Tuberculosis CONTROL *in Manitoba* 1954

Issued May, 1955

Annual Report
of the
SANATORIUM BOARD *of* MANITOBA

SANATORIUM BOARD
OF MANITOBA

Operating

X-RAY SURVEYS

TRAVELLING TUBERCULOSIS CLINICS

CENTRAL TUBERCULOSIS CLINIC
Winnipeg

MANITOBA SANATORIUM
Ninette

DYNEVOR INDIAN HOSPITAL
Selkirk

BRANDON SANATORIUM
Brandon

CLEARWATER LAKE SANATORIUM
The Pas

Co-operating with

St. Boniface Sanatorium

King Edward Memorial Hospital

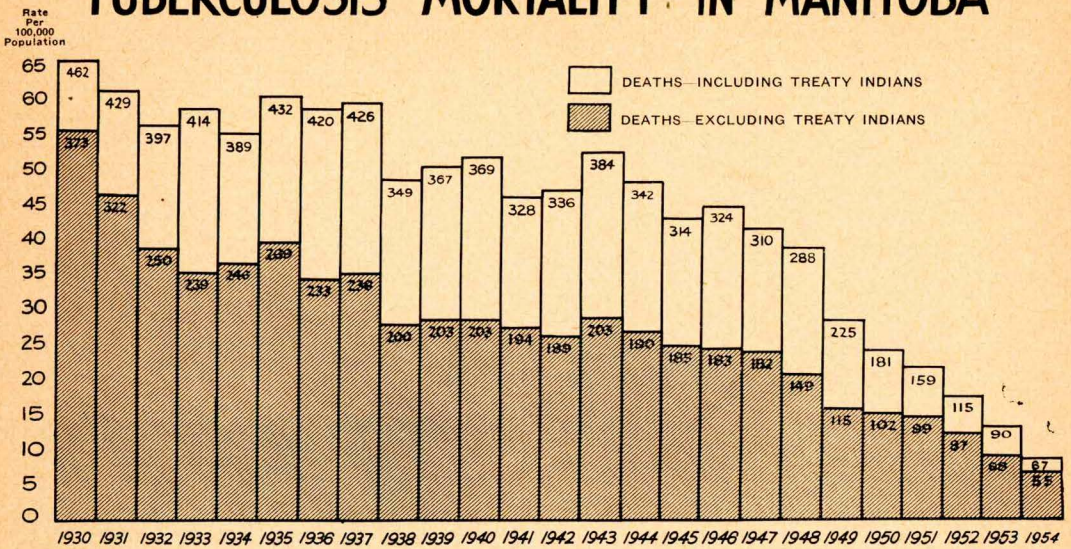
and Other Agencies

Report for the Year
1954

WINNIPEG, MANITOBA

CONTENTS

TUBERCULOSIS MORTALITY IN MANITOBA

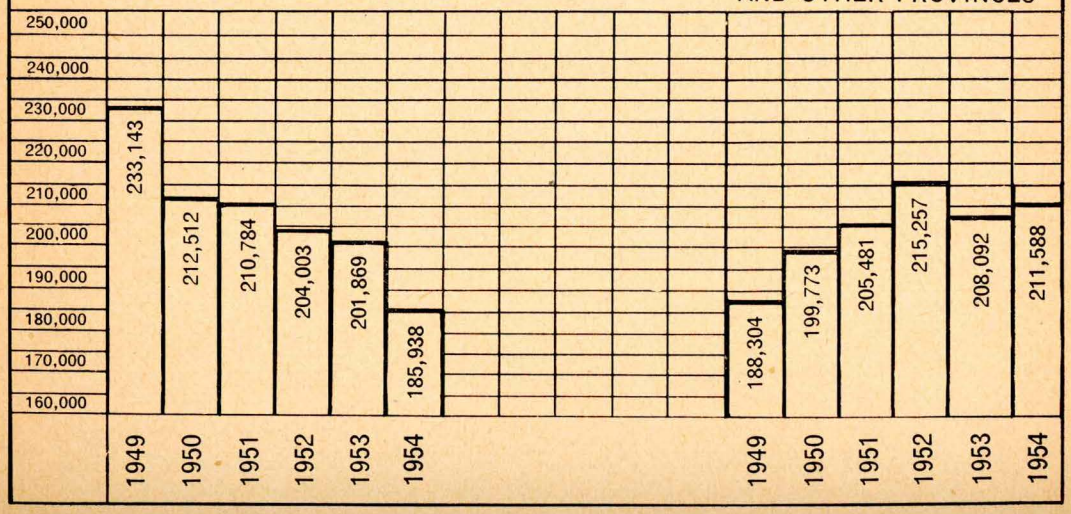


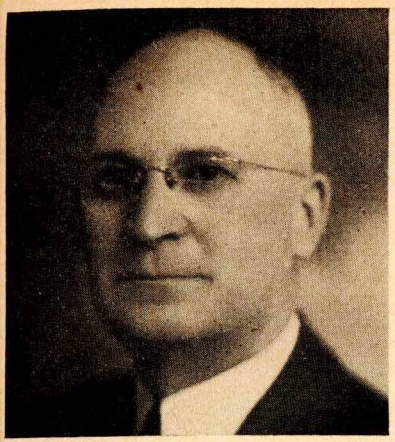
SEE STATISTICAL TABLE ON PAGE 16

	1944	1954
CASES under supervision in Manitoba	4,633	4,852
EXAMINATIONS	59,420	316,621
NEW CASES diagnosed Active	497	516
Inactive	216	325
	713	841
DEATHS	342	67

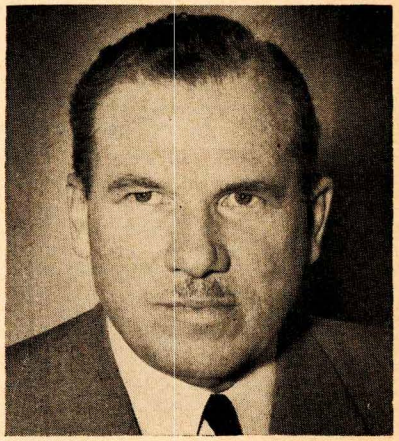
TUBERCULOSIS SANATORIA — TREATMENT DAYS
COMPARATIVE STATEMENT 1949-1954

TREATMENT OF PATIENTS WHO ARE THE RESPONSIBILITY OF PROVINCE OF MANITOBA / GOVERNMENT OF CANADA AND OTHER PROVINCES





HON. F. C. BELL
Minister of Health and Public Welfare
Manitoba.



M. R. ELLIOTT, M.D., D.P.H.
Deputy Minister.

ONCE again the Annual Report of the Sanatorium Board of Manitoba presents a record of achievement in every field of tuberculosis control of which all citizens can be proud. It is gratifying to read in the reports herein presented that our death rate from this cause is now only ⅛ of what it was just one generation ago; that fewer active cases are being found each year; that these factors together with improved treatment methods have made it possible to close one sanatorium in 1954. These and other accomplishments would not have been possible without the continued vigilance and efforts of the Sanatorium Board and its staff so ably supported by all the people of the province.

But there are still many years of arduous work ahead before the battle is won. It is a cause for sober reflection that an increasing percentage of cases is being found in our older population; that 1/3 of the new cases are far advanced when first discovered; and that over 1,000 beds are still required in six sanatoria to care for our patients. It means that there must be no relaxation of any part of the vast program being carried out by the Board.

Although actual treatment is largely supported by Government funds, the all-important work of prevention can only be carried forward by the continued cooperation of the medical profession and the voluntary assistance of the public in all walks of life. The Sanatorium Board of Manitoba, itself a voluntary body of able, public spirited citizens, have well merited the high confidence placed in them by both the Government and the public.

F. C. BELL,
Minister of Health
and Public Welfare.

SANATORIUM BOARD OF MANITOBA - 1954

Executive

Chairman	Mr. D. L. Mellish*
Vice-Chairman	Mr. Wm. Whyte†
Chairman, Administration and Finance Committee	Mr. J. W. Speirs††
Vice-Chairman, Administration and Finance Committee	Mr. F. Boothroyd†††
Chairman, Brandon Sanatorium Committee	Mr. J. N. Connacher
Chairman, Dynevor Indian Hospital Committee	Mr. C. E. Drewry
Chairman, Clearwater Lake Sanatorium Committee	Mr. R. H. G. Bonnycastle
Honorary Solicitor	Mr. I. Pitblado, Q.C.

Honorary Life Members

Mr. T. R. Deacon
Mr. W. H. French
Mr. G. W. Northwood
Mr. A. K. Godfrey

Statutory Members

Representing the Provincial Department of Health and Public Welfare	Hon. F. C. Bell Dr. M. R. Elliott Dr. C. R. Donovan Mr. G. D. Iliffe, C.A. Hon. R. T. Turner
As Municipal Commissioner	Hon. E. Prefontaine
Representing Union of Manitoba Municipalities	Mr. D. F. Rose Mr. Stanley Smith Mr. H. C. Odell
Representing St. Boniface Sanatorium	Dr. A. C. Sinclair
Representing King Edward Memorial Hospital	Dr. J. A. Hildes
Representing City of Winnipeg	Mr. J. R. McInnes

Elected Members

Dr. J. D. Adamson
Mr. R. L. Bailey
Mr. R. K. Berry
Mr. R. H. G. Bonnycastle
Mr. F. Boothroyd
Mr. G. Collins
Mr. J. N. Connacher
Mr. H. T. Decatur
Mr. C. E. Drewry
Mr. G. N. Curley
Mr. Stanley M. Jones
Mr. J. R. McMillan
Mr. D. L. Mellish*
Dr. A. F. Menzies
Dr. Ross Mitchell
Mr. I. Pitblado, Q.C.
Mr. J. W. Speirs
Mr. Wm. Whyte

Executive Director and Secretary-Treasurer

T. A. J. Cunnings

Auditors

Riddell, Stead, Graham and Hutchison

ST. BONIFACE SANATORIUM

Advisory Board 1954

Chairman	Justice J. T. Beaubien
Vice-Chairman and Secretary	Mr. A. Monnin
Mr. E. Cass	Mr. G. P. Jessop
Mr. E. Bole	Mr. Noel Vadeboncoeur
Mr. R. Misener	Mr. E. Duha††††

*Deceased April 25, 1954
†Appointed Chairman June 15, 1954
††Appointed Vice-Chairman June 15, 1954
†††Appointed June 15, 1954
††††Deceased March 1, 1954

MEDICAL STAFF

As at December 31, 1954

EDWARD LACHLAN ROSS, M.D.
Medical Director

D. L. SCOTT, M.D.
Assistant Medical Director

PREVENTIVE SERVICES
(Central Tuberculosis Clinic, Travelling Tuberculosis Clinics and Surveys)

edical Superintendent ..... DR. D. L. SCOTT
ysicians ..... DR. D. F. MCRAE, DR. E. MORIGI

MANITOBA SANATORIUM

edical Superintendent and Chief Surgeon ..... DR. A. L. PAINE
sistant Medical Superintendent and Assistant Surgeon ..... DR. W. ZAJCEW
ysicians ..... DR. PAUL MARI, DR. M. ATKINSON

DYNEVOR INDIAN HOSPITAL

edical Superintendent ..... DR. W. W. READ

BRANDON SANATORIUM

edical Superintendent and Surgeon ..... DR. A. H. POVAH
ysician ..... DR. G. COGHLIN
edical Assistant (Interne) ..... DR. W. SHAHARIW

CLEARWATER LAKE SANATORIUM

edical Superintendent ..... DR. S. L. CAREY
ysicians ..... DR. J. SILINSKY, DR. H. WALTERS

St. Boniface Sanatorium

edical Director and Thoracic Surgeon ..... DR. A. C. SINCLAIR
sistant Medical Director ..... DR. V. J. HAGEN
nior Physician ..... DR. F. KOZIN

MEDICAL CONSULTANTS

As at December 31, 1954

Sanatorium Board of Manitoba

Radiology ..... R. A. MACPHERSON, M.D., C.M.
Orthopedics ..... A. GIBSON, M.D., M.A., M.B., Ch.B., F.R.C.S., F.R.S.E.; HENRY FUNK, M.D., B.A., Ch.M., F.R.C.S. (C)
Urology ..... H. D. MORSE, M.D., C.M., F.R.C.S. (C); (Brandon) R.P. CROMARTY, B.A., M.Sc., M.B., M.D. F.R.C.S. (C)
General Surgery ..... (Brandon) H. S. EVANS, M.D., F.R.C.S. (Edin.) F.R.C.S. (C); (The Pas) C. S. CRAWFORD, M.D., Cert. Gen. Surg. (C)
Ear, Eye, Nose and Throat ..... (Brandon and Ninette) R. O. MCDIARMID, M.D.
Dentistry ..... (Ninette) J. L. DICKSON, D.D.S.

and

Honorary Attending Staff, Winnipeg General Hospital

St. Boniface Sanatorium

Medicine ..... J. D. ADAMSON, M.D., B.A., M.R.C.P., F.R.C.P.
Orthopedics ..... HENRY FUNK, M.D., B.A., Ch.M., F.R.C.S. (C)
Urology ..... A. C. ABBOTT, B.A., M.D., C.M., F.R.C.S. (C)
Bronchoscopy ..... D. S. MCEWEN, B.A., B.Sc., M.D.
Anaesthesiology ..... MARJORIE BENNETT, B.Sc., M.D., L.M.C.C., R.C.P.S. (C)
Dentistry ..... W. A. WEIR, D.D.S.; J. M. BENSON, D.D.S.; T. J. COOK, D.D.S.

and

Honorary Attending Staff, St. Boniface Hospital

Medical Advisory Committee

Chairman, DR. J. D. ADAMSON

DR. L. G. BELL
DR. M. BOWMAN
DR. R. G. CADHAM
DR. M. H. CAMPBELL
DR. S. L. CAREY
DR. C. R. DONOVAN
DR. J. DOUPE
DR. M. R. ELLIOTT
DR. J. A. HILDES
DR. M. S. LOUGHEED
DR. R. A. MACPHERSON
DR. DOUGALD MCINTYRE
DR. A. F. MENZIES
DR. ROSS MITCHELL
DR. A. L. PAINE
DR. M. B. PERRIN
DR. A. H. POVAH
DR. W. W. READ
DR. E. L. ROSS
DR. D. L. SCOTT
DR. A. C. SINCLAIR
DR. W. J. WOOD

NON-MEDICAL SENIOR STAFF

As at December 31, 1954

	SUPERINTENDENTS OF NURSES	BUSINESS OFFICERS	CHIEF ENGINEERS
ıl ium Board lanitoba	.....	John Mack (*Chief Accountant*) Edward Dubinsky (*Administrative Asst.*)	.....
nent Tuberculosis	Mrs. B. Chegwin, R.N.	F. A. Day (*Acct.*)	.....
ba Sanatorium	Miss I. Duncan, R.N. Miss E. A. Buchan, R.N. (*Instructor in Nursing Education*)	N. Kilburg (*Business Manager*) W. Bradford (*Accountant*) W. B. Stewart (*Purchasing Agent*)	J. R. Scott
r Indian Hospital	Miss A. Stefanson, R.N.	.....	.....
n Sanatorium	Mrs. I. A. Cruikshank, R.N. Mrs. M. M. Skene, R.N. (*Asst. Superintendent of Nurses*)	G. R. Gowing (*Business Manager*) R. B. Scott (*Accountant*)	R. N. Newman
ter Lake torium	Miss D. Ellis, R.N.	C. C. Christianson (*Business Manager*) T. W. Rudachyk (*Accountant*)	P. E. Johnson

St. Boniface Sanatorium

SUPERIOR	Rev. Sr. Cecile Maurice, R.N.
1ST ASSISTANT	Rev. Sr. Eugenie Choquette, R.N.
2ND ASSISTANT	Rev. Sr. Ste. Sabine, R.N.
CHAPLAIN	Rev. Fr. G. Svoboda

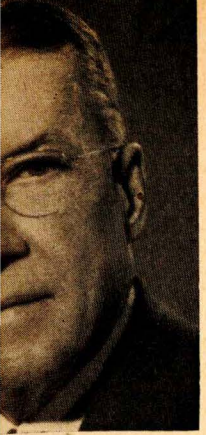
Rev. Sr. E. Choquette, R.N. (*Director of Nursing*) Rev. Sr. B. Patry, R.N. (*Night Supervisor*)	Rev. Sr. V. Rheaume (*Sec. Treasurer*) Rev. Sr. J. Valois (*Purchaser*)	G. Choquette

ntion Travelling Tuberculosis Clinics and Surveys	Organizer, Community and Industrial Surveys	J. J. Zayshley, R.T.
ployment Rehabilitation	E. G. Metcalfe, B.A. (*Director of Rehabilitation*)	
ds Central Tuberculosis Registry	Miss Elsie J. Wilson, R.N. (*Supervisor*)	.....

NON-MEDICAL SENIOR STAFF

As at December 31, 1954

RADIOGRAPHERS	LABORATORY TECHNICIANS	TEACHERS	OTHERS
W. J. Anderson, R.T.	.....	.....	Mrs. E. J. Fehr (*Sec. to Exec. Dir.*) Miss Nan T. Chapman (*Supervising Dietitian*)
E. W. Ackroyd, R.T.	H. Daneleyko, R.T.	.....	Miss E. L. McGarrol (*Sec. to Med. Supt.*)
Wm. C. Amos, R.T.	J. M. Scott, R.T.	Miss M. E. Busch Miss G. Manchester Mr. Guy Hamel Mrs. K. Venables (*Occup'l Therapist*)	Miss G. M. Wheatley (*Sec. to Med. Supt.*) Miss J. Romanson (*Food Supervisor*) F. J. Rodwell (*Laundry Foreman*)
.....	.....	Mrs. E. V. Pruden (*Occup'l Therapist and Teacher*)	Mrs. L. Paradoski (*Sec. to Med. Supt.*)
F. H. Gibson, R.T.	Miss. L. E. Delamater, R.T.	Mrs. J. Deroche Mrs. M. Ames Miss P. Williams Mrs. V. Davidson (*Occup'l Therapist*)	Miss Joan Smith (*Sec. to Med. Supt.*)
John Kaczoroski, R.T.	Miss P. M. Sismey	Miss A. Marion Miss O. Kischook (*Occup'l Therapist*)	Miss I. Fahy (*Sec. to Med. Supt.*) R. B. Lock (*Laundry Foreman*)
Rev. Sr. E. Choquette, R.N. (*O.R. and X-Ray Supervisor*)	Rev. Sr. A. Gamache (*Lab. Supervisor*) Rev. Sr. E. Choquette (*Pharmacist*)	Miss J. Molin Miss H. Hornick (*School Teachers*) Miss A. Hargreaves Miss E. G. Swatland (*Occup'l Therapists*) Mr. Alex Vermette (*Crafts Instructor*)	Rev. Sr. A. Boulet (*Main Kit. Super.*) Mrs. H. Pietuchow (*Soc. Worker*)
Alex. Roh, R.T. (*Supervising Radiographer*)	.....	.....	Miss G. H. Bowman (*Secretary*)
.....	.....	.....	Mrs. Therese Fraser (*Secretary*)
.....	.....	.....	Miss Gladys McGarrol (*Senior Statistical Clerk*)



M WHYTE

REPORT OF THE CHAIRMAN

For the Year Ended December 31st, 1954

GENTLEMEN:

It is with a great deal of pleasure that I welcome you today to this the forty-fourth annual meeting of the Sanatorium Board of Manitoba.

At the meeting of the Board last Friday, I expressed my appreciation of the honor conferred on me in my appointment as Chairman of the Board and stated that the unfortunate part of it was that it followed the untimely and regrettable death of our good friend Mr. D. L. Mellish. The Board and in fact the entire community suffered a great loss in his passing. He was appointed Chairman of the Board in 1949, after having filled other important offices in previous years. He brought to the Board's affairs a high sense of responsibility and wisdom and his good counsel and advice have been greatly missed. At the first meeting of the Administration and Finance Committee following his death, a resolution was passed expressing the profound regret at his passing and at the Board meeting last Friday tribute was paid to his memory.

At last Friday's meeting of the Board detailed reports were presented by the Chairman of the Medical Advisory Committee, Dr. Adamson; the Medical Superintendent of Preventive Services, Dr. Scott; the Medical Superintendents of the Sanatoria operated by the Board; and the Medical Directors of the St. Boniface Sanatorium and the Winnipeg Municipal Hospitals, respectively.

These reports, together with those you will hear today, represent an impressive record of the many and varied measures being taken to control and eradicate tuberculosis in this Province, and indicate further progress in reducing the toll among our citizens from this disease.

THE BOARD

At the present time, the Board is composed of twenty-nine members of whom eighteen are elected and eleven are statutory members, and all of whom contribute their services on a voluntary basis. One new member has been appointed to the Board, Mr. A. E. Longstaffe. Mr. Longstaffe has long filled a position of high responsibility in the business life of this City. He has displayed a wide interest in public affairs and has given distinguished service in many undertakings for the betterment of the Community. It is a pleasure to welcome him as a member of the Board.

During the year the Administration Committee and the Finance Committee were combined thus reducing the number of standing committees to six. These Committees met regularly throughout the year under their respective Chairmen to provide a continuous review and consideration of all aspects of the Board's business. During 1954 there were forty-three meetings of the Board or its Committees. I should like to record my sincere thanks and appreciation to the Executive Director and Secretary-Treasurer, Mr. Cunnings, the Vice-Chairman of the Board, Mr. Speirs, the Chairmen of the various committees and to the members of the Board for the co-operation and the thoughtful consideration given by them to the many policies and problems brought before them for decision throughout the year.

THE PROGRAM

The Board has continued to fulfill the responsibility assigned to it under the Tuberculosis Control Act for the care and treatment of tuberculosis patients in Manitoba, and the establishment of such measures of prevention and control as may be deemed necessary. The very substantial measure of achievement during the year will be indicated in the reports of officers of the Board and consequently I shall not deal with them in detail at this time.

Two major undertakings to improve physical facilities were undertaken during the year: the completion of an addition to the Nurses' Residence at Manitoba Sanatorium to provide accommodation for supervisors and other Registered Nursing staff; and the addition and alterations at the Central Tuberculosis Clinic to substantially improve the patient accommodation and other facilities of this important unit. I wish to record grateful appreciation to the Minister, the Honorable F. C. Bell and the Government for their support in carrying out this necessary modernization.

For some time it had become evident that the anti-tuberculosis program had progressed to a point where it was possible to fully carry on treatment services with a reduced complement of beds. Studies were made and it appeared that the most practical and effective measure would be to discontinue tuberculosis treatment at the King Edward Memorial Hospital and enable its facilities to be diverted to other purposes. Negotiations with the Municipal Hospital Commission to this end resulted in the transfer of remaining patients at the King Edward Memorial Hospital from that institution to other sanatoria on August 1st last. Discussions with the Municipal Hospital Commission were conducted in a fine spirit of friendly co-operation and the Board is very appreciative of the constructive and responsible attitude of members of the Municipal Hospital Commission in dealing with this problem.

FINANCE

Due to the continued aggressive preventive campaign, more expensive but also more effective treatment, and coupled with the readjustment of treatment facilities, the Board has been able to bring about a reduction of almost 16,000 treatment days in 1954 as compared to 1953, with a consequent direct saving to the Province, in treatment costs alone, of more than $70,000.00. All the sanatoria operated by the Board have been able to achieve a balanced budget for 1954.

The National Health Grants have continued to be of the greatest importance in supplementing and extending the Tuberculosis Control Program. Since 1948 when the grants were established some $900,000.00 has been expended from the National Health Grant in the campaign against tuberculosis in Manitoba. The assistance thus given has been of the greatest possible value in contributing to the saving of lives and the reduction of illness and the Board is grateful for the support accorded by the Minister and officers of the Department of National Health and Welfare at Ottawa in approving projects submitted from time to time by the Board through the Provincial Minister of Health and Public Welfare.

CONTRIBUTED FUNDS

Contributions to the Christmas Seal Fund totalled $129,499.00 in 1954, an increase of $4,445.00 over the previous year. In addition the Associated Canadian Travellers turned over to the Board $22,150.00 to assist in financing the Preventive Services, an increase of $1,300.00 over the previous year. All these contributed funds are used solely for preventive, educational and rehabilitation services and, indeed, they provide almost the full support for this important part of the work. By far the largest proportion of these contributed funds is used to finance the X-ray Surveys, and Travelling Clinics, which provided free chest X-ray examinations for nearly 240,000 persons in 1954 alone. In addition to the many thousands of persons who contribute to the Christmas Seal Fund a number of persons make special gifts or bequests in support of the Board's work. These gifts are used to meet special needs from time to time for the welfare of patients or the improvement of facilities for which provision is not made otherwise. Donors of $500.00 or more are listed on a permanent memorial page in our published Annual Report. The interest and support which had prompted these donors is highly appreciated.

RESULTS

The Medical Director, Dr. Ross, will report to you today in detail on measures that have been taken and the results of the work during the past year. It will be noted that there has been a further marked reduction in the death rate in 1954, being about 30% less than last year. In addition, there has been a notable decrease in the number of new cases in 1954. These achievements encourage the continuance of further efforts to eradicate tuberculosis in this Province. Our grateful thanks go to Dr. Ross and the Medical Superintendents of the sanatoria operated by the Board, for the efficient manner in which their arduous duties are performed.

APPRECIATION

The noteworthy accomplishments of the past year could never have been achieved without the devoted effort of the staff. In every department they have worked unceasingly in the care of the patients and in the Preventive and Rehabilitation Services and the Board is grateful for their loyal and competent services.

In closing I wish to record sincere appreciation of the continued confidence of the Minister of Health and Welfare and his colleagues in the Provincial Government; for the interest and support of Municipal Officials throughout the Province; for the co-operation and assistance of the officers of the associated sanatoria and the general hospitals throughout Manitoba; and for the continued help of thousands of individual citizens who give freely of their time and services in the Community X-ray surveys.

Respectfully submitted,

WILLIAM WHYTE,
Chairman of the Board.

NNINGS

REPORT OF THE EXECUTIVE DIRECTOR

THE operations of the Sanatorium Board of Manitoba have proceeded smoothly throughout 1954 and without major change in either finance or organization.

ASSETS AND LIABILITIES

At December 31st, 1954, assets held by the Board, including Special Funds, but not including buildings and equipment at Brandon, Clearwater and Dynevor owned by the Government of Canada and not carried in the Financial Statements of the Board, totalled $1,902,486. Liabilities, not including reserves, totalled $223,663. At the year end bank loans totalled $108,269 of which $42,500 represents a balance on a special laundry loan for construction and equipment at Ninette and $65,769 operating advances for Manitoba Sanatorium and the Central Tuberculosis Clinic.

Operation of Manitoba Sanatorium for the year showed an excess of expenditure over income of $157; and at the Central Tuberculosis Clinic operations resulted in an excess of income over expenditure of $256. The three Federal Government sanatoria have a fiscal year ending on March 31st but they are operating satisfactorily within their budgets. Endowment Fund No. 2 showed an excess of income over expenditure for the year of $13,551 and capital in Endowment Fund No. 1 was increased by $5,443. Donations and bequests to Endowment Fund No. 1 totalled $2,004 during the year.

CAPITAL EXPENDITURES

During 1954 the Nurses' Home Addition was completed at Manitoba Sanatorium to provide fifteen single rooms of satisfactory standard for the accommodation of senior nursing personnel. Total construction cost was $91,501 and in addition furnishings in the new and old sections of the Nurses' Home were purchased by the Board at a cost of $7,120. Two staff residences were completed at Clearwater Lake Sanatorium at a contract cost of $23,112. Alterations to improve accommodation at the Central Tuberculosis Clinic are in progress and with necessary new equipment will cost in the vicinity of $55,000. All necessary equipment has been purchased to maintain medical, surgical and laboratory facilities at a high standard. All the buildings and property have been fully repaired and maintained, with alterations and improvements where indicated.

INCOME

A rate of $4.50 per day was in effect throughout the year for patients who are the responsibility of the Province of Manitoba. This rate was also in effect for Treaty Indians at Dynevor Indian Hospital, and the rate at Brandon and Clearwater has been $4.75 per day. The differential permitted for necessary capital expenditures at the two latter institutions. Treatment days for patients who are the responsibility of the Province were reduced by 15,931 to 185,938 days in 1954. This permitted a substantial reduction in overall tuberculosis treatment costs. All tuberculosis treatment days in the Province totalled 397,526, a reduction of 12,435 as compared to 1953. The increase in Government of Canada treatment days was brought about by the treatment of 144 Eskimos during the year.

SANATORIUM COSTS

Sanatorium operating costs were held well in line with the previous year during 1954, individual changes being as follows:

Trend of Per Diem Costs—1954

Brandon Sanatorium—decrease 15c per patient day to $5.08.
Central Tuberculosis Clinic—decrease 6c per patient day to $6.85.
Clearwater Lake Sanatorium—increase 33c per patient day to $5.48.
Dynevor Indian Hospital—decrease 7c per patient day to $4.42.
Manitoba Sanatorium—increase 14c per patient day to $5.52.

The increase at Clearwater Lake Sanatorium was, in the main, occasioned by absorbing the cost of the two new staff residences into operating cost. The per diem costs indicated are gross figures with income from maintenance and quarters provided for staff being shown on our statements as revenue.

The total operating expenditures for treatment and preventive services in the institutions and departments operated directly by the Board amounted to $1,650,645 in 1954.

Raw food purchases totalled $269,956 in 1954, a reduction of $7,558 from the previous year. Nevertheless, the number of meals served increased by 96,921 to a total of 1,168,527 meals in 1954. Average food cost per meal was reduced 1.07c but production costs per meal increased .7c mainly due to rising wage scales.

Total expenditure for fuel and heating services at $57,994 showed an increase of $2,712 as compared to the previous year. It is of interest to note that 1954 was the first full year of operation of the new water-tube boiler at Manitoba Sanatorium and there was a decrease in coal consumption of about 500 tons as compared to the average consumption for the previous four years. Gross laundry cost increased $3,741 to a total of $53,114 but this is related to the increase in total treatment days in our sanatoria. Laundry for Brandon Sanatorium and Central Tuberculosis Clinic was done at Ninette and the total number of pieces processed in the laundry there was 1,100,374. At Clearwater Lake Sanatorium, 315,583 pieces were processed in the laundry. The diesel-electric plant operated at Clearwater Lake Sanatorium continues to supply both the hospital and the airport with power, 798,875 kilowatt hours being produced in 1954 at an average cost of 3.4c per kilowatt hour. Production increase was 29,590 kilowatt hours over 1953.

Preventive Services

During 1954 expenditure on preventive services totalled $150,173 including:

Chest X-ray Surveys (Community and Industrial, Indian Clinics and Travelling Clinics)	$ 86,149
Chest X-rays for patients admitted to general hospitals	62,337
B.C.G. Vaccinations	1,687
	$150,173

Cost of chest X-ray examinations at community and industrial surveys, including organization of the surveys and reading of the films averaged 32.93c per examination in 1954, compared to 35.78c in 1953.

INVENTORIES

At December 31st, 1954, supplies on hand including commissary stores, engineering and maintenance supplies, fuel, diesel fuel oil, bunker fuel oil, and miscellaneous supplies, totalled $117,779, an increase of $4,294 from the year previous. All inventories are valued at cost and all the materials are in current demand.

NATIONAL HEALTH GRANTS

Under the National Health Grants, the sum of $235,482 was available to assist in the Tuberculosis Control Program in the fiscal year 1954-55. Expenditures were subject, of course, to approval of acceptable projects.

During the year ended December 31st, 1954 expenditures under the grant totalled $185,956 a further reduction of $7,259 from the previous year, together with $3,750 from Hospital Construction Grant.

The following is a summary of expenditures under individual projects:

Streptomycin and Other Antibiotics	$28,958
Pneumothorax Treatment for Patients not able to Attend Free Clinics	1,730
Assistance to Rehabilitation Division	14,142
Chest X-ray on Admission to General Hospitals	62,337
Assistance to Sanatorium Board of Manitoba	13,605
Industrial X-ray Surveys	8,807
Assistance to St. Boniface Sanatorium	13,638
Extension of Travelling Clinic Service	3,861
Assistance to Manitoba Sanatorium	34,861
B.C.G. Vaccination	1,687
Assistance to Central Tuberculosis Clinic	335
Grant towards Cost of Nurses' Residence Addition—(Hospital Construction Grant)	3,750

These grants have been used to improve and extend treatment, preventive, and rehabilitation services and they have been of the greatest possible assistance in enabling the Board to take advantage of every new development in method and procedure in carrying out its work. We are very appreciative of the favourable consideration given to projects put forward from time to time by the Board, by both Provincial and Federal officials.

A section of the staff dining room at Manitoba Sanatorium. In the sanatoria operated by the Board, 1,168,527 meals were served in 1954.

INSURANCE

Fire insurance on buildings and equipment at Manitoba Sanatorium and the Central Tuberculosis Clinic was increased in amount by $60,000 to a total of $1,130,000. Supplemental perils are covered in this insurance. In accordance with Government policy no fire insurance is carried on the property at Brandon, Clearwater or Dynevor. Motor Vehicle Insurance under Fleet rating covers the usual loss or damage to the insured vehicles, legal liability for bodily injury or death of $50—100,000 and legal liability for damage to property of $10,000. Public Liability and Property Damage Insurance only is carried on the vehicles at institutions operated for the Federal Government. The All-Risks policy carried on Mobile X-ray and related equipment, and the Public and Employer's Liability Insurance covering all operations of the Board were renewed at some further reduction in premium. Comprehensive Dishonesty, Theft and Forgery Insurance, including minimum Fidelity coverage on each employee of $2,500 with special coverage on responsible officials has been continued in effect. Boiler insurance is carried on the steam equipment at Ninette and the Central Tuberculosis Clinic.

PERSONNEL

On December 31st, 1954, the Board had 528 employees, not including a few hourly workers and a few employed on a day to day basis. Changes in personnel have been much fewer than in recent years and this contributes materially to the efficiency of operation. The only shortage continues to be among registered nurses and these have been in better supply than previously. We are continuing to bring an occasional registered nurse from Great Britain among whom, at the present time, are two male registered nurses.

At the year end there were 385 members of the staff participating in the Group Insurance Plan, an increase of four during the year. They are insured for a total of $607,000 life insurance and $7,207 of weekly accident and sickness indemnity; 370 were covered for reimbursement of surgical expense up to a maximum of $200 for any one operation; and 118 members of the staff carried surgical coverage for their dependents. There was a notable reduction in claims in 1954. Forty-three members of the staff had claims for weekly indemnity benefits in 1954 as compared to eighty-one in 1953; and forty-two employees had claims for surgical benefits in 1954 as compared to eighty-three in 1953. Again this year there were no death claims. Payment of claims to employees or their surgeons totalled $8,060.

A Pension Plan was established for permanent employees of the Board in 1946 and as at July 31st, 1954, the anniversary of the contract, funds on deposit totalled $158,502. This is an increase of $25,892 as compared to the previous year.

Balance of Payments by the Board on account of service prior to Aug. 1st, 1946	$ 23,671
Balance of Payments by the Board on account of service subsequent to Aug. 1st, 1946	57,646
Net Payments by Employees	76,503
Refundable to Employees Leaving the Service	682
	$158,502

Only two employees who were members of the Retirement Annuity Plan left the service during the twelve months ended July 31st, 1954, one by resignation and one by retirement. They received paid-up personal annuity contracts with a present value of $3,764.

The Business Manager at Brandon Sanatorium and the Administrative Assistant in the Executive Offices are enrolled and making very satisfactory progress in the two-year course in Hospital Administration conducted by the Canadian Hospital Association. We have seven apprentices taking training that will lead to certification as Registered X-ray Technicians.

Those qualified to express an opinion maintain that there is probably no more complex and diversified an organization than a hospital. Responsibilities range through the professional services, food services, laundry, engineering, construction, water supplies, sewage disposal, specialized equipment and plant and a score of related fields. No matter what department is concerned there is but one basic purpose: the best possible care of the patient and the prevention of illness. In every administrative action, consideration must be given to the inter-relationship between human values, operative efficiency and finance. The thought and skills of all members of the staff have combined in this wide and varied undertaking to bring about another very satisfactory year of accomplishment throughout the organization.

APPRECIATION

I should like to record, again, my sincere thanks and appreciation for the direction and counsel of the Chairman of the Board and the Chairman and members of the Administrative Committees. It is pleasant, also, to express my gratitude and appreciation for the cordial and confident relationships enjoyed at all times with the Medical Director and the medical officers of the Board; officials of the Provincial and Federal Governments; the officers and members of the Advisory Board of St. Boniface Sanatorium; and hospital administrators throughout the Province.

Respectfully submitted,

T. A. J. CUNNINGS,
Executive Director
and Secretary-Treasurer.

STATEMENT OF TREATMENT DAYS—TUBERCULOSIS SANATORIA—1954

Province of Manitoba—Cities, Municipalities and Unorganized Territory	City of Brandon	City of Portage la Prairie	City of St. Boniface	City of Winnipeg	Other Organized Municipalities	Unorganized Territory	Total
Brandon Sanatorium	—	—	—	—	1,011	1,074	2,085
Central Tuberculosis Clinic	—	197	335	5,359	4,138	3,402	13,431
Clearwater Lake Sanatorium	—	—	—	—	503	4,657	5,160
King Edward Memorial Hospital	—	—	175	12,870	—	206	13,251
Manitoba Sanatorium	1,437	1,220	491	18,053	37,695	16,520	75,416
St. Boniface Sanatorium	31	257	4,706	20,625	31,111	19,865	76,595
	1,468	1,674	5,707	56,907	74,458	45,724	185,938

Government of Canada, Yukon Territory and Other Provinces	Dept. of Veterans Affairs	Dept. of National Health & Welfare	Dept. of Labour and Resources & Development	Dept. of National Defence	Yukon Territoy	Reciprocal Agreements with Other Provinces	Total
Brandon Sanatorium	172	89,366	—	—	—	—	89,538
Central Tuberculosis Clinic	455	520	11	344	—	242	1,572
Clearwater Lake Sanatorium	—	59,008	—	—	—	266	59,274
Dynevor Indian Hospital	36	19,174	—	—	—	—	19,210
King Edward Memorial Hospital	1,564	237	—	—	—	27	1,828
Manitoba Sanatorium	5,335	5,864	5	463	1,112	2,922	15,701
St. Boniface Sanatorium	3,814	15,276	433	—	—	4,942	24,465
	11,376	189,445	449	807	1,112	8,399	211,588

TOTAL TREATMENT DAYS—1954

Province of Manitoba, Cities, Municipalities and Unorganized Territory	185,938
Government of Canada, Yukon Territory and Other Provinces	211,588
	397,526

ROSS

REPORT OF THE MEDICAL DIRECTOR

EVERY phase of the Sanatorium Board's program against tuberculosis was continued vigorously throughout 1954. It is based upon preventing the spread of the tubercle bacillus, the discovery of new cases and sources of infection as early as possible, the provision of prompt and effective treatment, and a practical rehabilitation service. In Manitoba in 1954, 338,292 free chest X-rays were taken, 1,100 beds in six sanatoria provided 397,526 days treatment, and educational, vocational and rehabilitation services were available for patients in all sanatoria.

TUBERCULOSIS DEATHS

	Whites and Indians Combined		Whites		Indians	
Year	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths
1935	60.8	432	38.6	269	1,258	163
1940	50.3	369	27.7	203	1,140	166
1945	42.7	314	25.1	185	793	129
1946	44.6	324	25.1	183	848	141
1947	41.7	310	24.5	182	752	128
1948	38.0	288	19.7	149	754	139
1949	28.9	225	14.8	115	628	110
1950	22.8	181	12.8	102	438	79
1951	20.5	159	12.8	99	321	60
1952	14.4	115	11.2	87	145.1	28
1953	11.0	89	8.6	68	114.5	22
1954	8.0	67	6.8	55	60.9	12

(The figures for 1954 are tentative and based on the 1954 estimated population for Manitoba of 828,000 (808,300 White and 19,700 Indian).

I hesitate to feature the tuberculosis death rate for fear of creating unwarranted complacency, but, nevertheless, the continued decrease in the number of deaths from this disease is phenomenal. There were only 67 tuberculosis deaths in Manitoba in 1954, 55 of these non-Indian and 12 Indian, giving a respective rate of 6.8 and 60.9 per 100,000 population. A study of the foregoing table is very impressive, especially in considering the actual number of deaths year by year; for example, in 1935 there were 432; in 1945, 314; in 1950, 181 and in 1954 only 67. Not many years ago the tuberculosis death rate among Indians in Manitoba was the worst in Canada and a reduction from 110 in 1949 to 12 deaths in 1954 seems miraculous. Dynevor Indian Hospital, with 54 beds, did not have a death during 1954, a new record for a tuberculosis hospital in Manitoba and almost for Canada, the exception, I believe, being one other Indian Hospital in British Columbia.

The remarkable decrease in mortality is not a miracle but due primarily to earlier discovery of the disease, to prompt treatment and to much more effective treatment, the most notable reduction occurring after the introduction of anti-tuberculosis drugs.

Eighty per cent of deaths were due to pulmonary tuberculosis. There were 5 deaths in the year from tuberculosis meningitis. Twenty-five of the 55 deaths had their diagnosis of tuberculosis prior to 1950. Thirty-two or 60 per cent of all deaths were patients 50 years of age or over. Among the non-Indians 27, or about half, occurred in Sanatoria, and 13, or 25 per cent, were in general hospitals, all but one elderly, hopelessly ill on admission or diagnosed only after post mortem examination. Five died in Mental Hospitals, and 5 at home, suddenly or without medical attendance.

The foregoing commentary relative to death rates should not distort our vision for the future—indeed, we are squarely faced still with a major treatment program and will be for some years to come. Although treatment days are gradually reducing, in 1954 the total number on treatment on December 31st was 1,064. Modern drug treatment makes cure possible for most patients. Many otherwise would have died, including those that may fall short of a cure but with chronic disease requiring hospitalization. Our hope for further reduction in treatment days is in earlier discovery, shorter curative treatment and fewer relapses.

NEW DIAGNOSES OF ACTIVE TUBERCULOSIS

Year	Whites Active T.B.	Indians Active T.B.	Eskimos Active T.B.
1940	438	147	—
1945	438	134	3
1946	514	180	7
1947	492	337	3
1948	496	535	4
1949	427	402	5
1950	364	239	9
1951	333	169	8
1952	368	182	2
1953	346	165	44
1954	301	136	79

NEW CASES

A general observation throughout Canada and the United States during the last few years is that there has been little or no decrease in the number of new cases of tuberculosis, in spite of the rapidly declining death rate. In Manitoba in 1953 there was a slight drop in new cases and I am pleased to be able to report that in 1954 there was a further and more marked decrease among both White people and Indians. You will note a reduction from 346 to 301, or 13 per cent, for Whites and from 165 to 136, or 17 per cent, for Indians. This is not due to any relaxation of case-finding efforts because in 1954 a total of 338,292 free X-ray examinations were made, the greatest number for any year in the Board's history. The increase in new cases among the Eskimos is because X-ray surveys were extended into the far North. Another interesting feature of the new active cases is an increase in the number with primary disease; also that only 17 per cent of the Indians had far advanced disease and that their new cases have dropped from 535 in 1948 to 136 in 1954. Thirty per cent of the new active cases among the White people had reached an advanced stage. Twelve per cent of the new disease was non-pulmonary. A map of the province has been prepared, charting geographically the source of the new cases and further detailed study is being devoted to this group.

NEW ACTIVE CASES BY AGE GROUPS AND SEX, 1954

	Whites		Indians		Eskimos	
	Male	Female	Male	Female	Male	Female
0- 9	34	19	20	20	6	9
10-19	25	27	16	26	21	8
20-29	28	36	11	9	5	8
30-39	23	24	8	7	2	7
40-49	15	6	1	2	3	2
50-59	14	5	3	4	3	1
60-69	12	6	3	—	—	1
70 and over	16	7	3	2	—	—
Age not stated	3	1	—	1	—	3
	170	131	65	71	40	39

Among the White (non-Indian) population more males than females develop tuberculosis. Of the 301 new cases in 1954, 170 were males and 131 females. This trend is greater from the age of 50 years on, this age group accounting for 21 per cent of the total, with 70 per cent being males. There were 43 new cases (14% of the total) under 9 years of age and between the ages of 10 to 40 the males and females were about equal, with a slightly higher incidence among females from 20 to 30 years of age. Obviously, with 35 per cent of the new tuberculosis occurring under the age of 9 or over 50, these groups warrant emphasis in the case-finding activities of general practitioners and the Board.

ADMISSIONS AND DISCHARGES

During the year, 1,342 patients were admitted to sanatoria, compared to 1,232 in 1953, the increase being Eskimos. Of the first admissions (538) with re-infection pulmonary disease, 42.4% had minimal disease, 31.4% moderately advanced, and 26.2% far advanced. Odd as it may seem, disease was less advanced on the average among the Indians. Among the White people 31.7% had far advanced tuberculosis on admission and even with all the intensive effort for early discovery, for the last few years there has been no decrease in the far advanced percentage. There was a 7% decrease in re-admissions of non-Indians and a slight increase in Indian re-admissions.

There were 1,398 patients discharged from sanatoria and of the tuberculous reatment cases disease was classified as follows:

Inactive	24.7%
Arrested	45.5%
Active Improved	19.8%
Active Unimproved	6.6%
Dead	3.4%

You will note that 90 per cent were classified as improved or better on discharge nd compared to 1953 there has been a decided increase in those reaching arrest or nactivity of disease.

TREATMENT

A feature of historical significance in the treatment of tuberculosis in Manitoba as the closing of the King Edward Memorial Hospital in Winnipeg on August 1, 954. This 125-bed institution, operated by the Municipal Hospital Commission of he City of Winnipeg, was opened in 1912 when the death rate from tuberculosis in Ianitoba was 109 per 100,000 population. For 20 years the King Edward Hospital long with the Manitoba Sanatorium, Ninette, pioneered in this field when the results f treatment were much less encouraging than today. From 1930 on, with additional eds provided by St. Boniface Sanatorium and the Central Tuberculosis Clinic and or Treaty Indians in three more Sanatoria; with a tremendous increase in programs o discover new cases and sources of infection through X-ray clinics and surveys, he death rate, as pointed out before, has reached the remarkably low figure of .7 per 100,000. The King Edward Hospital has made an outstanding contribution oward this accomplishment and for years among the cities of Canada, Winnipeg has ad one of the lowest tuberculosis death rates; indeed, at times the lowest. As a esult of these circumstances the occupancy of the King Edward became reduced to point of creating administrative problems. By August 1, 1954, all the King Edward atients could be accommodated in the other tuberculosis sanatoria.

This surely must be a milestone in the progress made against tuberculosis in his province and, indeed, nationally, as it is the first tuberculosis sanatorium in anada to be closed. Appropriate recognition of the service of the King Edward to he citizens of Winnipeg will be made publicly at the Annual Meeting of the Can- dian Tuberculosis Association meeting in Winnipeg in June of this year.

Average Duration of Treatment of 1954 Tuberculosis Discharges

Manitoba Sanatorium	411 days
St. Boniface Sanatorium	477 days
Central Tuberculosis Clinic	51 days
Brandon Sanatorium	398 days
Clearwater Lake Sanatorium	397 days
Dynevor Indian Hospital	341 days

Excluding the Central Tuberculosis Clinic, which is primarily a diagnostic and istributing centre, the average duration of treatment for all sanatorium patients as a little over 400 days. Considering only Manitoba Sanatorium and St. Boniface anatorium the duration of treatment for patients discharged in 1954 was 100 days nd 50 days, respectively, less than for 1953. In a study of the breakdown of treat- ient duration in relationship to the extent of disease on admission, it is interesting o note that minimal cases were treated as long as those with moderately advanced isease. Far advanced cases were treated about 100 days longer and in all classi- cations the bacillary status on admission had little effect upon the duration of reatment.

Of special medical interest is an appended table summarizing the nature of the reatment given in each sanatorium. No pneumothorax or pneumoperitoneum is eing instituted. Of a total of 1,174 tuberculous patients discharged, major surgical rocedures performed on them were as follows:

Thoracoplasty	54
Pneumonectomy	13
Lobectomy	49
Segmental and wedge resections	87

esection surgery was done on 149 patients, 59 of these at Manitoba Sanatorium, 41 t St. Boniface Sanatorium, and 49 at Brandon Sanatorium. During 1954 there was n increase in the pulmonary resection surgery, particularly at St. Boniface Sana- orium. From bacteriological and pathological studies of resected material a better nderstanding of indications for surgery is being appreciated, although long period bservation of the surgical cases and those having prolonged chemotherapy alone s needed. Here and throughout America there is a trend toward a more conservative ttitude regarding resectional surgery, especially for small residual lesions.

All patients with active disease receive streptomycin and other drugs as part of their treatment and most improve rather dramatically in a few months, losing symptoms and tubercle bacilli from sputum. Consequently, it becomes difficult to keep patients in sanatorium for their necessary period of treatment, which usually requires 12 to 18 months, with the result that there is a demand for continuing the drugs at home. Although this practice is discouraged, nevertheless out-patient chemotherapy has a place in the overall and post-sanatorium treatment program. There are many advantages in restoring the home life of the patient and reducing the period and cost of hospitalization. Also, if a patient does leave sanatorium prematurely against medical advice, it is certainly questionable policy to rigidly deny continuation of drugs, if for no other reason than to protect the family contacts from infection. Each such case needs individual consideration.

During the year 151 out-patients received chemotherapy at the Central Tuberculosis Clinic. Of these, all but 26 had been in sanatorium and 17 of these were for non-pulmonary disease, mostly glandular. Drugs are only part of planned treatment and are not a substitute for sanatorium, which often includes surgery.

Of all patients discharged, 10 per cent left against medical advice, 89 (14%) out of 642 White patients and 21 (6%) out of 353 Indians. This has been an increasing problem everywhere and in the United States irregular discharge rate of 50% is not uncommon. This group in Manitoba increased from 8 per cent in 1953 to 10 per cent in 1954. A number of factors are responsible, the newer drugs particularly because of their prompt effect upon symptoms and the patient's feeling of well-being. There is not the same fear of tuberculosis. Sputum usually becomes negative for tubercle bacilli early in treatment and legal hold from a public health point of view is weakened. Until now there has been no provision for the detention of recalcitrant infective patients but within a few weeks 5 beds for this purpose will be available in the Central Tuberculosis Clinic. The greatest problem is created by alcoholics and addicts. Of the 89 discharged from sanatoria against medical advice, 37 have been re-admitted, 2 are in Mental Hospital and 24 are being re-examined periodically at out-patient clinics. Of the other 26, none were bacillary.

Considering non-Indian patients only, the Central Registry has in its active file records of 3,445 tuberculous cases, 525 in Sanatorium and 2,920 at home. Those in the latter group are periodically examined and advised and most have had sanatorium treatment. It is of special significance that only 21 of the pulmonary cases at home are classified as bacillary and only 10 of these by direct smear, the others by culture only. In practically all instances they are elderly people or couples living alone and creating no public health problem. New cases are obviously due to unknown sources of infection.

	Bed Capacity 1954		Bed Occupancy as at December 31st 1950	1951	1952	1953	1954	
Manitoba Sanatorium	285		263	242	244	228	244	
Central Tuberculosis Clinic	50		41	45	29	44	44	
Municipal Hospitals	—		138	121	97	82	—	
St. Boniface Sanatorium	287		271	267	276	272	276	
		622	713	675	646	626		564
Dynevor Indian Hospital	55		44	45	38	51	50	
Clearwater Lake Sanatorium	185		143	159	163	187	196	
Brandon Sanatorium	260		252	258	259	251	254	
		500	439	462	460	489		500
Total		1122						1064

There were 1,064 patients in sanatoria on December 31, 1954, compared to 1,115 on the same date in 1953—a reduction of 77 White people, 41 fewer Indians and 67 more Eskimos.

Treatment days for Province of Manitoba patients during 1954 totalled 185,938, compared to 201,869 for 1953, a reduction of 15,931. Including Government of Canada (mainly Indians and Eskimos) and other Provinces, the total treatment days in Manitoba Sanatoria was 397,526, which is 12,435 days less than in 1953.

TREATMENT GIVEN TO TUBERCULOUS PATIENTS DISCHARGED IN 1954

	Manitoba Sanatorium	Central Tuberculosis Clinic	St. Boniface Sanatorium	Municipal Hospitals	Brandon Sanatorium	Clearwater Lake Sanatorium	Dynevor Indian Hospital
Routine	31	88	8	—	17	55	13
Streptomycin	167	62	220	—	132	70	34
P.A.S.	160	52	201	—	132	54	34
I.N.H.	32	17	100	—	60	31	8
Pneumothorax	4	—	22	—	5	1	—
Pneumoperitoneum	10	—	18	—	29	—	—
Thoracoplasty	6	—	28	—	20	—	—
Pneumonectomy	2	—	4	—	7	—	—
Lobectomy	13	—	11	—	25	—	—
Resection (less than lobectomy)	44	—	26	—	17	—	—

REHABILITATION

Treatment falls short of its objective unless the patient can be restored to conomic independence and a useful place in his community. To attain this end the Board provides a rehabilitation service for patients in all sanatoria. This consists mainly of vocational counselling and academic, occupational and vocational training nd assistance in obtaining employment. Appended is the very interesting report of he Rehabilitation Division, which covers this service in some detail.

Present day treatment of tuberculosis has improved the prospect for successful ehabilitation. Educational programs can begin earlier in treatment—in fact, usually oon after entering the sanatorium. Treatment is less prolonged, the cure more omplete and relapse less likely. On the other hand, there are an increasing number f patients with a poorer educational background, which has an adverse bearing on mployment.

THE CENTRAL TUBERCULOSIS REGISTRY

A tuberculosis registry is necessary for the evaluation and direction of policy. This department, with offices in the Central Tuberculosis Clinic, contains complete nd readily available facts about all tuberculous patients, whether in or out of sanaorium, their follow-up, and information about their contacts and families from the eginning to the end of the patient's observation. Details are recorded concerning ew cases, deaths, surveys and clinics and sanatorium treatment. Through the egistry's Director a valuable liaison is maintained with the Public Health Nursing ervice. I do appreciate the service of the Director and staff of the Central Tuberulosis Registry.

APPRECIATION

I thoroughly appreciate but cannot begin to adequately acknowledge the co-operative, devoted and able service of so many who made possible all that has been eviewed in this and foregoing reports. I am very grateful for the advice, guidance nd support of the Chairman, Chairmen of all Committees and Members of the anatorium Board. No one more than I realizes how much of their time, energy nd wisdom is devoted to aspects of this worthy cause. The pleasant and cooperative relationship with the Executive Director, the Superintendents and the epartment heads of all the institutions is deeply appreciated. I sincerely thank all overnmental Health Agencies for their contribution to the whole program and join he Chairman in paying special tribute to the Associated Canadian Travellers.

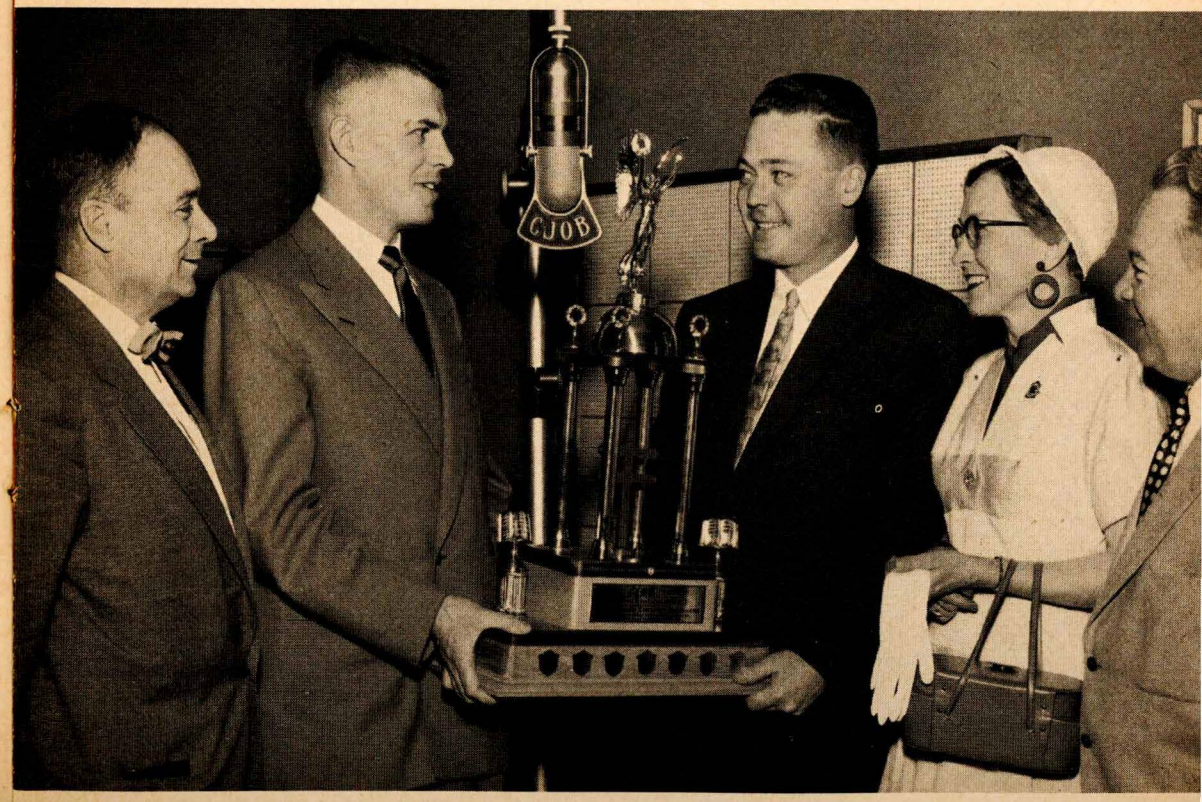
CONCLUSION

In general, I urge that there be no letdown in any phase of the present campaign gainst tuberculosis. There are the optimists whose thoughts are conditioned by the ramatic decrease in deaths and who consider the problem is solved or nearly so. t the other extreme are those who point out little lessening of new cases, the lack f a specific preventive vaccine, the limitations of the anti-microbial drugs and urgery, and the salvaging of lives but the production of chronic incurables. There s truth in both viewpoints but optimism has never been more justified than now efforts are sustained. The critical stage has been reached. We are now beginning o reap the benefits of greater knowledge, of improved techniques and procedures, nd of great expenditures of time, energy and money. Case-finding methods are ighly developed, tuberculosis hospitals and clinics are scientifically and efficiently perated, treatment has made great advances and failure to cure is the exception. tandards of living were never before more conducive to better heatlh. Now is the ime to put everything we have into the program to eradicate tuberculosis.

Respectfully submitted,

E. L ROSS, M.D.
Medical Director.

Employees in all industrial firms were given Chest X-ray examinations during the St. Boniface Survey. Here Mobile X-ray Un No. 3 is drawn up in front of the Canada Packers' Staff House.



Preventive Services Headquarters
Central Tuberculosis Clinic

Prevention

PREVENTIVE SERVICES

From the Report of the Medical Director

THE cause of tuberculosis is the tubercle bacillus. Sources of infection—that is, people with tuberculosis—were responsible for the 301 new active cases in 1954. long as new cases develop the search to find them as early as possible and their urces of infection needs to be continued vigorously by physicians generally and all the Board's case-finding agencies. X-ray surveys, industrial and community, stitutional and travelling chest clinics, pre-employment examinations and the mission X-ray program in general hospitals throughout the Province, provide with- t charge, greater and more readily available diagnostic facilities than ever before. is essential that they be used to the best advantage. Although the above organized se-finding programs have been developed, the private physician should appreciate s important role and responsibility in the anti-tuberculosis campaign.

CASE-FINDING

You will note that the following table shows the number examined by the various encies produced a total for the year of 338,292. There was efficient interpretation these X-rays, adequate records and follow-up of tuberculous cases, and sanatorium eatment was promptly provided if needed.

Examinations by Clinics, Hospitals, and Surveys

Year	Stationary Clinics	Travelling Clinics	Hospital Admission X-rays	Surveys	Total
1944	11,332	4,765		43,323	59,420
1945	9,302	5,562		50,520	65,384
1946	12,908	8,740		108,742	130,390
1947	10,457	6,084		259,271	275,812
1948	9,752	5,385		235,446	250,583
1949	10,636	4,515	12,722	222,919	250,792
1950	10,440	5,205	47,774	170,402	233,821
1951	10,353	4,055	64,181	240,110	318,699
1952	11,325	5,566	72,872	223,086	312,849
1953	10,137	4,703	83,259	214,916	313,015
1954	9,554	3,375	85,513	239,850	338,292
	116,196	57,955	366,321	2,008,585	
Grand Total, 1944 to 1954					2,549,057

Number X-rayed to find one active case

Stationary Clinics	68
Travelling Clinics	153
Hospital Admissions	813
Surveys (White)	4700
(Indian)	333

X-ray surveys, when they began 10 years ago, yielded one active case per 1,000 X-rayed. Significant tuberculosis found has been steadily decreasing since then, by 1953 being one in 4,000, and you will note that in 1954 there was only one in 4,700. For some years the Board has been aware of the diminishing returns and conscious of the increasing cost per case. However, it considered that delayed diagnoses would be more costly for treatment, not only for the persons concerned but for others through spread of infection. It also must be kept in mind that X-ray surveys and their community organization have health educational value. The geographical distribution of deaths and new cases, particularly the latter, is constantly under review. We still cover the province with surveys in a general way every two years but municipalities without new cases—and there are quite a number—are left for three or four years. Certain areas which have above average incidence are surveyed yearly or even twice yearly and all contacts are promptly X-rayed following the discovery of a new case in a school or industry.

Travelling clinics are distinct from the large mobile X-ray units. The latter have no doctor in attendance and their objective is to X-ray all people in a community. The travelling clinics with a doctor and X-ray technician provide a consultation service and examine mainly suspects, known cases and contacts. In 1954, 88 clinics were held, monthly at a number of centres, and 3,375 examinations were made. This is a decrease of about 1,300 compared to 1953 and we have been concerned about the low attendance, which is attributed to the general hospital admission X-ray program. Out-patients can be referred to the hospitals for X-rays and the films forwarded to the Central Clinic for reading. This provides a continuous service and fewer need to wait for the periodic visit of the travelling clinic. We are seriously considering limiting these clinics to monthly visits to larger centres and to communities where no hospital X-ray service is available.

Stationary Clinics are the out-patient clinics of each sanatorium and the Central Tuberculosis Clinic and were responsible for 9,554 examinations in 1954. There were 5,360 of these at the Central Clinic, which diagnosed 125 new active cases, or approximately 40 per cent of the total for the year. As was evident from the report of the Superintendent of Preventive Services, the Central Clinic is the hub of the tuberculosis diagnostic service. Apart from its out-patient department and the 50 ward-patients upstairs, thousands of survey and hospital admission X-ray films are read and reported upon weekly.

Industrial Surveys—For several years the Sanatorium Board and the Winnipeg Health Department have worked closely together in carrying out a comprehensive tuberculosis prevention program. The organizer of surveys, who was employed by the City Health Department, joined the Board's staff in 1954 and is now responsible for organizing the X-ray surveys for the whole province, including Winnipeg Industries. I wish to commend him for his excellent work, not only regarding survey detail but for his promotion of good public relations. He held 192 public meetings throughout Manitoba and arranged for surveys with 1,048 business concerns in Winnipeg.

Regarding tuberculosis control in Winnipeg please refer to the interesting and complete report appended of the Deputy Medical Health Officer of Winnipeg. The tuberculosis death rate of 7.0 per 100,000 is slightly below the provincial average of 7.7.

The following table summarizes the chest X-ray program in Winnipeg:

Number of business concerns X-rayed	1,048
Number of operational sites	82
Average attendance	96.2%
Number X-rays taken	32,764
Number of School Children X-rayed	40,905
Number of routine and pre-employment X-rays by City Hall Unit	10,214
Number of School Children x-rayed	40,905

Including hospital admission X-rays and those taken at the Central Clinic, in 1954 approximately 125,000 chest X-rays were taken of Winnipeg residents, which is half the population. The incidence of active disease found was approximately the same as the average for the whole province.

Chest X-Ray Program for General Hospitals—Persons who are admitted to General Hospitals have a higher incidence of tuberculosis than the general population. Federal Health Grants made it financially possible in 1949 to initiate a program to rountinely X-ray all such patients and by 1954, 61 hospitals in Manitoba were in participation. This includes all hospitals with X-ray equipment and if there are over 1,000 admissions annually, equipment to take miniature films at low cost is installed.

There were 106,415 patients admitted to these 61 hospitals in 1954, which is 13 per cent of the province's population. It is fortunate that this considerable proportion with a high tuberculosis incidence are aggregated where diagnostic facilities are readily available. Besides admissions, out-patients may be included by referral through the doctor or an agency of the Board, so a convenient and continuous chest X-ray diagnostic service is available almost anywhere in the province, with cost no barrier.

Number of Hospitals	61
Number of in-patients X-rayed	72,144
Number of out-patients X-rayed	8,847
Number of hospital staff X-rayed	5,874
Total	86,865

For information relative to this program I have included a list of the hospitals and other pertinent data. The percentage of the admissions X-rayed was 68. The objective is to X-ray all, excluding the new born and repeat admissions and others who may be too ill. Several hospitals get over 80 per cent but for others constant urging is necessary. Each hospital submits a quarterly report, which is carefully reviewed, and we also keep in close touch through reading of the films from the rural hospitals.

X-ray Findings

It is understood that these X-ray films are a method of screening out abnormalities, which have to be assessed by further investigation.

1. Of the 72,144 admissions 87, or one in 829, had apparently active tuberculosis.
2. 389, or one in 185, had tuberculosis that was considered inactive.
3. 198, or one in 364, had probable tuberculosis of doubtful activity.
4. 309, or one in 233, were considered tuberculosis suspects.
5. Taking into account all the above, 983, or one in 73, had evidence of present, past or suspected tuberculosis.
6. Of the out-patients one in 983 had apparently active tuberculosis.
7. The value of this program and, indeed, all our surveys is not confined to discovering tuberculosis because many other abnormalities are drawn to attention and referred to the private physician. This is evident by the fact that there were 2,457 (one in 27) non-tuberculous chest conditions reported and 3,579 (one in 20) with cardiac abnormalities among general hospital in-patients.

The Board is deeply appreciative of the interest and cooperation of the Manitoba hospitals in this project, which extends a very worthwhile health service into every community.

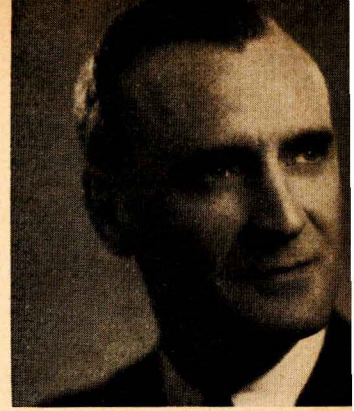
Vaccination with B.C.G. More people were vaccinated with B.C.G. in Manitoba in 1954, there being 873, compared to 660 in 1953. This does not include Indians, which have been reported upon by Dr. Wood.

Those vaccinated are in the following groups:

Contacts	143
Student Nurses (General Hospitals)	362
Student Nurses (Mental Hospitals)	21
Student Nurses (Practical)	86
Nurses' Assistants	38
Nursing Staff (Other)	3
Medical Students	41
Sanatorium Staff	39
Others	140
	873

The extent to which this program should be developed is a question of discussion. Theoretically, if protection against tuberculosis is afforded why not vaccinate all people who have not been previously infected? Apart from the fact that prevention is not absolute, we know that 95% to 98% of all school children would have to be vaccinated and such a program would be of no lasting benefit unless followed through by tuberculin testing and re-vaccinating periodically for years. I think an all-out B.C.G. program would divert time and money from our fundamental objective, which is the prevention of infection. Obviously, Indians and others as listed above, who have an increased risk of exposure to tuberculosis infection, need added protection. This past year we tuberculin tested all we could round up in a high incidence area and vaccinated 99, and extension under these circumstances is desirable. I highly commend the B.C.G. program of Indian Health Services.

Report of the Medical Superintendent Central Tuberculosis Clinic and Preventive Services



DR. D. L. SCOTT

CENTRAL TUBERCULOSIS CLINIC

Central Tuberculosis Clinic

THE Central Tuberculosis Clinic opened its doors on October 2, 1930, as a diagnostic clinic with 33 beds for diagnosis and observations. The Clinic was converted from what had been a bakery and had one wing only. The new East wing was added in 1932, giving us a total of 50 beds. Very few changes were made in the Clinic in the intervening years, although for some time the need for more office space and better nursing and laboratory facilities had been felt. This year plans were made to effect these changes, and through the energy and foresight of Mr. Cunnings we are now in the process of renovating and adding to the building. Some new wards, including space for difficult patients, will be provided, also a new service room and kitchen. The laboratory will be enlarged and more office space will be available so that all the clinical work will be housed in the West wing, including the Preventive Services. These changes should assist us all to look after the public much more efficiently.

At the Central Clinic there were 9,289 out-patient visits, of which 5,360 were for examination, 2,264 of these being known contacts of disease. The remainder—3,929—registered for various treatments—streptomycin, dressings, pneumothorax, etc.

There were 138 new cases of tuberculosis found out of the 5,360 examinations and 17 cases found by other means, making a total of 155 new cases discovered during the year. Active cases numbered 125 and of these 109 were discovered by examination at the Central Clinic—one new case for every 49.1 examinations.

Treatment—The function of the Central Clinic is one of diagnosis and observation but of necessity some treatment must be carried out. The important element of the cure is still rest, supplemented by chemotherapy. There were 404 admissions to the ward, 56 less than in 1953. In spite of this drop there were 997 more treatment days. This increased occupancy is explained by an increase in the average length of stay and possibly due to some patients coming to us from the King Edward Hospital until their disposal could be arranged; 342 of the admissions were for tuberculosis and 62 suspected of tuberculosis but found to be non-tuberculous. The average stay was 36 days, an increase of 5 days over 1953.

Tuberculosis in elderly people has been attracting our attention more and more during the past few years. Of the 404 admissions, 120 were over 50 years of age. Of the 155 new discoveries, 36 were over 50 years, and 23 of these were over 60 years of age. The incidence in older people may simply be more noticeable because of the freer use of X-ray films throughout the province.

In the course of our daily work we see numerous non-tuberculous conditions and every effort is made to direct these people to the proper places, where they can be looked after. A list of these conditions and of complications may be seen on pages 5 and 6.

Four hundred and four admissions and 404 discharges is a coincidence. Of the 404 discharges, over 50 per cent were transferred to other sanatoria for treatment; 3.2 per cent were discharged against advice. In explanation, many of these latter discharges were re-admitted after overstaying a leave granted in order to carry out some business at home. Over 35 per cent of our discharges completed treatment or were found to be not in need of any treatment.

Operating Room—There was a total of 741 procedures carried out in the Operating Room. Pneumothorax as a treatment has almost become obsolete. Only 482 refills were given. Our operating room is rapidly becoming a dressing and sterilizing room.

Laboratory—The total of laboratory procedures has increased and likely this trend will continue because the earlier cases require more laboratory investigation to prove the diagnosis. Vaccination with B.C.G. again increased and this year with the addition to our laboratory we hope to do more.

X-ray Department—Our X-ray work continues to be of a high standard. There were 5,141 films made and 776 fluoroscopic examinations. Our system of filing and registering of films continues to give us satisfaction because we do not seem to have the difficulties in locating films that one sees so often elsewhere.

Teaching—As in past years, teaching has been a prominent part of our program. Lectures are given to nurses in three of our large general hospitals. Weekly clinics are also given to medical students on tuberculosis and its cure.

PREVENTIVE SERVICES

Travelling Clinics—Travelling Clinics was our first active campaign whereby we aggressively went out into the province looking for early symptom-free tuberculosis. Eighty-eight of these clinics were held in 40 different centres and 22 active cases discovered in 3,375 examinations, or 1 in 153.4 people—a very fruitful method of discovering tuberculosis.

X-ray Surveys have their headquarters at the Central Tuberculosis Clinic. Detail of this important case-finding service is given on page 23.

Hospital Admission Program—Hospital admission films are a useful method of X-raying many other people who may elude our other screening methods. These X-rays catch at least two groups where the incidence is admittedly higher than in the general population, namely, expectant mothers and the aged. Forty-seven hospitals refer their films to the Central Clinic for interpretation and last year a total of 21,573 films were referred to us for this purpose. Of this number 96 were considered to be active, which is about three times as many as in the previous year.

APPRECIATION

For three months this year I was privileged to visit England and Scotland through the auspices of the National Association for the Prevention of Tuberculosis and the kind assistance of the Sanatorium Board. Institutions and clinicians in both countries were seen and interviewed. I was also able to attend a meeting in Madrid of the XIII International Congress against Tuberculosis, where all the free countries of the World were represented. This was a very enlightening experience for me, and I would like to take this opportunity to thank the members of the Board for making this possible.

To do work efficiently and well requires a competent staff, which I believe we have here at the Central Clinic, and I am glad to have an opportunity now to thank the members of all departments of the Central Clinic and the Preventive Services for their fine cooperation and the effort they have put into this year's work in helping to alleviate the lot of many unfortunate people. To the Central Registry staff for their always willing and ready help I extend my sincere thanks.

I wish also to express my thanks and appreciation to the Chairman and Members of the Board for their sincere interest in our work, and also to Dr. Ross and Mr. Cunnings for their cooperation, advice and assistance. We appreciate our cordial relationship with the other tuberculosis institutions and the general hospitals and health departments with which we deal.

Respectfully submitted,
D. L. SCOTT, M.D.
Medical Superintendent,
Central Tuberculosis Clinic
and Preventive Services.

It's an exciting time for everyone when the big X-ray vans come to town.

City of Winnipeg

TUBERCULOSIS CONTROL DIVISION

King Edward Memorial Hospital

Perhaps the most notable feature indicative of progress was the official closing of the King Edward Memorial Hospital in August, 1954. This hospital was built in 1912 and from that date until closing it was used as a hospital for treating tuberculosis patients. For some decades the one hundred beds available were constantly occupied; however, in the past few years, the state of bed occupancy has steadily declined to the point where it was apparent that the hospital could be utilized for a more useful purpose than a tuberculosis sanatorium. Therefore in August patients in the King Edward Hospital were transferred to available beds in the various Sanatoria operated by the Manitoba Sanatorium Board. The present lack of need for a tuberculosis treatment centre maintained by the City is indeed an indication of progress in the control of this disease.

Death Rate

There were 17 deaths in Winnipeg due to tuberculosis. This corresponds to a death rate of 7.0 per 100,000 population and is the second lowest death rate ever recorded in Winnipeg. (Tuberculosis death rate in 1953 was only 6.3.) The following table illustrates the gradual but steady decline in the death rate since 1920.

Year	No. of Deaths	Rate per 100,000 population
1920	138	71.7
1930	106	51
1940	52	23
1950	21	8.8
1954	17	7.0

Hospitalization

There was a monthly average of 191 patients hospitalized at City expense in the various Sanatoria during the year 1954. This is a substantial reduction in the monthly average of patients hospitalized during 1951 (238 patients), in 1952 (214 patients) and 1953 (199 patients). The monthly average number of patients in the various sanatoria were:

King Edward Memorial Hospital	60	(for 7 months)
Ninette	69	
St. Boniface Sanatorium	69	
Central Tuberculosis Clinic	18	

X-ray Surveys

During 1954 the Chest X-ray survey programme continued to expand. The mobile 70 mm. X-ray machine previously purchased by the Sanatorium Board of Manitoba and loaned with staff to the City Health Department, the stationary 4 x 5 X-ray Unit at the City Hall and two other 70 mm. machines (provided by the Sanatorium Board for use during the survey of all school children) were all utilized in X-raying a total of 83,883 individuals. This is the second largest number of citizens to be X-rayed during any single year.

Industrial Surveys

One thousand and forty-eight office, business and industrial concerns were provided with an oportunity for their employees to have a chest X-ray at one or other of the 82 sites where the X-ray machines were set up; 96.2% of the employees of these business concerns attended for an X-ray.

70 mm. Units

No. of operational sites	82		
No. of industries X-rayed	1,048		
Average attendance	96.2%		
No. of Industrial X-rays taken		32,764	
No. of school children X-rayed		35,630	
No. of private school children X-rayed		5,275	
Total 70 mm. X-rays			73,669

4 x 5 Unit at City Hall

No. of survey, contact, and patients X-rayed	6,520	
No. of pre-employment X-rays	3,694	
Total 4 x 5 X-rays		10,214
TOTAL X-RAYS TAKEN DURING 1954		83,883

Seventeen new cases of pulmonary tuberculosis were discovered during the year, which is 25.4% of the total number of new active pulmonary cases discovered by all agencies such as private physicians, sanatoria, hospitals, private and public clinics.

Active Cases of Pulmonary Tuberculosis Discovered Annually

Year	By all means	By City Health Surveys	% of Total found by City Health Surveys
1950	95	28	29.5
1951	77	22	28.6
1952	91	25	27.5
1953	74	26	35.1
1954	67	17	25.4

There was a ratio of one new case discovered for every 4,934 invididuals X-rayed. Once again the progress that is being made in stamping out this disease is evident in Table III which shows that in 1949, out of every 1,118 individuals X-rayed one new unsuspected case of tuberculosis was discovered compared to one out of every 4,934 individuals X-rayed in 1954. The value of the pre-employment chest X-ray program is also well illustrated by the finding of 3 new unsuspected cases among 1,694 pre-employment X-rays or one new case for every 1,230 individuals X-rayed.

Active Cases of Pulmonary Tuberculosis Discovered Annually by Surveys

Year	No. of X-rays	Total Active Cases	Active Cases Rate per 1,000 X-rays
1949	31,311	28	.9 or 1 every 1,118 X-rays
1950	44,916	22	.5 or 1 every 2,042 X-rays
1951	73,734	35	.5 or 1 every 2,107 X-rays
1952	52,466	25	.5 or 1 every 2,088 X-rays
1953	72,259	26	.4 or 1 every 2,779 X-rays
1954	83,883	17	.2 or 1 every 4,934 X-rays

In addition to these new unsuspected cases of tuberculosis some individuals were found to have other significant pathology of the lung, heart or great vessels. Such individuals were advised to consult their own physician for further advice or treatment as required.

Source of Active Cases Discovered by Health Department

Surveys	9
Pre-employment	3
Referred by Private Physician	1
Individuals	4
Total	17

As will be seen in Table V, Tuberculosis discovered on Surveys continues to be found among those individuals who are in the most productive years of their lives. Ten cases or 59% of the 17 new cases were discovered in the 20 to 39 age group.

Active Cases Discovered through X-rays taken on Surveys and at City Hall by Age Group

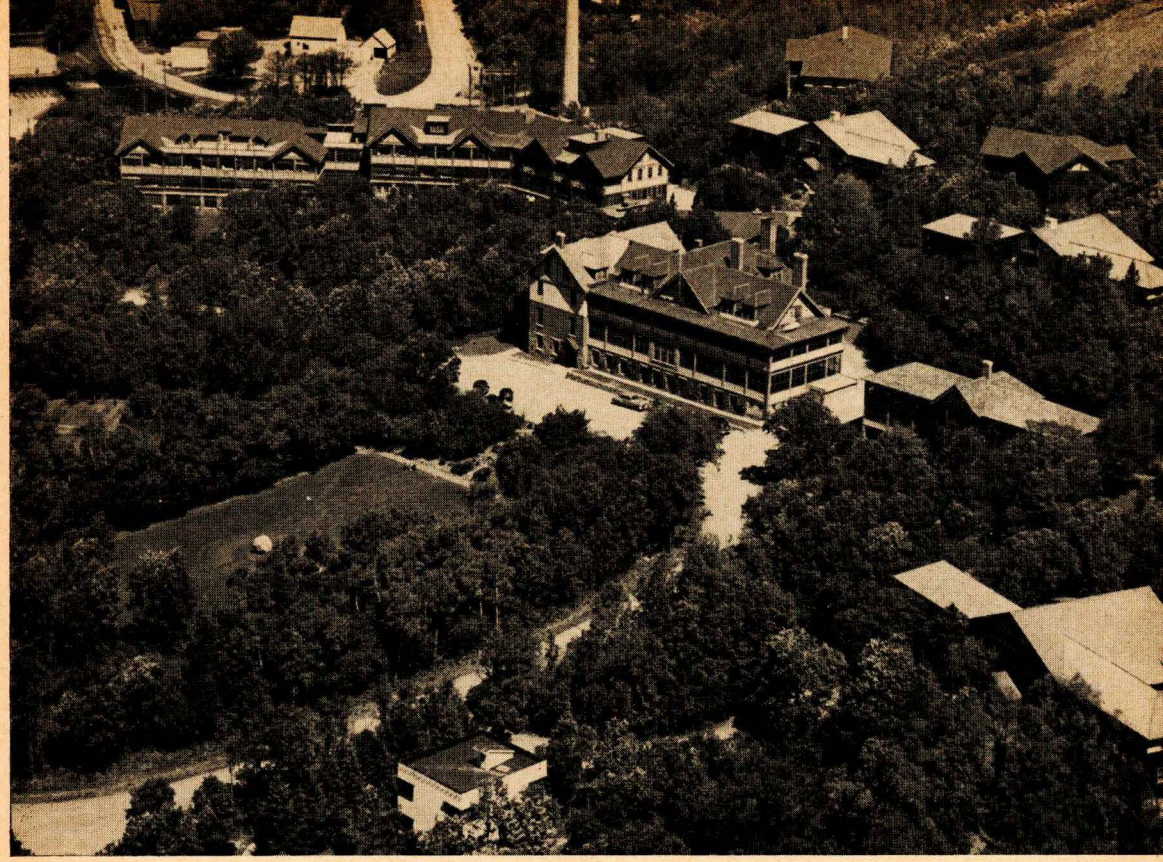
Year	0-19 yrs. No.	0-19 yrs. %	20-39 yrs. No.	20-39 yrs. %	40-59 yrs. No.	40-59 yrs. %	60-yrs. No.	60-yrs. %	Total Cases
1949	3	11	17	60	7	25	1	4	28
1950	1	4	18	82	3	14	—	—	22
1951	10	29	20	57	4	11	1	3	35
1952	5	20	16	64	2	8	2	8	25
1953	3	12	16	62	5	20	2	8	26
1954	5	29	10	59	1	6	1	6	17

Extent of disease on discovery

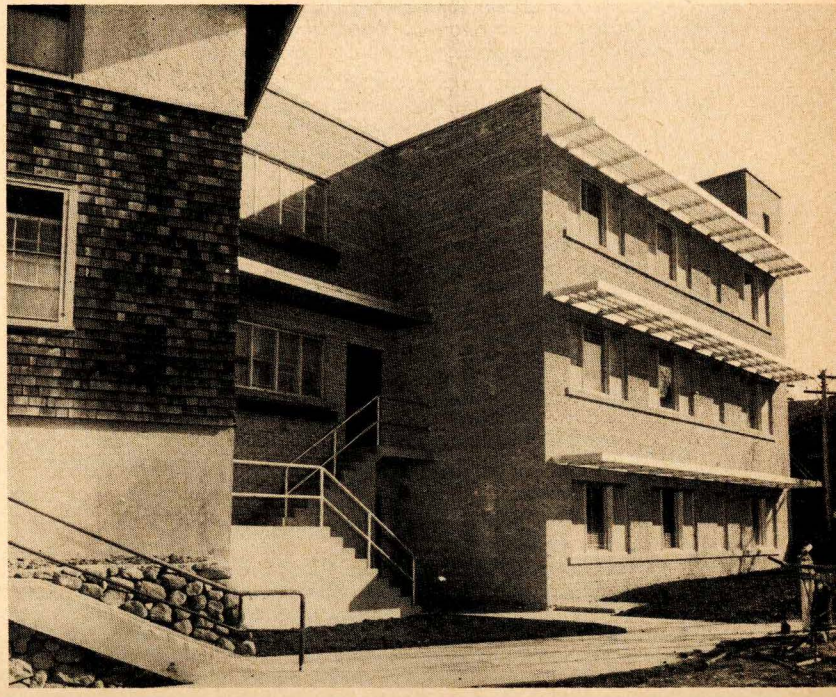
Extent	No. of Cases
Minimal	6
Moderately Advanced	10
Far Advanced	1

In conclusion, the co-operation and assistance extended to the City Health Department by the various agencies concerned with the treatment or control of tuberculosis has been greatly appreciated. In particular we are grateful to the Sanatorium Board of Manitoba for the loan to the City Health Department of technical staff when required; for the interpretation of X-ray films, and for various equipment and supplies.

R. G. CADHAM, M.D., D.P.H.,
Deputy Medical Health Officer.



Manitoba Sanatorium



An addition to the Nurses' Home at Manitoba Sanatorium was completed in 1954 to provide very comfortable accommodation for professional nursing staff.

L. PAINE

Treatment

MANITOBA SANATORIUM

THE year 1954, the forty-fifth of operation of Manitoba Sanatorium was again an active one, both in improvement of physical equipment and in the treatment of tuberculosis.

PATIENTS

Treatment days were 91,117, as compared to 87,289 in 1953 and the average n the last five years of 91,458. Several trends in patient population are worthy of ıote. The increase in male patients noted in the last year or so continued. Of 244 ɔatients at the year's end, 143 were men and 101 women. An increasing number of ɔatients are in older age groups and this applies, especially to men. Thus 20% of all ıdmissions were aged 50 or over and in this older age group 84% were men. The ɔroportion of patients with Indian blood continued to rise and now stands at one hird of those on treatment; most of this group are Metis. Department of Veterans \ffairs patients increased over the year from 13 to 18 as of December 31st.

ADMISSIONS AND DISCHARGES

During the year 404 patients were admitted, of which 239 were for treatment nd 165 for diagnosis or review. Average age on admission was 35 years; 135 were ıales and 104 females. Of patients admitted for treatment 45% had new disease, 6% had suffered relapse and 19% were continuing treatment after periods elsewhere. Extent of pulmonary disease in new cases was as follows:— Minimal 48%, ıoderately or far advanced, 52%.

Again referring to the increased incidence of tuberculosis in older men, new dmissions over the age of 50 were all men and disease was in the more advanced tages in 84% of the group as compared to 52% for all new admissions. New dmissions of non-pulmonary disease included 15 with pleurisy with effusion; and one ach with Pott's Disease, tuberculous cervical glands and tuberculous epididymitis.

Total discharges were 394, of which 229 were from treatment and 165 had been ı for short periods of diagnosis or review. Of the 229 discharged from treatment 3% went home with treatment completed, 9% were transferred to other institutions nd 5% left against medical advice. Status on discharge of those with pulmonary ıberculosis was as follows:— Inactive 10%, Arrested 65%, Active Improved 16%, ctive Unimproved 4%, Died 9, or 5%. Average duration of treatment was 1 year nd 2 months. Six patients went home with positive sputum, of which one has been -admitted.

OUT-PATIENTS

The out-patient department made 1,154 examinations, of which 324 were old ıtients back for review. We continue to see all old patients and diagnostic problems conference.

TREATMENT

No radical change in treatment has taken place in the last year. All admissions ere placed on rest and antibiotic therapy. Streptomycin 1 gram twice weekly with grams of P.A.S. daily is still the routine treatment, but in extensive disease INH, 0 mgms daily, may also be added. Length of antibiotic course is from one to two ars. After maximal clearing and never before six months resection is considered for gnificant residual disease. Sanatorium care plus antibiotics is continued for a

minimum six months post-operatively. Though many patients coming to resection still have extensive disease and cavitation we are doing an increasing number of lesser resections in those where small residual foci are believed to be a potential source of relapse. So far we have been impressed with the lack of healing observed in operative specimens from these smaller resections. At present we almost always prefer resection to surgical collapse in the belief that it gives a higher incidence of sputum conversion, less tendency to relapse and leaves the patient with better lung function. Extraperiosteal wax pack is still used occasionally in poor risk cases. Thorocoplasty is employed mainly in preparation for pneumonectomy, to reduce pleural space following resection. We are finding increasing use for cavernostomy in patients with vital capacity too low to tolerate resection and with source of positive sputum apparently confined to specific areas of cavitation. We believe this procedure will not infrequently salvage patients who are beyond the help of any other operative procedure.

No patients have been started on air treatment during the year but a few are still taking refills which totalled 23 for pneumothorax and 151 for pneumoperitoneum.

In all, 128 major chest operations were performed. Thoracoplasty was done in 9 patients with a total of 15 stages. Two patients had extra-periosteal wax pack. There were 90 pulmonary resections and 3 thoracotomies. Two patients had bilateral resection. Extent of resection was as follows: Pneumonectomy 8, Lobectomy 17, Lobectomy plus other resection 7, other Multiple Resection 8, segmental resection 5, Wedge Resection 45. In 7 resections extensive decortication was also done. Other major procedures were Cavernostomy 7, Gauze pack 1, Cavernostomy Closure 4, Shede 1, Excision Chest Wall Sinuses 3, Rib Resection 1, Excision of Bursa 1, Major Abdominal procedures were Appendectomy 2, Laparotomy 1, Gastrectomy 1. There were 3 operative deaths from chest surgery, all in pulmonary resection and in patients with extensive, long-standing disease, and little outlook for recovery without surgery. Minor surgical procedures include bronchoscopy 109, and Cystoscopy 4; aspirations 149, miscellaneous minor surgery 30. Blood transfusion was given 115 patients with 633 bottles used.

Almost all patients had some combination of antibiotic therapy, many continuing treatment from the previous year:— Altogether 462 patients received streptomycin during the year; I.N.H. was given to 211 and Viomycin to 31. P.A.S. was given routinely in combination with the above drugs whenever tolerated.

X-RAY DEPARTMENT

The Department continued its usual high standard of work with considerable increase in volume. Altogether 5,004 radiographs were made, which is 358 more than in 1953. Increase took place in routine chests, planigraphs, bedside portables and electrocardiographs. Color photography of all surgical specimens was undertaken by the Department early in the year and to date 110 color slides of 80 specimens have been made. Two student X-ray technicians from the survey department received training during the year.

LABORATORY

The work in this Department continues excellent and output increased 14.4% over 1953. A total of 12,449 tests were done which were classified as follows:— Hematology 4,487, Bacteriology 3,328, Biochemistry 2,858, Blood Bank 466, Histopathology 109, Others 1,201.

The increased volume of work may be attributed in large part to the greater volume of thoracic surgery done during the year and to greater use of anti-tuberculous drugs. Notable increases were in control urine tests after I.N.H., bacterial sensitivity testing to a wider range of drugs, cross matching of donor blood, respiratory function tests and in examination of resected lung tissues for tubercle bacilli. The number of cultures for resected tissues for tubercle bacilli continues to increase.

Decrease in sputum examination due to antibiotic therapy has resulted in a larger volume of gastric lavages and cultures for tubercle bacilli.

Larger laboratory quarters are urgently needed and construction is now under way.

REHABILITATION

A full report has been submitted elsewhere. This Department makes a very important contribution to the treatment programme. Through vocational training many patients leave sanatorium better equipped for making a livelihood than before admission. An increasing number of patients have little or no elementary schooling and profit by academic school work. Many also derive pleasure and diversion from occupational therapy which is a definite aid in their return to health.

STAFF

Medical staff remains unchanged since last year. The increasing amount of ection surgery, plus giving our own anaesthesia, appropriates a large share of lical time. Surgical load increased approximately by one-third during the year it becomes increasingly difficult to find time for other medical duties. Medical ff are to be commended for unusually heavy duty in the Operating Room and support on the wards. Over the year nursing staff has been shorter of graduates n last year and the increased surgical load was only possible through help from umber of wives of male staff who are nurses and found time to help on the wards. supervision of patients under existing conditions is a matter of grave concern the writer, especially in view of the continuing difficulty of filling the nursing itions of evening and night supervisors. Shortage of graduate staff leaves most rmary wards with only nurses assistants on duty during evening and night shifts. ients in pavilions (about half the patient population) are without any evening night supervision, except by the night watchman and an evening round by the tor. It becomes increasingly difficult to keep patients on their routines as more more come from social levels lacking in responsibility and sense of proper duct. In addition, the present day patient, thanks to antibiotic therapy, has seldom e through the chastening experience of a long severe illness with tuberculosis. sequently he has a much more casual attitude to tuberculosis generally and to s and regulations in particular and needs more supervision than formerly to keep in line. In my opinion proper supervision of our patients is a much more cult problem than the medical and surgical management of their disease. Aside n graduate nurses, staff conditions generally have improved and kitchen staff particular shows stability and uniform efficiency.

EDUCATION AND STUDY

The affiliate course in tuberculosis nursing with the Brandon General and ndon Mental Hospitals, though continuing, has been somewhat curtailed by the er hospital retiring from the training of registered nurses. Miss Buchan, who did ellent work, as instructress, left in September and has not yet been replaced. ogether 28 students have taken the course this year as compared to 54 in 1953. addition, 13 public health nurses had a week's instruction in tuberculosis at the atorium. Lectures are given by nursing and medical staff and members of oratory, dietetic, rehabilitation and Public Health Departments.

During the winter months, medical staff held regular evening meetings twice nthly to review and discuss current medical literature. The writer has just pleted a study carried out during the year on the results of five years of chest gery and hopes to have it published shortly. A paper was also written for the adian Nurse on "The Surgical Treatment of Pulmonary Tuberculosis".

BUILDINGS

Construction in the past year has been mainly in completing projects started in 3 which was a peak construction year for the Sanatorium. However, the new ition to the Nurses Home was built mainly in 1954 and was occupied in tember. Considerable landscaping was done about the home this fall with more ded in the spring. This last summer extensive clearing of bush was undertaken n in front of the west infirmary and extending to the lake, with marked im- vement in ventilation and appearance of grounds. Extensive redecoration was e in the downstairs of the old nurses home and new furniture was obtained for new and old sections. The main kitchen was painted and the main dining room corated and recently furnished with drapes.

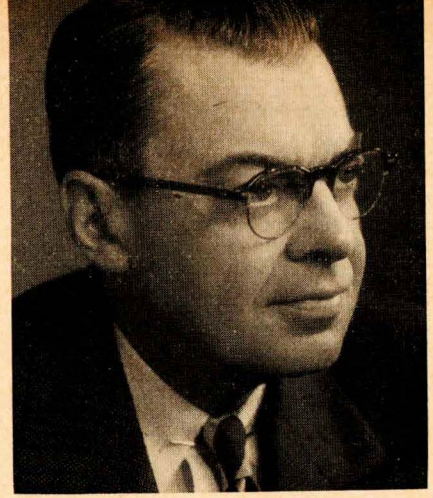
APPRECIATION

So many staff members have done excellent work and given loyal support the past year that it is not possible to mention names; to all these I extend my erest thanks. Sincere appreciation is expressed to the Chairman of the Board, Chairman of the Administration and finance Committee, the Executive Director all members of the Sanatorium Board for their utiring interest, support and ance. I wish to give thanks to the Medical Director of the Sanatorium Board, the erintendents of the various tuberculosis institutions and the Department of Health nuch assistance and cordial relations throughout the year.

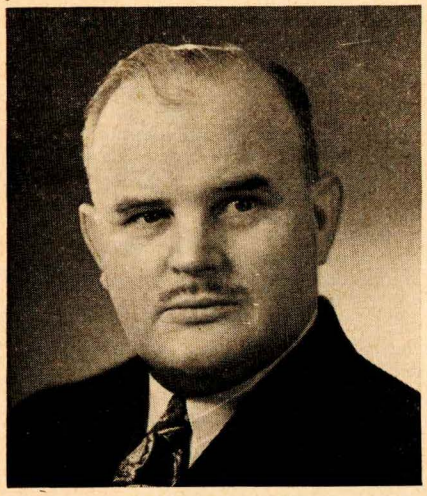
Respectfully submitted,

A. L. PAINE, M.D.
Medical Superintendent.

HON. PAUL MARTIN
Minister of National Health and Welfare



—National Film Board Photo



—National Film Board Photo

P. E. MOORE M.D., D.P.H.
Director, Indian Health Services
Department of National Health and Welfare

Statement
by the
HON. PAUL MARTIN
Minister of National Health and Welfare
for publication in the
1954 Annual Report of the
SANATORIUM BOARD OF MANITOBA

I am happy, on behalf of the Government of Canada, to commend the Sanatorium Board of Manitoba on another year of solid achievement. During 1954, most encouraging progress was evident in Manitoba's vigorous program of tuberculosis prevention and control. Not only was there a striking reduction in the death rate—for Indians and whites alike—but the number of new cases of active tuberculosis dropped significantly and the total number of treatment days in sanatoria was also considerably reduced.

The Federal Government is pleased to support provincial tuberculosis programs through grants-in-aid. These funds are used for a variety of purposes, such as the province-wide hospital admission chest X-ray program which, during 1954, reached more than 85,000 patients in sixty-one hospitals throughout the province. Preventive measures of this kind, coupled with prompt and effective treatment, have achieved notable results in helping to bring tuberculosis more effectively under control.

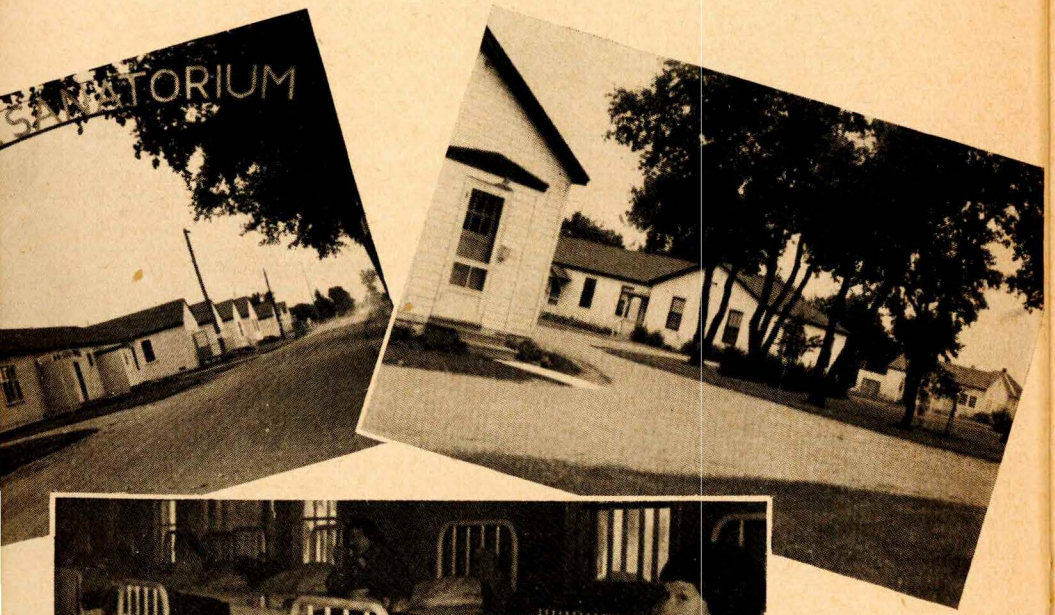
May I acknowledge the willing and expert assistance of the Sanatorium Board of Manitoba in the operation of the Department of National Health and Welfare's Indian Health Services in this province. Largely because of this Board's effective efforts, only twelve Indians died from tuberculosis in Manitoba during the year, a reduction of nearly fifty per cent over 1953. In commending the Sanatorium Board of Manitoba on the outstanding success of its preventive, diagnostic, treatment and rehabilitation activities, may I express the hope that, with continued efforts, we may realize our objective of eliminating tuberculosis as a major threat to human life and health.

Care of Indian Patients

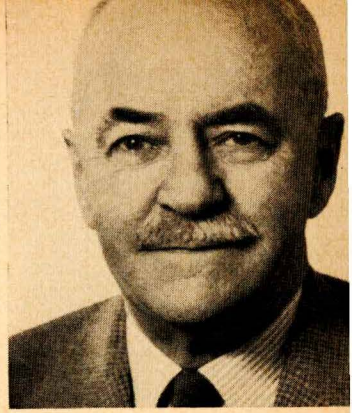
From the Report of the Medical Director

There are 19,700 Indians in Manitoba and the population is increasing. Tuber-
osis has been one of their arch enemies and the story of the "Red Man and the
ite plague" is very remarkable, especially concerning the control of this disease
ong them during the past few years. This experience has demonstrated the
ndness of the application of known anti-tuberculosis principles, namely, case-
ing, treatment and isolation. Other factors have contributed but prevention of
ction with the tubercle bacillus is fundamental. Over 12,000 Indians have been
ayed annually for the past seven years and the best in sanatorium treatment
nptly provided by 500 beds in Brandon Sanatorium, Clearwater Lake Sanatorium,
Dynevor Indian Hospital, which are operated by the Sanatorium Board for the
partment of National Health. In 1940, 166 Indians in Manitoba died of tuber-
osis; in 1950, 79; in 1953, 22; and in 1954 only 12. In 1948, at the start of an all-out
ay survey program, 535 Indians were found to have active tuberculosis. By 1953
was reduced to 165 and in 1954 to 136, with only 16 per cent having advanced
ase. X-ray surveys have been extended into the far Northland to the Eskimos,
being X-rayed in 1954 and 95 are on sanatorium treatment. Dr. W. J. Wood,
ional Superintendent, Indian Health Services, has reported more fully on Indian
erculosis. The Board recommends that there be no relaxation in the present
nsive anti-tuberculosis program among Indians and Eskimos.

The coordination of the non-Indian and the Indian programs has great advantages
the unique relationship between the Sanatorium Board and Indian Health
vices is mutually satisfactory and eminently effective.



Above: Shade trees on the spacious lawns at Brandon Sanatorium.



DR. W. J. WOOD

Report of the Regional Superintendent

INDIAN HEALTH SERVICES

THE war against tuberculosis shows little evidence of an early victory. Granted that we have fewer casualties, both dead and wounded and that we have better armaments, we still have new areas to conquer. More intensive work will be necessary in the guerilla warfare of routing out nests of infection we have so far bypassed or overlooked.

In 1953 we had 24 deaths from tuberculosis in Indians in Manitoba. In 1954 we have had 12 reported to date. Thus last year's rate of 114 per 100,000 is now 60. This is still six times as great as that in the white population, and equals the Manitoba rate of 1935. There were fewer new active cases, 136 in 1954 compared with 165 in 1953.

On X-ray surveys we took chest plates of 12,523 Indians and 2,145 non-Indians. Due to the wandering habits of the natives and the fact that we cannot X-ray in some places at the best time to get the most people, which is Christmas, we cannot do all that we wish.

In 1954 we used our technicians from Sioux Lookout Hospital to X-ray the Central Arctic. We took 1,007 X-ray plates and found 51 requiring admission to sanatoria for treatment or further investigation. All but ten were admitted by the end of 1954. Of these, 16 are being returned due to inactive disease or no evidence of tuberculosis. The processing and reading of these plates was done by the Sanatorium Board Staff at Clearwater Lake. They have our sincere thanks.

Last year we started a more intensive use of B.C.G. by employing special nurses, trained at the University of Montreal. We try to give B.C.G. to all newborn babies and to survey all schools and pre-school children where possible. In 1954 we gave B.C.G. to 1,026 persons which adds up to a total of 7,702 applications since 1948 when we started. We hope to have some evaluation of its usefulness by the spring.

Beds for tuberculosis have been adequate and we do not anticipate an increased demand that could not be met.

In 1955 we will attempt again to X-ray all the Indians and Eskimos we can reach.

At the beginning of 1954 we had 513 Indians and Eskimos under treatment in sanatoria in Manitoba, and 534 at the end of the year.

	Jan. 1st, 1954	Dec. 31st, 1954
Indians—Manitoba	372	363
Indians—Ontario	109	69
Indians—Saskatchewan	4	8
Eskimos	28	94
	513	534

There has been a decrease of 45 in Indians, and an increase of 66 in Eskimos.

What progress has been made was possible through the excellent co-operation of the Sanatorium Board of Manitoba. Once again boundaries were considered non-existent when you X-rayed 50 Eskimos at Ennedai Lake, N.W.T., during the survey at treaty time in the Brochet area of The Pas Agency.

We cannot thank you sufficiently for your interest and assistance in our anti-T.B. work among the native population. On behalf of the Department of National Health and Welfare, I would like to express our deep appreciation, not only to the Board, but to Dr. Ross, Medical Director, and his staff, with particular mention of the Superintendents of the Brandon, Clearwater Lake and Dynevor Sanatoria. Miss Wilson who records the peregrinations of our tuberculosis cases has always given us every help in her power and she and her staff have our sincere gratitude. Dr. Scott seems to be always on hand to examine referred cases and staff for which we are very grateful. We would also like to take this opportunity to thank Dr. D. F. McRae for his valuable assistance in reading our survey X-rays.

Respectfully submitted,

W. J. WOOD, M.D.,
Regional Superintendent,
Indian Health Services.

READ

DYNEVOR INDIAN HOSPITAL

DYNEVOR Indian Hospital completed its sixteenth year of operation by the Sanatorium Board of Manitoba in 1954. This was the busiest year in many ways since the institution began its services to Indians and Eskimos.

Dynevor has increased its beds from 50 to 55 and at times we have had to accommodate 60 patients. During 1954 there were 62 admissions and 63 discharges. The total treatment days of 19,922 is 1,000 more than in 1953 and a new yearly record. One notable feature of the year is that there were no deaths.

About one third of the patients are children. Of the 62 admissions, 39 were first admissions on treat-
nt and 23 were transfers, mainly from Brandon Sanatorium, to continue their
e. Sixteen patients were transferred to other sanatoria for more active treatment,
ticularly surgical. In addition to rest, still a most important part of treatment,
st patients received streptomycin, P.A.S. and I.N.H. during the year, and nearly all
owed steady improvement, both clinically and by X-ray. Good nourishing meals are
necessary part of the cure and I wish to extend my thanks to Miss Chapman,
pervising Dietitian, and our cooks for a carefully arranged menu and attractive
als.

During the summer the hallways downstairs were relaid with attractive gray
oleum, the walls and ceilings were painted, and with the offices, X-ray room,
chen, school room, and small wards being redecorated, the inside of the hospital
ver looked better. The grounds were kept in excellent condition and with new
cing and hedge and additional shrubs and flowers, appearances are very attractive
ring the summer. We hope that at least some attending the Canadian Tuberculosis
sociation meeting in Winnipeg in June will be able to visit Dynevor.

tient Entertainment

Moving picture shows were carried out regularly throughout the year, supple-
nted by those from the Y's Men's Club of the Y.M.C.A. The patients thoroughly
oy their monthly visit. Christmas again was a highlight of the year for patients.
ere were several Santa Claus parties, a profusion of gifts and entertainment, all
which was greatly appreciated. I do thank the numerous organizations and in-
iduals (47 in all), whose thoughtful and generous gifts contributed so much to
happiness and contentment of the patients.

ff

There was practically no change during 1954 and everybody worked harmoniously
the interest of the patients. I particularly thank Miss Stefanson, Superintendent
Nurses, for her efficient and conscientious service. Mrs. Paradoski carried out
secretarial duties thoroughly and efficiently. I would also like to mention our
nior Licensed Practical Nurse, Miss Parker, who is beginning her twenty-first
r of service at Dynevor.

In conclusion, I express my sincere thanks to the Chairman and members of the
natorium Board and the Dynevor Committee for their usual kindly help and
peration during the year. Thanks are also due to Dr. Ross, Dr. Scott, Dr. Morigi
l Mr. Cunnings for their constant help and advice, and also the accounting, X-ray
l laboratory staffs at the Central Clinic. To the Medical Superintendents of all
natoria, to Dr. W. J. Wood, and to the Agents, Doctors and Nurses of the Indian
alth Services, I extend my sincere thanks for their assistance and cooperation
oughout the year.

Respectfully submitted,

WALTER W. READ, M.D.,

Medical Superintendent.

DR. A. H. POVAH

BRANDON SANATORIUM

IT is my privilege to present the Annual Report for 1954, the eighth year of operation of Brandon Sanatorium, a 260 bed institution. This hospital is situated in Brandon, Manitoba, a city of 22,000 people, 140 miles west of Winnipeg. It is operated by this Board for the Department of National Health and Welfare. Our work is devoted to the treatment of chest conditions, mainly tuberculous, amongst Treaty Indians and Eskimos as well as the many other numerous tuberculous conditions. There is also considerable orthopedic work which is directed by our very competent and distinguished consultant, Dr. Alexander Gibson of Winnipeg. Our patients are drawn from a large area which includes the North West Territories, North Western Ontario, and Manitoba. This hospital also provides an out-patient service to which the physicians of Western Manitoba may refer patients with pulmonary diseases. Naturally, the primary purpose of these clinics is to find active cases of tuberculosis. Last year 997 out-patients were examined and 8 active cases of tuberculosis were discovered.

During the year the hospital has been kept comfortably full. There have been, at times, as many as 20-30 empty beds awaiting new admissions which frequently came in groups. Patients days for 1954 were 91,651 which is 1,414 days more than the previous year.

ADMISSIONS AND DISCHARGES

During the year there were 229 admissions to hospital. Of these admissions, 57 were new cases of tuberculosis, 16, or 7%, were re-admissions of known cases of tuberculosis with reactivation of their disease, and 100 were transfers of patients from other institutions for further treatment and for surgery.

Tuberculosis still seems to affect the younger age groups of the native population, at least so far as our admissions are concerned. Of the 173 cases of tuberculosis admitted for treatment, 80, or 46.2%, were less than 20 years of age, 54, or 31.2%, were between 20 and 30 years, 25, or 14.4%, were between 30 and 50 years, and 14, or 8.0%, were over 50 years of age.

Of the 156 admissions for the treatment of tuberculous chest disease, 62, or 39.7%, had either moderately or far advanced disease. This is an encouraging change for in 1953, 52.8% fell into this group and in 1952, 66.65% had advanced disease. However, of the admissions, 100 had treatment in other institutions and were transferred here after improvement in their condition had occured.

There was only one case of tuberculous meningitis diagnosed during the year. This dreaded complication has shown a marked decline over the eight years. This is the first year in which it caused no deaths among our patients.

Thirty-nine Eskimos were admitted in 1954.

Two hundred and twenty-six patients were discharged from hospital in 1954.

This figure includes the two deaths that occurred. Sixty, or 26.5%, of the discharges were patients who had been admitted for review, investigation, or for special treatment of non-tuberculous conditions such as hydatid cyst, bronchiectasis, pneumonia, etc., 140, or 61.8%, were tuberculosis patients discharged as cured; 21, or 9.3%, patients were transferred to other institutions. Of these, 21 transfers, 7 needed further treatment, 11 had treatment completed but needed a further period in Sanatorium and 2 were maximum benefit cases.

Only 3 patients, or .726%, went absent without leave during the year. Of these, 2 were abacillary and considered adequately treated. The third has been re-admitted to another institution.

Of all discharges only 5 had positive sputum. Of these, 4 were transferred to other institutions. The 5th, a difficult patient, was negative to concentrate and sputum culture while here but after discharge a gastric culture was reported positive. From a public health standpoint, he can pretty well be considered non-infectious. Therefore, of 226 discharges, none were infectious, one may require further treatment in Sanatorium, and 23 are continuing treatment elsewhere.

As regards the classification of the 162 discharged patients treated for Pulmonary Tuberculosis (including transfers), 2 or 1.2%, had active unimproved disease, 20, or 12.2%, had active improved disease, 59, or 36.4%, had arrested disease and 81, or 49.9%, inactive disease, i.e., 86.3% had inactive or arrested disease. Also of the 162 discharged successfully treated cases of pulmonary tuberculosis, 58 were treated by lung resection, 10 by thoracoplasty, 4 by pneumoperitoneum, 2 by pneumothorax and the remainder, or 74, by bed rest and chemotherapy.

During the year there were only two deaths. One was a tuberculous death of a Metis. The other was a surgical death, two weeks postresection of a poor risk patient due to pulmonary edema. Therefore, there were no treaty Indian deaths due primarily to tuberculosis.

The average duration of treatment of patients successfully treated for tuberculosis and discharged on medical advice was 721.7 days, a drop of 200 days as compared with 1953. During the year we saw a cleaning up of many old chronic cases, 30 of the cases discharged had been in Sanatorium over 1,000 days. In the future, with modern treatment, we forecast further reduction in the number of days patients are on treatment.

TREATMENT

Treatment has not changed markedly in the past year except that we are a little more conservative in our indications for surgery. Patients are not considered for surgery until maximum improvement occurs on chemotherapy. Then if tomograms show a residual nodule about 2 cm. in diameter or larger it is resected. Smaller nodules are left unless the patient has had a recurrence of disease after adequate chemotherapy. Of course other indications still stand, such as positive sputum, presence of cavitation, atelectasis, bronchiectasis, thoracoplasty failure, etc.

It is now realized that long term chemotherapy of 12 months or more will arrest many lesions that formerly seemed to need resection. Also with resectional surgery we are now able to examine and culture specimens directly so that with experience, we are better able to appraise lesions seen on the X-ray film.

There has been considerable discussion about giving combined 3-drug chemotherapy (I.N.H., P.A.S., and SM) from the onset. We are more in favor of withholding I.N.H. for surgery and for patients who develop toxicity or sensitivity to one of the other 2 drugs. Thus we do not put all our eggs in one basket. With the minimum optimal dose of 8 gms. of P.A.S. p.d., we have encountered very little objection, by the patients, to P.A.S. because of gastric upset. However, a patient admitted with far advanced disease, meningitis, bone and joint or kidney disease, etc., receives all 3 drugs, i.e. I.N.H., P.A.S. and SM.

Rest, chemotherapy, and resection when indicated seem to give the best results in the treatment of pulmonary tuberculosis. As a result, few of the older operative procedures were done during 1954.

During the year there were 84 open chest surgical cases. These include 40 lobectomies, 18 pneumonectomies, 9 segmental resections, 14 wedge resections and 3 thoracotomies. We are proponents of strong suction following lobectomy or partial lobectomy leaving the catheters in 8 days to be sure the remaining lung tissue re-expands and maintains obliteration of the pleural space.

Using this procedure and without reducing the size of the chest cavity by thoracoplasty, we have, with one exception, not had post-operatively, a bronchial leak or air pocket or positive pressure pneumothorax during the year. The one exception was a patient with a destroyed right upper lobe and highly positive sputum. One month post-operatively she developed a bronchial leak and a pneumothorax space. Catheters were re-inserted but failed to re-expand the lung and she developed a tracheo-bronchitis with positive sputum. A thoracoplasty has since been done. The other complications in the 84 cases are:— 2 of the 18 pneumonectomies developed bronchial leaks and empyemas requiring rib resection, 1 positive sputum and increase of contra-lateral cavitary disease following lobectomy, 1 positive sputum possibly due to disease beneath a contra-lateral thoracoplasty following segmental resection and 1 dead 2 weeks post-operatively following a lobectomy and segmental resection due to pulmonary edema. Complications therefore occurred in 5.9% of the open chest cases and death in 1.2%.

All specimens of lung tissue are examined and smears and cultures are done before sending them to the pathologist. Of 71 specimens so examined, 30, or 55%, were positive for tubercle bacilli either by smear or culture.

Other operative procedures done during the year which reflect on the trend of treatment are:

Thoracoplasty with Extraperiostial Lucite Plombage	1
Thoracoplasty following Pnuemonectomy	4
Bronchoscopy	143
Pneumothorax refills	36
Pneumoperitoneum refills	162
Number of Patients receiving Air treatment as at December 31, 1954	1

X-ray Department—The X-ray Department under the able direction of Mr. F. H. Gibson, R.T., has again done outstanding work; 5,481 radiographic examinations were made as compared with 5,413 the previous year.

Mr. Gibson does the clinical photography, an important part of our records; 252 35 mm. slides were made during the year.

Laboratory—The laboratory under the stimulating management of Miss L. Delamater, R.T., continues to add new procedures to the routine work and carries out all procedures accurately and well. This year a Collins Respirometer was added to the laboratory equipment for the pre- and post-operative evaluation of the patient's pulmonary function.

In the laboratory, 13,573 procedures were done.

All patients admitted were examined for intestinal parasites. Only one patient was found to harbour fish tapeworm as compared with 14 the previous year. Five were positive for endamœba histolytica.

Last spring at Dr. Wood's request, antigen tests were done on all resident Eskimo patients and 5 reacted to the Trichinella Antigen and 2 to the Cassoni Test.

During the year the laboratory was enlarged and renovated, much improving the working conditions.

STAFF

Dr. Gordon Coghlin has given outstanding service during the year. Replacements are in sight to fill the vacancies on the Medical Staff. I would like to make known my sincere appreciation of a capable and cooperative staff headed by Mr. G. R. Gowing, Business Manager, and Mrs. I. A. Cruikshank, Superintendent of Nurses.

BUILDING AND MAINTENANCE

Mr. R. Newman and his Engineering Department have kept the hospital in excellent shape during the year.

Office, X-ray and laboratory space in the Administration Wing was enlarged and re-allocated, much improving working conditions here.

The Central Hot Water Supply was set in operation April 1, 1954. This conversion has supplied an abundance of hot water with considerable saving in electrical power costs by eliminating the electrically heated hot water tanks.

Laundry—As of March 1, 1954, all laundry has been done at Manitoba Sanatorium, Ninette. Though the cost is no less than when it was done locally, there is considerable saving through wear and tear and the laundry is beautifully soft and white when it returns.

REHABILITATION

Three teachers and one occupational therapist comprise this department. An average of 80 to 90 patients are registered in academic subjects and 80 to 90 in occupational therapy.

APPRECIATION

In closing, I would thank the Ministerial Association of Brandon for their work among the patients. I would like too, on behalf of my staff and myself, to extend greetings to the Chairman and members of the Board and to the Superintendents of the other Sanatoria in Manitoba. I would like to thank Dr. W. J. Wood, Regional Superintendent of Indian Health Services and his staff and the Federal Department of Health and Welfare for their kind co-operation, assistance and guidance during 1954. I would especiallly thank Dr. E. L. Ross, Medical Director of the Board, and Mr. T. A. J. Cunnings, its Executive Director, for their help, interest and direction during the year.

All of which is respectfully submitted,

A. H. POVAH, M.D.,

Medical Superintendent.

CAREY

CLEARWATER LAKE SANATORIUM

IT IS with pleasure that the Tenth Annual Report of Clearwater Lake Sanatorium is hereby submitted.

The past decade has shown, not only tremendous progress in respect to administration and re-construction, but has also demonstrated an improvement in patient care, and a lessening of the mortality rate, that could not have been foreseen at the beginning.

ADMISSIONS AND DISCHARGES

During 1954, a total of 299 patients were admitted to Clearwater Lake Sanatorium, and of these, 166, or 55.5%, were new cases; 50, or 16.7%, were re-admissions and 74 were reviews. An intensive effort was put orward to admit all those cases showing radiological evidence of active or unstable iberculosis, arising as a result of the Northern Survey program. Consequently, the eview quota was high, and the admissions were almost 100 in excess of 1953.

New discoveries numbered 166, but after investigation, 26 proved to be non-iberculous in origin, and inactive tuberculosis was demonstrated in four others.

Of the remaining 136, evidence of active pulmonary tuberculosis was displayed i 129 cases. Distribution of the disease was as follows:

Primary	Minimal	Moderately Advanced	Far Advanced	Miliary	Pleurisy with Effusion
31	46	29	11	2	10

It is noted therefore, that 87 cases manifested early signs of tuberculosis, where-s 42 lay within the Moderately Advanced to Far Advanced disease classification.

Pleurisy with Effusion was abnormally high in incidence, and predominated in ie Eskimo.

Of all admissions, 16.7% were re-admissions, a new low figure for the Sana-orium, but it should be pointed out that after further analysis, five cases proved o have inactive disease and three suffered from non-tuberculous conditions; so that ie percentage re-admission rate was, in actual fact, lower. By far, the majority of e-admissions, proved non-bacillary upon admission.

Of the 290 patients discharged, institutional deaths numbered five, and was the owest figure yet recorded.

The causative factors are of interest.

A female admission died 24 hours later of pyæmia and showed no evidence of iberculosis. Two others were admitted in moribund conditions, dying of tuberculous ieningitis and grossly disseminated disease, within fourteen days, while the remain-ig two had had far advanced, hopeless disease, for several years prior to their ecease.

Eighty-four cases were transferred to other Board Institutions, the majority eing surgical referrals.

Average Days Treatment

This was computed by omitting:

(a) The new born;
(b) Those transferred to other Institutions;
(c) Those reviewed;
(d) Non-tuberculous conditions.

The therapeutic figure proved to be 459.4 days.

It is the feeling at Clearwater Lake Sanatorium, that bed rests is still vital and iat its combination with chemotherapy is essential for more permanent healing, nd this, in part, may explain the low re-admission figure.

Only one patient left against advice, but no bacilli had been demonstrated in ie sputum.

CHEMOTHERAPEUTIC AND OTHER TREATMENT MEASURES

The various combinations of Isoniazid, streptomycin and para amino salicylic :id were employed as indicated by the type of disease upon admission, and during ie year, 239 cases derived benefit from chemotherapy.

Four patients were treated as ambulant home cases, having been discharged om other Institutions.

In keeping with the modern trend, no pneumothoracies were induced during the year and no refills were given at its close. There were merely three patients receiving pneumoperitoneum by December 31, 1954.

To impress the fact that surgery is readily available to the patient, it should be pointed out that 50 cases were transferred to the Brandon Sanatorium as potential surgical problems, and that surgical treatment was rendered promptly.

A full Academical Teaching program is in effect at the Sanatorium, and it has been found possible to extend bed-side teaching, by grouping patients into their respective routine exercise categories. A patient library has been formed and has proved a popular innovation.

Arts and Crafts are also taught and the emphasis has been placed upon diversional play therapy for the young, and constructive therapy for the older patients. Native art is promoted and an attempt is being made to educate the Indian and Eskimo so that they might appreciate the more classical forms of music.

MEDICAL DEPARTMENTS

X-ray Department—The installation of a planigraphic attachment to the X-ray unit at the beginning of the year, enabled diagnoses to be established with greater certainty, and proved invaluable in the assessment of operable disease.

The total of institutional films numbered 2,561, a marked increase over former years, and was partly due to the fact that 147 individual planigraphic examinations were made, and partly to the fact that 299 patients were admitted.

Routine in-patient chest films numbered 1,031, and at the time of each X-ray examination a full medical summary and laboratory investigation was performed. Subsequently, all cases were reviewed in Conference.

Laboratory—Total examinations numbered over 7,000 and were comparable to 1954. An effort is being made to procure a registered technician for this Department.

Out-patient Department—This Department is relatively small, as most patients arrive from distant points, and require admission in order that a full investigation may be made. Nevertheless, 145 Out-patients were examined during the past yeai and new discoveries of tuberculosis numbered seven.

Hospital Admission X-ray Program—Over 2,000 films were read at St. Anthony's Hospital, in The Pas, during 1954, and approximately 14 cases emerged with active tuberculosis requiring admission to Sanatorium.

INDIAN AND ESKIMO CLINICS

Clearwater Lake Sanatorium has indeed become the Northern Diagnostic Centre!

The entire interpretation of the results of Treaty and Eskimo X-ray Surveys, have taken place at the Sanatorium.

A total of 10,424 clinic films were reported upon during 1954, an increase of over 1,000 as compared with 1953.

In conjunction with the Department of Indian Affairs, a total of 909 Eskimos were X-rayed, at nine sites, and it is understood that this worthwhile project will be extended during the coming year. An analysis of disease classification upon admission to Clearwater Lake Sanatorium is given below, and is self-explanatory.

DISEASE CLASSIFICATION OF ADMISSIONS TO CLEARWATER LAKE SANATORIUM BY DECEMBER 31st, 1954.

	Minimal	Moderately Advanced	Far Advanced	Primary	Pleurisy with Effusion	Pott's
Indian	27	11*	6**	7	1	1
*4 Bacillary ; **All Bacillary.						
Eskimo	7*	5**	Nil	5	6	Nil
*1 Bacillary ; **3 Bacillary.						

In all, 88 Treaty Indians were admitted as a direct result of the Treaty X-ray Survey, and 40 Eskimos were flown in from the nine points visited during the Fall. As demonstrated in the table above, 53 Indians, and 23 Eskimos, were ultimately admitted to Sanatorium with active tuberculosis, and were retained for treatment.

In addition to the reading of the above X-rays, routine chest films are regularly interpreted for Chesterfield Inlet, Fort Churchill, and Norway House Hospitals and these are often productive in respect to new discoveries.

MEDICAL STAFF

ysicians: With the exception of Dr. F. P. Hulke, who unfortunately resigned, ving accepted an appointment in London, Ontario, the supporting strength of edical staff during 1954, did not prove satisfactory. The other medical officers on iff have been on an intern basis only and have left as examination time has rived. Dr. John Silinsky a recent addition, shows promising signs of permanency.

irsing Staff: The annual fluctuation of staff complement has manifested itself arly during the past two years. The winter months, from October to May, find e Institutional staff at a low ebb, but, an "affiliation" with a Mennonite Comttee, under the direction of Mr. Toews, the situation is relieved during the maining months. A plan is under consideration to provide a constant supply of ined Mennonite staff, throughout the year, and this would certainly alleviate the uation.

HOSPITAL MAINTENANCE

To improve living conditions at Clearwater Lake Sanatorium there has been w construction and re-decoration. During the year two new residences were nstructed on the grounds and were occupied by the Business Manager and Senior esel Operator. This enabled two families to move into the vacated buildings, that ere on steam heat and sewage line. Although the total residences now number ten, ven families still reside in the original Army-type huts, and it has been suggested at a four-suite duplex might be constructed during 1955.

Within the Institution, the past year saw the interior decorating of the administative wing and offices. The male children's ward, originally partitioned into dividual units, was opened up into a spacious, brightly painted room, which has cilitated discipline and the enforcement of rest.

The pre-existing Conference Room was enlarged and re-shaped, and a new rkroom replaced a disused casualty station, thereby affording marked improvement facilities.

The hospital kitchen, sorely in need of repair, underwent extensive alterations, d new equipment was installed, including garburators and new stoves.

To facilitate garbage disposal, an incinerator was installed adjacent to the boiler om and is fed from inside the Institution; a desirable feature in the extreme rthern climate.

Fire drill and the checking of alarms was carried out regularly throughout the ar.

Laundry: The Laundry Department once again handled over 300,000 individual ms, an increase of approximately 6,000 pieces over the past two years.

APPRECIATION

I thank the Chairman of the Board, the Chairman of the Clearwater Lake natorium Committee, Mr. R. H. G. Bonnycastle, and the Members of the Sanatorium ard, for their deep understanding of the problems that have risen throughout 54, and for their assistance in these matters.

The medical and administrative counsel of both Dr. E. L. Ross, the Medical rector, and Mr. T. A. J. Cunnings, the Executive Director, has been invaluable the smooth functioning of the Institution.

It is anticipated that the cordial relationship existing between myself and my low Superintendents in other Institutions will continue in the same vein throughout the coming year.

I appreciate the friendly working basis that exists between ourselves and Dr. . J. Wood of the Department of Indian Affairs and his staff, and express satistion with the coordination existing between Clearwater Lake Sanatorium and the rthern Medical Superintendents, Nursing Superintendents, Dispensers and Agents.

We thank the Medical Practioners in The Pas and Flin Flon for their co-operon and their understanding of the problems involved in the prevention and lation of Tuberculosis.

In closing, I wish to express my personal thanks to the staff at Clearwater Lake natorium for their loyalty and untiring efforts that are directed toward the covery and comfort of the tuberculosis patient.

Respectfully submitted,
STUART L. CAREY, M.D.,
Medical Superintendent.

Part of Clearwater Lake Sanatorium with the Airport hangar in the background.

Training in the Sanatorium is an important part of the Rehabilitation process. Here Miss Gertrude Manchester, a member of the teaching staff, instructs a group of girls in one of the pavilions at Manitoba Sanatorium.

INCLAIR

ST. BONIFACE SANATORIUM

THIS report, with the Statistical Tables, is for the calendar year 1954. St. Boniface Sanatorium contributes 288 beds for the treatment of all forms of tuberculosis in this Province. The total number of treatment days for the year under revision was 101,060.

ADMISSIONS AND DISCHARGES

Two hundred and seventy-seven patients were admitted to treatment. Of this number 241 were for tuberculosis of the respiratory system and of these 125 were classed as bacillary, while the remainder, 116, were non-bacillary.

The extent of disease was found to be: minimal 17.1%, moderately advanced 33.2%, far advanced 38.2%, and 11.5% fall into a miscellaneous group itemized in the table 7 (A) attached.

Two hundred and seventy-three patients were discharged: 66.3% had completed eatment, 8.4% transferred to other Institutions, 18.6% left against medical advice, 2% for disciplinary reasons and 15 or 5.5% were deceased.

Bone and Joint Tuberculosis—Approximately 10% of the patient population is omprised of so-called bone and joint tuberculosis, as the majority of this type of isease in white people is, by arrangement, channelled to this Sanatorium. Dr. Henry unk, our Orthopaedic Consultant, conducts clinics and does the surgery required treatment.

TREATMENT

All admissions to Sanatorium receive medical histories, physical examinations, boratory and radiological study before their treatment is outlined in final form. subsequent review examination is done on each patient at three-monthly intervals. his is a form of stock taking and has proved advantageous to the patient and tends shorten the average length of time spent n Sanatorium.

AVERAGE TREATMENT DAYS

Pleurisy with effusion	230 days
Pulmonary Tuberculosis, minimal	364 days
Pulmonary Tuberculosis, moderately advanced	441 days
Pulmonary Tuberculosis, far advanced	529 days

The economic loss is even greater because almost all patients require a period home convalescence before being rehabilitated.

Two hundred and twenty-eight pulmonary cases were classified on discharge as llows: inactive 3.9%; arrested 53.2%; active improved bacillary 7.4%, non-bacillary .3%; active unimproved 4.3%; deceased 9 persons or 3.9%.

Pneumothorax, Pneumoperitoneum and Thoracoplasty.—This form of treatment becoming rare in our Sanatorium. In fact pneumothorax was not initiated in a ngle case during 1953 or 1954. One case only of pneumoperitoneum was started in 54. Thoracoplasty is usually chosen when resection therapy is contra-indicated. velve patients received a thoracoplasty in 1954.

Pulmonary Resection.—Seventy-one patients were treated last year by pulmonary section (32 in 1953). There were four pneumonectomies, 17 lobectomies, 9 segental resections, 31 wedge resections and one straight decortication to expand a evious pneumothorax.

TEACHING

Practical Nurses from the St. Boniface Training School spend three months in e Sanatorium during which time they receive instruction and regular lectures. edical Students from the Third Year receive three hours instruction weekly during e teaching term. Twelve internes from St. Boniface Hospital each spend one onth in the Sanatorium. Part of the Fourth Year Class is on a rotating service. iese Students come for a week at a time. This effort, on the part of the Medical aff, is made to improve the treatment of the tuberculous of this Province and to vance the anti-tuberculosis program.

INCOME AND EXPENSE

The following is a summary of the 1954 statement, to which we have added the corresponding figures for the preceding two years:

	1954	Per Diem	1953	Per Diem	1952	Per Diem
Operating and other Income	$471,605.94	$4.67	$434,473.65	$4.32	$432,856.10	$4.27
Operating Expenditure	$564,062.77	$5.58	$522,531.91	$5.19	$460,070.51	$4.54
Operating Deficit	$ 92,456.83	$ .91	$ 88,058.26	$ .87	$ 27,214.41	$ .27
Hospital Treatment	101,060 Days		100,614 Days		101,314 Days	

There as a slight increase in the number of days for 1954, and the income shows an increase of $37,132.29. But this is offset by an increase of $41,530.86 in the expenses. The 1954 wages and salaries, less board and room, show an increase of $42,631.63, as compared with 1953. The new schedule of rates, which will be fully effective as from January 1, 1955, should materially help towards a substantial improvement for 1955.

Occupational Therapy.—The Department of Occupational Therapy has been active during the year and is supervised by Miss E. Swatland. The Department of Rehabilitation, supervised by Mr. Metcalfe, under the direction of the Sanatorium Board of Manitoba, the Handicraft Department, supervised by Mr. Alex Vermette and the School being operated by Miss J. Molin and Miss G. Hornick, have all contributed to the treatment and the smooth operating of the Institution.

APPRECIATION

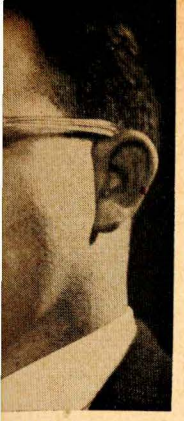
The Medical Department wishes to express appreciation and thanks to the following individuals and Agencies who have co-operated with the Sanatorium to the fullest extent: The Manitoba Physicians sending patients; the Department of Health for the Province of Manitoba and the Dominion Government; the Department of Social Welfare of the Province and Cities; the Superintendents and Staff of the various Manitoba Sanatoria; the Sanatorium Board of Manitoba; the Central Tuberculosis Clinic and the Central Tuberculosis Registry.

Finally I wish to express my thanks and appreciation to the Sisters, members of the Medical Staff, and staff of the Sanatorium in general, for services well rendered during the year.

Respectfully submitted,

A. C. SINCLAIR, M.D.,
Medical Director.

St. Boniface Sanatorium, Main Entrance



HILDES

Winnipeg Municipal Hospitals

KING EDWARD MEMORIAL HOSPITAL

I BEG to submit this report of the activities of the tuberculosis division of the Winnipeg Municipal Hospitals for 1954.

I would first like to acknowledge the loyal services of the attending medical staff of the King Edward Hospital and also of the Nursing Supervisor, Mrs. A. J. MacMorran. Their tolerance and sympathetic understanding has done much to ease the burden of ill health borne by the patients. The services of the nursing division, the X-ray department, the educational rehabilitation department and the various ancillary rvices are also gratefully acknowledged. Also deserving honorable mention are the ıxiliary organizations which have contributed much to the comfort and entertainent of the patients.

By virtue of the pending closure of the tuberculosis division of the Winnipeg unicipal Hospitals there was a substantial decline in admissions during the months is unit functioned. But even with this sharp decline it was found necessary on ore than one occasion to accept emergency admissions of tuberculosis patients who uld not be accommodated elsewhere in the urban area.

It was in 1912 that the King Edward Memorial Hospital was opened for the eatment of tuberculosis. During the last days of August, 1954, the few remaining berculosis patients were discharged or transferred to other hospitals and the work closing down the Out-patient Department was begun.

The latter involved the writing of letters to some 350 people—ex-patients, ntacts and suspects—inviting them to report for a final chest X-ray and interview. pproximately a 40% response was obtained and to each of the remainder another tter was sent advising recheck examination at the Central Tuberculosis Clinic. every case the X-rays were reviewed and forwarded to the Central Tuberculosis inic with a letter covering the pertinent details of the case. Thus 42 years of rvice and care for the tuberculous have terminated.

During this period of almost half a century, 6,454 patients were admitted for eatment. The therapy they have received has undergone profound changes over e years. Antibiotics have become the mainstay of treatment. Pneumothorax is w obsolete. Surgical excision of diseased lung has become an accepted principle. these developments surgical research, the pulmonary physiologist, the bacteriogist and the chemist have made major contributions. To the patient these developents mean a shortened sanatorium stay and better treatment of his disease.

In 1912, 129 patients were admitted for treatment of tuberculosis and in 1953, 0. During the intervening years the annual admission rate has fluctuated between high of 234 and a low of 68, with an over-all average of 150 patients a year. It is t that this illustrates the constant demand for sanatorium facilities within the innipeg area, a demand probably engendered by the natural desire to be close to me and family.

Thus in an era of antibiotic therapy and of pulmonary surgery, in times when the sciplines of medical research are a necessity in good medical and surgical practice, a period when a tuberculous patient can often return to work early while ceiving specific antibiotics, the closing of an institution for the treatment of berculosis is indeed a sign of the times. However, the closing of such facilities a metropolitan, medical teaching area is entirely contrary to modern trends and to be regretted.

Respectfully submitted,

J. A. HILDES, M.D.
Medical Director

Re-Employment

Report of the REHABILITATION DIVISION

E. G. METCALFE

REHABILITATION in Canada made an important advance in 1954 with the appointment of Provincial Coordinators on a nation-wide scale. A significant result of this action by national and provincial governments will, of course, be the strengthening of the bond of unity between all rehabilitation agencies, indicating more clearly a common goal and making available the physical equipment necessary for achieving that goal as quickly and as efficiently as possible.

The tuberculosis program in Manitoba will benefit greatly from the stress laid on vocational training by this coordinated plan. Vocational training has always been an important part of the program of the Sanatorium Board, and the financial help that will now be made available to ex-patients will undoubtedly result in more and better vocationally trained people. This will then inevitably lead to an increase in satisfying job placements.

The in-sanatorium emphasis on vocational training was maintained in 1954 with 140 patients taking correspondence courses. Ex-patients who were accommodated at the Manitoba Technical Institute numbered 16, and 3 completed their training in barbering.

The activity of sanatorium patients in the academic field will again be noticed and, it cannot be repeated too often, an all-embracing rehabilitation program must give a great deal of attention to its pre-vocational training program. Our training institutes are continually finding it necessary to raise entrance qualifications in order to keep up with technological advance. Our case-finding methods in tuberculosis control are, more and more, bringing to sanatoriums people whose educational background is poor. If the ultimate objective of satisfactory job-placement is to be applied to these patients, then our pre-vocational training program assumes great importance.

PERSONNEL

Our staff set-up altered only slightly in 1954, with major changes being the resignation of two of our members. Miss Gladys Motheral, after 5 years of service with the Sanatorium Board, left their employ with the closing of the King Edward Memorial Hospital in Winnipeg in August. Miss Mildred Johnston, our homemaking instructor, resigned in September after 3½ years' service at both the Manitoba Sanatorium and the St. Boniface Sanatorium.

The rehabilitation services at Ninette were, once again, under the capable supervision of Miss Margaret Busch. Miss Gertrude Manchester and Mr. Guy Hamel continued to make a valuable contribution to our rehabilitation program. In April, Mrs. Katherine Venables assumed her duties as Occupational Therapist and the work and progress of that department has been excellent. Miss Ada Jakeman assists Mrs. Venables in the craft shop and Mr. J. Mahr handles the library facilities in place of Mr. R. Kahler.

Miss Jeanne Molin continued as vocational instructor at the St. Boniface Sanatorium while Mr. Alex Vermette carried on as supervisor of the workshop.

MANITOBA SANATORIUM

The Manitoba Sanatorium continues to be the more active of our institutions by virtue of a somewhat larger staff. Briefly, the work done there can be described as follows:

Patients engaged in vocational training	88
Patients engaged in pre-vocational training	191
Number of units completed	53
Patients engaged in homemaking instruction	59[1]
Patients engaged in occupational therapy	222[2]

[1]) Up to September 1954
[2]) From April 1954.

In the vocational training, typewriting is by far the most popular subject. In der to give patients as complete training as possible, it is necessary to supply a od type of machine for practising. During the year two standard typewriters were rchased and these enable the patients to turn out both more and a better quality work.

The occupational therapy has been a valuable aid under Mrs. Venables, with me attention being given to art and design as well as to the other more familiar bbies—leather work, copper tooling, etc. Several displays were set up during the ar at bazaars in neighboring churches and this helps to familiarize the general blic with the type of activity carried on in a typical sanatorium. A small saw and combination buffer-sander were purchased during the year and these will be of eat help to the participating patients.

The Sanatorium lost a valuable activity with the resignation of our Home conomist. This course had provided a very worthwhile source of information to the usewives and it had a steady, interested following. It is hoped that the course ll be resumed within the very near future.

ST. BONIFACE SANATORIUM

The adult population of St. Boniface Sanatorium is served by one vocational structor. This work is carried on efficiently by Miss Molin although her task is a rmidable one. Patients were active in the following ways:

Vocational training	40
Pre-vocational training	61
Workshop	97
Occupational Therapy	179

Once again, typewriter training is popular and the four typewriters provided the Sanatorium Board enable the patients to progress at an above-average rate.

The workshop continues to provide valuable training in the use of power tools both wood and plastic. Under Mr. Vermette's instruction, articles of beauty and ality are created by the patients who are carefully supervised by the medical staff. ne Sanatorium is gaining much recognition for this particular activity. A new type grinding tool, operated by means of a flexible cord, has resulted in a type of carved astic that is craftmanship at its best. This tool was purchased during 1954.

In September, after 14 years of service, Miss Eva Swatland left the Occupational nerapy department of the Sanatorium. Her place was taken by Miss Ann Hargreaves.

KING EDWARD MEMORIAL HOSPITAL

An era ended in 1954 with the closing of the King Edward Memorial Hospital. was always the scene of much activity in the rehabilitation field and this was aintained during the first half of the year, although the hospital population was ry much reduced in advance of the actual closing date. The active patients were, course, accommodated in other institutions and are carrying on their work there.) to August, Miss Motheral was able to report:

Patients engaged in vocational training	16
Patients engaged in pre-vocational training	18
Patients engaged in occupational therapy	54

In the early spring, a large display of handicraft materials was set up in the . Stephens-Broadway United Church. It is no exaggeration to say that this was the ost popular of all displays in the Church, and evidence of this popuplarity was the ct that over $75.00 patient handicraft was sold. Miss Motheral spent a busy day swering many questions concerning in-hospital facilities and activities which ere asked by an enlightened public.

BRANDON SANATORIUM

The activity of the Occupational Therapy division under Mrs. Vera Davidson ntinued on a very satisfactory scale. Two hundred and six (206) patients were commodated during the year and the extent of their interests and abilities has been ly amazing. In the academic section, Mrs. Jeanne Deroche was joined by Mrs. athilda Ames and Miss Pat Williams. The work there has been extremely valuable d productive.

Dr. A. H. Povah's attention to the work of the Rehabilitation division is grate- lly acknowledged.

CLEARWATER LAKE SANATORIUM

One hundred and seventy-nine (179) patients at Clearwater Lake made use of the Occupational Therapy facilities, under the supervision of Miss Olga Kischook. In addition, some 60 smaller children were given organized play therapy. This has proved quite useful in introducing the pre-school children to the idea of planned recreation.

Miss A. Marion again capably fulfilled her duties as academic instructor, and this activity opened new fields of endeavor to many previously untrained older patients.

Throughout the year, the cooperation and interest of Dr. S. L. Carey, Medical Superintendent, was very much appreciated.

DYNEVOR INDIAN HOSPITAL

At Dynevor, Mrs. E. V. Pruden has been supervising both the academic activity and the occupational therapy. The hospital has always been known for the amount of activity among the patients, and the close association between them and Dr. W. W. Read, the Medical Superintendent, has been conducive to a continued high quality of work.

NATIONAL EMPLOYMENT SERVICE

During the year many improvements in the referral system to the National Employment Service were introduced. These have all served to speed up the accommodation of ex-patients and have added greatly to the efficiency of this most important part of our over-all rehabilitation program.

The cooperation of Mr. H. J. Thompson, of Employment Operations, and of Mrs. E. M. Robertson and their staffs is gratefully acknowledged.

THE MESSENGER OF HEALTH

The Messenger completed another year of operations, continuing its original policy of bringing to patients and staff the latest developments in the field of treatment and rehabilitation. The service it offers adds appreciably, we feel, to the over-all field of tuberculosis control in Manitoba.

CONCLUSION

It has been said that "No one is more severely handicapped than the disabled person who must compete in the unskilled labor market." This was perhaps never more true than it is today with the problem of rising unemployment, where the unskilled laborer, disabled or not, has little hope of finding steady employment. And a rehabilitation program must work toward more than just "steady" employment for the disabled. It must do its best to insure that that employment will be satisfying to the individual and within the bounds of his physical capabilities.

The tuberculosis program in Manitoba adopts the principle that the fastest and best way to the greatest good of the greatest number is through a sound vocational training curriculum, coupled with competent vocational counselling. This, we feel, is being accomplished. Our instructors not only are experts in the teaching field, they are a vitally interested part of the rehabilitation team and regard every patient as a unique problem requiring individualized care. Continual emphasis on this point enables the program in Manitoba to maintain its high standard of operation.

APPRECIATION

The work of the Rehabilitation Division could not possibly be handled without the complete cooperation of other members and divisions of the Sanatorium Board. To the Business Managers, Mr. Kilberg, Mr. Gowing, and Mr. Christianson, to Dr. Paine, Dr. Scott and Dr. Sinclair of the Institutions, to Miss E. Wilson and her staff of the Central Registry, and to Dr. Ross and Mr. Cunnings, the thanks and appreciation of the Rehabilitation Division are extended.

Respectfully submitted,

E. G. METCALFE,
Director of Rehabilitation.

ecords

CENTRAL TUBERCULOSIS REGISTRY

	Whites		Reported as: Indians		Eskimos	
	1953	1954	1953	1954	1953	1954
ents on File, Dec. 31	3,115	3,445	1,208	1,285	55	122
imary type	24	27	25	19	1	3
e-infection type	3,091	3,418	1,183	1,266	54	119
Cases diagnosed in Manitoba January 1—December 31	656	509	246	242	47	90
imary	25	40	31	26	5	9
e-infection	631	469	215	216	42	81
hese, New Active Cases—Classified	346	301	165	136	44	79
imary type	25	40	31	26	5	9
nimal	88	64	46	43	11	27
oderately advanced	73	65	39	20	12	13
r advanced	50	54	22	13	10	14
lmonary tuberculosis, extent not stated	17	9	7	3	1	1
iberculous pleurisy	43	34	6	11	—	7
on-pulmonary tuberculosis	50	35	14	20	5	8
Diagnoses admitted to Sanatoria	223	227	112	115	19	72

STATIONARY AND TRAVELLING CLINICS AND SURVEYS

	Whites	Indians	Eskimos
MINATIONS at all clinics and surveys January 1—December 31, 1954	238,940	12,929	910
ationary Clinics	9,348	205	1
avelling Clinics	3,308	67	—
rveys	226,284	12,657	909
/ CASES of tuberculosis diag. at Clinics and Surveys	369	140	27
ationary Clinics	162	15	—
avelling Clinics	29	2	—
rveys	178	123	27
hese, new cases of Primary Infection Type	33	13	3
ationary Clinics	20	2	—
avelling Clinics	6	1	—
rveys	7	10	3
Cases of Re-infection type	336	127	24
ationary Clinics	142	13	—
avelling Clinics	23	1	—
rveys	171	113	24
TACTS EXAMINED at clinics	5,024	50	1
ationary Clinics	2,845	30	1
avelling Clinics	2,179	20	—
TUBERCULOUS PATIENTS REVIEWED	5,113	715	3
ationary Clinics	3,761	77	—
avelling Clinics	549	16	—
rveys	803	622	3
mothorax treatments given at all tationary clinics	2,759	2	—

INSTITUTIONAL STATISTICS

	Whites		Reported as: Indians		Eskimos	
	1953	1954	1953	1954	1953	1954
PATIENTS IN SANATORIA as at December 31	602	525	485	444	28	95
PATIENTS ADMITTED to Sanatoria January 1 to December 31	812	801	387	397	33	144
Tuberculous patients admitted	725	713	297	311	23	83
First Admissions	300	282	184	179	23	77
Primary type	8	26	18	18	1	8
Re-infection type:						
Minimal	81	72	53	68	2	25
Moderately advanced	88	68	50	38	8	16
Far advanced	63	65	37	23	8	14
Tuberculous pleurisy	38	31	5	10	—	6
Non-pulmonary tuberculosis	22	20	21	22	4	8
Re-admissions	317	294	101	113	—	6
Primary type	2	1	4	2	—	—
Re-infection type:						
Minimal	50	44	31	42	—	2
Moderately advanced	110	107	26	22	—	1
Far advanced	121	111	27	32	—	1
Tuberculous pleurisy	5	7	3	1	—	—
Non-pulmonary tuberculosis	29	24	10	14	—	2
Patients admitted for review	108	137	12	19	—	—
TUBERCULOUS PATIENTS Transferred	255	259	108	128	10	11
PATIENTS DISCHARGED from Sanatoria January 1 to December 31	830	870	392	450	16	78
Tuberculosis patients discharged	738	779	305	371	8	24
Discharged after review	108	137	12	18	—	—
Discharged with inactive tuberculosis	90	85	66	151	1	15
Discharged with arrested tuberculosis	246	321	114	140	3	3
Discharged with act. imp. tuberculosis	205	150	92	50	2	2
Discharged with act. unimp. tuber.	51	58	9	8	—	1
Discharged dead	38	28	12	4	2	3
Discharged against medical advice	91	89	24	21	—	—

ASSOCIATED CANADIAN TRAVELLERS

DURING 1954, the Winnipeg and Brandon Clubs of the Associated Canadian Travellers continued to give invaluable support to the preventive program of the Sanatorium Board of Manitoba. Each club arranged two series of amateur talent contests, one in the spring and one in the fall, which were broadcast on Saturday nights over radio stations CJOB in Winnipeg and CKX in Brandon. The two radio stations very generously contributed the time for these public-service broadcasts.

During the year, the Travellers turned over to the Board for the anti-tuberculosis campaign $22,150. Added to the amounts previously given, this makes a total of $234,574 contributed by the Travellers since they began their magnificent work against tuberculosis in 1945.

The thanks of the Sanatorium Board of Manitoba are extended to the Associated Canadian Travellers and to radio stations CJOB and CKX for their enthusiastic and wholehearted assistance, through which they are rendering a service of inestimable value to the people of Manitoba.

BALANCE SHEET as at 31st DECEMBER, 1954

MANITOBA SANATORIUM, SPECIAL FUNDS AND CENTRAL TUBERCULOSIS CLINIC

ASSETS

	Manitoba Sanatorium	Central Tuberculosis Clinic	
ash on hand and in bank	$ 1,500.00	$ 200.00	$ 1,700.00
ccounts Receivable:			
General Account:			
Treatment account	86,274.00	15,642.00	
Federal health grant	3,904.25	5,007.85	
Special Grant	——	7,004.47	
Provincial Government:			
Capital grant	——	8,257.02	
Reciprocal accounts	3,573.60	208.50	
Federal Government	8,507.32	1,374.50	
Other	3,471.90	1,229.11	
	105,731.07	38,723.45	144,454.52
equests:			
Estate of John Yellowlees, deed of land	1.00		1.00
ventories and Prepaid Expenses:			
Supplies on hand, per Schedule "I"	43,790.15	7,969.80	
Prepaid expenses	3,308.99	223.02	
	47,099.14	8,192.82	55,291.96

and, Buildings, Plant and Equipment:	Cost	Depreciation Reserve	Book Value	
Land and improvements	$ 10,852.71	$ ——	$ 10,852.71	
Buildings	774,654.42	507,042.36	267,612.06	
Plant and machinery, heating, lighting, water and sewer	179,612.86	106,915.71	72,697.15	
Furniture	32,390.51	18,477.43	13,913.08	
Equipment	116,722.30	73,178.05	43,544.25	
Laundry Equipment	43,962.19	7,927.73	36,034.46	
Automobile	2,288.42	2,094.34	194.08	
Horses, harness, etc.	1,572.39	1,572.39	——	
Spur track, etc.	700.85	700.85	——	
Fire equipment	3,911.82	3,911.82	——	
Fire protection reservoir	12,304.27	5,167.72	7,136.55	
	1,178,972.74	726,988.40	451,984.34	
Furniture and equipment Central Tuberculosis Clinic	5,698.91	1,201.96	4,496.95	456,481.29

eneral Account:			
Cash on hand and in bank		$ 3,808.13	
Provincial Government:			
Treatment account	$196,825.50	——	
Special grant	8,750.00	205,575.50	
Federal health grant		11,800.38	
Other		148.42	221,332.43
ndowment Fund No. 1:			
Cash in bank		6,151.62	
Investments at par, Schedule "6"		109,955.00	
Accrued interest on investments		927.87	
Bequest—Christian Estate		1.00	117,035.49
ndowment Fund No. 2:			
Cash on hand and in bank		87,428.68	
Accounts receivable:			
Department of National Health and Welfare, Indian health services		3,579.45	
General account, Federal health grant		2,932.32	
Other		539.70	
Investments at par, Schedule "6"		28,000.00	
Accrued interest on investments		278.20	
Inventories and prepaid expenses		1,172.23	
Fixed assets:			
Vehicles and mobile units	26,524.23		
X-ray and similar equipment	37,051.98		
Furniture and other equipment	13,837.32		
	77,413.53		
Less: Reserve for depreciation	66,851.97	10,561.56	134,492.14
nployees' Emergency Fund No. 1:			
Cash in bank		439.99	
Investments at par, Schedule "6"		17,000.00	
Accrued interest on investments		105.16	17,545.15
nployees' Emergency Fund No. 2:			
Cash in bank			437.92
			$1,148,771.90

LIABILITIES

	Manitoba Sanatorium	Central Tuberculosis Clinic	
Bank of Montreal:			
Current account	$ 44,752.66	$ 21,016.49	
Demand loan	42,500.00	——	
	$ 87,252.66	$ 21,016.49	$ 108,269.15
Accounts Payable:			
Trade	19,299.44	4,183.68	
Other	5,306.69	2,273.62	
Accrued wages	8,823.76	4,287.13	
Accountable supplies	——	1,938.89	
	33,429.89	12,683.32	46,113.21
Patients' Store and Contingent Account, Schedule "3"	1,214.45		1,214.45
Capital Surplus, Schedule "7"	227,311.53		227,311.53
Surplus:			
Balance at 31st December, 1953	249,366.44	15,813.74	
Add: Contributed capital assets, Federal health grant	1,562.31	——	
Special grant	——	1,114.97	
Building fund grant expended	7,099.95	——	
Income adjustments, prior years	36.90	——	
Excess of income over expenditure—Exhibit "8"	——	295.35	
	258,065.60	17,224.06	
Deduct: Income adjustments, prior years	——	48.40	
Inventory adjustment	62.91	——	
Excess of expenditure over income—Exhibit "8"	157.92	——	
	220.83	48.40	
	$257,844.77	$ 17,175.66	275,020.43
General Account:			
Treatment Account:			
Manitoba Sanatorium	$ 86,274.00		
Central Tuberculosis Clinic	15,642.00		
Others	94,909.50	$196,825.50	
Special grant		12,671.00	
Federal health grant		11,835.93	221,332.43
Endowment Fund No. 1:			
Capital account, Exhibit "C"			117,035.49
Endowment Fund No. 2:			
Accounts payable		5,888.35	
Accrued wages		2,615.73	
Appropriation for glasses and dentures		489.00	
Capital account, Exhibit "C"		125,499.06	
			134,492.14
Employees' Emergency Fund No. 1:			
Capital account, Exhibit "C"			17,545.15
Employees' Emergency Fund No. 2:			
Capital account, Exhibit "C"			437.92
			$1,148,771.90

WILLIAM WHYTE
Chairman of the Board

T. A. J. CUNNINGS
Executive Director and Secretary-Treasurer

The Chairman and Members,
The Board of Trustees,
Sanatorium Board of Manitoba,
Winnipeg, Manitoba.

We have completed an examination of the books and accounts of Manitoba Sanatorium, Central Tuberculosis Clinic and Special Funds for the year ended 31st December, 1954. Our examination was made in accordance with generally accepted auditing standards and included such tests of the accounting records and other auditing procedures as we considered necessary in the circumstances.

The accounts do not include any provision for interest on capital invested. With minor exceptions, depreciation has been provided only on those assets acquired since 1946.

We have obtained all the information and explanations we have required and, in our opinion, the attached Balance Sheet, Exhibit "A", is properly drawn up so as to exhibit a true and correct view of the state of the affairs of Manitoba Sanatorium, Central Tuberculosis Clinic and Special Funds as at 31st December, 1954, according to the best of our information, the explanations given to us and as shown by the relative records.

RIDDELL, STEAD, GRAHAM & HUTCHINSON,
Chartered Accountants.

Thank You

THE SANATORIUM BOARD EXTENDS SINCERE THANKS TO THOSE NAMED BELOW, IN RESPECT TO THE INSTITUTIONS THEY HAVE HELPED:

MANITOBA SANATORIUM

Clergy

Belmont: Mr. Hopper, Student, Anglican Church—**Brandon:** Rev. Brach, Lutheran Church; Rev. Father S. Tarnowecky, Ukrainian Catholic Church—**Dunrea:** Rev. Father R. Bertrand, Roman Catholic Church—**Rosenort:** Rev. P. J. Reimer, Mennonite Brethern—**Ninette:** Rev. T. A. Payne, United Church—**Winnipeg:** Rev. Father R. Beaulieu, Roman Catholic Church.

Entertainment

Winnipeg: Athletic Association, Winnipeg Police Force; Drama Workshop Committee—**Brandon:** St. Paul's United Church Young People's Club; Canadian Legion Band—**Pilot Mound:** Pilot Mound Band—**Wawanesa:** United Church Choir—**Elgin:** United Church Choir—**Ninette:** United Church Choir.

Flowers

Carman: The Strachan Seed Company—**Morden:** Experimental Farm—**Ninette:** W. R. Stewart; Mrs. John Paskewtiz—**Winnipeg:** Orchid Florist.

Other Gifts

Winnipeg: T. Eaton Company; St. Augustine's Business Girls Club; Engineers' Wives Association; Simmons Limited; Ladies' Auxiliary, Associated Canadian Travellers; H. L. MacKinnon Company; Women's Airforce Auxiliary; Canadian Legion; Bonta Club; First Church of Christ, Christian Science; E. B. Frost; A. M. Miller; Mrs. Sadie Gallagher; Jewish Child and Family Service; Brown and Rutherford Ltd.; Silver Wings Chapter I.O.D.E.; Rev. W. H. Davies; Department of Veterans' Affairs; Red Cross Society; Agenda Club; Fellowship Club; Mr. T. S. Foulds; Major G. W. Northwood; Ukrainian Catholic Women's League.

Brandon: Canada Paint Co.; Irene Hobby Shop; Canadian Legion; Ukrainian Catholic Women's League—**Brandon Hills:** Brandon Hill Busy Bees—**Brandon R. R. No. 1:** Johnston McPherson—**Belmont:** A. J. Box; Silver Cross Women of Canada—**Baldur:** Canadian Legion; Grund Ladies' Aid—**Carman:** Sunshine Club; United Church W.M.S.; Neil Love; Albert Copper Club—**Gretna:** Neuhoist Sewing Circle—**Lowe Farm:** Elaine Giesbrecht; Missouri, New Point School—**Ninette:** Canadian Legion, Ladies' Auxiliary; Mrs. Joe Davreaux; H. Lowe—**Minnedosa:** Women's Institute—**Rounthwaite:** Mr. and Mrs. Bob Morrison; Miss Georgina McPherson Bequest—**Varsity View:** Canadian Legion—**Winkler:** The Prairie Canners Limited—**Whitehorse, Yukon:** Southern Yukon Tuberculosis Association—**Treherne:** Miss M. Cummings; Anonymous; Canadian Nature Annual—**Brandon:** Ladies' Auxiliary, Associated Canadian Travellers—**Pine Falls:** Miss Birdie Smith—**Ninette:** W. D. Jensen; Ladies' Auxiliary of the British Empire Service League, Ninette Branch.

BRANDON SANATORIUM

Clergy

Brandon: Rev. J. T. Horricks; Rev. D. E. Noonan; Rev. R. A. Davidson; Rev. J. C. Bronin; Rev. G. G. Morrison; Rev. H. G. Rees; Rev. B. O. Whitfield; Rev. J. B. Anglis; Father Cooney.

Gifts

Brandon: T. Eaton Company; Musicians' Protective Association; Monarch Lumber; Woolworth Store Limited; Metropolitan Stores Limited; McLeod's Limited; Scory's Hairdressing; Ladies of the Royal Purple; Women's Auxiliary to St. George's; Johnson Hardware Co. Limited; St. Matthew's Women's Auxiliary; Ladies Auxiliary, Associated Canadian Travellers; Southminster Sunday School; Canada Paint Company; Coca Cola Co. Limited; Salvation Army; Wolf Cubs; 1st Pack Brownies; St. Paul's United Church.

Winnipeg: Pepsodent Division, Harriet Hubbard Ayer of Canada Limited—**Toronto:** The Noxzema Chemical Co. of Canada Limited; Richard Hudnut Ltd.; Daggett and Ramsell (Canada) Ltd.; Colgate-Palmolive Limited—**Windsor:** Beauty Counsellor of Canada Ltd.—**Red Lake, Ont.:** Mrs. M. McDougall—**Gillam:** Mrs. M. Hughes-Caley —**St. Marius:** Mr. N. S. Roy—**Notre Dame de Lourdes:** Mr. J. B. Deroche—and the numerous persons who contributed money, used clothing, toys, magazines, scrap books, etc. for the use of patients at Brandon Sanatorium.

DYNEVOR INDIAN HOSPITAL

Clergy

Selkirk: Rev. T. C. B. Boon, St. Peter's Anglican Church; Rev. Walter G. Crane, Selkirk United Church; Ven. Archdeacon R. N. R. Holmes, Christ Church (Anglican) —**St. Boniface:** Rev. Fr. Romeo Beaulieu, O.M.I.—**Winnipeg:** Very Rev. Dean Burton J. Thomas.

Gifts

Selkirk: The Kinsmen Club; S.O.S. Store; Master Vernon Gunter; Mrs. Gwen Rutledge, P.O. Selkirk; Dr. Sam Sarbit; Boy Cubs, 5th Selkirk Pack; Mrs. Allan Anderson; Central Collegiate; Lutheran Church Sunday School; Mr. Wilson Bennett; First Selkirk Brownies; Mr. George Gilhuly; C.G.I.T. Group, United Church; Little Britain Chapter, I.O.D.E.; Selkirk Beverages; Dr. Gardner Dickey, Knox Church— **R. R. 2 Selkirk:** Miss W. Stapleton; Junior Auxiliary, St. Peter's Church; Mrs. Rod Dunning; Mission Band, United Church, Box D-314.

Winnipeg: Mr. T. M. Miller, Employee's Charitable Fund, T. Eaton Company Ltd.; Mr. C. E. Drewry; Y's Men's Club, Y.M.C.A.; Winnipeg Dental Nurses and Assistants Association; St. Matthew's Church Sunday School; Brad, The Happy Clown, c/o St. Matthew's Church; Mrs. W. A. Mott; Mrs. Janet Palmer; Miss Joyce Smith; Flying Circle, St. John's Hobby Supply; Lord Wolseley School; Angus McKay School; East Kildonan Kiwanis Club.

Sioux Lookout, Ont.: Miss M. Swain—**Lively, Ont.:** Girl Explorers, Trinity United Church—**Grand Marais:** Mrs. Ruth Powel—**Mather:** Miss Ivy Myall—**Middlechurch:** Girl's Auxiliary, St. Paul's Anglican Church—**Clandeboye:** Ladies' Hospital Aid— **Petersfield:** Norwood Anglican W.A.—**Bissett:** Women's Association, United Church —**Alameda, Sask.:** Mrs. L. Walls; United Church Sunday School—**Cambridge, England:** Mr. Allan Casey, Cambridge University.

CLEARWATER LAKE SANATORIUM

Clergy

Rev. Father Trudeau, Pro-Vicar; Rev. Father L. Poirier, O.M.I., Provincial; Rev. Father Chaput, Econome; and the Roman Catholic Missions throughout the North— **Flin Flon:** Ven. Archdeacon R. B. Horsefeld—**The Pas:** Rev. Aitkin Harvey, United Church; Rev. C. L. Morgan, Anglican Church; R. F. Stephenson, Devon Mission; Mr. Garrett, Presbyterian Church; Lieutenant Whitesell, Salvation Army.

Gifts

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Flin Flon: Flin Flon Rangers; Girl Guide Division; The United Church; The Kiddies' Club and C.F.A.R.; Elba, W.M.S.—Auxiliary of Northminster United Church; Miss M. E. Spencer; Misses Frances and Helen Booth; Mr. Jack King; Miss R. Leask; Mrs. R. J. Stewart.

The Pas: Mr. Jack Graham; Mr. A. R. Hayes; F. Piragoff, Esq.; Mr. Gordon Prior; Miss Stella Sokoloski. **Clearwater Sanatorium P.O.:** Mrs. A. Clark; Mrs. R. W. Martin; Miss Sandra Steer.

Cranberry Portage: First Brownie Pack—**Durban:** Mrs. E. F. Chapman—**Gillam:** Mrs. M. Hughes-Caley—**Lynn Lake:** United Church—**Oberon:** Mission Band; Mr. Lyle O. Thorn; Miss Karren Oliver—**Pine River:** Pine River and Ethelbert Mission Bands of United Church of Canada—**Shilo:** Brownie Pack; Mrs. G. W. Slee—**Shoal Lake:** United Church Mission Band—**Swan River:** Sunday School by Post—St. Faith's —**Red Sucker Lake:** Indian School—**Kenora:** The Evening Branch of St. Albans Pro. Cathedral—**St. Paul, Alta.:** Blue Quills School—**Toronto, Ont.:** 273 Brownie Pack.