.

Rural Municipalities-1. No. 34, 1.

SMALLPOX-Total Cases 2.

Villages-1. Southey, 1.

Rural Municipalities-1. No. 367, 1.

TETANUS-1 Case.

City of Saskatoon-1.

Trachoma-1 Case.

Rural Municipality-No. 128, 1.

Tuberculosis—Total Cases 657.

Cities-172. Moose Jaw, 9; North Battleford, 2; Prince Albert, 10; Regina, 52; Saskatoon, 71; Swift Current, 8; Weyburn, 16; Yorkton, 4.

Towns—78. Arcola, 1; Assiniboia, 1; Battleford, 2; Biggar, 6; Broadview, 1; Canora, 2; Carlyle, 2; Duck Lake, 1; East End, 1; Estevan, 4; Govan, 2; Gravelbourg, 1; Hanley, 1; Humboldt, 5; Indian Head, 2; Kamsack, 4; Kindersley, 3; Lloydminster, 1; Maple Creek, 2; Meadow Lake, 4; Melfort, 1; Melville, 1; Mortlach, 4; Mossomin, 1; Ogema, 1; Radville, 1; Rosetown, 4; Saltcoats, 2; Sutherland, 1; Unity, 1; Vanguard, 1; Wadena, 1; Watrous, 4; Watson, 1; Whitewood, 1; Wilkie, 4; Wynyard, 3.

Villages—96. Abbey, 1; Aberdeen, 1; Adanac, 2; Bateman, 1; Benson, 1; Blaine Lake, 1; Brock, 1; Candiac, 1; Canwood, 1; Climax, 1; Colonsay, 2; Cut Knife, 1; Dalmeny, 1; Denzil, 1; Dilke, 1; Dinsmore, 1; Eatonia, 1; Edam, 1; Elfros, 1; Englefeld, 1; Esterhazy, 2; Fairlight, 1; Fife Lake, 1; Fort Qu'Appelle, 3; Glenavon, 1; Hafford, 1; Hardy, 1; Harris, 1; Herschel, 1; Hughton, 1; Invermay, 1; Khedive, 1; Kinistino, 1; Kipling, 1; LaFleche, 1; Lampman, 1; Landis, 1; Lashburn, 1; Lawson, 1; Leslie, 1; Limerick, 1; Lockwood, 1; Luseland, 1; Maidstone, 2; Major, 1; Manor, 1; Maymont, 1; Medstead, 1; Medstead, 1; Middle, 1; Milden, 1; Major, 1; Manor, 1; Maymont, 1; Medstead, 1; Meota, 1; Midale, 1; Milden, 1; Montmartre, 2; Mossbank, 3; Muenster, 2; Neidpath, 1; Odessa, 1; Pangman, 1; Paynton, 1; Penzance, 1; Perdue, 1; Plato, 1; Preceville, 1; Punnichy, 1; Quill Lake, 1; Rabbit Lake, 1; Raymore, 2; Rhein, 1; Rose Valley, 1; Scotsguard, 1; Shellbrook, 2; Silton, 1; Springside, 1; Stalwart, 1; St. Boswells, 1; Stenen, 2; Sturgis, 2; Torquay, 1; Trossachs, 1; Turtleford, 1; Viceroy, 1; Willow Bunch, 2.

Rural Municipalities—249. No. 2, 1; 4, 1; 5, 2; 6, 1; 8, 1; 20, 1; 22, 1; 31, 3; 34, 1; 36, 1; 40, 1; 42, 1; 43, 1; 47, 1; 52, 1; 67, 10; 68, 1; 71, 1; 73, 1; 74, 2; 75, 2; 91, 1; 92, 1; 102, 1; 103, 1; 104, 2; 126, 1; 128, 1; 151, 2; 155, 2; 156, 1; 158, 1; 159, 2; 161, 1; 163, 1; 164, 1; 184, 2; 186, 1; 187, 5; 214, 1; 215, 1; 216, 1; 217, 1; 219, 2; 220, 1; 228, 2; 241, 3; 243, 2; 244, 2; 245, 3; 246, 1; 247, 1; 251, 1; 254, 1; 273, 2; 274, 3; 276, 2; 277, 1; 278, 1; 281, 1; 287, 2; 290, 1; 304, 1; 305, 2; 306, 1; 312, 1; 320, 1; 322, 4; 331, 2; 333, 1; 334, 1; 335, 1; 336, 2; 340, 1; 342, 1; 345, 1; 346, 1; 347, 3; 352, 1; 364, 1; 367, 2; 369, 1; 370, 2; 371, 1; 372, 1; 373, 1; 374, 1; 375, 1; 376, 1; 377, 2; 379, 1; 381, 2; 382, 1; 394, 1; 395, 2; 396, 1; 397, 6; 398, 1; 400, 2; 401, 1; 403, 2; 423, 1; 426, 1; 427, 6; 428, 3; 430, 1; 431, 3; 434, 2; 435, 3; 439, 1; 442, 1; 456, 2; 458, 1; 459, 4; 460, 4; 461, 5; 463, 1; 465, 1; 486, 2; 487, 1; 490, 1; 491, 2; 494, 4; 495, 1; 496, 4; 497, 1; 499, 2; 517, 1; 519, 4; 523, 1; 524, 1; 525, 3; 532, 2; 559, 2; 561, 1; 583, 1; 588, 3; 621, 1. Unorganized Territory: Beauval, 1; Buffalo Narrows, 1; Churchill Lake, 1; Cree Lake, 1; Cumberland House, 3; Green Lake, 1; Ile a la Crosse, 6; Island Falls, 1. Indian Reserves—62.

Indian Reserves-62.

TYPHOID AND PARATYPHOID FEVER-Total Cases 30.

Cities-6. Moose Jaw, 1; Regina, 2; Saskatoon, 3.

Towns-4. Lanigan, 1; Leader, 1; Melville, 1; Nokomis, 1.

Villages-13. Burstall, 5; Blaine Lake, 1; Hepburn, 4; Leroy, 1; Loreburn, 1;

Rural Municipalities-7. No. 11, 1; 80, 4; 262, 1; 400, 1.

TYPHOID CARRIER—Total Cases 2.

Town of Melfort 1.

Rural Municipality-1. No. 372, 1.

UNDULANT FEVER-1 Case.

Rural Municipality-1. No. 305, 1.

VINCENT'S ANGINA—Total Cases 120.

Cities-17. Prince Albert, 9; Saskatoon, 5; Yorkton, 3.

Towns-2. Vonda, 2.

Villages-3. Aberdeen, 1; Elrose, 1; Kincaid, 1.

Rural Municipalities-8. No. 34, 2; 65, 2; 71, 2; 257, 1; 501, 1.

Armed Forces-90.

Whooping Cough—Total Cases 104.

Cities-91. Moose Jaw, 79; Prince Albert, 7; Regina, 2; Weyburn, 3. Villages-10. Fox Valley, 1; Prelate, 4; Weldon, 5.

Rural Municipalities-3. No. 38, 1; 231, 2.

TABLE VIII—SUMMARY OF DISTRIBUTION OF COMMUNICABLE DISEASE, 1946.

Percent- age of Total Cases	14.6 24.2 24.2 1.4 6.7 6.7 1.0s		-
Total	1,445 388 54 1111 1115 1117 1142 1142 1142 1142 1142 1142 1142	9,872	1
Armed Forces	8	250	2.5
Indian Re- serves	-	92	6.
Rural Munici- pali- ties	24 1 1 1 2 2 4 5 1 1 2 3 8 8 1 4 5 2 2 1 1 2 4 5 1 1 1 2 4 5 1 1 1 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,412	14.3
Vil- lages	84 × 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	597	6.4
Towns	2 1 1 1 1 1 1 1 1 1	677	6.9
(Cities' Totals)	1,213 14 1,232 1,948 1,948 1,948 1,948 1,72 1,948 1,72 1,72 1,948	(6,844)	(0.69)
York- ton	%	46	10
Wey- burn	3 6	270	2.6
Swift Cur- rent		69	7.
Saska- toon	. 5 1 1 1 1 1 1 1 1 1	735	7.4
Regina	478 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2,826	28.5
Prince Al- bert	23 1 1 1 1 2 2 2 4 1 1 2 2 2 2 2 2 2 2	497	5.0
North Battle- ford	48°	278	2.8
Moose	88.088	2,123	21.5
Cases Reported	Chickenpox Conjunctivitis Diphtheria Diphtheria Diphtheria Diphtheria Diphtheria Encephalitis Encephalitis Encyapelas Impetigo Contagiosa Influenza Jaundice Malaria Meningitis Meningitis Meningitis Poliomyelitis Pheumonia Poliomyelitis Riupela Scabies Scabies Scabies Scabies Scabies Scabies Scabies Scabies Carier Fever Scapie Sore Throat Tuberculosis Trachoma Tuberculosis Trachoma Typhoid and Paratyphoid Typhoid Carrier Undulant Fever Undulant Fever Undulant Fever Undulant Fever Vincent's Angina	TOTALS	Percentage of total cases by location.

Table IX (A)—Morbidity and Mortality Certain Communicable Diseases, 1905-1946.

12			Diphtheri	а		100		Sc	arlet Fev	er	
Period	Popula- tion	Cases	Deaths	Deaths per 100 Cases Re-	Popu	Per 00,000 lation	Cases	Deaths	Deaths per 100 Cases Re-	Popu	Per ,000 lation
				ported	Cases	Deaths			ported	Cases	Death
1905 1906 1907 1908 1909	250,000 257,763 304,230 350,607 397,000	202 210 201	23 52 55 54 31	25.7 25.7 15.4	78.0 59.9 50.6	9.2 20.0 18.0 15.4 7.8	98 91 14	14 21 12 5 22	21.4	38.0	5. 8. 3. 1. 7.
	Totals	613	215				203	74			
1910 1911 1912 1913 1914	443,397 492,432 523,512 554,592 585,672	143 289 402 312 602	28 58 49 52 42	19.6 20.1 12.2 16.6 7.0	32.3 58.5 76.8 56.3 102.8	6.3 11.8 9.3 9.4 5.6	323 474 561 1,300 1,031	15 57 58 82 25	4.6 12.0 10.3 6.3 2.4	72.9 96.3 107.2 234.5 176.0	3. 11. 11. 14. 3.
5-Year	Totals	1,748	229				3,689	237			
1915 1916 1917 1918 1919	616,252 647,835 669,770 691,705 713,640	449 276 1,005 776 278	29 44 101 74 79	6.5 15.9 10.0 9.5 28.4	72.8 42.6 150.0 112.2 38.9	3.8 6.1 14.1 10.4 9.5	149 296 317 219 172	2 9 25 11 19	1,3 3,0 7,9 5,0 11,0	24.2 45.7 47.3 31.7 24.1	0.: 1.: 3.: 1.: 2.:
5-Year	Totals	2,784	327				1,153	65			
1920 1921 1922 1923 1924	735,570 757,510 785,508 814,000 815,000	486 960 1,058 1,133 1,015	91 159 202 204 210	18.7 16.7 19.1 18.0 20.7	66.1 126.7 134.7 139.8 124.5	11.0 22.8 25.7 25.1 25.8	940 1,743 1,245 979 920	53 87 71 41 37	5.6 5.0 5.7 4.2 4.0	127.8 230.1 158.5 120.8 112.8	6. 11. 9. 5. 4.
5-Year	Totals	4,652	866				5,827	289			
1925 1926 1927 1928 1929	833,000 821,042 836,000 851,000 866,700	581 470 369 464 465	127 116 63 82 92	21.8 24.8 17.1 17.6 19.8	69.7 57.0 44.1 53.9 53.6	15.2 14.4 7.5 9.6 10.6	713 822 1,013 1,057 1,077	23 23 28 22 43	3.2 2.8 2.7 2.1 4.0	85.6 100.0 121.2 122.7 124.2	2. 2. 3. 2. 5.
5-Year	Totals	2,349	480				4,682	139			
1930 1931 1932 1933 1934	882,000 921,281 933,000 951,000 966,000	300 306 194 132 211	69 39 40 18 22	23.0 12.7 20.6 13.6 10.4	30.0 33.2 20.8 13.7 22.9	7.9 4.2 4.3 1.9 2.3	683 543 352 491 525	10 15 6 12 5	1.5 2.8 1.7 2.4 .9	77.4 58.9 37.7 51.6 54.3	1. 1. 0. 1. 0.
5-Year	Totals	1,143	188				2,594	48		1 10	
1935 1936 1937 1938 1939	978,000 931,000 939,000 941,000 949,000	131 117 72 256 261	16 11 10 28 36	12.1 9.4 13.9 10.9 13.8	13.4 12.7 7.7 27.2 27.5	1.6 1.2 1.1 3.0 3.8	558 980 1,648 1,479 716	10 16 16 12 12	1.6 .9 .8 1.7	57.1 105.3 175.6 157.2 75.5	1. 1. 1. 1.
5-Year	Totals	837	101				5,381	66			
1940 1941 1942 1943 1944	930,000 896,000 906,000 842,000 846,000	131 137 96 41 92	24 12 7 7 15	18.3 8.8 7.3 17.1 16.3	14.1 15.3 10.6 4.9 10.9	2.6 1.3 0.8 0.8 1.7	470 522 1,369 1,323 684	9 7 13 8 2	1.9 1.3 .9 .6 .3	50.5 58.3 151.1 157.1 80.9	1. 0. 1. 1. 0.
5-Year	Totals	497	65		Aug II		4,368	39			
40 Yea	rs' Total	14,623	2,471				27,897	958			
1945 1946	845,000 832,700	74 54	11 6	14.8 11.1	8.7 6.5	1.3	331 142	1 2	2.1	39.4 17.0	:
Totals		14,751	2,488				28,370	961			-

TABLE IX (B)—MORBIDITY AND MORTALITY CERTAIN COMMUNICABLE DISEASES, 1905-1946.

				Smallpox				Who	ooping Co	igh	
Period	Popula-	Cases	Deaths	Deaths Per 100 Cases Re-	100	Per ,000 lation	Cases	Deaths	Deaths Per 100 Cases Re-	100	Per ,000 lation
	Closs	Caous	Deatins	ported	Cases	Deaths	Cases	Deaths	ported	Cases	Death
1905 1906 1907 1908 1909	250,000 257,763 304,230 350,607 397,000	28 103			10.8	0,3		4 20 18 25 27			1.6 7.7 5.8 7.1 6.8
	Totals	131	1			****		94			0.0
1910 1911 1912 1913 1914	443,397 492,432 523,512 554,592 585,672	17 125 327 598 392	1 4 2		3.8 25.4 62.5 107.8 66.9	0.2 0.7 0.2	1 33 153 304 241	24 31 64 46 27	41.8 15.1 11.2	6.5 29.2 54.8 41.1	5.4 6.3 12.2 8.3 3.6
5-Year	Totals	1,459	7	1/25/11/2			732	192	1		
1915 1916 1917 1918 1919	616,252 647,835 669,770 691,705 713,640	49 6 120 97 141	2 1 1	4.1 .1 .7	7.9 .0 17.9 14.0 19.8	0.2 0.1 0.1	339 1,092 334 556 166	41 93 60 78 58	12.1 8.5 25.6 14.0 34.9	54.8 168.6 34.9 80.4 23.3	5.4 13.0 8.5 10.9 7.0
5-Year	Totals	413	4				2,487	330			
1920 1921 1922 1923 1924	735,570 757,510 785,508 814,000 815,000	390 961 266 154 234	8 2 4	.8	39.4 126.9 33.1 19.0 28.7	1.0 0.2 0.5	705 574 471 509 667	128 58 28 75 81	18.1 10.1 6.0 14.7 12.1	94.5 75.8 59.9 62.8 81.8	15.5 7.6 3.5 9.2 10.0
5-Year	Totals	2,005	14				2,926	370			1
1925 1926 1927 1928 1929	833,000 821,042 836,000 851,000 866,700	62 337 340 503 382	1 1 1 1 3	 3 1.3 0.2 .8	7.6 41.0 40.6 58.4 44.0	.1 .1 0.1 0.3	860 538 349 362 1,070	66 108 46 47 58	7.6 20.1 13.0 13.0 5.4	103.1 65.5 41.7 42.0 123.4	7.9 13.1 5.5 5.5 6.7
5-Year	Totals	1,624	6		-		3,179	325			1
1930 1931 1932 1933 1934	882,000 921,281 933,000 951,000 966,000	375 568 163 74 4	 1 1		42.5 61.6 17.2 7.7	.1	689 502 701 849 1,289	54 54 40 34 68	7.8 10.8 5.7 4.0 5.3	78.1 54.5 75.1 89.2 133.4	6.1 5.9 4.3 3.6 7.0
5-Year	Totals	1,184	2	7			4,030	250		79.7	
1935 1936 1937 1938 1939	978,000 931,000 939,000 941,000 949,000	12 3 3 47 31	2 2	16.7	1.2 .3 .3 5.0 3.3	.2	2,204 985 904 178 1,257	90 50 47 18 48	4.1 5.1 5.2 10.1 3.8	225.3 105.8 96.3 18.9 132.5	9.2 5.4 5.0 1.9 5.1
5-Year	Totals	96	4				5,528	253			
1940 1941 1942 1943 1944	930,000 896,000 906,000 842,000 846,000	11 25 5 4			1.9 2.8 .6 .5		1,449 399 225 959 468	65 20 29 21 29	4.5 5.0 12.8 2.2 6.2	155.8 44.5 24.8 113.9 55.2	7.0 2.3 3.2 2.3
5-Year	Totals	45	1				3,500	164			
40 Yes	ars' Total	6,957	38				22,382	1,978			
1945 1946	845,000 832,700	5 2		1117	.6		164 104	9 2	5.5 1.8	19.6 12.5	1.
Totals		6,964	38	77,10			22,650	1,989			

TABLE IX (C)—MORBIDITY AND MORTALITY CERTAIN COMMUNICABLE DISEASES, 1905-1946.

	-			Measles				M	umps	
Period	Popu- lation	Cases	Deaths	Deaths per 100 Cases Re-	100	Per ,000 lation	Cases	Deaths	Rate 100 Popu	
	neton			ported	Cases	Deaths			Cases	Deaths
1905 1906 1907 1908 1909	250,000 257,763 304,230 350,607 397,000	274 254 226	6 12 6 11 .11	4.4 4.3 4.9	106.0 72.4 56.9	2.4 4.6 1.9 3.1 2.8				
5-Year	Totals	754	46		1					
1910 1911 1912 1913 1914	443,397 492,432 523,512 554,592 585,672	424 421 1,188 1,613 837	19 16 50 27 7	4.5 4.0 .4 1.7 .8	95.6 85.5 226.7 290.8 142.9	4.3 3.3 9.5 4.9 0,9	66 257 132 172		8.4 52.1 23.8 29.4	
5-Year	Totals	4,483	119				627			COL M
1915 1916 1917 1918 1919	616,252 647,835 669,770 691,705 713,640	1,293 4,419 2,457 2,091 565	5 105 36 38 14	2.4 1.5 1.8 2.5	209.8 680.6 366.8 302.3 79.2	0.6 14.6 5.0 5.3 1.6	125 96 834 265 256		20.3 14.8 124.5 38.3 35.9	
5-Year	Totals	10,825	198				1,576			
1920 1921 1922 1923 1924	735,570 757,510 785,508 814,000 815,000	2,567 1,850 1,897 4,216 1,507	32 61 18 66 49	1.2 3.3 .9 1.5 3.2	348.1 244.2 241.5 520.2 183.6	3.9 8.0 2.2 8.1 6.1	822 1,455 1,346 351 34	 1	111.8 192.1 177.7 43.3 4.1	71
5-Year	Totals	12,037	226			4	4,008	1	1000	1 100
1925 1926 1927 1928 1929	833,000 821,042 836,000 851,000 866,700	1,919 6,139 714 1,995 2,395	15 118 12 21 28	.8 1.9 1.7 1.05 1.17	223.0 746.9 85.4 231.7 276.2	1.8 14.4 1.4 2.5 3.2	588 1,399 2,124 1,553 673	2 3 	71.8 171.0 254.0 180.4 77.6	.4
5-Year	Totals	13,162	194	1		1	6,337	5		
1930 1931 1932 1933 1934	882,000 921,281 933,000 951,000 966,000	1,249 3,294 935 554 3,872	8 17 17 5 16	1.4 .5 1.8 .9 .4	141.6 357.5 100.2 58.2 400.8	0.9 1.8 1.8 .5 1.7	427 895 404 375 241	2	48.4 97.1 43.3 39.4 24.9	.2
5-Year	Totals	9,904	63			Printers.	2,342	2		
1935 1936 1937 1938 1939	978,000 931,000 939,000 941,000 949,000	6,124 5,309 7,078 412 261	34 39 252 19 6	.6 .7 3.6 4.6 2.3	626.2 569.2 753.8 43.8 27.50	3.5 4.2 26.8 2.0 .6	6,695 2,966 406 132 144		719.1 317.9 43.2 14.0 15.17	100 100 100 100
5-Year	Totals	19,184	350				10,343			
1940 1941 1942 1943 1944	930,000 896,000 906,000 842,000 846,000	6,180 5,003 1,590 4,345 2,384	14 31 15 26 23	.2 .6 .9 .6	664.5 558.4 175.5 516.0 281.8	1.5 3.5 1.7 3.1 2.7	904 1,460 5,714 2,151 469	3 3	97.2 162.9 630.7 255.5 55.4	.3
5-Year	Totals	19,502	109				10,698	6		
40 Year	rs' Totals	89,851	1,305	511			35,931	14		
1945 1946	845,000 832,700	1,226 4,235	6 56	1.3	145.1 508.6	6.7	951 2,386	1	112.5 286.4	.1
Totals		95,312	1,367				39,268	15		

TABLE IX (D)—Morbidity and Mortality Certain Communicable Diseases, 1905-1946.

			Т	uberculos	is		T	yphoid an	d Paratyp	hoid Fev	ers
Period	Popu- lation	Cases	Deaths	Deaths Per 100 Cases Re-	100	Per ,000 lation	Cases	Deaths	Deaths Per 100 Cases Re-	100	Per ,000 lation
	incion			ported	Cases	Deaths			ported	Cases	Death
1905 1906 1907 1908 1909	250,000 257,763 304,230 350,607 397,000	15 87 64	67 73 97 129 159	****	****	26.8 28.3 31.9 36.8 40.0	383 297 831	30 120 54 77 95	31.0 25.9 11.4	148.2 84.4 209,3	12.0 46.3 17.3 21.9 23.9
5-Year	Total	166	525				1,511	376		-	
1910 1911 1912 1913 1914	443,397 492,432 523,512 554,592 585,672	35 68 54 63 370	125 184 202 269 265			28.0 37.4 38.6 48.6 38.1	587 453 548 1,101 875	151 162 153 117 92	25,7 35,8 27,9 10,6 10,5	132.4 92.0 104.7 198.5 149.4	34.6 32.9 29.2 21.1 12.4
5-Year	Total	590	1,045				3,564	675			
1915 1916 1917 1918 1919	616,252 647,835 669,770 691,705 713,640	131 103 106 91 55	298 325 295 394 276		 	39.6 45.7 49.2 55.0 38.9	566 222 237 209 321	67 61 54 48 72	11.8 27.5 22.8 23.0 22.4	91.8 34.3 35.4 30.2 45.1	8.5 8.5 7.5 6.7 8.7
5-Year	Total	486	1,588				1,555	302			100
1920 1921 1922 1923 1924	735,570 757,510 785,508 814,000 815,000	64 61 52 72 102	348 311 330 332 363			42.0 40.6 41.6 40.9 44.5	387 183 249 151 83	80 62 71 63 37	20.7 33.9 28.5 41.7 44.5	52.6 24.2 31.6 31.6 10.2	9.7 8.1 9.0 7.7 4.5
5-Year	Total	351	1,684				1,053	313			
1925 1926 1927 1928 1929	833,000 821,042 836,000 851,000 866,700	52 57 51 42 123	343 382 391 374 374			41.3 46.5 46.8 43.4 42.3	223 115 91 81 60	39 30 21 21 23	17.5 26.5 20.0 26.0 38.3	28.1 13.7 10.9 9.4 6.9	4.7 3.6 2.5 2.5 2.7
5-Year	Total	325	1,864				570	134			
1930 1931 1932 1933 1934	882,000 921,281 933,000 951,000 966,000	179 261 678 649 589	407 326 281 297 293	41.1 45.8 49.6	72.6 68.2 60.9	46.1 35.4 30.1 31.2 30.3	98 88 98 63 91	29 25 24 19 24	29.6 28.4 22.4 30.2 26.4	11.1 9.5 10.5 6.6 9.4	3.3 2.7 2.6 2.0 2.5
5-Year	Total	2,356	1,604			1	438	121	100		
1935 1936 1937 1938 1939	978,000 931,000 939,000 941,000 949,000	527 537 502 525 494	272 279 303 271 233	51.6 51.9 60.3 44.4 47.4	53.9 57.7 53.5 55.8 52.0	29.2 30.0 32.3 28.8 24.6	69 136 204 74 75	14 23 36 8 10	29.3 16.9 17.7 10.8 13.3	6.9 14.6 21.7 7.9 7.9	1.4 2.5 3.8 .9 1.1
5-Year	Total	2,585	1,358				558	91		1	
1940 1941 1942 1943 1944	930,000 896,000 906,000 842,000 846,000	427 485 525 503 508	241 284 251 250 223	56.4 58.6 46.1 49.7 43.9	45.9 54.1 57.9 59.4 59.9	25.9 31.7 27.7 29.7 26.4	76 173 38 14 18	17 12 2 1 7	22.4 6.9 5.3 7.1 38.8	8.2 19.3 4.2 1.7 2.1	1.8 1.3 .2 .1
5-Year	Total	2,448	1,249			177	319	39			
40-Year	s' Total	9,307	10,917				9,568	2,051			
1945 1946	845,000 832,700	614 657	222 223	36.1 33.9	72.7 78.9	26.3 26.8	21 30	5 6	23.8 20.0	2.5	.6
Totals		10,578	11,362		1-30		9,619	2,062			

TABLE IX (E)—Morbidity and Mortality Certain Communicable Diseases, 1905-1946.

		,	Influ	ienza		Chick	enpox	
Period	Popu- lation	Cases	Deaths	Rate Per 100,000 Population	Cases	Deaths	Popu	ation
				Deaths Only			Cases	Deaths
1905	250,000	1000	9	3.6	****		****	1000
1900	257,763	44.0	2	.8		****	****	pin
1907 1908	304,230 350,607	4111	11 5	3.6 1.4	2000	****	****	8000
1909	397,000	****	7	1.8		****	****	
	Totals		34					
1910	443,397		2	.5	-	-		
1911	492,432	****					1000	****
1912	523,512		****				1111	
1913	554,592	****			179		32.3	****
1914	585,672		14	1.8	685		116.9	
5-Year	Totals		16		864			
1915 1916	616,252 647,835		27 95	3.6 13.2	970 581	****	157.4 89.7	1111
1917	669,770		42	6.0	801	****	119.6	****
1918	691,705	****	4,916	546.1	701		101.3	
1919	713,640	****	1,010		632	****	88.6	
5-Year	Totals	-da	6,090		3,685		****	****
1920	735,570	****	479	57.9	1,064		144.6	****
1921	757,510	117	58	7.6	1,181		142.7	****
1922 1923	785,508 814,000	115 247	259 298	32.8 36.7	782 935	****	99.5 115.3	****
1924	815,000	97	330	40.5	1,110	1	136.2	.1
	Totals	459	1,424		5,072	1		77
1925	833,000	15			946	-	113.5	-
1926	821,042	17			1,457	1	176.3	.1
1927	836,000	45	340	40.7	1,249		149.4	****
1928	851,000	373	353	41.0	1,054		****	
1929	866,700	281	439	50.6	1,751	****		
5-Year	Totals	731	1,132		6,457	1		
1930	882,000	13	158	27.9	1,575	****	178.6	****
1931	921,281 933,000	299 168	251	27.2	1,265	1	137.3	.1
1932 1933	951,000	506	261 318	28.0 33.4	1,169	4	125.3 145.7	.4
1934	966,000	35	145	15.0	2,307	i	238.8	.1
5-Year	Totals	1,021	1,133		7,702	7		
1935	978,000	10	168	18.1	1,737	****	177.7	
1936	931,000	815	282	30.3	2,134		229.2	
1937	939,000	2,184	404 154	43.0	1,968	3 5	209.6	
1938 1939	941,000 949,000	14 242	199	16.4 21.0	1,667 1,517	5	177.2 159.8	5
5-Year	Totals	3,265	1,207		9,023	8		
-	930,000			26.6			101.7	
1940 1941	896,000	204 179	247 219	26.6 24.5	1,783 1,816	1	191.7 202.7	.1
1942	906,000	132	84	9.3	1,890	2	208.6	.2
1943	842,000	269	171	20.3	2,113		251.0	
1944	846,000	248	161	19.0	1,590		187.9	
5-Year	Totals	1,032	882		9,192	3		
40-Year	s' Totals	6,508	11,918		41,995	20		
1945		36 19	68	10.3	1,677	****	198.5	
1946	832,700		86	10.3	1,445	1	173.4	.1
Totals		6,563	12,072		45,117	21		

TABLE IX (F)—Morbidity and Mortality Certain Communicable Diseases, 1905-1946.

1000			P	oliomyelit	is		William I	Encephal	itis
Period	Popu- lation	Cases	Deaths	Deaths Per 100 Cases Re-	100	Per ,000 ulation	Cases	Deaths	Rate Per 100,000 Population Deaths Only
	ILCIOIL .	Carlon I		ported	Cases	Deaths			Deaths Only
1905	250,000		****	****	****		****		****
1906	257,763	****	11.17	****	****	****		1000	
1907 1908	304,230 350,607	****	****		****	****	****	1000	1011
1909	397,000	****			****				***
5-Year	Totals								
1910	443,397	3			.7				
1911	492,432	3			.7	****			
1912	523,512	18		1111	3.4				
1913	554,592 585,672	5	****		1.9	****	****		***
				****		****	100		1411
	Totals	40			-		****	****	
1915 1916	616,252 647,835	80	15	18.7	12.3	2.0			****
1917	669,770	10	6	60.0	1.5	.9	****		
1918	691,705	17	100000000000000000000000000000000000000		2.4	****	1	1000	
1919	713,640	6	3	50.0	.8	.3			
5-Year	Totals	114	24						NE OFFICE
1920	735,570	11	4	36.4	1.5	.4	****	****	
1921	757510	9	4	50.0	1.1	.5	****		101
1922	785,508 814,000	4	2 5	30.0	.5	.2	****	1111	
1924	815,000	28	13	46.4	3.4	1.6			1111
5-Year	Totals	56	28	-					
1925	833,000	38			4.6				
1926	821,042	3	- 6	****		.7	****		
1927	836,000	8	8	4.70	2 2	.9			****
1928 1929	851,000 866,700	26 59	12	46.0 3.4	3.3	1.4	****		****
	Totals	134	30						
				20.0	7.0	2.4			-
1930 1931	882,000 921,281	70	21	30.0	7.9	1.2			
1932	933,000	6	6		.7	.6			****
1933	951,000	29	8	27.6	3.0	.8	4		***
1934	966,000	14	10	71.4	1.5	1.0	1171	4	.4
5-Year	Totals	125	56				4	4	Comments of
1935	978,000	22	5	22.7	2.3	.5			****
1936 1937	931,000 939,000	89 512	9	10.1	9.6 54.5	1.0	1	100	
1938	941,000	30	22 7	23.3	3.2	.7	3		****
1939	949,000	16	1	6.2	1.7	.1	4		
5-Year	Totals	669	44				8		
1940	930,000	9	2	22.2	1.0	.2			****
1941	896,000	56	3	5.3	6.2	.3	543	44	4.8
1942	906,000	15	3	20.0	1.6	.2	19	8	.9
1943 1944	842,000 846,000	37 17	3 1	8.1	4.4 2.1	.4	7 2	6 7	.7
	Totals	134	12				571	65	
	s' Totals	1,272	194				583	69	
				15.0	2.0				
1945 1946	845,000 832,700	19 38	3 3	15.8 8.0	2.2 4.6	.4	2 5	3 5	.6
-	ds	1,329	200				590	77	

Exclusive of encephalitis lethargica.

TABLE X-VACCINES AND

Donatoral	1	1917 - 1	941	194	2	194	3
Product		Amount	Cost	Amount	Cost	Amount	Cost
Diphtheria Antitoxin	Units	11.064,479,000	\$ 142,223.82	16,256,000	\$ 1,968.24	13,093,000	\$ 1,758,22
Diphtheria Schick Test	Persons	180,070	1,833,40	17,300	173,00	15,225	152.25
*Diphtheria Toxoid *Diphtheria Toxoid & Pertussis Vaccine,	persons	536,228	75,263.51	31,334	5,321.14	33,803	5,838.67
(Combined)	persons				and the same	6,069	3,883.00
*Pertussis Vaccine	persons	34,374	11,790,11	5,459	2,977.00	12,209	6,104.50
Smallpox Vaccine	persons	847,036	38,012.28	45,370	2,041.65	46,685	2,084.63
Typhoid Vaccine Typhoid-Paratyphoid	persons	103,111	8,358.57	1,651	278.85	1,965	309.65
Vaccine Anti-Meningococcus	persons	14,320	1,462.07	2,143	256.05	1,822	216.30
Serum	c.c.	64,940	4,143.25	3,840	240.00	3,020	188.75
Tetanus Antitoxin	Units	22,546,000	6,627.82	2,365,000	490.85	2,661,500	497.14
Tetanus Toxoid Scarlet Fever Anti-	persons		7				*******
toxin	c.c.	175,245	The second	00000	100000		********
	Units	61,799,000	50,854.40	11,256,000	3,231.00	9,696,000	2,797.00
Scarlet Fever Toxin Scarlet Fever Toxin	persons	193,797	41,172.43	40,159	8,430.02	42,361	8,881.12
Reinforcing	doses		2 (27 (27				
Scarlet Fever Dick Test	persons	126,305	3,637.65	9,140	457.25	9,040	452.00
Anti-Dysenteric Serum	c.c.	2,100	280.35	*******		*******	
Anti-Anthrax Serum Poliomyelitis Serum Encephalomyelitis Anti-	Doses	4,100 1,265	152.50 2,871.00	28	63.00	12	27.00
serum	Doses	607	43.60	20		6	*******
Rabies Serum	Doses	2	12.00				*******
T.A.B.T. Vaccine	persons						
Anti-Measles Serum	persons				1100000		
Cholera Vaccine	persons	100000		********	1 1000000		*******
Typhus Vaccine	persons				4000444		
Yellow Fever Vaccine	persons (20)		en fano				
Costs			\$ 388,738.76		\$25,928.05		\$33,190.23

SERA ISSUED, 1917-1946

194	14	19	45	19	46	Total	1
Amount	Cost	Amount	Cost	Amount	Cost	Amount	Cost
19,100,000	\$ 2,409.20	21,224,000	\$ 2,568.96	22,733,000	\$ 2,746.22	1,156,885,000	\$153,674,66
26,975	269.75	20,850	208.50	30,150	301.50	290,570	2,938,40
30,871	5,447.51	17,081	3,208.51	17,919	3,453.39	667,236	98,532,73
00,011							
27,184	14,281.15	24,087	12,476.85	32,580	17,231.85	89,920	47,872.85
11,717	4,407.55	7,813	2,649.19	7,788	2,623.39	79,360	30,551.74
53,590	2,411.55	42,420	1,908.90	68,020	3,060.90	1,103,121	49,519.91
2,633	395.05	1,856	275.20	1,883	321.05	113,099	9,938.37
3,314	385.35	1,800	271.20	2,216	356.30	25,615	2,947.27
1,060	66.25		100000			72,860	4,638.25
2,860,000	531.85	3,851,500	718.59	5,273,500	982.51	39,557,500	9,848.76
				282	54.90	282	54.90
	- mining	viii 100		, money		175,245)	63,837.65
8,658,000	2,495.50	8,031,000	2,328.75	7,368,000	2,131.00	106,808,000)	
49,323	10,454.28	32,139	6,861.44	36,450	7,959.16	394,229	83,758.45
		2,097	84.24	675	27.36	2,772	111.60
9,335	466.75	10,720	362.00	15,440	386.00	179,980	5,761.65
********					pressure.	2,100	280.35
100	5.00	*******			********	4,200	157.50
*******	· · · · · ·				*******	1,305	2,961.00
16	*******	*******			********	649	43.60
	*******	********		1	6.00	3	18.00
		106	29.90	334	74.55	440	104.45
	********	127	127.00	2,310	2,310.00	2,437	2,437.00
	*******	5	1.50	35	10.50	40	12.00
********	*******	10	3.30	14	4.62	24	7.92
	anneine.	6		*******		6	*********
	\$ 44,026.74		\$ 34,084.03		\$ 44,041.20	THE PARTY OF	\$570,009.01

^{*—}Table hereunder indicates maximum possible number of persons protected by use of these products separately or in combination since introduction of Diphtheria Toxoid—Pertussis Vaccine (Combined) in 1943.

Disease Immunized		Year				Total	Grand	Period
Against	1942 1943		1944	1945 1946		5 years	Total	
DiphtheriaPertussis	31,334 5,459	39,872 18,278	58,055 38,901	41,168 31,900	50,499 40,368	220,928 134,906	757,156 169,280	1923-46 1933-46

DIVISION OF VENEREAL DISEASE CONTROL

On April 1, 1946, the Division of Venereal Disease Control was transferred from the direction of Dr. C. G. Sheps, to the direction of Dr. H. S. Doyle.

Venereal disease has shown an increase from 38,772 cases in Canada in 1944, to 40,528 cases in Canada in 1945. In the first nine months of 1946, a total of 32,064 cases of venereal disease had been reported in Canada. It would appear therefore, that a further increase will be shown for 1946, as a whole if cases continue to be reported at the same rate.

Saskatchewan shows a greater number of reported cases in 1946 than in 1945. In spite of the fact that the figure for the whole year is higher, a slow but steady decrease in the number of cases reported for each quarter can be seen in both syphilis and gonorrhea. The decrease in reported cases of syphilis is only apparent in the last three months of 1946. The downward trend of gonorrhea and syphilis combined, and gonorrhea, and the drop in syphilis during the last quarter can be seen pictorially in Graph No. 1.

The annual number of infections reported from 1942 to 1946 is seen in Table 1.

EPIDEMIOLOGY

Reporting of venereal disease cases was increased in 1945, and has been again increased in 1946. Total number of doctors reporting venereal disease cases in 1945 was 203, in 1946, 267. This shows increased co-operation with the Division of Venereal Disease Control by private practitioners.

On contact information supplied by physicians, 392 contacts were located. Of these, 50 were found to have syphilis, and 217 had gonorrhea.

On information supplied by clinics, etc., 1,187 contacts were located. Of these 105 were found to be suffering from syphilis, 513 suffering from gonorrhea.

This is a total case finding by the Division of 155 cases of syphilis, and 730 cases of gonorrhea. The remainder were found to have either non-specific infection or to be negative. This information is seen in Table 2.

DRUGS

A program of free drug distribution was carried on throughout 1946. Eight thousand, three hundred and thirty, (8,330) doses of arsenicals were sent to physicians, clinics, institutions, and 10,728 doses of bismuth were distributed in the same way. There was no significant difference between the quantity of arsenical and bismuth to that used in 1945.

Penicillin however, showed a marked increase. Throughout the whole of 1945, 390,300,000 units of penicillin were distributed to physicians, clinics, and institutions in the Province. During 1946, 1,172,800,000 units of penicillin were distributed for use in venereal disease treatment. In addition, 22,800,000 units of penicillin in beeswax and peanut oil were distributed for special venereal disease cases.

This marked increase is due to several factors:

- 1. The increased use of penicillin in the treatment of early and late syphilis.
- 2. The increase in reported cases, for which physicians are given free penicillin.
- 3. An actual increase in the number of cases requiring treatment in the Province.

This information will be found in Table 3.

EDUCATION

The Division has supplied consultative services to physicians in the Province. A constant flow of correspondence between physicians in the Province and the Division have been received, in which the private physician wished information concerning diagnosis, treatment or follow up of venereal disease cases.

Besides this, the Division has distributed regular bulletins to the profession concerning technical aspects of venereal disease, diagnosis, treatment, etc.

A course of instruction consisting of 6 lectures was given to the Nurses in Training, Regina General Hospital, and they were also given an examination at the conclusion of the course. A similar series of lectures was given to the nurses of the Grey Nuns' Hospital, and they also were required to write an examination, as part of their academic training.

EDUCATION SCHOOLS

V. D. education has been incorporated in the secondary schools curriculum. The Division was able to secure the approval of the Minister of Education to have a manual, "The V.D. Manual for Teachers" included among the texts listed in the curriculum. A sufficient supply of these manuals has been obtained so that each school will be supplied. These manuals are now on hand, and will be distributed shortly. These books were obtained without charge to the Department through the medium of Federal funds, specified for materials and literature.

ORGANIZATION

The Moose Jaw Venereal Disease Clinic has been turned over for administrative purposes to the Health Region No. 6. This was undertaken for several reasons.

First, the Medical Officer of Health should be the first to know what communicable diseases are going on in his Region.

Secondly, within the Region, follow up is done by the Regional Staff. Reporting of cases of venereal disease, must of necessity, go to the Medical Officer of Health. The V.D. Clinic, therefore, should also report to the Medical Officer of Health.

Thirdly, it has been considered for some time, that too little contact was possible between the central division and the clinic, whereas under the new system, the Medical Officer of Health is easily available and can provide adequate supervision.

Treatment policy has been maintained as a responsibility of the central division.

A system of standard records and returns has been set up in 3 of the 4 fulltime clinics. It is intended to reorganize the 4th clinic shortly, and it is felt that this will greatly facilitate the collection of statistical data.

STATISTICS

- TABLE 1-The incidence of Venereal Disease in Saskatchewan, 1942 to 1946.
- TABLE 2-Analysis of Contacts Located Through Information Supplied.
- Table 3—Table of drug Distribution showing a comparison between 1945 and 1946, with the Value of Drug Distribution during 1946.
- TABLE 4-Venereal Disease Cases Reported by Disease, Sex, and Age Groups.
- Table 5-Analysis of Venereal Disease Cases Diagnosed in Clinic.
- TABLE 6—Venereal Disease Cases Reporting in 1946, by Reporting Agency, Sex, Disease and Stage.
- FIGURE 1—Shows graphically the downward trend of gonorrhea and combined gonorrhea and syphilis throughout 1946, when plotted by quarters.
- TABLE 7—Shows facilitation in the 5 major cities in the Province, and is selfexplanatory.
- Table 8—Comparative Report of V.D. Clinic Activity. This table shows that 2,757 persons were admitted to the 4 V.D. clinics now in operation in Saskatchewan, and of these, 265 were cases of syphilis, and 1,020 were gonorrhea, making a total of 1,285 venereal disease cases admitted.

Further, a total of 16,800 visits were made by venereal disease cases to the clinics during 1946.

This table, in addition, shows breakdown of clinic activity by disease and sex. A total of 630 were discharged from the clinic, apparently cured; 56 were transferred; and 10 were delinquent; and could not be traced; 2 cases died, making a total number discharged from the clinic of 698.

H. S. Doyle, M.D., D.P.H.,

Director,

Division of Venereal Disease Control.

TABLE 1

THE INCIDENCE OF VENEREAL DISEASE IN SASKATCHEWAN

Annual Number of Infections Reported*

1942 to 1946

Year	Syphilis (all forms)	Gonorrhea	Total	Rate Per 100,000
1942	217	580	797	93
1943	277	978	1,255	147
1944	362	1,109	1,471	173
1945	409	1,680	2,289	271
1946	646	2,123	2,769	N-A
Total for 5 year period	1,911	6,470	8,581	

^{*-}Reports from Armed Services are included.

TABLE 2

EPIDEMIOLOGY

Saskatchewan, 1946

ANALYSIS OF CONTACTS,

LOCATED THROUGH INFORMATION SUPPLIED

	1945	1946
Information Supplied by Physicains—		
Located	300	392
Syphilis	37	50
Gonorrhea	145	217
Non-Specific	24	103
Negative	94	22
Information Supplied by Clinics, Etc		
Located	497	1.187
Syphilis	21	105
Gonorrhea	136	513
Non-Specific	44	100
Negative	196	469
Information Supplied from Combined Sources-		
Located	797	1.579
Syphilis	58	155
Gonorrhea	381	730
Non-Specific	68	203
Negative	290	491
New Doctors Reporting Cases	********	126
Total number of doctors reporting V.D. cases	203	267

TABLE 3
TABLE OF DRUG DISTRIBUTION

Saskatchewan, 1946

	1945		1946	
Arsenicals (Doses)—				
Physicians	5,154		4,664	
Clinics	2,910		3,648	
Institutions		-	18	
Total		8,064-	•	8,330
Bismuth (c.c.)—				
Physicians	7,650		6,050	
Clinics	2,990		4,648	
Institutions	*******		30	
Total		10,640-		10,728
Penicillin-				
(Int. Units)	390,	300,000	1,172,	800,000
Penicillin in Wax			22.	800,000
Distilled Water (Amps)				7,859
Sulphathiazole (Tabs)	******			27,798
Sulphathiazole (Tabs)	******			27,798

VALUE OF DRUG DISTRIBUTION

1946

Drug Penicillin Penicillin in Wax	\$	Cost 7,299.82 285.00		otal Cost 7,584.82
Mapharsan .04 gms. Mapharsan .06 gms.	s	278.30 1,422.75	0	
Bismuth Salicylate. Distilled Water (amps). Sulphathiazole (tabs). Total Cost		***************************************	s	1,701.05 238.40 550.13 279.35 10,353.75

Table 4.—Venereal Disease Cases Reported by Diseases, Stage and Age Groups—Saskatchewan, 1946

	Total		206 206 206 206	2,124	2,124
hea		F	1377 289	592	22
Gonorrhea	Other Forms	M	78 890 133 133 133	1,530	2,122
Ī	THE POST OF THE PART OF THE PA	(14	3-111111	-	
.	Ophthalmia Neonatorum	M	, :-:::::	-	2
. 1		124	1111010	2	1
	-Chancroid	M	1111110011	4	9
	Total Syphilis Sex Combined		6 47 249 249 254 81	645	645
	By Sex		:4+000+ 400000	228	5
	silidqy2 letoT.	M	3 10 171 171 184 40	417	645
		14	:4=0=0:=	14	-
	Prenatal	M	:01-10-01-	10	24
	Total Total	H	39 39 21	84	9
	IntoT.	N	177	142	226
	Undetermined	124	11114409	25	
Late	Type	M	:::::::::::::::::::::::::::::::::::::::	43	89
	Other	(II,	1::::::	9	
Acquired Latent and	Latent	M	1111110	10	16
Late		(La	::::401	42	1
red		M	322	55	6
cqui	Syphilis	H	::1::=00-	10	36
4	Neuro-	M	900	26	
	Vascular	124		_	6
	-cardio-	N	111111104	00	
	Total	H	241:::	130	395
	fereT	M		265	36
Earl		124	1551	20	
ired	Secondary	M	100 100 100 100 100 100 100 100 100 100	40	8
Acquired Early		(II.	114521:::	80	15
	Primary	M	80 80 18	225	305
	Cases	(H	823 7 7 10 169 367 153	823	5
	Total Cases	M	1,952 1,063 609 175	1,952	2,775
			2,775 10 10 1,430 1,430 263 287		
			Total Cases Under 1 year 1 to 4 years 5 to 14 years 15 to 19 years 30 years and over. Age not stated	Total by Sex	

TABLE 5.—ANALYSIS OF VENEREAL DISEASE CASES DIAGNOSED IN CLINICS—SASKATCHEWAN, 1946

	Total		342 287 219 172	1,022	1,022
Gonorrhea	Other Forms	í	96 72 68 43	279	1,022
600		M	246 215 151 129 2	743	-
	Total Syphilis Sex Combined		. 55 55 55 55		265
	By Sex	H	26 112 23 23	101	15
	Total Syphlis	M	56 27 32 32	164	265
	The state of the s	14	w:	1	
	Prenatal	M	0 :0H :	·s	12
		H	r4x0:	26	
Late	IstoT -	M	50081:	20	76
and	Undetermined	(Li	9::	00	
atent	-Type	M	0-44:	18	26
ed L	Tertiary Other	M	1:-1:	-	-
Acquired Latent and Late		(T	:640:	16	
-	-Latent	M	0844:	27	43
	Nento	in.	:::	2	
		M	-2-::	4	9
		T	16 35 6 11 ::	89	7
ly.	LetoT	M	38 43 113,	100	17
Ear	£.meurenne	T	4940:	24	0
Acquired Early	-Secondary	M	- N=0 :	15	39
Ac	Primary -	(IL	12 29 2 1	#	. 00
	Yaemird.	M	38 38 11 11 11 11 11 11 11 11 11 11 11 11 11	94	138
	826	F	122 112 80 66	380	1,287
	Total Cases	M	302 264 178 161	206	
	Ţ		424 376 258 227 227	1,287	
	Clinics		Regina Saskatoon Moose Jaw Prince Albert	Total Clinics	Totals—Sex Combined

Table 6.—Venereal Disease Cases Reported—By Reporting Agency, Sex, Disease and Stage—Saskatchewan, 1946

		Total Gonorrhea	1	2,124	342 287 219 172	1,022	- 8	6	212	2,124
_			II.	311	43.8228	279			2	22
Gonorrhea		Отрет Forms	M	1,530	246 215 151 129 2	743	H :00	6	210	2,122
3	-	Neonatorum	F		11111	:	1 11	:	:	2
		Ophthalmia	M		11111	3	1 11	:		
	Chancreid		íI.	22	1111	1	1 11			-2
				44	1111	:	1 17		-	9
		Total Syphilis Sex Combined		645	39 882	265		9	59	645
		Total Syphilis By Sex		228 126	23 22 23 23 23 23 23 23 23 23 23 23 23 2	101	: -:	-	-	10
				417	32 32	164	- :4	S	59	645
			12	41	w==0:	-1	1 11	1	:	
		Prenatal Con 'n ta	M	014	0 :0- :	NO.	41 .1-	-	1	24
	peno		124	588	1.450 ::	26	1 11		-	226
		-Total	M	142	00 01 18	50		1	4	2
		Undetermined	(L	25	9 : :	00.			1	89
		Type	N	43	0-44:	18		:	2	
	and Late	Tertiary Other	E	010	11411	-	1 11	1 :	-	16
	and		N	1 26 1	:640:	91	1 11	1		
	Acquired Latent	-Latent	MF	55	0644:	27	- ::	-	-	26
silis	d La	Syphilis	12	018	:::	5	1 11	:	1	
Syphilis	uire	Neuro-	M	26		4	1 11	1	1	36
	Ac	Assenlar	(L)		11111		1 ::1	1		
		Cardio-	M	90 90		-	CON !	1:		6
	18		14	130	35 6 111	89		1	1	2
		LetoT-	Z	265	38 15 13 13	109	: :00	3	55	395
	arly		í.	20	4940 :	24	1 11	1	1	
	E Po	Secondary	M	19	PR=0:	15	17 IH	-	100	8
	Acquired Early		E CH	35	25221 :	44	: -:	-	1 :	
	A	Primary	M	225	38 31 11 11 11 11 11 11 11 11 11 11 11 11	94	1 :0	2	20	305
-	1		1	823 2	122 112 80 80 66	380	:	-	2	
		Te s	(14							2,775
		Total Venereal Disease Cases	M	1,952	302 264 178 161	907	2 12	14	269	2,3
		Total Diseas		2,775	424 376 258 227 2	1,287	2 111	15	271	2,775
		Reporting Agency		Total Cases.	C.INICS— Regina Clinic— Saskatoon Clinic— Moose Jaw Clinic— Prince Albert— Swift Current	Total Clinics	INSTITUTIONS— Prince Albert Gaol (Men 8) Prince Albert Gaol (Women 8) (Regina Gaol	Total Institutions	Armed Forces	Totals

Table 7.—Summary of Facilitation—Major Cities—Saskatchewan, 1946

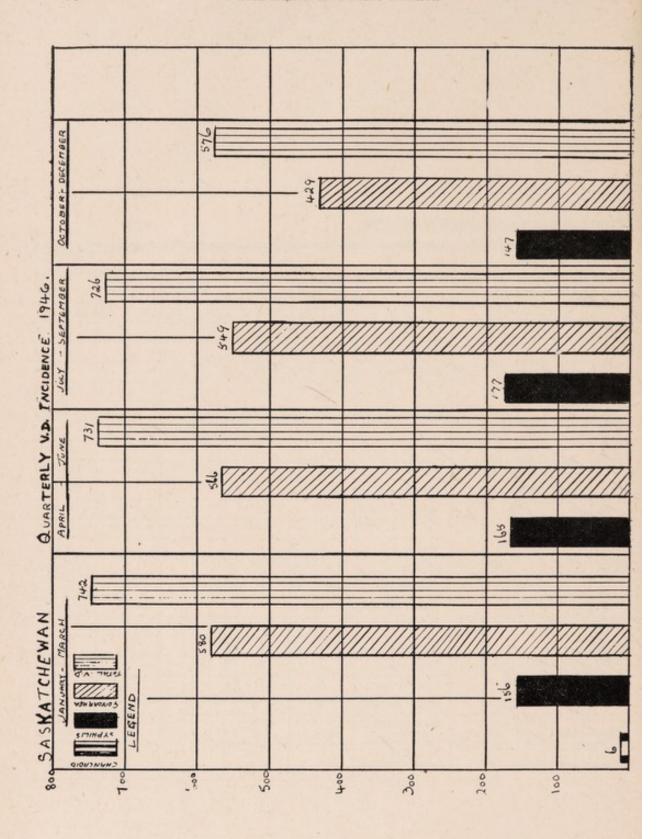
	Meeting	Meeting Place Only	Meeting a (Includin	Meeting and Exposure (Including Marital)	Place of 1	Place of Exposure Only
Type of Place	Total	Percentage	Total	Percentage	Total	Percentage
Hotels Cafes Dance Halls Rooming Houses and Apartments Pickups—Streets, etc. Other—(Including Private Dwellings).	17 172 157 233 239	2.06 20.85 19.03 .85 28.24 28.97	114 1 34 327	30.07 .26 8.97 59.89	264 4 4 86 164 303	32.00 .48 .48 .10.42 19.88 36.73
Totals	825		379		825	

TABLE 8.—COMPARATIVE REPORT OF V.D.

Clinics			Admi	itted	to C	linic					Case	Visits		
	V.D	s.	V.D	.G.	Ot!	her	То	tal	V.I	o.s.	V.D	.G.	То	tal
	М	F	М	F	М	F	М .	F	M	F	М	F	M	F
Regina	56	26	246	96	219	173	521	295	782	488	1,048	835	1,830	1,32
in the same	-					1								7
Total Combined	8	2	34	12	39)2	81	6	1,2	70	1,883		3,153	
Saskatoon	49	40	215	72	359	266	523	378	812	473	2,610	2,612	3,422	3,08
Total Combined	- 8	9	28	37	625		901		1,285		5,222		6,507	
Moose Jaw	27	12	151	68	102	65	280	145	461	312	1,401	1,009	1,862	1,32
Total Combined	3	9	219		167		425		773		2,410		3,183	
Prince Albert	32	23	129	43	226	762	387	228	1,081	885	1,553	438	2,634	1,32
Total Combined	5.	5	17	72	38	38	61	.5	1,9	66	1,9	91	3,957	
Clinic Total By Sex	164	101	941	279	906	666	1,711	1,046	3,136	2,158	6,612	4,894	9,748	7,052
Clinic Total Sex Combined	26	55	1,0	20	1,5	72	2,7	57	5,294		4 11,506		16,800	

CLINIC ACTIVITY—SASKATCHEWAN, 1946

	Clini	c Tests		2			I	Discha	rged fr	om Cl	inic				
	S.T.S.	Sm'rs	D/ Fld.	C. S.F.	+ 17	Appa ly C	arent- ured	Tra	ns- red	Del		De		T	otal
						M	F	M	F	M	F	M	F	М	F
Negative															
ega	1,168	1,465	65		Syphilis	2	4	10	7	3	6	1		16	1
Z	1,100	1,400	- 00	33	Gonorrhea	144	72	5	6				1	149	7
itiv	216	-390	18		Total by Sex	146	76	15	13	3	6	1	1	165	9
Pos					Total Combined	22	2	2	8	9		2		26	1
ive							1			4		di mana			
gat		0.100	-		Syphilis	42	28		1			.,		42	2
ž	824	2,188	31	50	Gonorrhea	151	41							151	4
trive	162	510	31		Total by Sex	193	69		1		J.,			193	- 1
Pos					Total Combined	20	52							26	3
ve		100									-				
Negative Positive Negative Positive					Syphilis	4	2	5	2					9	
ž.	645	713	4	3	Gonorrhea	110	22	6	8					116	:
Negative Positive	78	402	3		Total by Sex	114	24	11	10					125	
Posi					Total Combined	13	38	2	1				-	15	9
ive	7						1								
egat					Syphilis			5	e 1		1			5	
	500	437	-	2	Gonorrhea	3	5	1						4	
Positive	83	375			Total by Sex	3	5	5	1		1			8	
Pos	1				Total Combined		8		6	1		-,		15	,
Neg.	3,155	4,803	100		Total Clinic By Sex	456	174	31	25	3	7	1	1	491	20
'os.	287	1,677	- 52	88	Total Clinic Sex Combined	63	0	5	6	1	0			69	8



DIVISION OF LABORATORIES

REGINA, SASK., January 11, 1947.

DR. C. F. W. HAMES,

Deputy Minister of Public Health.

Sir:

I have the honor to present the following report on the work of the Division of Laboratories for the year 1946.

During this year the work of the Division of Laboratories settled back to almost purely civilian work after the blood testing program on discharged personnel from the Armed Forces had been completed in April. There was a general increase in the volume of work done in all sections of the Division and with the increased number of physicians practising in the province there was a marked increase in the diagnostic work referred from them and the rural hospitals. It was rather surprising that this increase of work extended to the Luetic Serology section where 12,000 more specimens were examined in 1946 than in 1945 in spite of the decrease of military work.

Table I shows the number of examinations made in the various sections of the Laboratories in 1946 as compared with the two previous years.

TABLE I

Examinations Made in Various Sections During Years 1944, 1945 and 1946.

	1946	1945	1944
Luetic Serology	117,426	105,353	75,408
Blood Agglutinations	4,194	3,095	2,189
Bacteriology	20,300	14,988	10,278
Sanitary Examinations	11,988	10,284	8,329
Laboratory Pasteurization of Milk		442	
Chemical	3,226	2,505	1,883
Haemotology	650	678	379
Undulant Fever Survey		********	11,554
Whey Agglutinins for Undulant Fever		442	
Swine Erysipelas Survey		*******	8,942
Blood Meal of Mosquitoes	1,495	300	1,408
Examinations Made at other Labs.—			
Tissue Pathology Service;			
Regina (Grey Nuns' Hospital)	4,220	3,358	2,815
Saskatoon (City Hospital)	3,563	3,383	2,873
Milk Examinations:			
Weyburn Mental Hospital	174	268	74
North Battleford	290	273	174
Yorkton	177		
University of Saskatchewan	10	*********	
Totals	167,713	145,369	126,306

The congestion in the laboratory had reached the condition where there was not sufficient bench space to carry out the routines required, as a consequence, no attempt was made to continue some of the investigations which had been begun in previous years. The only program maintained was the studies of the Blood Meal of Mosquitoes which was part of the general investigation into possible vectors of Encephalomyelitis. Other programs such as those related to detergent efficiency of various commercial products as related to restaurant dishwashing, stream polution, mastitis and undulant fever had to be left in abeyance.

At the request of Dr. Kinneard, M.H.O. of Health Region Number 6, the laboratory undertook to prepare special bacterial culture media for use in a survey of dishwashing procedures in the restaurants at Moose Jaw. This was continued for a number of weeks. A similar service was provided to Health Region Number 1, but on a much more limited scale. This latter project is still continuing and a total of 1,437 units of media were used in these investigations.

During the year the Department of National Defence made available to this Department 1,030 bottles of dried blood plasma. These were distributed from the

laboratory to the various hospitals of the province on the basis of the beds available. A number of administration sets were also made available and these were sent to the various rural hospitals receiving plasma.

A study of the Mazzini test as a screen for Luetic Serology has been undertaken and it is hoped to make a comparison of several thousand sera using this test against the Presumptive Kahn which is at present in use in these laboratories. It is claimed that this test is more specific than the Presumptive Kahn and capable of being developed to handle large numbers with a small staff. Certain difficulties are being encountered under the low humidity conditions of the prairies, but further studies are in progress.

During 1946 the laboratories were requested to undertake the testing of gasoline for presence of purple dye for the Treasury Department, in connection with the administration of The Gasoline Act. This has presented a difficult problem to the laboratory staff in that no satisfactory methods were available for the required examinations. Methods are being developed for this and should be satisfactory for the 1947 summer season.

During the year the Regina Hospital laboratories were provided with diagnostic antigens and anti sera for enteric infections. The procedures used in these laboratories were demonstrated to various members of the hospital staff upon the request of Dr. Magner and it is proposed to continue supplying these standardized diagnostic reagents for this type of work. It is likely that other hospitals in the province may request such supplies and it would be desirable that they use standardized materials. In addition, known positive and negative sera were supplied to the hospitals as controls for luetic serological tests of blood donors.

A considerable amount of the Director's time was taken up with the additional planning and supervision of the work going on at the new quarters for the laboratory. Favourable progress has been made considering the difficulties of securing supplies of material and skilled labour. It is anticipated that the new quarters will be occupied during the summer of 1947.

During the year there were a number of changes in the laboratory staff, almost entirely associated with the technical group. Mr. H. E. Robertson came on the staff as Chemist to take charge of the chemistry section of the laboratory. There were seven resignations from the staff and six new appointments in addition to Mr. Robertson, to replace these. Of the persons that resigned, three returned to University to begin their medical courses and two others accepted responsible positions in hospital laboratories in the east.

Since the hospitalization scheme for the people of Saskatchewan was to begin on the first of January 1947, it was necessary to take steps to provide technical assistance in laboratory and X-ray for the small hospitals. The Department of Public Health decided to sponsor a combined training course for technicians in these two fields. The courses were developed as a Canadian Vocational School and was opened primarily for veterans. Each candidate was given twelve weeks training in a laboratory course supervised by the Director of the Division of Laboratories, followed by an equal length of time in X-ray under the supervision of Dr. A. E. Perry, Radiologist of the Grey Nuns' Hospital, Regina. The purpose of this training was to provide a thorough training in basic principals in order that each person could provide competent basic diagnostic services for hospitals of thirty to sixty beds.

Table II details the work done in these laboratories during the year 1946.

TABLE II

Examinations Made During 1946

1. Syphilis Serology:

Fontana's stain	51
Dark field	72
Presumptive Kahn tests	98,058
Standard Kahn tests	8,106
Quantitative Kahn tests	1,830
Kahn Verification tests.	4
Kolmer Wassermann Tests-	
Blood	8,106
Spinal Fluid	1,199

2.	Blood Agglutinations:	
	Tunki H	585
	Typhi H	585
	Paratyphi A	585
	Paratyphi B. (type)	585
	Paratyphi B, (group)	585
	Brucella abortus.	826
	Pasteurella tularense	86
	Bacillus proteus OX19 (Rocky Mountain spotted fever)	10 297
	Shiga and Shigella Vi	50
		, 50
	BACTERIOLOGY	
1.	Enteric Diseases:	
	Blood cultures	425
	Faeces.	262
	Urine	127
	Milk	5
	Water	63
	Foods	11
	Miscellaneous Enteritis.	2
	Relapsing Fever	1
	Malaria	, ,
2.	Gonnorrhea:	
	Direct smears	15,810
	Cultures	255
	Complement fixation tests	19
2		
3.	Tuberculosis:	
	Sputum	160
	Urine	28
	Miscellaneous	198
	Animal inoculations.	26 31
	Cultures	4
	Cervical gland	2
4.	Diphtheria:	
	Throat cultures.	688
	Virulence tests	49
	Typing	36
5.	Staphylococcic, Streptococcic and Pneumococcic Infections:	
	Blood cultures	105
	Pleural fluids	60 23
	Miscellaneous	301
	Vaccines	44
	Pneumococcic typing	2
	Streptococcic grouping	3
	Food poisoning	3 3
	Meat and fish	3
6.	Spinal Fluid Examinations:	
	Protein.	238
	Glucose	140
	Chlorides	23
	Cell count	155
	Colloidal gold	439 129
	Cultures and smears	129
7.	Fungus Diseases:	
	Scrapings from skin and hair.	14
	Examinations for actinomycosis	2
	Cultures	39
	Sputum	4

8.	Parasitic Diseases:	
	Faeces	100
	Blood smears for malarial parasites.	3 3
9.	Miscellaneous Bacteriological Exams:	
		71
	Milk (Mastitis) Vincent's Angina	16
	Food Poisoning.	18
	Blood in faeces. Foods	5 6
	Meat	4
10.	Hospital Operating Room Supplies for Sterility:	
	Dressings	10
	Gloves	3
	Plasma	6 2
	Other supplies.	13
	HAEMOTOLOGY	
	Complete blood counts	52 458
	Smears for differential counts	450
	Paul-Bunnell tests (Heterophile antibodies)	79
	Smears for Malaria Sedimentation rate	8
	Lead poisoning	2
	WBC count.	1 2 2 2 3
	Grouping	3
	Sanitation	
1.	Water:	
	Standard plate counts	873
	B. coli presumptive	2,491 1,801
	B. coli confirmed	2,652
2	Milk:	
-		
	Standard plate counts. B. coli count	1,085 1,087
	Phosphatase test	1,066
	Routine chemical	933
	CHEMISTRY	
1	. Urinalysis:	
		1 220
	Routine Glucose	1,320
	Lactose	14
	Bile	3 2 1
	Diastatic Index	1
	Mucin	1 2
	Albumen Red Blood Cells	1
2	. Biochemistry:	
	Blood Chemistry:	
	Bromide	2
	Glucose	301 65
	Protein	179
	Chlorides	65 33
	Chlorides	87

BACTERIOLOGY:

Diphtheria: There were 688 cultures submitted during the year of which 133 showed typical morphology or were suspicious diphtheroids. A number of these were repeats from known cases of diphtheria, but all isolations were tested for virulence with 33 positives. Thirty six strains were typed with 25 proving to be gravis, 2 intermedius and 2 mitis.

Two years ago a study of diphtheria strains was begun in co-operation with the Laboratory of Hygiene of the Department of Health and Welfare at Ottawa. This was to determine the strains of Corynebacterium diphtheriae appearing in Canada in view of the possibility of new types being introduced from Europe. various Public Health Laboratories submitted positive cultures to the Ottawa laboratories where they were serologically typed in addition to complete studies on virulence. As a result of these intensive studies, the twenty five strains submitted showed 2 type i gravis, 11 type ii gravis, 1 atypical gravis, 2 intermedius and 2 mitis. The prairie provinces show mainly type ii while eastern provinces and British Columbia showed other serological types as the predominant strains.

Attempts are now being made to secure cultures from all other labs in the province doing bacteriology in order to get more complete information on the strains in Saskatchewan.

Enteric Diseases: There was a further increase in the number of specimens submitted to the laboratory in 1946 as compared with previous years and this section is becoming an increasingly important unit in the work of the laboratory. During the year 1946 the Vi agglutination was introduced into the routine as a means of detecting carriers of typhoid organisms. While not 100% diagnostic it is of considerable assistance to the epidemiologist in detecting patients in the carrier state. The various types of work done in this section are detailed in Table III.

TABLE III

ORGANISMS ISOLATED FROM CASES OF GASTRO-ENTERIC INFECTIONS

2 from blood culture E. typhosa 3 from faeces S. paratyphi B 2 from faeces 1 from urine 2 from faeces

S. typhimurium

Sh. paradysenteriae Flexner W 3 referred cultures

Sh. paradysenteriae Boyd 1 faeces

Sh. paradysenteriae

1 from faeces sonnei 3 from blood culture Sh. dispar

1 from urine 2 from faeces Proteus

Two organisms reported in the annual report for 1945, namely S. Worthington and S. sundvall were the first isolations in Canada and possibly on this continent,

VENEREAL DISEASES:

The numbers of specimens submitted for both syphilis and gonorrhoea increased markedly, in spite of the decrease in the number of armed services personnel in the province. Twelve thousand more specimens for syphilis serology and sixty two hundred more smears for gonorrhoea were submitted in 1946 than in 1945. This is probably due to the increased number of cases during the year, together with excellent follow up work and the larger number of practising physicians in the province. Many of the new medical men came from the armed services where they had good professional education in venereal disease control.

As mentioned before the Mazzini test is being compared with the Presumptive Kahn at present in use as the screen test in these laboratories. This comparison is part of a co-operative program with other laboratories which is being undertaken to evaluate the various screen tests as to sensitivity, specificity and speed. This is a micro scale test and difficulties are being encountered due to rapid evaporation of the small amounts of material in the low humidity atmosphere of the prairies. This is not true in eastern Canada.

Parasitology and Mycology:

The increased interest in these infections during the year was quite noteworthy. However, a real need is felt for a convenient reference laboratory in parasitology from which prompt assistance may be obtained. Dr. Williams of the Deer Lodge Hospital, Winnipeg has been most kind in his assistance in this field on numerous occasions.

Improved culturing and animal procedures have been instituted during the year in mycology and plans are under way for further improvement and the opening of a separate section when the new laboratory quarters are ready.

Table IV shows the isolations made from the specimens submitted in these two fields.

TABLE IV

Parasites Identified:

Ascaris lumbricoides (ovae)	4
Giardia lamblia (cysts)	2
Endamoeba coli (cysts)	1
Oxyuris vermicularis	2
Tape worm (1 section damaged)	1
Fungi:	
Candida albicans	4
Monilia psilosis	1
Ringworm (direct exam. only).	5

MISCELLANEOUS:

The other sections of bacteriology were increased in volume of work submitted. During the year considerable emphasis was placed on more complete examinations of the various specimens submitted. As a consequence, the total amount of work increased much more than is indicated by the increased number of specimens. In many cases the additional work secured results that would have not been evident had the usual routines been adhered to. While this increases the unit cost of the work we feel that it is well worth while in improved service and in the increased interest of the staff in the work.

SANITARY EXAMINATIONS:

Milk: Ideally every milk sample should be examined as soon as it is taken. In many cases this is not possible as there are no competent laboratories at hand to carry out the work required. However, where possible, the examination of the regular milk samples for the Division of Sanitation has been assigned to the nearest laboratory capable of carrying out the tests. The hospital laboratory at Yorkton is now doing the samples for that area and Melville. The University of Saskatchewan now examine samples from Kindersley in addition to its regular work for the City of Saskatoon. The laboratory of the Mental Hospital at Weyburn continues to do the samples from that city and has recently undertaken to do Estevan, while at the laboratory of the North Battleford Mental Hospital samples from Lloydminster are examined in addition to those from the local dairies.

Water: The complete analysis of all water supplies in organized towns, cities and villages which have regular water supplies was begun late in the year and will be completed in 1947.

CHEMISTRY:

The demand for clinical diagnostic services from physicians outside the cities and from small hospitals with inadequate laboratories or none has increased particularly since the middle of the year. A wider range of determinations has been made available and now many special tests are required routinely which were required before only by the larger hospitals. This situation emphasizes the need for more laboratories, properly equipped and staffed in the larger towns of the province such as the regional centres.

The miscellaneous chemical analysis which require the personal attention of the Provincial Analyst have returned to their pre-war level and as a consequence the chemistry section has not been able to undertake a number of the special investigations requested by the Division of Sanitation. This situation has been made more difficult by the limited space.

TISSUE PATHOLOGY:

The tissue pathology services located in the City Hospital, Saskatoon and the Grey Nuns' Hospital, Regina continued to provide their effective service to the rural physicians and surgeons. The numbers of specimens have increased markedly in line with the crowding of the hospital facilities. I wish to take this opportunity of expressing the thanks of the department to the pathologists of those two hospitals for a most effective service.

SURVEYS:

The program in connection with the blood meal of mosquitoes as related to encephalomyelitis was continued this year and an attempt was made to evaluate the precipitin reaction used in the previous surveys. Mosquitoes were raised from

eggs and permitted to feed under controlled conditions on known hosts. In the experience of this laboratory the precipitin test is approximately 95% to 96% specific and the result of the field examinations would have definite significance. A total of 693 specimens were examined in this way and an additional 702 specimens from field collections were examined for field feedings. The total tests for blood meals on these specimens amounted to 6,433.

MENTAL HOSPITAL LABORATORIES:

The laboratory at the Weyburn Mental Hospital continued to function with the original two members of the staff that opened up the service. They have been diligent and enterprising, thus providing an excellent service in range and quality.

The laboratory in North Battleford unfortunately lost one of the trained members of staff leaving only one other to carry on. This has resulted in the mere maintenance of routine services without any possibility of expanding into a wider range of examinations. This has been most commendable and it is hoped that this situation may be corrected.

Table V sets forth the work done at these two laboratories during 1946.

TABLE V

TABLE V		
	Wey- burn	N Battle- ford
Haematology:	Dilli	
Complete Blood Counts	722 276 27	616 87 50
Groupings	5	326
B.S.R	244 15	5
Hb & R.B.C. Hemoglobins	198 56	
Reticulocyte Counts	17	
Miscellaneous	45	
Smears from mouth & gums	212 70	8 20
Sputum Smears for G.C.	61 14	36 19
Miscellaneous. Blood Cultures.	103	13
Gastric Lavages. Urine	19	1 2
Faeces:		
Blood	23 14	1
Culture	45	,
Emesis:		
Blood	4	
Blood Cholesterol.	45	
Creatinine	15	
Chlorides	15	9
Alkali Reserve	37	18
Gastric AnalysisSugar	218	25 321
Sugar Tolerance Curves	23 24	
Serum Total Protein	10 111	87
Van den Bergh	21 8	1
N.P.N. Uric Acid.	32	
Phosphate	2	

Phosphatase	1	
Serum Albumen	5	
Serum Bromides	1	****

Cerebrospinal fluids:		
Colloidal gold curves	34	100
Cell counts	42	113
Glucose (Qualitative)	5	113
Glucose (Quantitative)	8	
Chlorides	22	****
Globulin	40	
Total Proteins	24	****
Total Proteins	3	
renicie romation		
URINALYSIS:		
Chamical & Miarassania	1 602	1,193
Chemical & Microscopic	1,692	1,100
Chemical Super Talanana	1,272	
Sugar Tolerance	11	
Urobilinogen		2
Bile	11	4
MILK EXAMINATIONS:		
Bacteria Counts	174	290
B, coli	174	290
Butterfats	64	222
Total Solids	64	180
Phosphatase tests	162	280
Gradings (Methylene Blue Reductase Test)	230	7.75
	200	****
WATER EXAMINATIONS:		
Bacteria	10	79
N B, coli count		79
CULTURE MEDIA:		
Blood Agar Plates	165	
Brilliant Green Bile (tubes)	18	
Colloid Medium (tubes)	40	
Chocolate Agar Plates	12	
Endo Agar Plates	85	
E.M.B. Plates	114	
Krumweide's Triple Sugar Slants	205	
Lactose Broth (tubes)	130	
MacConkey Agar Plates	77	
Nutrient Agar (tubes)	290	
Peptone Broth (tubes)	20	
S. S. Agar Plates	7	
Tetrathionate Broth (tubes)	47	****
Tryptone Glucose Extract Agar (tubes)	338	****
Tryptose Phosphate Broth (flasks)	23	****
Tryptose Phosphate Broth (tubes)	185	****
Tricresol Saline (tubes)	20	****
Violet Red Bile Agar (tubes)	293	
Basal Metabolism Rates	16	
	10	
PLASMA:		
(500 c.c.) bottles	4	
Collection of blood samples for serology	796	
Vaccines	2	****
Totals	9,757	5,596
	-	-

I would like to take this opportunity of thanking all members of the staff for their unfailing co-operation and attitude of service, which made the trying conditions of overcrowding bearable.

In conclusion, I would like to express to The Honorable, the Minister of Public Health, and to yourself, the Deputy Minister of Public Health, my appreciation of the constant interest and support accorded me in developing this Division.

Respectfully submitted,

W. A. RIDDELL, PH. D., Director.

DIVISION OF HEALTH EDUCATION

DR. C. F. W. HAMES,

Deputy Minister of Public Health.

DEAR SIR:

The Division looks back upon a very busy year, and one of many and varied experiences. Some of the chief activities are set out immediately:

Food Handlers Schools: After preliminary study, and in close consultation with the Division of Sanitation, the Division launched almost a year ago the first food-handlers schools of their kind in Canada, and provided an example of a much-needed activity which has since been adopted in various other provinces.

The course, offered to all those managing and working in the food-serving trades, was an elementary one, lasting four hours, and generally conducted in two sessions. It consisted of films and talks, discussions, and a true-or-false quiz program, 90 minutes being devoted to sound films alone. These pictures and the talks covered the entire subject of safe storage and preparation of food, sanitatization of table and kitchenware, cleanliness of premises, equipment, and staff, proper food-serving, and control of pests.

The schools were staffed by a representative of the Division of Health Education, who arranged itineraries, look after public relations, publicity, accommodation, projection, quiz, and literature distribution; and a sanitary officer, whose responsibilities were confined to lecturing, leading discussions, answering questions. Whereever possible, co-operation of local health officers was obtained. Interest of Boards of Trade, women's groups, and others was solicited. Twenty-five such local schools were conducted, and this number included all cities except Saskatoon and Regina, where the medical-health officers did not wish the schools to be conducted. Schools were also held in the Dome Cafe, the two provincial mental hospitals, and the Ft. Qu'Appelle Sanatorium, in addition to the 25 public places mentioned.

On conclusion of the itineraries the director was of the opinion that with a view to the elementary nature of the course, the rapid turnover of staff, and the very superficial impact made, an intensified program was needed. However, increased sales of detergents in the Province may be a barometer of increasing interest in restaurant and dining room sanitation.

Air Ambulance Service: The division gave wide publicity to the inauguration of this service and continued to furnish information throughout the year. It maintained an up-to-date file of photographs for publicity purposes. The director wrote some 20 feature stories on the subject. He also discussed with the supervisor of the service the building of an exhibit for the 1947 fair circuits.

Hospital Services Plan: All resources of the division were swung into an interpretative and educational campaign early in the autumn on request of the deputy minister and the chairman of the Health Services Planning Commission. Services of J. W. B. Bremner were placed at his disposal. An effort was made to obtain additional help from the Division of Adult Education, but this did not materialize as hoped. An intensive radio compaign was conducted, some special articles were written, and considerable newspaper publicity was obtained; however, much of the newspaper copy was written by Jas. Struthers of the Bureau of Publications. One coloured poster and one informational poster were distributed. A pamphlet-folder went out to all householders in the province. Several other and less spectacular media were employed.

Regional Health Services: The division took an active part in education and interpretation leading to a favourable vote to organize Health Region No. 2. Through the year it has worked in fairly close collaboration with regional health officers, but a wholly satisfactory liaison was not possible due to lack of staff. Miss Sidaway of the divisional staff took a course in motion-picture projection and has gone out to instruct regional staffs. She has also demonstrated her competence to screen pictures whenever occasion demanded. Regional staffs have been assisted with suggestions and bookings of films, previews, rentals and various other details pertaining to visual education. The most important service in this regard was the division's investment of funds in projectors, screens and other accessories, which were loaned to Health Regions 1, 3, and 6.

Regional medical officers consult the division regarding health-education problems and they have been assisted in various types of campaigns, such as, for instance, rodent control. Communicable Diseases: Education for the prevention and control of communicable disease continued throughout the year but special emphasis was given during National Immunization Week in September, when special mail, including literature, circular letters, and sheets of up-to-date Saskatchewan information went out to 7,200 teachers; superintendents; women's clubs; and many others. The division conducted a special 15-minute radio program over six stations, in which the director of the Division of Communicable Disease was featured. Action to counter the poliomyelitis hysteria had the result of some radio stations and newspapers taking a more reasonable view of the incidence in this Province, and the occasion was utilized to emphasize the possibilities of preventing whooping cough and other dangerous diseases.

There is good evidence that the people of the province have largely been sold on immunization and that some emphasis should be given to complete immunization procedures and follow-ups.

Venereal Disease: Relatively little was done in this field, but continued emphasis was given the psychiatric approach, and the importance of education in the home, good family relations, education for family life, preparation for marriage. Requests for films were promptly filled and literature and posters were offered. Special note was taken of National Health Week and National Social Hygiene Day in February, but not as intensively as in the previous year.

Pasteurization: The campaign for safe milk has been continued unrelentingly, with the ultimate goal being a public opinion that will support provincial legislation. Special pressure was applied in various centres where people were voting or where discussions or controversies occurred. Much of the educational emphasis has been placed in the schools.

Cancer: The division produced two publications for the Saskatchewan Cancer Commission. In the absence of any departmental publications for popular reading it has utilized free publications of the Canadian Cancer Society. Some indirect assistance was given the United Commercial Travellers and the Cancer Society with regard to the campaign for funds.

Mental Health: Continued interest has been taken in the role of family relations and in education for family life, but the projected National Conference on Family Relations was dropped as we were unable to meet our commitments to the provisional provincial committee which was to sponsor the conference with provincial support. The director attended the Pacific Northwest Conference on Family Relations, (Vancouver), in which he was induced to take an active part, and where he spoke as "Saskatchewan Plans for the Health of the Family." Since the appointment of Dr. D. G. McKerracher there has been set up a close and friendly relationship out of which will come a long-term and far-reaching mental-health-education program. It is conceived that the subject of temperance education will be part of this program.

School Health Education: The director is member of a departmental committee headed by Dr. H. S. Doyle which is in consultation with the director of curricula of the Department of Education regarding preparation of high-school health studies. The director prepared certain sections for the grade 10 curriculum. In consultations he has given special emphasis to the need of better teacher-training for health education, the importance of integrated rather than direct health education; the advisability of incorporating education in human biology and the physiology of sex, and education for family life in high-school curricula.

There has been correspondence with many teachers, and hundreds of requests for literature have been filled. Teachers have been assisted with information and references with respect to specific needs. Films to aid in class programs have been selected and recommended.

In the last month of the year the director was engaged in preparation of supplementary material for the use of audio-visual teachers when they employ health films.

The director also took over from Dr. C. G. Sheps efforts to arrange for two institutes in health and human relations, which were to be conducted last August in Saskatoon and Regina for teachers and other leaders. The project had to be shelved owing to staff problems.

Nursing Services: The public-health nurses, working among the people, in their homes and their schools, are considered valuable field workers. We have been of some slight assistance to them, but we have not yet been able to assist these nurses in an effective manner. The Division should work closely with the nurses in their various activities, and such a relationship is hoped for in the new year.

Films: The department's films are in the custody of the Saskatchewan Film Board, which notifies the division when applications for films are made to it. Many worthwhile additions have been made to the library, which is integrated with the Film Board's library. Great use has been made of films. The division has borrowed many films for preview and has screened them for department officers when in its opinion they warranted consideration for purchase. There has been a good liaison with the National Film Society and the Department of National Health and Welfare with respect to production of Canadian films on subjects not already treated or inadequately handled in foreign pictures.

Information Services: A substantial amount of time has been given to requests for information about the provincial health program and the department's services, and it has been impossible to meet all such requests as promptly as they should have been. This seems properly a responsibility of the division, but the division has not been staffed adequately to give prompt service.

Literature: During the year the division distributed 275,670 pieces of literature, and in addition a considerable number of posters, (this figure does not include monthly distribution of the Health Newsletter with a select circulation of 1,300). This literature distribution has taken the full time of a clerk who is in charge of the work and also in charge of stock. An inventory is kept. The distribution of literature by no means reflects all the activities related to any subject, since it is often integrated with film screenings and other activities. Moreover, the distribution of large quantities of literature as an isolated activity is not considered effective or economical.

The division produced three original posters on (a) pasteurization; (b) immunization; (c) personal hygiene; and in addition it kept in readiness a poliomyelitis bulletin for circulation in the event of a severe outbreak.

Window Displays: The division has made inquiries for window space in the Government Insurance Building annex, and hopes to utilize this opportunity during 1947. Other window displays will be considered.

Exhibits and Displays: Due to difficulties in obtaining materials, and lack of staff, it was not possible to develop new exhibits and displays but existing exhibits were sent to the Class A and most of the Class B fairs, the Frontier Days celebration at Swift Current, and several smaller events. Health-education displays were shown at several provincial conventions and also at the annual convention in Saskatoon of the Canadian Federation of Home and School. These displays and exhibits are stored very inadequately in a hut at the Regina airport, where they cannot be supervised or be set up for cleaning and maintenance. It is considered inadvisable to invest money in such displays until there is good storage space and until we have staff to utilize them more effectively.

Radio: This is probably the most valuable educational medium for reaching large numbers of people. On special occasions during the year the division has broadcast over five Dominion network stations and CKCK (Regina). An intensive radio campaign involving an expenditure of \$3,500 was conducted in connection with the Hospital Services Plan. The division was regretfully obliged to discontinue the constant use of free time on the stations; nor was it able to develop earlier plans for monthly dramatized programs. It has been noted that the Alberta Department of Public Health, following our lead, embarked on radio education and now has weekly programs. It is the opinion of the director that radio should be used constantly, but only if programs of a good standard can be presented.

Newspapers: Newspaper publicity and the use of newspapers in health education slumped during the year, partly due to pressure of work on the division, and partly because the division now no longer has direct access to newspaper space, all releases going through the Bureau of Publications. Channelling health education through the Bureau seems of no particular advantage to the Bureau but is a distinct disadvantage to health education. In the opinion of the director, health education can be done more economically and often more effectively by voluntary agencies because they can obtain services and other advantages which are not available to a public agency or to a commercial agency. In a somewhat similar way, a health-education division in a public-health department has an advantage over other departments of government.

When health news must share the attention of editors with material from other sources it loses its advantage. In the name of the people's health doors and newspaper columns are opened in a way they are not for other of the people's business. This may be wrong, but it is a situation which should be recognized.

Newspapers generally gave fairly good support this year and even the Regina Leader-Post was more generous (or less unco-operative) than before.

Professional Education: During the year Lederle Laboratories, New York, presented us with recordings of 75 radio talks in its U.S. series: THE DOCTORS TALK IT OVER, and these have had wide circulation among the medical and nursing professions of the province. The seventy-five subjects are treated by recognized authorities. We have slowly acquired some professional films which have been in considerable demand. Staffs of the mental hospitals have used both recordings and films.

General Remarks: This has been an extremely active year for the small staff, and all members gave loyal and devoted service. The results of health education are seldom immediate, but its value is being demonstrated in various ways, such as the demand for immunization, the greater sale of washing detergents, the generally friendly attitude toward the Hospital Services Plan, passage of bylaws (here and there) for pasteurization, co-operation of public and medical profession in venereal-disease control, etc. There is no doubt in the director's mind that given the facilities, the division can do an increasingly effective job.

CHRISTIAN SMITH, Director.

DIVISION OF NUTRITION

REGINA, SASK., January 11, 1947.

DR. C. F. W. HAMES,

Deputy Minister of Public Health.

Sir:

The following is the second annual report of the work of the Division of Nutrition, for the calendar year 1946.

It has been the aim of this Division to continue the promotion of those projects already begun, and to add other activities as time and facilities permitted. Our work is divided into two main services—educational and consultant. The educational work for the most part, is done in connection with schools, although some projects are planned for adults. There is need for a great deal more work to be done with pre-school children and mothers.

School lunch projects are very practical demonstrations and provide a splendid medium for nutrition education in the schools. It is encouraging to note, that from the information accorded our office, at least 21 School Units in the province are actively engaged in school lunch work. This is double the number of the previous year. All of these will supply equipment for their schools, for at least a simple method of lunch service. Approximately 8 units are also providing food for one hot dish at school.

During the year we have made individual contacts with 9 School Units-

East Saskatoon West Saskatoon Swift Current Weyburn Maple Creek Milestone Foam Lake Prince Albert Assiniboia

In addition, an opportunity was given us to speak at the Saskatchewan, the Consolidated, and the Separate School Trustees Association Conventions, and as well at the annual meeting of the School Superintendents.

Visits were made throughout the year to 44 schools in the interest of school lunch work. Of these, 26 were rural, 10 town and village, and 8 city schools.

Familiarizing teachers and teachers-in-training with school lunch work has occupied much of our time. Continuing with the work of the previous year, we visited practice teaching schools with the view of assisting in lunch work. Regular visits were made to the two Provincial Normal Schools, and there has been close co-operation between Nutrition Division and the Home Economics Departments in these schools. At 9 teachers conventions, either displays were planned or addresses given, during the first term of this school year. The number of requests for information on school lunches is steadily increasing, which would indicate a growing interest in this phase of school activity.

The Place Mat Contest for school children was concluded early in the year, with 131 entries. This was sponsored by the Department of National Health and Welfare, through our Provincial Departments of Public Health and Education. Our own nutrition competitions at summer fairs revealed a keener interest in 1946, with 18 fair boards and agricultural societies participating.

In July, a short course in nutrition, consisting of five one-hour lectures was given at the summer sessions at both Regina College and the University of Saskatchewan. The enrolment was low, in part due to the fact that the class carried no credit.

A nutrition survey among school children in the province was one of our major projects of the year. This was carried out in co-operation with the Department of National Health and Welfare. The study, three-fold in nature—dietary, physical and bio-chemical, included approximately 1,500 children from 43 schools, chosen in five areas in the province. The first food record, physical and biochemical examinations were made in April, May and June, followed by a second food record in October. The results revealed no acute forms of deficiency but did give evidence that milder degrees of malnutrition existed in a considerable number of the children. This emphasizes the need for much educational work.

We appreciate the friendly co-operation of the Department of Education and their superintendents, and gratefully acknowledge the assistance of the Public Health Nurses, in our work. The past year has shown an increase in requests to our Division for consultant services. The Department of Social Welfare requested, and received, a schedule for food allowances. The Department of Education has sought our help in planning the high school curriculum, setting Home Economics examination papers, and for the Home Economics Correspondence courses. As well, we have provided assistance to the Chef School, in the Vocational Training plan. Assistance was given the Maple Creek School Unit in food service in their dormitory. As a beginning in camp feeding, material was distributed last year to such organizations as the Y.W.C.A., and the Girls' Work Board.

At the request of the Penal Commission, the five penal institutions in the province were visited. A report was made to the Commission of the foods served in each institution, with recommendations for improvement. In co-operation with the Tourist Bureau, work has been commenced on selecting a "provincial dish" for Saskatchewan.

An effort has been made in this Division to re-establish the dietary staffs in each of the Provincial Mental Hospitals. To date, three qualified dietitians have been secured, and with their help a scale of issue has been drawn up for the Hospitals.

Frequent contact is made with Home Economics teachers and dietitians throughout the province, to make available to them the facilities provided by Nutrition Division.

Other projects include display work at summer exhibitions, numbering 7. A large display, "Meal Planning for Health", aroused interest in the subject of foods, and through this project we were able to contact many people otherwise not reached. Assistance was given with the judging of foods at two fairs. During August we had the privilege of showing, by means of a display, a little of our work to the delegates of the National Federation of Home and School.

In co-operating with the Division of Laboratories, analysis of Saskatchewan wild fruits was commenced in July. The nutritive value of five varieties has been studied.

In addition to 22 addresses to local groups, our Division appeared on the program of 8 provincial conventions throughout the year. Three provincial and one national magazine carried articles prepared by Nutrition Division.

We produced only one publication and that was a small leaflet, "Notes to Lunch Packing Mothers".

The Director attended two meetings in Ottawa, Dominion-Provincial Nutrition Committee, and also the Canadian Dietetic Association Convention; held in Toronto.

Considerable difficulty was experienced in obtaining and maintaining a staff. In addition to the Director and one stenographer, we have had temporary assistants. Due to ill health, one girl was with us only three weeks; because of a previous appointment another worked in the Division for only three months. In September a satisfactory appointment for Assistant Nutritionist was made.

Respectfully submitted,

JEAN ODDIE,

Provincia! Nutritionist.

MENTAL HYGIENE

On November 1, 1946, Dr. D. G. McKerracher was appointed Commissioner of Mental Services and Chief Psychiatrist for Saskatchewan. The following is an extract from the speech of the Honourable T. C. Douglas, Premier and Minister of Public Health in the Budget Debate in the Legislative Assembly, March 18, 1947

"We are embarking upon what is a fairly ambitious Mental Hygiene Program, Mr. Speaker. We have been extremely fortunate in persuading to come to the province one of the outstanding psychiatrists in Canada. That has been told to me on all sides, and I have had occasion to hear it again since Dr. McKerracher came here. Dr. McKerracher is proceeding to organize what will be an up-to-date mental hygiene program. We have the hospital at North Battleford, the hospital at Weyburn and, at the airport at Weyburn, we have the training school. We hope later to have a mental hospital on the University Campus near the Medical School in Saskatoon. To us, however, what is the more important thing, more important than the institutions where treatment is given, will be the Mental Hygiene Clinics which we hope will act as screening places to help us pick up cases in their early stages and provide early treatment. Many cases can, if dealt with early, be prevented from reaching an institution at all; other cases can be treated in the local hospital, so that they never need reach the state where institutional treatment is required."

PSYCHIATRIC WARD—REGINA GENERAL HOSPITAL

REGINA, SASK., March 10, 1948.

COMMISSIONER OF MENTAL SERVICES:

DEAR SIR:

I herewith enclose the annual report for the calendar year 1946. Please pardon the delay in the preparation and submission of this report.

The body of the report outlines the total number and the various types of mentally ill people observed and treated in this Department during that year.

On October 1, 1946, the services given by Dr. C. E. Rothwell, since this Department was opened on December 20, 1930, were discontinued. On that date I was appointed to the post of Director, being transferred from the Saskatchewan Hospital, North Battleford, to give full time psychiatric service. Dr. Rothwell has been permitted by me, with the consent of the Deputy Minister of Public Health, to admit and treat patients in association with me and, on a number of occasions, has assumed responsibility for the Ward in my absence. I believe it is only fitting in this report to acknowledge the many years of valuable service rendered to the public and to the Department of Public Health by Dr. Rothwell.

In addition to the full time treatment of patients in hospital, I was asked by the Deputy Minister of Public Health to institute some out-patient consultation service. In preparation for this I paid a visit to the Psychopathic Hospital, Winnipeg, to learn something of the methods followed there. I then began to give some out-patient consultation service to the Department of Social Welfare, Children's Aid Department, on two afternoons per week, and to patients of physicians in general practice, and to the Department of Veterans' Affairs. In October, November and December, 1946, I saw sixty-three out-patients in a total of seventy-eight consultations.

At the time that I became Director of the Ward the Agreement between the Department of Public Health and the Regina General Hospital Board had expired (1945) and the arrangement was continuing by mutual consent, pending revision.

Your obedient servant,

J. A. McLurg, M.D.,

Director, Psychopathic Department.

SCHEDULE No. 1

Disposition of Patients:	20
Patients in Hospital, January 1, 1946. Patients admitted during year.	20 288
Total cases dealt with during the year	308
Discharges:	
Returned home, improved	213
Returned home, unimproved	12
In for observation and diagnosis	12
Transferred to General Hospitals	37
Transferred to Mental Hospitals.	
Transferred to General Hospitals Transferred to Mental Hospitals In for Safe-Keeping only Escaped Died in Psychopathic Ward	4 2 8 19
Died in Psychonathic Ward	8
Patients in Hospital, December 31, 1946.	19
	308

SCHEDULE No. 2—DEATHS

No.	Age	Sex	Cause of Death	Predisposition
*3,143	48	М	Bronchopneumonia	Without Psychosis (Encepha
*3,146	77	M	Hypostatic Pneumonia.	Without Psychosis (Uraemic Delirium)
*3,159	49	F	Uraemia.	Dementia Praecox.
3,219	58	F	Hypostatic Pneumonia.	Psychosis with Cerebral Haemorrhage.
*3,248	58	M	Bronchopneumonia.	Psychosis with Somatic Dis ease (Uraemia).
*3,256	17	M	Septic Haemorrhagic Broncho- pneumonia.	Schizophrenia— Catatonic Type.
*3,337	45	F		- January Par

(*indicates that autopsies were done)

SCHEDULE No. 3-AGE OF PATIENTS

1-14 years:	15-34 years:	35-54 years:	From 55 years on
111 yrs.	115 yrs.	435 yrs.	655 yrs.
112 yrs.	116 yrs.	436 yrs.	556 yrs.
	317 yrs.	737 yrs.	557 yrs.
	718 yrs.	438 yrs.	358 yrs.
	419 yrs.	539 yrs.	759 yrs.
	420 yrs.	740 yrs.	360 yrs.
	821 yrs.	541 yrs.	461 yrs.
	622 yrs.	042 yrs.	362 yrs.
	923 yrs.	543 yrs.	363 yrs.
	524 yrs.	644 yrs.	564 yrs.
	1125 yrs.	645 yrs.	165 yrs.
	826 yrs.	246 yrs.	166 yrs.
	727 yrs.	047 yrs.	067 yrs.
	628 yrs.	748 yrs.	168 yrs.
	929 yrs.	749 yrs.	169 yrs.
	630 yrs.	950 yrs.	270 yrs.
	1031 yrs.	251 yrs.	171 yrs.
	1032 yrs.	352 yrs.	172 yrs.
	533 yrs.	753 yrs.	073 yrs.
	934 yrs.	654 yrs.	274 yrs.
			175 yrs.
			176 yrs.
			277 yrs.
			078 yrs.
			179 yrs.
			180 yrs.
			189 yrs.
2	129	96	61

SCHEDULE No. 4—CLASSIFICATION OF MENTAL DISEASES:

		M	F
1.	Traumatic Psychoses		
2.	Senile Psychoses	6	4
3.	Psychoses with Cerebral Arteriosclerosis	1	1
4. 5.	General Paresis	4	
5.	Psychoses with Cerebral Syphilis.		
6.	Psychoses with Huntingdon's Chorea	1	2
7.	Psychoses with Brain Tumor	1	
6. 7. 8.	Psychoses with Brain Tumor	7	2
9.	Alcoholic Psychoses	2	1
10.	Alcoholic Psychoses	1	
11.	Psychoses with Pellagra	200	
12.	Psychoses with other Somatic Diseases	3	6
13.	Manic-Depressive Psychoses —(a) Manic	3	8
	Manic-Depressive Psychoses —(a) Manic	12	15
	(c) Other Types		1
14.	Involution Melancholia	5	19
15.	Dementia Praecox and Schizophrenia	34	44
16.	Paranoia and Paranoid Conditions		
17.	Epileptic Psychoses	2	2
18.	Psychoneuroses and Neuroses —(a) Hysteria	4	10
	(b) Psychasthenia and An-		
	xiety States	14	11
	(c) Neurasthenia	4.	
	(d) Other types	4	7
19.	Psychoses with Psychopathic Personality	3 3 3	1
20.	Psychoses with Mental Deficiency	3	4
21.	Undiagnosed Psychoses	3	1
22.	Without Psychosis	25	11
		138	150
			288

SCHEDULE No. 5

Month	Admi	ssions	Re-ac		Disch	narges	Tran	sfers	Dea	ths
	M	F	M	F	M	F	M	F	M	F
January	9	8	1	2	7	8		1		
February	12	8	1		7	8	1.0	4	2	
March	7	11	2 3	3	9	6		1		1
April	13	13	3	3	10	11	1	1		
May	13	11	2	1	11	15	2	2		
Tune	11	15	1	4	8	10	2	3	44	1
July	16	15	3	3	16	10		1	. 2	
August	8	10	3	4	8	11			100	
September	5	8		1	11 5	4	2			
October	11	17	1	6		16	2 2	4		
November	21	17	1	5 3	11	13	2	3		1
December	12	17	2	3	15	14	5	1	1	
	138	150	20	35	118	126	16	21	5	3

THE MENTAL HOSPITAL, NORTH BATTLEFORD

NORTH BATTLEFORD, SASK., July 22, 1947.

COMMISSIONER OF MENTAL SERVICES:

DEAR SIR:

I beg to submit herewith the thirty-third annual report of the Saskatchewan Hospital, North Battleford, for the year ending December 31, 1946.

The number of patients on our register on December 31, 1945, was 1,732. Of these there were 1,111 men and 621 women. In the year 1946 there were 421 admissions. Of these 212 were men and 209 women; 321 were first admissions and 100 readmissions. Three hundred and three were paroled; 134 were men and 169 were women. The percentage of paroles to admissions was 71.97. The total number of patients on our register on December 31, 1946, was 1,732, thus showing an increase during the calendar year of 17. 31.35 of the total admissions were over 60 years of age. Of the deaths during the year 75.5 were over 60 years of age.

You will observe that the admission rate increased by 24 over the preceding year. The rate is increasing during the current year and in consequence the overcrowding is becoming an increasing problem. It is imperative that something must be done to deal with this problem. Our bed capacity must be made greater, or consideration given to admitting patients when beds are available, as is done in general hospitals.

Our medical staff was depleted during the year by the transfer of Dr. J. A. McLurg to the position of Director of the Psychiatric psychopathic Ward, Regina General Hospital, and by the resignation of Dr. H. Hellerova. The medical staff, never adequate, has thus been over-worked, and two or more physicians are urgently required.

The various departments of the hospital have carried on in spite of difficulties in a commendable way and much credit is due to the personnel.

The hospital requirements as outlined in the report for the year 1945 are worthy of further consideration, and I would request that this be given.

I wish to express my thanks to all the staff of the hospital for their co-operation throughout the year and to you, sir, gratitude for your unfailing support.

I have the honour to remain

Your obedient servant,

G. F. Nelson, M.D.

Medical Superintendent.

TABLE NO. 1—TOTAL ADMISSIONS—PSYCHOTICS

Month		Admiss- ions Par		Paroles Deaths		Elope- ments		Deport- ations		Trans- fers		
	M	F	M	F	M	F	M	F	M	F	M	F
Psychotics:												
946:												
January	15	18	4	5 7	9	5						1
February	16	14	6		4							
March	21	14	11	18	3	4						1
April	16	19	18	20	4	3						
May	16	23	9	8	5	2		1 1			1	
June	17	16	18	19	9	5						
July	12	19	15	19	2	2						1
August	20	16	16	19	2 7 3 5 5	2	**	**	**			
September	19	18	7	22	3	1	ï			"	**	
October	24	15	12	15	5					**	1	1
November	20	22	8	8	5	2 2				**	7	
December	16	15	10	9	2	4	**			***		
December	10	15	10	7	-	4	**	**	**	**	**	
Total	212	209	134	169	58	32	1				2	8
Frand Total	42	1	30.	3	90)	1				1	0

Table No. 2—Admissions and Movement of Patients, Comparative Statement

No. of Patients on Regist	tor Innus	ev 1 1046		Male 1.094	Female 621	Total 1,715
Admissions:	Male	Female	Total	1,001	021	1,715
First Admissions		137	321			
Readmissions	28	72	100			
	-			212	209	421
Total under	our care	during the	year	1,306	830	2,136
Discharged or Removed:		Female	Total			
Paroled	134	169	303			
Died	58	32	90			
Deported			9			
Eloped	1 2		1			
Transferred Total removed from	2	8	10			
register during year -				195	209	404
register during year				175	209	404
Total remaining on					621	1,732
Total admissions during	the year.					421
Total paroles during the	year		•••••			303
Percentage of Paroles of Male admissions during t						71.97%
Male paroles during the	vear	***************************************			***************************************	134
Percentage of Male Parol	es of Ad	missions				63.21%
Female admissions during	the year	r				209
Female paroles during the	e vear					169
Percentage of Female par	oles of a	dmissions				80.86%
Total number of cases tre	eated du	ring the yea	ır			
Total number of deaths of Percentage of deaths of c	iuring th	e year				90
	oces und	or trootman	+			4 21%

TABLE NO 3-MOVEMENT OF PATIENTS-30 YEAR PERIOD

					-		
	1914–15	1915–16	1916–17	1917–18	1918-19	1919-20	1920-2
	271	250	260	200	210	206	202
Admissions	271	250	268	290	318	296	302
Paroles	97	100	123	122	160	168	134
Deaths	24	44	55	58	115	85	56
Deportations	20	12	6	7	4	5	7
Elopements	****	2111	2	4	4	6	11
Fransfers	4	2	2	1	2		1
Remaining on Register	375	501	593	673	771	804	836
	1021 22	1022 22	1022 24	1924-25	1025 26	1026.27	1027 2
	1921-22	1922-23	1925-24	1924-25	1925-20	1920-27	1921-2
Admissions	321	188	200	234	246	257	260
Paroles	133	108	107	106	114	141	136
Deaths	50	35	38	38	43	62	58
Deportations	7	10	6	5	9	17	16
Elopements	8	4	4	5	1	4	5
Fransfers	457	1	1	9	2	1	
Remaining on Register	932	598	628	672	742	818	851
				-			
	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-3
Admissions	306	330	329	330	382	383	362
Paroles	150	177	154	175	165	183	199
Deaths	59	44	57	71	75	81	97
Departations	25	28	29	21	22	12	8
Deportations		22	15	12	14	10	8
Elopements Transfers	0	2	68	12	1	75	0
Remaining on Register	898	962	1,019	1,024	1,075	1,180	1,202
	1935-36	1936-37	1937–38	1938-39	1939-40	1940-41	1941-4
Admissions	432	390	373	390	388	369	387
Paroles	223	239	230	233	249	228	218
Deaths		75	91	88	76	86	109
Deportations		1		1	1000		103
Elopements		8	6	9	7	2	4
Transfers		3	3	4	7	11	13
Remaining on Register		1,343	1,407	1,450	1,505	1,597	1,640
Remaining on Register	1,232	1,343	1,407	1,450	1,505	1,397	1,04
	1942-43	1943-44	1944	1945	1946		
					121		
Admissions	347	373	350	397	421	1	
Paroles	183	235	217	397 263	303		4
Paroles	347 183 109			- CONT CO.			1
Paroles Deaths Deportations Deportations	183 109 1	235 115	217	263 96	303		
Paroles	183 109 1 2	235 115	217 101	263 96	303 90		
Paroles	183 109 1 2 9	235 115 3 14	217 101	263 96 9	303 90		
Paroles Deaths Deportations Deportations	183 109 1 2 9	235 115 3	217 101 3	263 96 9	303 90 		

TABLE 4-AGE GROUPS

	Admis	sions	Pare	oles	Deaths	
Age Groups	М	F	M	F	M	F
1- 9		3				
10-19	9	9	7	9		1
20-29	54	46	35	39	2 3	2
30-39	25	39	24	37	3	1
10-49	29	46	20	39		2
50-59	22	27	22	27	5	7
60-69	35	16	21	15	20	5
70-79	27	16	5	2	21	11
80-89	9	6		1	6	2
90 and over	2	1			1	2
Totals	212	209	134	169	58	32
Grand Totals	42	1	30	3	90	

TABLE No. 5-DIAGNOSES

		Female
Psychoses with Syphilitic Meningo-encephalitis (General		
Paresis)	11	
Psychoses with other forms of Syphilis of the Central Nervous		1000
System—Cerebro-Spinal lues-tabo paresis	2	
Psychoses with epidemic encephalitis	3	2
Psychoses due to drugs or other exogenous poisons		1
Fraumatic Psychoses with post-traumatic mental deterioration	. 1	
Alcoholic Psychoses:		
Pathological Intoxication	1	
Acute Hallucinosis	2	
Korsakow's Psychosis	1	
Psychoses with Cerebral Arteriosclerosis	46	13
Cerebral Embolism.		1
Psychoses with Convulsive Disorders (Epilepsy)	3	3
Epileptic Deterioration	4	3
Epileptic Clouded States		1
Senile Psychoses:	-	
Simple Deterioration	7	12
Presbyophrenic Type	3	2
Depressed and Agitated Type		5
Paranoid Type	7	1
Other Types	1	
Involutional Psychoses:		0
Melancholia	2	9
Other types to be specified	4	1
Psychoses due to other Metabolic diseases, etc.: With diseases of the endocrine glands to be specified		
With other somatic disease to be specified	3	1
Psychoses due to New Growth:	3	1
With Intracranial Neoplasms	1	
Psychoses Associated with Organic changes of the Nervous		1
System:		
With other brain or nervous diseases		3
Other types to be specified	4	3
Psychoneurosis:	4	
Psychasthenia or Compulsive States		2
Neurasthenia.	3	4
Hypochondriasis		2
Reactive Depression	3	4
Anxiety State	2	4
Mixed Psychoneurosis.	-	1
Drug Addiction.	**	1

TABLE No. 5—DIAGNOSES—Continued

Diagnoses	Male	Female
Manic Depressive Psychoses:		
Manic Type	5	6
Depressive Type	9	28
Circular Type	1	20
Mixed Type		4
Other Types.	5	3
Dementia Praecox (Schizophrenia):		-
Simple Type	3	2
Hebephrenic Type	19	13
Catatonic Type	14	36
Paranoid Type	7	11
Paranoia and paranoid conditions:		-
Paranoid conditions	-	1
Psychoses with Mental Deficiency	4 .	8
Psychoses—Undiagnosed	2	4
Without Psychoses:		
	4	5
Epilepsy with Mental Deficiency		2
Alcoholism	5	
Drug Addiction	1	***
Mental Deficiency	17	7
Psychopathic Personality	6	
Other types	6	.1
Primary Behaviour Disorders	1	
Totals	212	209
Grand Total	42	21

TABLE No. 6—BIRTHPLACE OF ADMISSIONS—PSYCHOTICS

Country	Male	Female	Country	Male	Female
Canada	121	121	China	1	
England	18	17	United States	22	28
Scotland	4	1	Hungary	22	1
reland	3	5	Latvia	1	1
Germany	5	5	Finland	1	ï
Norway	6	2	Denmark	2	1
Poland	5	8	France	2	
Austria	3	3	Besarabia	1	"
Czechoslovakia	1	1	Yugoslavia		1
Sweden	5	3	Roumania		1
Russia	3	5	Unknown	3	3
Total				212	209
Grand Total				4	21

TABLE NO. 7-MILITARY PATIENTS ADMITTED

-				
N	Madulan	1-0	Social	Di
No.	Nativity	Age	Condition	Diagnoses
1.	U.S.A.	49	Married	Psychosis associated with Cerebro-spinal
2.	Canada	23	Single	Lues—Tabo Paresis. Mental Deficiency, Low grade, Asocial and Amoral Trends.
3.	Canada	26	Single	Epilepsy without Psychosis.
4.	Roumania	56	Married	Without Psychosis, Tabes Dorsalis.
5.	Besarabia	25	Single	Schizophrenia, Hebephrenic Type.
6.	England Canada	39 34	Married Married	Manic Depressive Psychosis, Mixed Type. Without Psychosis, Acute Alcoholism.
8.	Canada	23	Single	Undiagnosed.
9.	Canada	30	Single	Schizophrenia, Hebephrenic Type.
10.	Canada	61	Widowed	Psychosis Associated with Cerebro-spinal Lues, probably General Paresis.
11.	Canada	29	Single	Schizophrenia, Hebephrenic Type.
12. 13.	Canada Canada	29 22	Single Single	Manic Depressive Psychosis, Depressed Type. Schizophrenia, Hebephrenic Type,
14.	Canada	25	Married	Without Psychosis, Chronic Alcoholism.
15.	Canada	30	Married	Schizophrenia, Catatonic Type.
16.	Canada	43	Married	Without Psychosis, Personality Changes As-
				sociated with Convulsive Disorders of Un-
17.	England	39	Married	certain Origin. Manic Depressive, Mixed Type.
18.	Canada	22	Single	Schizophrenia, Catatonic Type.
19.	Canada	46	Single	Schizophrenia, Paranoid Type.
20.	Canada	50	Widowed	Psychoneurosis, Neurasthenic Type, Post-
21.	Canada	24	Married	operative in Origin. Manic Depressive, Depressed Type.
22.	U.S.A.	22	Single	Without Psychosis, Cerebro-spinal Syphilis,
				With Personality Changes.
23.	Canada	32	Single	Epilepsy with Deterioration and Psychotic Episodes.
24.	Canada	29	Single	Schizophrenia, Hebephrenic Type.
25.	Canada	29	Single	Schizophrenia, Hebephrenic Type.
26.	Canada	30	Single	Schizophrenia, Simple Type.
27. 28.	Canada England	28 58	Single Married	Schizophrenia, Hebephrenic Type. Without Psychosis, Chronic Alcoholism.
29.	Canada	31	Single	Schizophrenia, Simple Type.
30.	Canada	27	Married	Psychopathic Personality with Amoral
	1.			Trends Characterized by Exhibitionism.
31.	Canada	24	Single	Schizophrenia, Catatonic Type.
32. 33.	Canada Canada	22 22	Single Single	Schizophrenia, Catatonic Type. Schizophrenia, Hebephrenic Type.
34.	Canada	30	Single	Schizophrenia, Paranoid Type.
35.	Canada	26	Single	Schizophrenia, Catatonic Type.
36.	Canada	28	Single	Psychoneurosis, Reactive Depression, Associ-
				ated with which is a pathological reaction to
37.	Canada	67	Single	Alcohol. General Paresis, Dementing Type.
38.	Canada	24	Single	Schizophrenia, Hebephrenic Type.
39.	U.S.A.	49	Married	Psychosis Associated with Cerebro-spinal Lues with Tabo-paresis.
40.	Canada	22	Single	Undiagnosed.
41.	Canada	30	Married	Manic Depressive Psychosis, Alternating
42.	England	69	Widowed	Type with Schizoid Manifestations. Psychosis Associated with Cerebral Arterio-
43.	U.S.A.	26	Married	sclerosis. Without Psychosis, Psychopathic Personality,
	England		Maria	Pathological Lying.
44. 45.	England U.S.A.	56 71	Married Married	Psychonic Associated with Combro-spinal
10.	0.5.7.	11	Married	Psychosis Associated with Cerebro-spinal Lues, probably General Paresis.
46.	Canada	24	Married	Acute Alcoholic Psychosis, Pathological In-
		1		toxication on a Psychopathic Personality Basis.
47.	Canada	20	Single	Psychopathic Personality, Amoral and Asocial
				Trends.

TABLE No. 7-MILITARY PATIENTS ADMITTED-Cont.

Remaining in hospital on January 1st, 1946 Number admitted during the year	140 47
Total	187
Number paroled during the year	20 1
Removed from Register during the year	21
Remaining in Hospital on December 31, 1946	166

TABLE No. 8—RACIAL ORIGIN OF ADMISSIONS—PSYCHOTICS

Race	Male	Female	Race	Male	Female
Canadian	1	3	Danish	3	1
English	37	43	Hungarian	1	2
Irish	21	18	Roumanian	1	
Scotch	24	26	Latvian	1	
Norwegian	14	8	Scandinavian	1	2
French	27	18	Finnish	1	1
Indian (N.A.)	4	6	Austrian	î	Î
German	21	24	Jewish	1	1
Ukrainian	15	13	Czechoslovakian	•	2
Russian	7	11	Icelandic		1
Polish	-	11	Welsh	**	1
Swedish	5	11	Bohemian	**	1
D. tob	12	0			1
Dutch	12	9	Yugoslavia	5	1
Chinese	4	**	Unknown	3	1
Totals				212	209
Grand Totals				4	21

TABLE No. 9—DEATHS—PSYCHOTICS

No.	Sex	Age	Immediate Cause of Death	Predisposition
1.	М	78	Pulmonary Hemorrhage	Psychosis with Cerebral Arter-
2.	М	51	Pulmonary Tuberculosis	iosclerosis. Schizophrenia, Hebephrenic
3.	M	77	Softening of the Brain	Type. Senile Psychosis, Simple Deterioration.
4.	M	78	Bronchopneumonia	Psychosis with Cerebral Arteriosclerosis.
5.	F	76	Bronchopneumonia	Psychosis with Cerebral Ar- teriosclerosis.
6. 7.	M F	68 24	Uraemia Cerebral Edema	Arteriosclerotic Psychosis. Psychosis associated with ideopathic Epilepsy.
8.	M	66	Cerebral Hemorrhage	Psychosis with Cerebral Ar- teriosclerosis.
9.	F	76	Bronchopneumonia	Senile Psychosis, Presbyophre- nic Type.
10.	M	72	Cerebral Hemorrhage	Psychosis associated with Cere- bral Arteriosclerosis.
11.	М	67	Gastro Intestinal Hemorrhage, most probably secondary to capillary fra- gility due to Hepatic Cirrhosis.	Psychosis Associated with Cere- bral Arteriosclerosis.
12.	F	73	Bronchopneumonia	Senile Psychosis, Simple De- terioration.
13.	F	80	Acute Dysentry	Senile Dementia, Presbyophre- nic.
14.	M	65	Softening of the Brain	Schizophrenia, Simple Type with considerable deteriora- tion.
15.	M	37	Acute Anemia of the Brain, Stoppage of the Heart Due to a Sudden Vagus Irritation.	Schizophrenia, Catatonic Type on a Defective Base.
16. 17.	M M	66 61	Cerebral Hemorrhage	Cerebral Syphilis. Schizophrenia, Hebephrenic Type.
18.	M	56	Chronic Cardio renal disease, with pas- sive congestion,	Schizophrenia.
19.	M	70	Cerebral Hemorrhage	Psychosis with Cerebral Ar- teriosclerosis.
20. 21.	F	40 79	Brain Tumour	Undiagnosed. Dementia Praecox.
22.	F	57	Pyemia	Psychosis Associated with Or- ganic changes of the Ner- vous System with Hunting- don's Chorea.
23.	M	85	Chronic Myocarditis	Senile Psychosis, Simple Deterioration.
24.	M F	55 72	Tumour of the Brain (Left frontal lobe) Coronary Occlusion	Tumour of the Brain. Senile Dementia, Paranoid.
25. 26.	M	61	Cerebral Hemorrhage	Manic-Depressive Psychosis, Depressed and Agitated Type.
27.	F	70	Hypostatic Pneumonia	Psychosis with Cerebral Ar- teriosclerosis.
28.	M	83	Intestinal Obstruction	Senile Psychosis, Simple De- terioration.
29.	F	48	Pituitary Tumour—type unknown	Psychosis with Disturbance of Circulation, due to Subdura Hemorrhage.
30. 31.	F M	39 79	Pulmonary Tuberculosis	Schizophrenia, Catatonic Type. Psychosis Associated with other Somatic Disorders— Carcinoma and Generalized Arteriosclerosis and Carcinoma of the Prostate with Metastases.

TABLE No. 9—DEATHS—PSYCHOTICS

-				
No.	Sex	Age	Immediate Cause of Death	Predisposition
32.	М	64	Chronic Myocarditis and Chronic pas- sive congestion	Manic Depressive, Depressed Type.
33. 34.	M F	55 75	Hypostatic Pneumonia	General Paresis. Psychosis with Cerebral Ar-
35.	М	68	Uraemia	teriosclerosis. Psychosis with Cerebral Ar- teriosclerosis.
36.	М	61	Cerebral Hemorrhage	Psychosis with other Somatic Disease, Cerebral Arterio- sclerosis.
37.	M	28	Edema of the Brain	Schizophrenia, Hebephrenic Type, on a Defective Base.
38.	М	69	Cerebral Hemorrhage	Psychosis with Cerebral Ar- teriosclerosis.
39.	F	56	Multiple Sclerosis of the Brain and Spinal Cord	Undiagnosed.
40. 41.	M F	79 52	Softening of the Brain. Brain Tumour—Cerebral Hemorrhage. Mitral Stenosis.	Senile Dementia, Simple Type. Psychosis due to new growth, Brain Tumour.
42.	F	44	Multiple pulmonary infarction	Manic Depressive Psychosis, Mixed Type.
43. 44.	F M	61 75	Softening of the Brain	Involutional Melancholia. Psychosis Associated with Cere- bral Arteriosclerosis.
45. 46.	M F	65 55	Hypostatic Pneumonia	Epilepsy with Psychosis, Manic Depressive Psychosis, Recurrent, Depressive and Stuporous Type.
47.	M	74	Coronary Occlusion	Senile Psychosis, Presbyophre- nic Type.
48.	M	82	Acute Cardiac Failure	Psychosis Associated with Cere- bral Arteriosclerosis.
49. 50.	M M	81 46	Chronic Myocarditis General Paresis of the Insane, Syphil- itic Infection	Senile Dementia. General Paresis.
51.	M	79	Cerebral Hemorrhage	Psychosis Associated with Cere- bral Arteriosclerosis.
52.	F.	47	Tumour of the Pituitary Gland	Psychosis due to New Growth —Brain Tumour.
53.	M	70	Cerebral Hemorrhage	Psychosis Associated with Cere- bral Arteriosclerosis.
54.	F	69	Hypostatic Pneumonia	Psychosis due to Disturbances of Circulation, Hemiplegia associated with Cerebral
55. 56.	M M	65 57	Acute Bronchopneumonia	Arteriosclerosis. Arteriosclerotic Psychosis.
57.	F	26	ary cancerous growths	Dementia Praecox. Acute psychotic disturbance of
31.		-		an undetermined nature, most probably on the basis of Mental Deficiency.
58.	M	69	Chronic Myocarditis and Myocardial Degeneration (non-rheumatic)	Senile Dementia, Simple Type
59.	F	65	Hypostatic Pneumonia	Psychosis Associated with Cere- bral Arteriosclerosis.
60.	M	65	General Peritonitis	Dementia Praecox, Paranoid Type.
61.	M	35	Respiratory Paralysis following adminis- tration of curare	Schizophrenia, Hebephrenic Type.
62.	F	90	Chronic Myocarditis (non-rheumatic)	Senile Psychosis, Simple De- terioration.
63.	М	79	Softening of the Brain	Psychosis with Cerebral Ar- teriosclerosis.
64. 65.	M	72 44	Internal Hemorrhage (Gastric)	Dementia Praecox. Epilepsy without Psychosis.

TABLE No. 9-DEATHS-PSYCHOTICS

No.	Sex	Age	Immediate Cause of Death	Predisposition
66.	M	66	Bronchopneumonia	Post-traumatic Psychosis with
67.	M	91	Softening of the Brain	Seizures. Psychosis associated with Cere-
68.	F	75	Hypostatic Pneumonia	bral Arteriosclerosis. Senile Psychosis, Depressed and
				Agitated Type.
69. 70.	M M	72 77	Uraemia	Dementia Praecox. Huntingdon's Chorea with Pro-
71.	M	76	Myocarditis	gressing Dementia. Psychosis Associated with Cere-
	141	10	Myocardida	bral Arteriosclerosis, and
72.	M	67	Valvular Disease	Cardiac Decompensation, Psychosis Associated with Val-
	- 11			vular Disease of the heart and General Arterioscler-
				osis.
73.	F	72	Myocarditis	Psychosis due to Cerebral Arteriosclerosis, compli-
7.4	-		N. 19.1	cated by Apoplexia.
74. 75.	F	69 86	Myocarditis	Dementia Praecox. Arteriosclerotic Psychosis.
76.	M	70	Bronchopneumonia	Psychosis Associated with Cere-
	2000			bral Arteriosclerosis and
				complicated by Chronic Cystitis, possibly also pye-
				litis.
77.	M	76	Bronchopneumonia	Psychosis Associated with Ar- teriosclerosis.
78.	F	80	Bronchopneumonia	Senile Psychosis, Depressed
79.	M	67	General Paresis of the Insane	and Agitated Type. Psychosis due to Infection-
		0.	Ochicia Laresis of the Institution	Meningo-Encephalitic Type.
80.	M	77	Bronchopneumonia	General Paresis. Psychosis Associated with Cere-
10000		3444		bral Arteriosclerosis.
81.	M	72	Uraemia	Senile Psychosis, Presbyo- phrenic Type.
82.	M	69	Bronchopneumonia	Psychosis Associated with Cere-
83.	F	56	Acute Intestinal Obstruction	bral Arteriosclerosis. Psychosis Associated with Cere-
84.	M	67	Peripheral Circulatory Collapse	bral Arteriosclerosis. General Paresis.
85.	M	81	Bronchopneumonia	Senile Psychosis.
86.	Г	62	Cerebral Hemorrhage	Psychosis Associated with Cere- bral Arteriosclerosis.
87.	F	79	Pulmonary Edema	Manic Depressive Psychosis, Depressed Type.
88.	F	95	Bronchopneumonia	Senile Psychosis.
89.	F	79	Bronchopneumonia	Senile Psychosis, Simple De- terioration.
90.	M	83	Bronchopneumonia	Senile Psychosis, Simple Type.

TABLE No. 10-DENTAL DEPARTMENT-1946

Number of Patients treated	1,763
Number of Examinations.	1,294
Prophylaxis	246
Fillings	609
Dentures—new	121
Dentures—repaired	78
Miscellaneous treatments	657
Number of Extractions	1.498
Total number of operations	4,503

In addition to the above, one complicated fractured mandible was successfully treated.

A number of consultations were given to members of the staff, and a small number of staff treated for the relief of pain.

THE MENTAL HOSPITAL, WEYBURN

August 4, 1947

COMMISSIONER OF MENTAL SERVICES:

DEAR SIR:

I beg to submit for your consideration the twenty-sixth annual report of the Saskatchewan Hospital, Weyburn. The fiscal year ended on March 31st this year and the report, therefore, covers only an eleven months period.

At the commencement of this year, there were 1,485 male patients and 1,049 female patients making a total of 2,534. During the year 522 were transferred to The Saskatchewan Training School. There remained on the register March 31st, 1947, 1,230 male and 833 female or a total of 2,063 showing an overall decrease of 471 patients.

Every effort has been made to alleviate the over-crowded condition which prevails in the wards by transferring patients to the Training School. It was also necessary to allocate one of the male wards to the female patients in order to equalize as much as possible the over-crowded condition. It is recommended that serious consideration be given to the erection of a receiving unit as soon as building conditions permit. It is hoped that the Training School will be able to take sufficient additional patients to allow a partial clearing of the basement wards.

During the year we have made a start on a dairy herd and expect by fall of 1947 to be producing a part of our milk requirements. Suitable housing for the cattle will be required before winter.

Considerable progress has been made on the water project and it is hoped and expected that by fall the water scarcity problem will be eliminated.

The staff accommodation is still a serious problem and the projected Nurses Home will be of great assistance not only in housing but in retaining the nursing staff. Suitable housing is also necessary in order to obtain medical staff. It is anticipated, however, that the latter problem will be at least partially solved before winter.

The assistance given by yourself and your staff during the year has been greatly appreciated.

Your obedient servant,

F. S. Lawson, M.D., Superintendent, Saskatchewan Hospital, Weyburn.

TABLE No. 1-Admissions-Psychotics

Month	Admis- sions		Paroles		Deaths		Elope- ments		Deporta- tions		Trans- fers	
	М	F	M	F	M	, F	M	F	M	F	M	F
1946												
May	17	12	10	4	2	3						
June	14	10	21	12	6	4 3	1					
July	13	12	14	5	3	3						
August	16	8	16	11		6	2					
September	9	7	11	2	4 5	4	1					
October	20	14	- 7	6	5	1		***				
November	11	12	6	5	1	5						
December	26	3	6	4	6	2			100			
1947			-									
January	19	11	7	8	4	5 3	1		**		**	
February	12	6	7	6	2	3						
March	16	6	9	3	8	- 3	**	**		**	100	
Total	173	101	109	66	50	39	5					
Grand Total	2	74	17	5	89)	5					

Table No. 2—Admissions and Movement of Patients Comparative Statement

Number on our register May 1, Admissions: First admission, psychotic First admission, defective Re-adm. psychotic Re-adm. defective By transfer-psychotic By transfer-defective	1946 Male 123 52 50 19	Female 74 40 27 15	Total 197 92 77 34	Male 1,485	Female 1,049	Total 2,534
Total admissions				244	156	400
Total under our care during year				1,729	1,205	2,934
Discharged or removed:	Male	Female	Total			
Paroled psychotic Paroled defective Deaths psychcotics Deaths defective Elopement psychotic Transfer psychotic Transfer defective	109 18 50 14 5	66 27 39 21 	175 45 89 35 5			
Total removed from register during year	303	219	522	499	372	871
Total remaining on register Marc Total admissions during year (ps Total paroled during year (psych Percentage of paroles of admissio Males admitted for year (Psychot Percentage of paroles of admissio Females admitted for year (Psychot Percentage of paroles of admissio Females paroled for year (Psychot Percentage of paroles of admissio Total cases under treatment Total deaths during year Percentage of deaths of cases und Defective Male admissions Defective Male Paroles	ychotic notic) ons c) ons hotic) ons hotic) ons der trea	tment			833 274 175 63.86% 173 109 63.00% 101 66 65.34% 934 89 3.03% 71 18 25.37% 55	2,063

TABLE No. 3-MOVEMENT OF PATIENT -25 YEAR PERIOD

	1922-23	1923-24	1924-25	1925-26	1926-27
Admissions	341	254	270	271	275
Paroles	146	113	112	143	138
aroles	90	60	65	67	
Deaths					67
Deportations	6	10	11	15	13
Elopements	5	7	1	1	3
Fransfers	1	3			
Remaining on register	666	729	815	862	916
	-		1		
	1927-28	1928-29	1929-30	1930-31	1931-32
Administra	240	205	207	395	205
Admissions	240	385	307		285
Paroles	100	121	137	124	105
Deaths	68	96	70	59	79
Deportations	17	24	21	24	15
Elopements	6	4	1	1	2
Fransfers					
Remaining on register	965	1,005	1,083	1,270	1,354
	1932-33	1933-34	1934-35	1935-36	1936-37
	1702-00	1700-01	1701-00	1700-00	1900-01
Admissions	245	332	318	303	374
Paroles	93	108	139	142	159
Deaths	77	97	103	80	95
Deportations	7	10	2	2	
Elenements	6	8	ő	5	4
Elopements	0	0	,	3	4
Fransfers Remaining on register	1,416	1,526	1,590	1,664	1,780
					1
	1937-38	1938-39	1939-40	1940-41	1941-42
	1931-36	1930-39	1939-40	1940-41	1941-42
Admissions	372	374	396	386	401
Paroles	150	195	216	162	176
Deaths	101	93	89	90	85
		30	2	90	03
Deportations		2			**
Elopements	5	3	1 -	3	1
Transfers	1	3	2007		
Remaining on register	1,895	1,981	2,076	2,207	2,346
				The second of	1016 15
	1942-43	1943-44	1944-45	1945-46	1940-47
Admissions	401	415	374	404	400
	401 212				
Paroles	401 212	415 208	374 219	404 218	400 220
Paroles Deaths	401 212 139	415 208 134	374	404	400
Paroles Deaths Deportations	401 212 139 3	415 208 134 1	374 219 126	404 218 137	400 220 124
Paroles Deaths Deportations Elopements	401 212 139	415 208 134	374 219	404 218	400 220 124
Admissions	401 212 139 3	415 208 134 1	374 219 126	404 218 137	220 124

TABLE No. 4-AGE GROUPS

	Admi	ssions	Pare	oles	Deaths	
Age Groups	M	F	M	F	М	F
1- 9. 10-19. 20-29. 30-39. 40-49. 50-59. 60-69. 70-79. 80-89. 90-99. 100-109. Unknown.	7 31 24 20 25 34 19 9 2 1	2 3 13 24 15 12 11 7 14	6 23 22 19 16 18 4 1	2 9 16 13 17 6 2 1	1 3 1 5 13 16 7 2 1	2 5 5 2 2 10 7 7
Total	173	101	109	66	50	39
Grand Total	27	4	17	5	8	9

TABLE No. 5—DIAGNOSES

Diagnoses	Male	Female
Psychosis with syphilitic meningo-encephalitis (Paresis)	6	
Psychoses with cerebral syphilis	2	
Psychosis with encephalitis.	110	1
Psychosis with infectious diseases	3	
Psychoses due to drugs		
Fraumatic psychosis	1	
Psychoses with cerebral arteriosclerosis	15	9
Epileptic psychoses		
Senile Psychoses	37	19
Involutional psychoses.	9	7
Psychoses with organic changes of the nervous system	7	3
Psychoneuroses (Anxiety type)	2	4
Compulsive neuroses		
Hysterical	2	2
Not differentiated	4	
Manic depressive psychoses:	7	7
Manic	1	'
Mixed	1	3
Not differentiated	1	1
Schizophrenia:	7	1
Simple type	4	10
Catatonic	6	7
Hebephrenic	23	7
Paranoid.	11	8
Not differentiated	10	3
Psychoses with mental deficiency	12	11
Undiagnosed psychoses	3	11
Without psychoses:		10.2
Mental deficiency, Moron	18	4
Mental deficiency. Imbecile	25	13
Mental deficiency, Idiot	8	20
Epilepsy		3
Mental deficiency, Other types	7	5
Psychopathic personality	4	
Not insane.		
Acute alcoholism	6	2
Other types	10	6
Total	244	156

TABLE No. 6-NATIVITY OF ADMISSION-PSYCHOTICS

Country	Male	Female	Country	Male	Female
Turkey	-	1	Newfoundland	-	
Austria	9	3	Norway	3	
Canada	87	61	Poland.	4	3
China	1	1	Roumania	4	1
Czechoslovakia			Russia	8	2
Denmark	1		Scotland	6	2
England	16	11	Ukraine		
Germany		1	U.S.A.	20	7
Finland			Yugoslavia		
Hungary			Ireland	4	1
celand			France	1	
Galacia	1	2	Sweden	2	3
			Unknown	6	3
Total				173	101
Grand Total	2	74			

TABLE NO. 7—-MILITARY PATIENTS ADMITTED

No.	Nativity	Age	Soc. Stat.	Sex	Mental Diagnoses
1.	Canadian	25	M	M	Mental Deficiency, dull normal.
2.	Canadian	31	S	M	Psychosis with Mental Deficiency.
2.	Canadian	24	S	M	Without Psychosis, Acute Alcoholism.
4.	Canadian	30	M	M	Schizophrenia, catatonic.
5.	Ireland	44	M	M	Psychopathic personality.
6.	Canadian	24		M	Schizophrenia, Catatonic.
7.	Canadian	27	S S S M S S	M	Schizophrenia, Hebephrenic.
8.	Canadian	23	S	M	Schizophrenia, Hebephrenic.
9.	Canadian	22	S	M	Schizophrenia, Paranoid.
10.	Canadian	25	M	M	Schizophrenia, Hebephrenic.
11.	Unknown	24	S	M	Schizophrenia, Paranoid.
12.	Canadian	31	S	M	Schizophrenia, Hebephrenic.
13.	Canadian	48	S	M	Chronic Alcoholism.
14.	England	60	M	M	Psychosis due to organic causes, cerebral degeneration.
15.	Polish	57	S	M	Schizophrenia, Paranoid.
16.	Canadian	57	M	M	Involutional Psychosis.
17.	Ireland	77	S	M	Psychosis due to arteriosclerosis.
18.	England	68		M	Psychosis due to organic causes, diabetes mellitus.
19.	Canadian	30	S	M	Schizophrenia, Hebephrenic.
20.	Canadian	26	M	M	Convulsive disorder, Epilepsy.
21.	U.S.A.	53	S	M	Manic Depressive Psychosis.
22.	Canadian	47	S	M	Toxic Psychosis Membutal Poison.
23.	England	71	M	M	Psychosis due to arteriosclerosis.
24.	England	47	M	M	Dementia Praecox
25.	England	58	M	M	Dementia Praecox.
26.	Canadian	27	S	M	Schizophrenia, Simple.
27.	Canadian	28	S	M	Schizophrenia, Hebephrenic.
28.	Canadian	24	S	M	Psychopathic personality.
29.	Canadian	22	SSSSS	M	Manic Depressive Psychosis.
30.	Canadian	31		M	Schizophrenia, Hebephrenic.
31.	Canadian	25	M	M	Mental Deficiency, Dull Normal.
32.	Canadian	23	S	F	Psychoneurosis, Hysteria.

TABLE NO. 7-MILITARY PATIENTS ADMITTED-Continued

			M	F
Remaining in hospital on May 1st, 1946 Number admitted during year			101 31	1 1
Total			132	2
	M	F		
Number paroled during the year Number died during the year Number eloped during the year	1	1		
Number removed from the register dur	ing ye	ar	24	1
Remaining in hospital on March 31st,	1947		109	

TABLE No. 8-RACIAL ORIGIN OF ADMISSIONS-PSYCHOTICS

Race	Male Female Race		Race	Male	Female
Austrian Belgium Czechoslovakia Danish Dutch English French German Hungarian Icelandic Indian (Red) Irish	7 1 2 1 31 5 13 3 1 1 26	3 1 1 2 25 3 9 1 1 16	Polish Roumanian Russian Scots Swedish Ukrainian Welsh Unknown Yugoslavian Galician Chinese American Hebrew	4 3 6 22 4 10 1 17 2 1 1	3 1 3 14 4 2 1 4 1 2
Norwegian	10	3		173	101

TABLE No. 9—DEATHS—PSYCHOTICS

		1		
No.	Sex	Age	Immediate Cause of Death	Predisposition
1.	М	65	Bronchopneumonia	Psychosis with Cerebral arterioscler
2.	M	77	Bronchopneumonia	osis. Psychosis with Cerebral arterioscler- osis.
3.	M	64	Bronchopneumonia	Schizophrenia.
4.	M	88	Bronchopneumonia	Senile psychosis with arteriosclerosis.
5.	M	100	Bronchopneumonia	Senile psychosis with arteriosclerosis.
6.	M	65 54	Carcinoma of pharynx	Senile psychosis.
8.	M	94	Acute intussusception of small bowel	Schizophrenia, long standing.
9.	M	79	Arteriosclerosis (chronic)	Senile psychosis. Senile psychosis.
10.	M	65	Bronchopneumonia	Schizophrenia.
11.	M	83	Cerebral arteriosclerosis with psy- chosis	Psychosis with arteriosclerosis.
12.	M,	90	Bronchpneumonia	Senile psychosis with Cerebral arterio- sclerosis.
13.	M	65	Bronchopneumonia	Psychosis due to organic disease. Congenital heart failure.
14.	M	35	Strangulation	Schizophrenia.
15.	M	68	Pneumonia (unspecified)	Schizophrenia, Paranoid.
16.	M	81	Myocarditis, (unspecified) Bronchopneumonia	Senile psychosis.
17.	M	59		Psychosis associated with Cerebral ar- teriosclerosis.
18.	M	78	Bronchopneumonia	Psychosis associated with Cerebral ar- teriosclerosis & Parkinson's disease.
19.	M	68	Pneumonia (unspecified)	Schizophrenia, Paranoid.
20.	M	69	Bronchopneumonia	Schizophrenia, Hebephrenic.
21.	M	69 74	Myocarditis	Senile psychosis.
22.	LVI	14	Bronchopneumonia	Psychosis associated with convulsive disorder.
23.	M	56	Cerebral hemorrhage	Psychosis associated with Cerebral ar- teriosclerosis.
24.	M	81	Bronchopneumonia	Senile psychosis.
25.	M	57	Bronchopneumonia	Psychosis with Encephalitis lethargica.
26.	M	41	Pneumonia (unspecified)	Schizophrenia, Paranoid.
27.	M	61	Pneumonia (unspecified)	Psychosis with Cerebral arteriosclerosis
28.	M	35	Idiopathic epilepsy	Idiopathic, Epilepsy.
29. 30.	M	84 70	Chronic Myocarditis	Psychosis with Cerebral arteriosclerosis
31.	M	39	Pneumonia (unspecified)	Psychosis with cerebral arteriosclerosis. Psychosis with Epilepsy.
32.	M	69	Bronchopneumonia	Schizophrenia.
33.	M	70	Pneumonia (Unspecified)	Senile Psychosis.
34.	M	76	Pneumonia (Unspecified)	Schizophrenia, Hebephrenic.
35.	M	U.	Bronchopneumonia	Undiagnosed psychosis.
36.	M	66	Pneumonia (unspecified)	Senile Psychosis with arteriosclerosis.
37. 38.	M	73 75	Pneumonia (unspecified)	Senile Psychosis. Psychosis with Cerebral arteriosclerosis
39.	M	61	Chronic myocarditis Exhaustion and Cold	Schizophrenia
40.	M	67	Tuberculosis of the lungs	Paranoid condition.
41.	M	81	Arteriosclerosis	Senile Psychosis
42.	M	17	Exhaustion and cold	Psychosis on Defective base
43.	M	70	Carcoma of the Bladder	Schizophrenia, Hebephrenic.
44.	M	75	Pneumonia, (unspecified)	Senile Psychosis with arteriosclerosis.
45.	M	53	Chronic Myocarditis	Psychosis on organic Base cerebral vas- cular Pathology.
46.	M	78	Pneumonia (unspecified)	Senile Psychosis.
47.	M	83	Bronchopneumonia	Senile Psychosis associated with ar-
48.	M	78	Pneumonia (unspecified)	teriosclerosis. Senile Psychosis associated with ar-
49.	M	77	Chronic muocarditie	teriosclerosis.
50.	M	70	Chronic myocarditis	Schizophrenia.
	247	10	degeneration	Psychosis due to arteriosclerosis.
51.	M	73	Bronchopneumonia	Dementia Praecox.
-	100			

TABLE No. 9—DEATHS—PSYCHOTICS—FEMALE

No.	Sex	Age	Immediate cause of death	Predisposition
1.	F.	85	Senile Psychosis	Senile Psychosis with arteriosclerosis.
2.	F.	75	Bronchopneumonia	Senile Psychosis with arteriosclerosis and hypertension.
3.	F.	61	Myocarditis	Psychoneurosis, neurasthenic type.
4.	F.	14	Epilepsy Bronchopneumonia	Without Psychosis, Epilepsy.
5. 6.	F. F.	31 15	Epilepsy	Psychosis with Epilepsy. Psychosis with Epilepsy and Deterioration.
7.	F.	70	Bronchopneumonia	Psychosis with arteriosclerosis.
8.	F.	69	Endocarditis, Chronic	Pre-Senile Psychosis.
9.	F.	43	Endocarditis, Chronic	Schizophrenia, Catatonic.
0.	F.	85	Myocarditis	Senile Psychosis with arterioscleros and hypertension.
1.	F.	69	Generalized Arteriosclerosis with Parkinsons Sindrome	Senile Psychosis.
12.	F.	79	Pneumonia	Senile Psychosis.
13.	F.	3m.	Congenital heart disease	Without Psychosis.
14.	F.	61	Cerebral Hemorrhage	Cerebral Hemorrhage due to arterios- clerosis and hypertension.
15.	F.	32	Pulmonary Tuberculosis	Schizophrenia, Paranoid.
16.	F.	74	Bronchopneumonia	Senile Psychosis, with arteriosclerosis.
18.	F. F.	79 64	Acute Eutrites	Senile Psychosis. Reactive Depression.
19.	F.	58	Pneumonia	Psychosis with encephalitis.
20.	F.	82	Pneumonia	Senile Psychosis with arterioscleros and hypertension.
21.	F.	4m.	Congenital heart disease	No Psychosis.
22.	F.	86	Senile Psychosis	Senile Psychosis.
23.	F.	64	Pneumonia (unspecified)	Involutional Melancholia.
24. 25.	F.	86 80	Pneumonia (unspecified)	Senile Psychosis, with arteriosclerosis.
26.	F.	89	Coronary Sclerosis	Senile Psychosis. Senile Psychosis.
27.	F.	68	Myocarditis	Psychosis associated with arterio
28.	F.	66	Senility with dementia	Manic depressive. Psychosis manic typ
29.	F.	71	Diabetes	Psychoneurosis.
30.	F.	62	Bronchopneumonia	Schizophrenia, Hebephrenic with a teriosclerosis.
31. 32.	F.	56	Bronchopneumonia	Schizophrenia, Hebephrenic.
33.	F.	84	Senile Psychosis Schizophrenia, hebephrenic	Senile Psychosis. Schizophrenia, hebephrenic.
34.	F.	61	Coronary Sclerosis	Schizophrenia, Catatonic.
35.	F.	74	Bronchopneumonia	Senile Psychosis with arterioscleros and hypertension.
36.	F.	38	Acute Myocarditis	Arteriosclerosis with Cerebral hemory
37.	F.	37	Due to exhaustion from physical and Mental over activity	Dementia Praecox.
38.	F.	85	Cerebral hemorrhage	Senile Psychosis.
39.	F.	45	Intestinal Obstruction at Sigmoid	
			due to impacted faeces	Schizophrenia, Catatonic.

TABLE NO. 12-MOVEMENT OF MENTAL DEFECTIVES

Month	Admis- sions		Paroled		Deaths		Elope- ments		Deport- ations		Trans- fers	
	М	F	M	F	М	F	M	· F	М	F	M	F
1946 May	10 10 5 7 5 10 6 8	7 4 7 9 2 12 2 2 2 4 4 4 2	1 3 2 3 1 3 2 	2 3 2 4 6 4 1	2 :3 3 1 :1 1 2 :1	3 1 3 3 3 1 3 1 4 1					206 1 14 1 71 4 	 80
Total	71	55	18	27	14	21	1			**	303	219
Grand Total	1	126		45		35		1			5.	22

TABLE No. 13—AGE GROUPS—MENTAL DEFECTIVES

	Admi	ssions	Par	oles	De	aths	Eloper	ments
Age Group	M	F	M	F	M	F	M	F
1- 9	15	16	5	5	7	7		
10-19	16	15	5	5	2	4		
20-29	9	11	4	5	3	1		
30-39	16	8	2	8		5		
10-49	8	3	2	4		4		
50-59	3	1			1		1	
50-69	2	1		**	1			
70.70				.,		"		**
00 00	. "	"						- 10
00.00				**				**
Unknown	2		**	***	**	**		**
Unknown	4			**	**			
Total	71	55	18	27	14	21	1	
Grand Total	12	26	45		3	5		1

TABLE NO. 14—MENTAL DEFECTIVES—BIRTHPLACE OF ADMISSIONS

Country	Male	Female	Country	Male	Female
Austria Belgium Canada England Russia U.S.A.	ium		Norway Ukraine Finland Sweden Poland Unknown	 1 1 1	1 2
Total				71	55
Grand Total	126				

TABLE NO. 15-MENTAL DEFECTIVES-RACIAL ORIGIN OF NEW ADMISSIONS

Race	Male	Female	Race	Male	Female
Austrian Belgian Chinese Dutch English French German Hungarian Icelandic Indian (Red)		1 1 10 5 11 1 2	Jewish Norwegian Polish Russian Scots Ukrainian Danish Roumanian American Finnish Swedish Unknown	1 4 4 3 10 4 2 3 3 1	3 -4 7 4
Total				71	55
Grand Total				1	26

TABLE NO. 16-MENTAL DEFECTIVE DEATHS

444		4		
No.	Sex	Age	Immediate cause of death	Predisposition
1.	M	50	Coronary thrombosis with rupture of	
112			heart	Mental deficiency, Moron.
2.	M	25	Pulmonary Tuberculosis	Mental deficiency, Imbecile.
3.	M	4	Idiocy with Epilepsy	Mental deficiency, Idiot on organic basis.
4.	M	2	Bronchopneumonia	Mental deficiency, Idiot.
5.	M	11	Status epilepticus	Mental deficiency, Epilepsy.
6.	M	1	Bronchopneumonia	Mental deficiency, Mongolian.
7.	M	5	Mental deficiency, Idiot	Mental deficiency, Idiot.
8.	M	1	Endarteritis and Thrombosis of lower	
	1		extremities	Mongolian Idiocy.
9.	M	22	Tuberculosis of Lungs and right hip	Mental deficiency, Mongolian.
10.	M	4m.	Mongolian Idiot	Mongolian Idiocy.
11.	M	63	Coronary Occlusion	Mental deficiency, Imbecile.
12.	M	16	Pneumonia unspecified	Mental deficiency, Idiot.
13.	M	25	Tuberculosis of Lungs	Mental deficiency, Idiocy with epilep- sy.
14.	M	1	Congenital Hydrocephalus	Congenital hydrocephalus.
15.	F	34	Epilepsy	Mental deficiency low grade imbecile.
16.	F	44	Myocarditis	Mental deficiency.
17.	F	19	Bronchopneumonia	Mental deficiency, Idiot.
18.	F	1	Hycrocephalus	Mental deficiency, Idiot.
19.	F	15	Bronchopneumonia, with mental de- ficiency.	Mental deficiency, Idiocy.
20.	F	1 m.		Mongolian Idiocy.
21.	F	31	Status epilepticus	Mental deficiency, Epilepsy.
22.	F	8	Empyema (right side)	Mental deficiency, Idiot.
23.	F	34	Tuberculosis Pulmonary	Mental deficiency, Idiot.
24.	F	49	Left acute Lobar pneumonia	Mental deficiency, idiot with epilepsy.
25.	F	28	Lobar pneumonia	Mental deficiency, low grade imbecile.
26.	F	6	Bronchopneumonia	Mental deficiency, imbecile with
	100	Towns !		epilepsy on organic basis.
27.	F	16	Status epilepticus	Mental deficiency, idiot with epilepsy.
28.	F	47	Bronchopueumonia	Mental deficiency, Imbecile.
29.	F	2	Acute Enteritis, Hydrocephalus	Mental deficiency, with Hydro- cephalus.
30.	F	3	Bronchopneumonia	Mental deficiency, Idiot.
31.	F	36	Congenital syphilis, Secondary anaema	
32.	F	16	associated with congenital syphilis Suppurative pericarditis	Mental deficiency, Imbecile. Mental deficiency, with epilepsy.
33.	F	34	Epilepsy, Mental deficiency	Mental deficiency with epilepsy.
34.	F	3	Hydrocephalus	Mental deficiency Mongolian Idiot.
35.	F	40	Epilepsy, Mental deficiency	Mental deficiency, Epilepsy.
00.		10	aspirepos, mentar denerone,	mental deficiency, Epitepsy.

THE SASKATCHEWAN TRAINING SCHOOL, WEYBURN

July 16th, 1947.

COMMISSIONER OF MENTAL SERVICES,

DEAR SIR:

I am enclosing herewith, the second annual report of the Saskatchewan Training School, Weyburn, for the period from May 1st, 1946 to March 31st, 1947.

Admissions, as shown in the report, are all transfers from the Saskatchewan Hospital, Weyburn, there being no direct admissions to this Institution during the period which the report covers.

We are hoping to open a new children's ward and also a ward for crippled patients, but shortage of staff and materials is a serious handicap in this work, since there is still considerable reconversion of the buildings still to be completed.

As you know, the extreme blizzard conditions of the past winter were very trying for both patients and staff. Many members of the staff were required to work double shifts on account of blocked roads and no means of transportation. I should like to record here my appreciation of the loyal co-operation of the staff of this Institution under these trying conditions. These same conditions emphasized the need for a stand-by electrical unit to avoid serious danger to patients and staff in connection with any break which may occur in the electrical transmission lines. I sincerely hope this may be rectified prior to next winter.

In conclusion, I desire to thank you for the very able assistance you have rendered to us since assuming your position as Commissioner of Mental Services.

Yours very truly,

R. O. DAVIDSON, M.D., Superintendent.

The school moved from the Mental Hospital on Nov. 13, 1946. Classes resumed work on Nov. 18 with one teacher and 37 children attending.

On Feb. 11, 1947, a second teacher arrived and another classroom was opened bringing the attendance up to 52.

Teaching days Nov. 18-Apr. 1st-87.

Enrolment as on April 1, 1947.

Ages	3	2	2	4	2	6	5	3	5	1	 ***	
												52

Attendance and Classification:

Very irregular during this term due to weather conditions, re-decorating the school, plumbing repairs, and flu.

The 52 children are divided into three groups: 17 in kindergarten and Gr. 1 ranging in ages from 7 to 12; 10 in a manual group attending ½ day only, (I.Q.'s 50 and below); 25 in the senior academic group ranging from Gr. 1 to VIII.

Manual Work:

The boys' workshop has been re-established and some new tools obtained. Twenty-five boys take turns of at least an hour in the shop daily. Articles made were small pieces of equipment for the school and educational toys for the kindergarten.

Eleven of the girls were given hand-sewing instructions during the preparation for the Xmas Program, all girls assisted in the making of costumes.

With the co-operation of the dietitian a project was tried to train 8 of the girls for dining room service. This was promising to be a successful and a helpful attempt, but was discontinued when the dietitian left.

Before Easter both boys and girls took part in dyeing about 500 eggs and making table decorations for the dining-room tables.

Recreation and Other Activities:

Whenever weather permitted, children were taken outdoors for playing or skating for at least ½ hr. daily. One sleigh ride was enjoyed.

Educational films were used weekly.

A Christmas Program consisting of drills, dances, choruses, and acrobatics was put on for the whole institution.

A monthly birthday party is held for children whose birthday falls in that month.

TABLE No. 1-MOVEMENT OF MENTAL DEFECTIVES

Month		dmis- ons	Par	oled	De	aths		ope- ents	Dep		†Tra	ins-
	M	F	M	F	М	F	M	F	M	F	M	F
1946 May June July August September October November December 1947 January February March	14 1 62 9	71 67 3	1 3 3 4 1 1 1 1 1		//	1	ï					: : : : : : : : : : : : :
Total	303	220	15			1	1				5	3
Grand Total	5	523	1	5		1		1				8

^{*—}Admissions—shown are all transfers from the Saskatchewan Hospital, Weyburn.

There were no direct admissions during this period to the Saskatchewan

Training School.

TABLE NO. II-AGE GROUPS-MENTAL DEFECTIVES

Age Group	Adm	issions	Paroles		Deaths	
Age Group		F	M	F	M	F
1- 9	7	6	1			
10-19	67	35	2			
20-29	100	75	7			
30-39	63	56	4			
40-49	33	25	1			1
50-59	17	15				
60-69	10	5				
70-79:	4					
80-89					200	
90-99					1.0	1.
Unknown	2	3				
Total	303	220	15			1
Grand Total	5	23	15		1	

^{†-}Transfers-shown are transfers back to the Saskatchewan Hospital, Weyburn.

Table No. 3—Mental Defectives—Birthplace of Admissions

Country	Male	Female	Country	Male	Female
Austria	1 259 7 1 1	1 176 6 1 1 	Norway	1 1 2 1 1 19 9	1 1 1 2 1 1 16 13
Total				303	220
Grand Total				5	23

TABLE No. 4-MENTAL DEFECTIVES-RACIAL ORIGIN OF NEW ADMISSIONS

Race	Male	Female	Race	Male	Female
American	25	18	Hungarian	2	2
Austrian	13	7	Icelandic	1	
Belgian	2		Irish	11	2
3ohemian		1	Latvian	1	
Bukovenian	1	1	Lithuanian	1	
Canadian	58	66	Norwegian	5	6
Chinese	1		Polish	6	3
Danish	2	1	Roumanian	6 3	4
Dutch	2 5	Î	Red Indian	1	
English	42	25	Russian	20	13
French	10		Scotch	14	9
French Canadian	12	3	Servian		1
Galacian		1	Swedish	3	4
German	11	3	Ukrainian	6	6
			Unknown	47	43
Total		-		303	220
Grand Total					523

REGIONAL PUBLIC HEALTH, 1946

General:

During 1946 four health regions instituted public health services on a regional basis. Medical Health Officers were appointed in Regions Nos. 1 and 3 in May of 1946 and in Regions 6 and 14 in July and October respectively. During the year other staff were appointed as space and equipment became available and at the end of the year, the four regions had a total staff complement of 52.

TABLE 1

Region	Date Established	Month Organization Instituted	Operational Months	Total Staff at end of year
1. Swift Current	Dec. 11, 1945		8	15
3. Weyburn 6. Moose Jaw	Dec. 11, 1945 May 16, 1946		8 5	15 17
14. Meadow Lake		October 1946	3	5
			24	52

Health Region No. 1:

Health Region No. 1 began operations in May and services were expanded rapidly. A regional office was established in Swift Current and district offices were opened at Leader, Shaunavon and Maple Creek. Efforts were mainly directed at a mass immunization program, improvements in restaurant and school sanitation and school health services. During the eight operational months there was a total attendance of 12,855 at immunization clinics and 5,345 school health inspections were completed, while the sanitary officers made 2,085 sanitary inspections in the Region. A nutritional survey of school children was carried out in co-operation with the Federal and Provincial Departments of Health.

Health Region No. 3:

The Weyburn Health Region also began operation in May—opening a Regional Office in Weyburn and District Offices in Estevan, Arcola, Radville and Oxbow. During the year the Public Health Program was extended as staff were appointed. The Nursing Service concentrated on school hygiene and immunization, 3,258 school children having been given health inspections and the total attendance at immunization clinics was 4,824. The sanitary officers conducted a compaign to improve the sanitary conditions of food handling establishments. A survey to determine the visual health of school children was conducted in the Region by Dr. A. G. Wior and over one thousand children were examined.

Health Region No. 6:

The Moose Jaw City Health Department was absorbed by Health Region No. 6 in July of 1946. The Public Health program was organized under five main headings:

- 1. Environmental sanitation.
- 2. A year round immunization service.
- 3. School health services.
- 4. Maternity and child welfare program.
- 5. General health education.

The Regional Health Centre on Stadacona St. West in Moose Jaw was occupied at the end of August, where a large number of child health clinics and immunization clinics were held.

Health Region No. 14:

A Regional Office was opened in Meadow Lake in October, at which time a staff of five were appointed. A mass immunization service was instituted during the first months of operation because of the occurrence of cases of diphtheria in the Region and a very low level of immunization.

Table 11 is a numerical tabulation of some of the services rendered and will give an indication of the volume of service provided by these Regions during the early months of operation.

TABLE 11

Region	1	3	6	14	Total
Official Calls	515	622	637	5	1,779
School health inspections	5,345	3,258	3,614	783	13,000
Home visits	1,417	1,596	1,058	302	4,373
C. D. Calls	311	143	126	21	601
Child Health Clinics	- 26	-1		2	29
Attendance	524	75	1,243	12	1,854
Home Nursing Classes	17		6	1	24
AttendanceImmunization:	458		194	21	673
(a) Total attendance	12,855	4,824	3,157	1,763	22,599
(b) Number completed	3,354	2,050	1,621	284	7,309
Sanitary Inspections	2,085	1,425	6,928	95	10,533

AIR AMBULANCE SERVICE

December 31, 1946.

Since the inception of the Air Ambulance Service by the Department of Public Health on February 3, 1946, this Division has been responsible for the transportation of medical emergency cases from the location of the patient to a hospital, or to adequate medical facilities, both within and outside the Province. The Air Ambulance Service is devoted to the carriage primarily of emergencies where there is no other adequate means of transportation, where the saving of time may be a factor, or where it may be in the patient's best interests to have smooth and comfortable transportation. All patients who are picked up for transportation, on the grounds of being medical emergencies, are allowed to choose their own hospital and doctor, but this arrangement is usually taken care of by the doctor in the patient's locality. To prevent the abuse of this Service, the requests for transportation are normally required to come from the local doctor. However, in many cases requests have come from individuals when it was not possible for the local doctor to investigate the case himself.

All emergency flights within the boundaries of Saskatchewan are charged for at the rate of \$25.00 per flight, regardless of the time or distance involved. Non-emergency cases, in or out of the Province, are charged at the rate of \$40.00 per flying hour, which is the operating cost for the type of aircraft which this Service uses. Emergency cases requiring transportation outside the Province of Saskatchewan, are charged at the rate of \$40.00 per flying hour beyond the boundaries of the Province, and the usual \$25.00 for the round trip inside the Province.

Recently an additional flat charge of \$10.00 per passenger per flight with a patient has been invoked to provide a further revenue in connection with all flights made.

Since the inauguration of this Service on February 3, 1946, 179 flights have been undertaken, of which 173 were made for emergencies inside the Province, 3 for emergencies outside the Province and 3 for non-emergencies within the Province. Together with this, 100 calls for emergency transportation have been received but could not be taken, either because of bad weather or being received at night when the aircraft cannot fly into unlighted fields. In these cases, the patients had either found other means of transportation, or were beyond help when aircraft were available. During one period in April, 1946, flights could not be taken because of the unserviceability of the only aircraft which this Service possessed.

This Service originally began with one aircraft, one pilot, one air engineer, and one nurse. Since that time, the heavy demand for air ambulance transportation has necessitated the addition of a second aircraft, a second pilot, two more air engineers and a second nurse. In addition, an office has been set up with a clerk-stenographer to manage and control the increasing volume of correspondence, accounts, records, orders, and general liaison between flying personnel, ground personnel, the Department of Transport, the Air Transport Board, and the Department of Public Health.

The Service is normally available to all members of the public, seven days a week the year around. It may be hampered, however, by bad weather or minor unserviceabilities of the aircraft. Exclusive of the period during April 1946, when the only aircraft which the Service owned was unserviceable for the month, the Air Ambulance Service has been grounded for a total of 16 different days throughout the year, because of bad weather or aircraft unserviceability.

To guarantee the efficient operation of this Service, regulations have been set up to control the limits of flying, maintenance of aircraft, care of patients, and office administration. Personnel in charge of each of these departments are both familiar and fully qualified to do the work assigned them. Prior to flights, every reasonable precaution is taken to check the weather, pre-arrange flight plans, and to check serviceability of aircraft, so that, barring natural obstacles or conditions at the patient's home or location, there is very little danger of any trouble occurring during any specific flight.

All regulations concerning this Service have been laid down in accordance with existing regulations as promulgated from aircraft authorities in the Department of Transport and Air Transport Board of the Dominion of Canada, and in accordance with regulations as laid down by the Government of the Province of Saskatchewan.

A stock of aircraft spare parts, including engines, propellers, instruments, radio supplies, etc., has been built up, and the shop in which the normal servicing of

aircraft can be accomplished has been laid on, and contains all necessary equipment. Nearly all work which cannot be accomplished by the engineers of this Service, due to interference of normal duties or lack of equipment, is relayed for completion to the Department of Reconstruction workshop hangar in Regina. Adequate provision has been made for the housing of the aircraft, workshop space and office space for the Service; and fueling facilities are now handled by the Service itself.

Normally, on all flights, the crew on the aircraft consists of the pilot, air engineer and nurse, and unless otherwise designated, the same crew generally flies together. The pilots normally do periodical flying practice on each machine operated by the Service to ensure at all times the necessary familiarity with both aircraft and the continually changing terrain conditions. Considerable radio beam and instrument flying is carried on by the pilots, both as practice and in actual flight, to ensure at all times the highest standard of pilot-ability. In this connection, it will be interesting to note that the aircraft of this Service are equipped with much the same radio and instrument facilities as are all Airline aircraft, and pilots are required to be familiar with Airline procedures insofar as this equipment is concerned.

The patients carried have been afflicted with 48 different ailments, and during the life of this Service to December 31, 1946, 100 towns have been visited, some several times.

The experience of this Service to date has been that the portion of the Province lying south of a line drawn through Davidson has required the greatest attention, but north of that area many calls have been received. Generally speaking, it would appear that the areas of the Province served by anything but daily train service are those which require this Service most. The Service has proven that it is more economical to operate from a given base with all aircraft where adequate facilities exist, than to split aircraft into various sections of the province. There are two reasons for this; the first being that every aircraft that flies, especially in a Service of this nature, must have certain minimum base facilities, and duplication of these facilities will naturally lead to considerable overhead on the total opera-tion. The second reason is that from base in Regina this Service is within 2½ hours flying time from any point in the Province, south of a line running east and west through Waskesiu Lake, and the time saving element of having an aircraft based elsewhere would be greatly overshadowed by the additional overhead involved. With regard to the saving of time by this Service in medical emergencies, operation to date has shown the biggest obstacle to adequate operation has been the short daylight hours during the winter period, and the fact that calls for air ambulance service oftentimes are received when it is too late to get to a patient's home before dark. To facilitate this, however, a request for night-flying endorsement has been granted by the Department of Transport which allows us, under extenuating cir-cumstances, to land after dark at lighted airdromes, which means that flights which would normally not have been undertaken because of lack of authority to land back at base after dark, may now be completed. This does not mean, however, that flights may be made into unlighted fields at farmers' homes.

To sum up, it will be well to note by the number of emergency flights done in ten months' operation that a definite need exists for this type of service in the Province, but it is quite apparent that the area from Swift Current to North Battleford on the west side of the Province is not utilizing this Service in accordance with the need which, it is felt, must exist in that area as it appears to exist in others.

D. K. MALCOLM, Supervisor.

DIVISION OF PHYSICAL FITNESS AND RECREATON

REPORT FOR CALENDAR YEAR 1946

SECTION 1

Introduction:

It is now two years since the Division of Physical Fitness and Recreation was formed, as part of the Department of Public Health. During those two years much has happened, and there has been a considerable revision in the program that was initially projected. But no change has had to be made in the basic philosophy underlying the program, nor in the main channels of its implementation.

Perhaps, therefore, it would be in order to re-state these.

We believe that "physical" fitness cannot be separated from mental, moral and spiritual fitness. To be effective, any program of physical fitness and recreation must be interpreted in such a way as to include these. We are interested in building better boys and girls, not just in building better bodies. Since the problem involves the worthy use of leisure, we have an expressed and active interest in the field of crafts, music, woodworking, and drama, as well as in exercises, games, and sports.

With regard to the manner of implementing a program, we believe:

- (1) that recreation is primarily "community business", and that a recreation program should grow from within the community, in line with its particular needs and abilities, rather than be superimposed by a central authority. If a community wants a recreation program, it must be willing to work for, plan, and (at the present time at least) finance that program. Our business is not to give any community a program but to help them develop one for themselves.
- (2) that we are only a very small part of Saskatchewan Recreation. Recreation began in this province when the first two farmers pitched horseshoes in their yard, not two years ago when the S.R.M. was formed. It has been carried on by literally hundreds of organizations and thousands of individuals. It is no part of our job to control the work of these, or to direct their programs. Rather, we can serve best by helping communities to co-ordinate the work that is being done, by assisting individuals or groups—other than financially—when called upon, and by stimulating the formation of new groups where there is a need.
- (3) that in our present society there are many agencies drawing our young people away from our basic social institutions, and that every effort should be made to provide wholesome recreation first of all in the Home, the Church, and the School. We believe that community organization should supplement and not supplant the work of these.
- (4) that we must work very closely with the schools. If we do not have recreation-conscious school population we cannot expect a recreation-wise adult population.
- (5) that a prime function of any government group interested in recreation should be to provide opportunity for leadership training.
 - (6) that other legitimate functions of a government agency include:
 - (a) the giving of publicity to recreation problems, and to good work that is being done in the recreation field;
 - (b) provision of a reference library and film service to recreation groups within the province;
 - (c) the stimulation and support of special projects in the field of physical fitness and recreation, with a view to making these self sustaining as early as possible;
 - (d) taking the initiative in calling together groups which have a common interest in the field of recreation, and helping them to co-ordinate their work.

SECTION 2

Administrative Developments and Changes During the Past Year:

(1) The provisional provincial council has been disbanded and a Council has been appointed in accordance with the terms of The Physical Fitness Act. This Council held its first meeting in November, 1946, which meeting was devoted to acquainting the Council with what has been done to date.

- (2) Mr. G. C. Darby, who for two years has been the Administrative Director of the program, has been moved to another position in the Department of Public Health. We who have worked with Mr. Darby for the past two years know how valuable a contribution he has made to the development of the S.R.M. His never failing energy and good sense will be greatly missed. At the same time, he is to be congratulated on his appointment to a position involving wider responsibilities. Mr. Darby has not been replaced as a Director, but Mr. E. W. Stinson has been promoted to the post of Administrative Assistant to Dr. Kirkpatrick. Mr. J. M. Wilkie, formerly principal at Hodgeville, has been added to the staff, replacing Mr. Stinson in Estevan.
- (3) Mr. John Farthing, previously on loan to the Normal School, has been placed as a field representative in Saskatoon, and one new field representative, Mr. G. L. A. Daverne, has been appointed and is located in the Wolseley District.
- (4) Mr. O. L. Campbell left the division in September and has been placed on a year's leave of absence.

SECTION 3

Specific Implementation of the Program of Physical Fitness and Recreation, in Terms of the Methods Outlined in Section 1.

RE: Section 1(1)

For a year now we have had a field representative stationed in Prince Albert, covering the north eastern area of the province. He has been working with different centres in his territory, stimulating an interest in recreation, and acting as consultant to recreation groups in the area.

Since he was placed in this area many things of interest have happened:

Seven key centres have established recreation councils, all of which are active and are doing good work;

One centre has appointed, for the first time, a full time recreation director:

Three centres, for the first time, have operated a full scale summer playground schedule, with paid supervisors;

A Ski Meet was revived in the area;

A District High School Athletic Association has been formed, and has laid plans for organized sport in basketball, hockey, curling, skiing, track and field, and soccer:

A Juvenile and Midget Hockey Association has been formed between four towns in the area;

A High School Board, which is planning the construction of a new school gymnasium, has been persuaded to take the gymnasium out of the cellar, to remove a row of posts down the centre, and to plan an up to date, functionally sound structure that would adequately serve their needs;

Physical Education classes were organized for men and women at a provincial gaol, and a weaving instruction class was organized for women;

A Drama School was organized at two centres;

A Leathercraft Course was reorganized at another centre:

Young People's Clubs have been formed at different centres; e.g., the Rainbow Club at one centre was an organization of girls working in restaurants, who had few social contacts due to their working hours and to the fact that many of them were from out of town. They carried on an active program of social activities, craft work, etc.

One could go on enumerating dozens of other developments in the area, in all of which this field representative has had some share. A copy of the report of his work made to the Provincial Council is attached.

The difficulty with this type of work is that it is impossible to say just how much can be credited to his work, and how much would have happened anyway. We believe that many desirable developments would not have occurred at all without his efforts, and that valuable direction has been given to those which might have developed without direct stimulation on his part.

A field representative has been stationed at Saskatoon and another at Wolseley to carry on the same type of work.

We estimate that these three representatives will be able to give adequate coverage in community recreation services to approximately one-tenth of the province, but believe that it is better to do an adequate job in a restricted area than to do a superficial job over a larger territory. These services will be extended to other areas as rapidly as funds become available.

RE: Section 1(2):

We have consistently maintained a policy of working with and through already organized groups where such exist. An example is our work with the Saskatchewan Drama League. We are now represented on the executive of the League, and any work that we do is thoroughly co-ordinated with the activities of the League as a whole. In five fields of sport—track and field, tennis, basketball, junior curling, and speed skating—we are working very closely with provincial associations.

The services of Miss Bird have been made available for the Youth Training Schools at Kenosee and North Battleford.

RE: Section 1(3):

In talks to Home and School Clubs, Service Clubs, Church groups, and Community Meetings, this angle has been stressed. Mr. C. M. Bedford's booklet "Home Construction of Playground and School Apparatus", was designed to stimulate home play.

RE: Section 1(4):

The most significant development here is in the progress of the Estevan Larger Unit Experiment. Briefly, a physical education supervisor and a school nurse were placed within a larger school unit, to do both a school and a community job—the nurse in public health and the supervisor in physical education and recreation. Changes in the administrative areas of the Department of Public Health have precluded the possibility of the nurse's appointment to a unit, but the experiment succeeded to the point that authorization has this year been obtained for the subsidization by this division of the appointment of seven physical education supervisors, to the extent of \$500.00 each. The Department of Education will also subsidize such appointments to the extent of \$700.00, if the appointee is the first specialist teacher in the unit, and \$300.00 otherwise. Several units have indicated an interest in the proposition, and it is expected that the full appropriation will be used up during the next school year. A tremendous teacher shortage, and the fact that the offer could not be made until recently, has prevented any units from co-operating this year. In the meantime, we are leaving a supervisor in the one unit, believing that the full effect of his work cannot be shown in one year.

RE: Section 1(5):

- (a) A most successful summer school was conducted this year, in co-operation with the University of Saskatchewan. One hundred and twenty-seven students completed the course in Physical Education S11, and thirty completed the second year course in Physical Education S12.
- Dr. A. H. Steinhaus, Professor of Physiology at George Williams College, Chicago, was guest lecturer during one week of the course. The services of Dr. Steinhaus were made available by this division.

Some still pictures of summer school groups, and a film showing a few of the summer school activities are available. It would be difficult to over-estimate the importance of these summer school courses. From personal observations, and from the expressed opinion of school superintendents, we know that students taking last year's course returned to do outstanding work in their districts.

It is expected that from one hundred and fifty to two hundred and fifty students will be trained each year. Over a period of years, the result should be a distinct upgrading in the quality of physical education in our schools and communities.

In connection with S12, it should be noted that a class in Community Recreation was included in the course. This class was carried on by Miss M. Nicholson, Supervisor of Group Work. It was designed to interest teachers in the problems of community recreation, and to suggest to them how these problems might be approached in their own communities.

Scholarships to the value of \$25.00 each were given to seventy-two of the students who took Physical Education, most of these being granted on the recom-

mendation of School Superintendents. In addition to providing scholarships in Physical Education, S.R.M. also provided eleven scholarships in Drama, ten in Art, eight in Music, six in Arts and Crafts, four in Woodworking, and four in Shop Mechanics.

(b) A follow up survey was conducted on the leadership training school held at North Battleford. A summary of this survey is appended to the report.

We have concluded, however, that it is hardly accurate to designate schools of this type as leadership schools; they might better be called "Stimulation Schools". The time that can be devoted to any one activity (approximately ten hours) is not enough to allow for effective leadership training. The approach to leadership training must be through concentrated, full time courses such as the Physical Education summer school course.

In the field of crafts, and drama, it will be possible to shorten these courses, provided the subject matter is specific—e.g., a two weeks' course in leathercraft or weaving. We have already conducted such concentrated schools in drama; the next step will be to secure a full time craft person for the purpose of conducting similar courses.

(c) Six short courses in Drama were conducted at different centres the past year. These were concentrated courses carried on for a period of two weeks, five days a week. The total number of hours instruction was approximately thirty.

Where possible, the course was conducted as an actual practice school. A play was selected and cast, and rehearsals were held, with a presentation of the play on the final night.

It was found advisable to have the school sponsored by some local group, which undertook the task of organization. Towns nearby were contacted and invited to send representatives. The school served an area rather than just the one town. The same approach is being continued for drama schools this year.

RE: Section 1(6):

(a) The magazine, "Saskatchewan Recreation", is published four times a year—in the spring, summer, fall, and winter and distributed to schools, recreation councils and interested people. Copies are sent to Legislative Members, to keep them acquainted with what is being done.

This division undertook to organize staff, and finance a Recreation Exhibit at a fair circuit this year. The display was shown during the months of July and August at seven centres. The central office of S.R.M. has received many enquiries as a result of the interest stimulated. Craft work was featured in the exhibit.

(b) Hundreds of requests for the loan of reference books on all types of recreational activity are being met by the library service of S.R.M. Books are loaned free of charge for a two weeks' period.

Our film library to date consists of five films on track and field, one on baseball, three on tumbling, and four films on basketball. These films have been used extensively as it is felt that this service will have to be greatly expanded in the near future. No charge has been made for the use of these films.

(c) The first activity undertaken by the division was the promotion of track and field athletics. For two years we have sponsored District Meets and encouraged participation in the Provincial High School Meet at the University. Response has been good and an active interest in track and field activities has developed greatly.

The second activity, begun this year, was the stimulation of interest in tennis. A week's tour was organized in the Prince Albert to Nipawin territory by our field representative, and two outstanding players visited a number of small centres. They played exhibition matches, and gave instruction to junior players at each centre visited. The response was most enthusiastic. Next spring, it is planned to extend the operation to other areas in co-operation with the S.L.T.A. The proposed basis of operation is that S.R.M. will finance the project while the S.L.T.A. will provide the players and arrange transportation. An effort will be made to have all centres visited affiliate with the S.L.T.A.

The third project undertaken to date is that of organizing a tour of a prominent Saskatchewan Speed Skater to the three centres in the province. This tour is to take place in January and is designed to arouse interest and activity in a sport that should be most widespread in Saskatchewan.

(d) A two day conference of all supervisors of recreation in Saskatchewan communities was arranged, and took place in the first week of November.

A similar conference will be held next spring. Two such conferences were held last year. These were felt to be most helpful to people engaged in community recreation.

Tentative plans have been laid to call a meeting of all groups interested in camping, with a view to forming a Saskatchewan Section of the Canadian Camping Association.

Respectfully submitted,

J. B. KIRKPATRICK, Ed. D. Director.

DIVISION OF INDUSTRIAL HYGIENE

This is a small division and it continues to operate under arrangement with the Department of National Health and Welfare, whereby that Department supplies the Director of the division on a loan basis, laboratory equipment and travelling expenses, while the Provincial Department contributes laboratory facilities, office facilities and clerical staff.

Surveys:

This division conducted a survey of blood concentrations of carbon monoxide in employees in a large repair garage in Regina for correlation with the findings in a previous survey of concentrations of carbon monoxide in the air of the garage. Lighting conditions in the offices of the Government Insurance Building were investigated. A questionnaire survey of the larger industrial establishments of the Province was made in order to determine what medical services are maintained on their premises.

A survey of occupational health conditions in farming was begun. General information was gathered concerning the hazards to which farmers and grain buyers are exposed. Existing information regarding soil compositions as related to possible health hazards was surveyed and plans made to gather information not yet available. The Industrial Health Division of the Department of National Health and Welfare has consented to perform the necessary analytical work on a large series of soil samples and will co-operate in the survey of health hazards in agriculture by assigning a team of specialists to work on the project during the spring and summer of 1947.

Consultations:

In conjunction with the Workmen's Compensation Board, claims involving occupational disease are reported to the Division of Industrial Hygiene which then undertakes the inspection of the work place with a view to eliminating the danger of recurrence. Sixteen such cases were reported and investigated. Others received and dealt with concerned illumination, paint hazards, lead hazards and hazards in packing plants and garages. These inquiries came from Medical Health Officers, private practitioners and in one case from the owner-manager of the plant concerned.

Occupational Health and Safety Committee:

Arrangements were made for the formation of this committee which will consist of representatives of the Government Departments directly concerned with working conditions. The Committee will advise the Division of Industrial Hygiene in matters concerning program and the carrying out of the Division's Duties.

DIVISION OF MEDICAL SERVICES

REGINA, SASK., December 5, 1947.

DEPUTY MINISTER,

DEPARTMENT OF PUBLIC HEALTH.

SIR:

Herewith is a brief report of the Medical Services Division for the calendar year 1946. This report is given in two parts: Part 1 covers the old relief program which is still being carried on and Part 2 deals with the work carried on under The Health Services Act.

PART 1

Subsidies were paid to eleven physicians in the Northern Areas for the purpose of retaining their services and to cover any services rendered to social aid or destitute cases, the cost for the year being \$7,929.68.

One dentist at Meadow Lake was given a grant in the Northern Areas to cover dental services provided to social aid and destitute cases. This amounted to \$600.00.

Free insulin was supplied to persons during the year for the control of their diabetic condition. They were either social aid or destitute cases and unable to supply their own. This cost \$1,233.30.

The sum of \$338.24 was advanced to the Canadian National Institute for the Blind up to the end of April to assist them in providing destitute persons with ophthalmological treatment or spectacles and to provide spectacles to any indigent school children referred by public health nurses. This grant was discontinued on April 30th, 1946, as an appropriation was established for these cases which is administered directly through Medical Services Division.

The infirmary operated by the Sisters of the Presentation of Mary at Green Lake in the Northern Areas was granted the sum of \$75.00 a month, also drugs and hospital supplies. The total cost was \$1,356.87.

The same service was granted to the Grey Nuns' Infirmary at LaLoche as was granted to the one at Green Lake, the cost being \$1,604.26.

The Victorian Order of Nurses was granted the sum of \$45.00 a month to assist its branches at Regina and Saskatoon, the cost being \$540.00.

Medical, dental, optical, nursing services, hospitalization, provision of drugs, transportation and burial were provided social aid and destitute cases in Local Improvement Districts at a cost of \$56,274.11.

Similar services were provided to single homeless and transient families in the Southern Areas at a cost of \$38,124.61.

Medical Examination Boards were established at Regina and Moose Jaw through their respective District Medical Associations for the purpose of examining social aid recipients and reporting as to their being physically capable of supporting themselves.

A recapitulation of the expenditures for the twelve months of the calendar year 1946 by classification is as follows:

Administration	S	247.26
Grants:		
Subsidies to Physicians\$ 7,929.68		
Hospitals—Green Lake		
—LaLoche		
Victorian Order of Nurses 540,00		
Dentists 600,00		
Canadian National Institute for the Blind 338.24		
Insulin		
Medical Examination Boards, Regina and		
Moose Jaw		
		14,370.74
Other Services		56,274.11
All Others.		38,124.61
Total Expenditure for 12 months	3	109,016.72

PART 2

This portion of our activities under The Health Services Act was designed to provide free medical, dental and allied services to Old Age and Blind Pensioners, their spouses and dependent children and grandchildren under the age of sixteen, cases of Mother's Allowance, their dependent children, and wards.

On May 1st, 1946, incapacitated husbands of Mother's Allowance cases were

added to this group of beneficiaries.

The number of persons eligible for benefits in this group under the Act totalled

26,952 at the end of the calendar year 1946.

As the period for which this report is given covers portions of two fiscal years, two Votes are shown for each section which cover the same purpose: Vote 13-28-16 and Vote 16-30-15.

Health Services (with the exception of hospitalization) and the cost of adminis-

tration to this group of persons amounted to the following:

Administration.	\$ 45,939.82
Medical	264.246.72
Dental	
Drugs	100,615.58
Optical	34,848,30
Nursing	7,077.15
Physiotherapy.	534.50

Total cost for the 12 month period.....\$ 526,803,98

Relative to the medical portion of the above listed expenditures, medical practitioners were paid an interim payment of 50% when presenting their accounts and the balance payable was contingent upon the amount left in the medical appropriation at the end of the calendar year; which payment was made in the early part of the following calendar year.

Hospitalization for this group of persons amounted to the following:

Hospitals \$	322,532.39
Nursing Homes	247.48

Total cost for the 12 month period\$ 322,779.87

Vote 13-28-21 and Vote 16-30-20, referred to as "Prevention of Blindness Appropriation", provided ophthalmological care and health services to blind persons and their dependents when they were unable to provide this service themselves and also for those persons suffering from failing eyesight in destitute circumstances.

These Votes were established as of June 15th, 1945 and, as this service super-imposed upon the grant issued to the Canadian National Institute for the Blind, the grant to that organization was discontinued as of May 1st, 1946. The cost of these services was as follows:

Medical	5	5,640.90
Dental		1,276.00
Drugs		2,158,21
Nursing		33.35
Optical		354.62
Hospital		6,819.45
Nursing Homes		287.02
Total cost for the 12 month period	3	16,569,55

The following is a recapitulation of expenditures for the twelve months, January 1st, 1946 to December 31st, 1946 and added to this are the amounts still payable to physicians, thus giving actual cost for the above calendar year:

	1	Physicians
Administration	45,939.82 480,864.16 \$	149,485.48
Vote 13-28-17 & 16-30-17	322,779.87	
Vote 13-28-21 & 16-30-20	16,569.55	2,983.88
Expenditure for 12 months\$ Still payable to Physicians	866,153.40 152,469.36	152,469.36
Total cost for 12 months\$	1,018,622.76	

Yours very truly,

A. J. McDougal, M.D., Director.

SASKATCHEWAN ANTI-TUBERCULOSIS LEAGUE

(Through the courtesy of The Board of Directors and the Director of Medical Services and General Superintendent the following report is included in this annual report of the Department).

DR. C. F. W. HAMES,

Deputy Minister,

Department of Public Health, Regina, Saskatchewan.

SIR:

The various medical services of the League, including treatment, diagnosis, follow-up, Indian Research, examination of Normal School Students, school children and nurses, when taken altogether comprise a total of 177,804 persons who had medical advice during the year. Of this number 174,564 persons were examined by the Medical Staff of the League an increase of 10,549 over 1945. Three hundred and ninety-four persons were examined by Family Physicians at the request of the League and 2,846 Indians were examined in association with the Department of Indian Affairs and the National Research Council. Of the 177,804 persons having medical advice during the year 167,311 were examined at the expense of the Christmas Seal Fund, an increase of 13,632 over 1945.

During the year 150,810 persons were examined in miniature-x-ray surveys. Of this number 145,081 persons were representative of the entire communities examined. The remaining 5,729 persons were examined in surveys in special groups.

The frequency of new active cases found among the 145,081 persons examined was 0.517 per thousand, compared with 0.597 per thousand among the 138,936 persons examined in similar surveys in 1945, and 0.865 per thousand among the 121,847 persons examined in 1944, and 0.93 per thousand among 82,135 persons examined in 1943.

There were 227 deaths due to tuberculosis in the Province in 1945, a rate of 26.9 per 100,000 population.

There were 588 new cases of active tuberculosis discovered in 1946, both pulmonary and non-pulmonary, twenty-eight fewer than in the preceding year. Of the 588 new cases of active tuberculosis discovered in 1946, one hundred and eighty-nine were among ex-service personnel, compared with one hundred and ninety-one among ex-service personnel in 1945. New cases of active tuberculosis discovered among civilian population in 1946 was 399 as compared with 425 in 1945.

The proportion of early cases among the new cases of active pulmonary tuberculosis discovered in 1946 was as follows:

	Pulmonary Tuberculosis			
		Mod.	Far	
	Minimal	Advanced	Advanced	
1945	57.8%	16.3%	25.9%	
1946	59.2%	21.7%	19.1%	

The increase in the number of minimal cases found in 1946 is due to the relatively high percentage of minimal cases found among the demobilized service personnel.

The proportion of adult pulmonary cases under treatment in the sanatoria on December 31, 1946, who have had positive sputa since admission and would have been spreaders of infection had they not been hospitalized was as follows:

Adult Pulmonary	Cases		534	
		Positive Sputa	172 or	74.4%

Taking into consideration the number of active cases of tuberculosis admitted during the year, the proportion of new cases and readmissions for 1946 was 68.6% and 31.4% respectively, as compared with 73.6% and 26.4% respectively for 1945.

Of the new cases of active tuberculosis discovered in 1946, one hundred and fifty-one or 25.7% were treated or observed outside the sanatorium. The proportion of non-pulmonary new cases discovered during the past year was 11.2% compared with 8.45% in 1945.

During the past year 1,217 persons were examined by the Consultation Service of the League, compared with 672 examined in 1945. Of the 543 new cases examined, three or 0.55% had active tuberculosis.

There were 6,615 examinations made at the Stationary Clinics this year, an increase of 484 over 1945. Three hundred and eighty-eight more new cases were examined than in 1945, and seventeen fewer new active cases found than in 1945. The incidence of active tuberculosis among the new cases examined at the Clinics in 1946 was 8.6% compared with 11% in 1945.

During the year 3,967 review examinations of ex-patients were carried out by the various services of the League, and 169 were admitted for treatment.

There were 3,719 contact examinations made compared with 3,429 in 1945. The incidence of new active disease found among the entire group of 3,719 contacts examined was 2%.

Contacts examined by:	New Cases		Review Cases		Total	
Family Physicians	1945 203	1946 253	1945	1946 141	1945 256	1946 394
Consultants	132	335	53 223	402	355	737
Clinics	490 764	768 865	686 878	650 305	1,176 1,642	1,418 1,170
					1,042	
Total	1,589	2,221	1,840	1,498	3,429	3,719

The average period of treatment of the discharged tuberculous cases in 1946 was 12,5 months.

In the fall of 1946 the Indian children in the Indian Residential Schools were examined, a total of 1,391. Among these 1,391 children examined 14 or 1% were found to have tuberculosis requiring treatment in hospitals or sanatoria. In addition 24 or 1.72% were found to have minimal tuberculosis of the lungs, or were doubtful cases requiring observation only. Another 70 children or 5.04% had evidence of fibrosis of the lungs, characteristic of that resulting from previous tuberculous lesions. The majority of these children will progress satisfactorily under school conditions, a few will undoubtedly relapse.

There were 1,455 adult, pre-school and day school Indians examined on the Reserves and in the Day Schools. There were 14 or 0.96% who required treatment and 25 with minimal tuberculosis who, it was considered, could get along at home under observation.

During the year the Normal School Students at Saskatoon and Moose Jaw were examined, 1,573 in all. Five active cases of tuberculosis were found among them.

Among 1,508 students tuberculin tested at the Saskatoon and Moose Jaw Normal Schools 288 or 19.1% were found to be positive reactors.

The arrangement made through the co-operation of the Department of Education and the teachers, for the examination for tuberculosis of all the teachers in the schools of Saskatchewan in the clinics of the League is progressing satisfactorily.

We have continued our policy of giving under-graduate medical students instruction in the diagnosis and treatment of tuberculosis. During the past year seventeen medical students have received instruction for varying periods of time. Twenty-five medical students of the University of Saskatchewan attended lectures and clinics at the Saskatoon Sanatorium during the year.

Since beginning the course of instruction in tuberculosis nursing at the Fort Qu'Appelle Sanatorium, in affiliation with nine of the Hospital Training Schools of the Province, one hundred and fifty-one student nurses have taken this eightweek course. This affiliation course was worked out by the Hospitals concerned, the Saskatchewan Registered Nurses' Association and the League, and approved by the University of Saskatchewan. The increased knowledge and interest in tuberculosis as a disease brought about by this affiliation course will help in the eradication of tuberculosis in the Province.

Vaccination against tuberculosis, using B.C.G. Vaccine has been going on in the hospitals and sanatoria of the Province for the past eight years. Approximately four thousand vaccinations have been done. The result of vaccinating this group, who entered training schools or sanatorium employment during the period September 1938 to March 1943 has been summarized and all information on these persons up to March 1945 has been included. The results of vaccination were compared with the previous period in the same environments when vaccination was not carried on. The general conditions of the environments were found to be quite stable throughout the periods studied. The unusual significance of this study arose from

the fact that the great majority of the persons in the study were females; the age both of vaccinated and non-vaccinated is considered a susceptible period, being age 20 to 25. The infectivity of the environment and the period of exposure in the environment, probably the two most fundamental factors, remained comparatively stable throughout the period. From this it would appear that known factors other than vaccination which might influence the cases with regard to developing the disease in these environments have been quite comparable. The conclusions from this summary are that B.C.G. Vaccination of tuberculin negative nurses in a general hospital environment where the rate of infection was approximately 12% per annum among the non-vaccinated negatives, reduced the number of cases of manifest tuberculosis that developed among this group to its fourth, and that B.C.G. Vaccination of Saskatchewan Sanatoria Employees negative to tuberculin on entrance to the sanatorium environment where the rate of infection among the non-vaccinated negatives was 60% during the first year of exposure, reduced the number of cases of manifest tuberculosis that developed among this group to its fifth. These findings are of statistical significance, but it must be pointed out that B.C.G. Vaccination is not a 100% prophylactic, although its protection is very considerable, it is not absolute. The complete text of this study can be found in the Canadian Journal of Public Health, November 1946, 37-435-51.

Respectfully submitted,

R. S. Ferguson,

Director of Medical Services and
General Superintendent.

REPORT OF THE TUBERCULOSIS SANATORIA

OPERATED BY THE SASKATCHEWAN ANTI-TUBERCULOSIS LEAGUE

(for the year ending-December 31, 1946)

SCHEDULE 1-Bed Complement and Movement of Population-

	Fort San	Sask- atoon	Prince Albert	Total
Bed Complement:				
Infirmary beds	290	175	260	725
Pavilion beds	69		9	78
Total bed complement	359	175	269	803
Movement of Patients:				
Patients in Sanatoria January 1,				
1946	359	184	232	775
Admissions during the year	413	230	221	864
Transfers from other Sanatoria	20	62	57	138
Total under care during year	792	476	510	1,778
Discharges during year	356	217	194	767
Deaths during year	22	29	46	97
Transfers to other Sanatoria	57	49	33	139
Delicate in Secretaria December				
Patients in Sanatoria, December	257	101	227	775
31, 1946	357	181	237	775
Average number of patients daily	386	194.9	254.3	835.2
Collective days' stay of patients	140,896	71,131	92,821	304,848

This statement includes surplus tuberculous patients cared for in General Hospitals at the expense of the Saskatchewan Anti-Tuberculosis League.

The Average Length of Treatment for active tuberculous cases was 12.5 months

SCHEDULE II-Sanatoria Staff.

	Fort San	Sask- atoon	Prince Albert	Total
Administrative and Clerical	17	7	4	28
Salaries Doctors, full time	7	6	4	17
Graduate Nurses	25	20	11	56
Affiliate Nurses	12			12
Nurses Assistants	30	29	38	97
Graduate Dietitian	2	1	1	4
Orderlies and Cleaners	30	14	16	60
Instructors, Academic	2	1	1	4
Technicians, X-ray	2	3	3	8
Technicians, Laboratory	2	2	1	5
All other employees	82	44	53	179
Total employees	211	127	132	470

SCHEDULE III—Surgical, Radiological and Laboratory Services:

	Fort San	Sask- atoon	Prince Albert	Total
Surgical Operations:				
Major	11	186	9	206
Minor	813	927	431	2,171
Pneumothorax treatments	6,815	1,544	1,599	9,958
Laboratory examinations	20,966	12,098	8,459	41,523
X-ray examinations in Sanatoria	5,065	7,139	3,897	16,101
Fluorographic examinations	65,369	54,976	30,465	150,810
Kahn Tests	721	227	580	1,528
Wassermann Tests	18		156	174
Autopsies performed	11	2	4	17
SCHEDULE IV—Preventive Services:				
	Fort	Sask-	Prince	
	San	atoon	Albert	Total
Clinics Conducted Within Sanatoria:				
Diagnoses	623	1,167	402	2,192
Reviews	805	1,822	734	3,361
Pneumothorax and special treat-		-1,7		0,001
ments	431	737	373	1,541
Clinics in Outside Hospitals:				
Diagnoses and Reviews	5,829	. 59	727	6,615
Pneumothorax treatments	1,122		19	1.141
X-ray examinations	3,938	62	659	4,659
Travelling Clinics:	0,500	-	007	2,000
Persons examined	1,052	165		1 217
X-ray examinations	1,211	165		1,217
	1,211	103	****	1,376
Fluorographic Surveys:	1 50 000	30.000	2013000	
Persons examined	65,369	54,976	30,465	150,810

SCHEDULE V-Summary of all Persons Seen with Active Tuberculosis in 1946.

New Cases:	Pulmonary	Non- Pulmonary	Total
Admitted to Sanatoria	. 380	57	437
Not Admitted	. 142	9	151
Total	522	66	588
Old Cases:			
Readmissions	. 141	28	169
First Admissions.	. 28	3	31
Total	. 169	31	200
Total Active Tuberculosis Cases	691	97	788

SCHEDULE VI-Summary of Operating Costs 1946-

	Total	Fort San	Saska- toon	Prince Albert
Administration\$	50,116.88	\$ 22,587.96	\$ 12,225.49	\$ 15,303.43
Interest and Discounts	6,736.37	2,790.11	1,515.10	2,431.16
Hospital	392,544.56	176,629.11	112,429.25	103,486.20
Dispensary	13,453.64	6,038.56	5,107.51	2,307.57
Laboratory	13,701.78	6,277.03	4,958.81	2,465.94
X-ray	18,476,46	6,304.92	6,240.38	5,931.16
Kitchen	267,757.46	116,795.00	71,781.02	79,181.44
Stewards	9,472.03	3,681.50	2,924.93	2,865.60
Housing	45,523.83	22,361.72	11,486.47	11,675,64
Maintenance of Buildings	54,065.63	42,305.67	8,212.05	3,547.91
Power House	164,323.90	77,007.19	38,789.49	48,527.22
Laundry	35,489.72	15,805.06	8,235.06	11,449.60
Grounds	13,613.62	5,441.74	3,222.56	4,949.32
Garage	5,567.03	3,293.70	273.32	2,000.01
Stable	1,916.94	1,916.94	***********	***********
Red Cross Lodge	1,146.08	1,146.08		***********
School Grants	3,517.25	1,934.20	932.70	650.35
Staff Insurance	7,747.21	3,252.83	1,859.33	2,634.05
Replacements—under Sec. 12,				
Sanatoria Act	10,000.00	4,200.00	2,400.00	3,400,00
League Patients in other Hos-				
pitals	47,087.59	41,471.89	2,915.90	2,699.80
Pneumothorax (League Pa-	2 127 01	0.040.06		
tients) in other Hospitals	2,425.06	2,210.06	2 100 00	215.00
Superannuation Fund	10,000.00	4,200.00	2,400.00	3,400.00
Workmen's Compensation	2 000 00	940.00	600.00	100.00
Fund	2,000.00	840.00	680.00	480,00
	1,176,683.04	568,492.27	298,589.37	309,601.40
Less: Canteen Net Profit	2,026.47c			
Operating Expenditure\$	1,174,656.57	\$566,465.80	\$298,589.37	\$309,601.40
Number of Patient Days	304,848	140,896	71,131	92,821
Cost per Patient per day for period\$	3.853	\$ 4.021	\$ 4.196	\$ 3.335

SCHEDULE VII-Summary of Revenue for 1946:

	Total	Fort San	Saska- toon	Prince Albert
Patients Fees\$ Government Grants	305,501.22 304,848.00	\$137,406.32 140,896.00		2 \$ 107,332.68 92,821.00
Over-Expenditure 1945-brought	610,349.22 forward	\$278,302.32	\$131,893.22	23,793.44
Expenditures—1946			550,128.54 305,501.22 304,848.00	1,174,656.57
			1,160,477.76	\$1,198,450.01
Over-Expenditure—December 31, carried to Balance Sheet			37,972.25	
		\$_1	1,198,450.01	\$1,198,450.01

MEDICAL STAFFS-SASKATCHEWAN ANTI-TUBERCULOSIS LEAGUE:

Fort San:

Dr. John Orr (Medical Superintendent)
Dr. John Gross
Dr. C. O. Banting
Dr. L. Wettlaufer
Dr. G. D. Barnett
Dr. D. F. Lewis
Dr. C. F. Bennett

Saskatoon:

Dr. H. C. Boughton (Medical Superintendent)
Dr. G. H. Hames
Dr. H. J. Anderson
Dr. I. C. Molony
Dr. W. A. Allen
Dr. J. C. Dundee

Prince Albert:

Dr. R. W. Kirkby Dr. H. D. Jenner Dr. D. C. Baker

Fort San:

Dr. R. G. Ferguson, Director of Medical Services and General Superintendent, Saskatchewan Anti-Tuberculosis League.



