Tuberculosis CONTROL *in Manitoba* 1958

Issued May, 1959

Annual Report
of the
SANATORIUM BOARD *of* MANITOBA

SANATORIUM BOARD
OF MANITOBA

Operating

X-RAY & TUBERCULIN SURVEYS

TRAVELLING TUBERCULOSIS CLINICS

CENTRAL TUBERCULOSIS CLINIC
Winnipeg

MANITOBA SANATORIUM
Ninette

ASSINIBOINE HOSPITAL
Brandon

CLEARWATER LAKE HOSPITAL
The Pas

Co-operating with

St. Boniface Sanatorium
and Other Agencies

Report for the Year
1958

WINNIPEG, MANITOBA

CONTENTS

SANATORIUM BOARD OF MANITOBA

Executive

Chairman ..... Mr. J. W. Speirs
Vice-Chairman and Chairman, Assiniboine Hospital Committee ..... Mr. J. N. Connacher
Chairman, Administration and Finance Committee ..... Mr. F. Boothroyd
Vice-Chairman, Administration and Finance Committee ..... Mr. A. E. Longstaffe
Chairman, Clearwater Lake Hospital Committee ..... Mr. R. H. G. Bonnycastle
Chairman, Rehabilitation Hospital Committee ..... Mr. S. Price Rattray
Honorary Solicitor ..... Mr. E. B. Pitblado, Q.C.

Honorary Life Members

Mr. C. E. Drewry
Mr. I. Pitblado, Q.C., LL.D.
Mr. G. W. Northwood
Mr. Wm. Whyte

Statutory Members

Representing the Provincial Department of Health and Public Welfare ..... Hon. G. Johnson, M.D.; Dr. R. M. Creighton; Mr. G. L. Pickering; Mr. G. D. Iliffe, C.A.; Hon. Sterling Lyon
As Municipal Commissioner ..... Hon. J. W. M. Thompson
Representing Union of Manitoba Municipalities ..... Mr. J. J. Pynoo; Mr. A. Bedard; Mr. D. F. Rose; Mr. A. T. Hainsworth
Representing St. Boniface Sanatorium ..... Dr. A. C. Sinclair
Representing City of Winnipeg ..... Mr. J. R. McInnes

Elected Members

Dr. J. D. Adamson
Mr. R. L. Bailey
Mr. R. H. G. Bonnycastle
Mr. F. Boothroyd
Mr. G. Collins
Mr. J. N. Connacher
Mr. H. T. Decatur
Dr. J. E. Hudson
Mr. Stanley M. Jones
Mr. A. E. Longstaffe
Mr. G. E. Mayne
Mr. J. R. McMillan
Dr. Ross Mitchell
Mr. E. B. Pitblado, Q.C.
Mr. S. Price Rattray
Mr. J. W. Speirs

Executive Director and Secretary-Treasurer

T. A. J. Cunnings

Auditors

Riddell, Stead, Graham and Hutchinson

ST. BONIFACE SANATORIUM

Advisory Board

Chairman ..... Mr. Justice A. Monnin
Vice-Chairman ..... Mr. E. Cass
Secretary ..... Rev. Sr. M. Roy

Mr. E. Bole
Mr. G. E. Sharpe
Mr. G. P. Jessop
Mr. Noel Vadeboncoeur

MEDICAL STAFF

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
ysician ..... DR. P. P. MARI

MANITOBA SANATORIUM

edical Superintendent and Chief Surgeon ..... DR. A. L. PAINE
ysicians ..... DR. S. M. MURPHY, DR. T. NICOLAIDES, DR. L. KASZA

ASSINIBOINE HOSPITAL

edical Superintendent and Surgeon ..... DR. A. H. POVAH
sistant Medical Superintendent ..... DR. G. COGHLIN
ysicians ..... DR. W. SHAHARIW, DR. B. KRASINS

CLEARWATER LAKE HOSPITAL

edical Superintendent ..... DR. S. L. CAREY
ysicians ..... DR. A. P. CHORNOMORETZ, DR. H. J. WISINGER

St. Boniface Sanatorium

edical Director and Thoracic Surgeon ..... DR. A. C. SINCLAIR
ssistant Medical Director ..... DR. V. J. HAGEN
nior Physician ..... DR. F. KOZIN
esident ..... DR. L. TOTH

MEDICAL CONSULTANTS

Sanatorium Board of Manitoba

Radiology	R. A. MACPHERSON, M.D., C.M., F.A.C.R. R. H. D. SYKES, M.D., R.C.S. & P. (Eng.), R.C.P. & S. (Canada)
Orthopedics	W. B. MACKINNON, M.D., Ch.M. (Man.), F.R.C.S.(C) R. F. TUCKER, M.D., M.Ch. (Orth.), F.R.C.S. (Edin.), F.R.C.S.(C)
Urology	H. D. MORSE, M.D., C.M., F.R.C.S.(C) R. P. CROMARTY, M.D., M.Sc., M.B., F.R.C.S.(C) C. B. STEWART, M.D., F.R.C.S. (Edin. and Canada)
General Surgery	H. S. EVANS, M.D., F.R.C.S. (Edin. and Canada) J. LEICESTER, M.D., L.M.C.C.
Eye, Ear, Nose and Throat	R. O. MCDIARMID, M.D.
Pathology	A. P. LAPKO, M.D.
Pediatrics	HARRY MEDOVY, M.D.
Cardiology	L. R. COKE, M.D., F.C.C.P., F.A.C.P., R.C.P. & S.
Internal Medicine and Cardiology	V. J. H. SHARPE, M.D., R.C.P. & S. (Canada)
Psychiatry	T. A. PINCOCK, M.D., R.C.P. & S.
General Practice	A. L. JACOBS, M.D.
Dentistry	R. G. HURTON, D.D.S. B. CLAMAN, D.D.S.

St. Boniface Sanatorium

Medicine	J. D. ADAMSON, M.D., M.R.C.P., F.R.C.P.
Orthopedics	W. B. MACKINNON, M.D., Ch.M. (Man.), F.R.C.S.(C)
Urology	A. C. ABBOTT, M.D., C.M., F.R.C.S.(C)
Bronchoscopy	D. S. MCEWEN, M.D.
Anaesthesiology	MARJORIE BENNETT, M.D., L.M.C.C., R.C.P.S.(C)
Dentistry	J. M. BENSON, D.D.S. T. J. COOKE, D.D.S.

Medical Advisory Committee

Chairman, DR. J. D. ADAMSON

DR. L. G. BELL	DR. M. R. ELLIOTT	DR. A. L. PAINE
DR. R. G. CADHAM	DR. COLIN FERGUSON	DR. A. H. POVAH
DR. M. H. CAMPBELL	DR. J. E. HUDSON	DR. E. L. ROSS
DR. S. L. CAREY	DR. J. M. LEDERMAN	DR. D. L. SCOTT
DR. ROSS CREIGHTON	DR. R. A. MACPHERSON	DR. A. C. SINCLAIR
DR. R. M. CHERNIAK	DR. ROSS MITCHELL	DR. W. J. WOOD

NON-MEDICAL SENIOR STAFF

	SUPERINTENDENTS OF NURSES	BUSINESS OFFICERS	CHIEF ENGINEERS
n Board **itoba**	Miss B. Hejlsted, R.N. (*Director of Nursing Services*)	Edward Dubinsky (*Administrative Asst.*) R. F. Marks, C.A. (*Comptroller*) G. B. Hurley (*Accountant*)	.....
nt **uberculosis**	Mrs. P. Torgerson, R.N.	Mrs. D. Rannard (*Accountant*)	.....
Sanatorium	Miss D. Ellis, R.N.	N. Kilburg (*Business Manager*) W. Bradford (*Accountant*) W. B. Stewart (*Purchasing Agent*)	G. Stinson
e Hospital	Mrs. I. A. Cruikshank, R.N.	C. Christianson (*Business Manager*) T. K. Yorke (*Accountant*)	R. N. Newman
· Lake **l**	Miss M. Lovell, R.N.	R. B. McIvor (*Business Manager*) T. W. Rudachyk (*Accountant*)	F. F. Smith

St. Boniface Sanatorium

SUPERIOR.....Rev. Sr. A. Ell, R.N.
1ST ASSISTANT.....Rev. Sr. M. Roy
2ND ASSISTANT.....Rev. Sr. H. Bellec
CHAPLAIN.....Msgr. C. Paille

Rev. Sr. E. Hamon, R.N. (*Director of Nursing*) Rev. Sr. E. Lane, R.N. (*Night Supervisor*)	Rev. Sr. M. Roy (*Sec. Treasurer*) Rev. Sr. M. Tougas (*Purchaser*)	L. Beaupre

on

Travelling Tuberculosis Clinics and Surveys.....Surveys Officer..... J. J. Zayshley, R.T.

oyment

Rehabilitation.....Miss M. Busch..... E. Locke
(*Director of Rehabilitation*) (*Indian Rehabilitation Officer*)

Central Tuberculosis Registry.....Miss Janet Smith, R.N.....
(*Supervisor*)

NON-MEDICAL SENIOR STAFF

RADIOGRAPHERS	LABORATORY TECHNICIANS	TEACHERS	OTHERS
W. J. Anderson, R.T.	.....	.....	Mrs. P. McFarlane (*Sec. to Exec. Dir.*) Miss Nan T. Chapman (*Supervising Dietitian*) Mrs. P. Holting (*Health Educator and Informational Writer*)
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 G. Manchester.... Miss G. Motheral..... Mrs. V. Hastings..... Miss M. Newmark..... (*Occup'l Therapist*)	Miss G. M. Wheatley (*Sec. to Med. Supt.*) Mrs. F. Wardrop (*Food Supervisor*) F. J. Rodwell (*Laundry Foreman*)
F. H. Gibson, R.T.	Miss L. E. Delamater, R.T.	Mrs. M. Ames..... Miss W. Bromley..... T. Daigle..... Mrs. V. Davidson..... (*Occup'l Therapist*)	Mrs. Joan Bevand (*Sec. to Med. Supt.*)
E. Zemianski.....	Miss G. Joyal.....	Miss C. Wiebe..... J. Zurbec..... Mrs. H. Playford..... (*Occup'l Therapist*)	Mrs. L. Hoksbergen (*Sec. to Med. Supt.*) R. B. Lock (*Laundry Foreman*)
Rev. Sr. Y. Thibert..... (*Lab. and X-ray Supervisor*)	Rev. Sr. B. Patry, R.N..... (*Pharmacist*)	Miss I. Kujansuu..... Mrs. G. E. Horvath (*School Teachers*) Miss A. Hargreaves..... (*Occup'l Therapist*) Alex Vermette..... (*Crafts Instructor*)	Miss A. Eyres (*Medical Secretary*) Rev. Sr. A. Boulet (*Main Kit. Super.*) Miss H. Pietuchow (*Social Worker*)
Alex. Roh, R.T..... (*Supervising Radiographer*) O. D. Buhler, R.T..... A. Schmecko, R.T.....	.....	.....	Miss G. H. Bowman (*Secretary*) .....
.....	.....	.....	Miss Gladys McGarrol (*Senior Statistical Clerk*)

SPEIRS

REPORT OF THE CHAIRMAN

For the Year Ended December 31st, 1958

IT GIVES me a great deal of pleasure to welcome you to this, the forty-eighth annual meeting of the Sanatorium Board of Manitoba.

At a meeting of the Board last week comprehensive reports were presented by the Medical Superintendent of Preventive Services, Medical Superintendents of Manitoba Sanatorium, Assiniboine Hospital, Clearwater Lake Hospital, and the Medical Director of St. Boniface Sanatorium covering the medical services of their respective hospitals. Those reports, along with the reports that will be presented to you today, indicate the very extensive treatment, preventive and rehabilitation services carried on by the Board on behalf of the people of Manitoba.

The Board

The present Board consists of four Honorary Life Members and twenty-eight active embers of whom sixteen are elected members and twelve statutory members. All contribute eir services on a voluntary basis.

During 1958 there were twenty-eight meetings of the Board or its Committees. I would ke to pay tribute to the very busy professional and businessmen who have accepted member- ip on the Sanatorium Board of Manitoba, and who are so faithful in attending meetings to nduct the Board's affairs. I would like especially to record my appreciation to members the Executive Committee, who attended almost every Board meeting, consisting of the llowing members: Mr. J. N. Connacher, Vice Chairman of the Board and Chairman of the ssiniboine Hospital Committee; Mr. R. H. G. Bonnycastle, Chairman of the Clearwater ake Hospital Committee; Mr. Frank Boothroyd, Chairman of the Administration and inance Committee; Mr. A. E. Longstaffe, the Board representative on the Manitoba Medical entre Council and Mr. S. Price Rattray, who has been nominated as Chairman of the new ehabilitation Hospital. I am indeed grateful for the support these gentlemen have accorded e as Chairman of the Board, giving the most careful consideration to the many problems ought before them during the past year.

General

The trend towards the reduced demand for tuberculosis treatment beds continued through- ut 1958. Early last year it became apparent that in the near future it would be possible to scontinue the use of another block of sanatorium beds for the treatment of tuberculosis atients. Under these circumstances, and in co-operation with the Provincial Department Health and at the request of the Minister, The Honorable Dr. Johnson, the Board instituted intensive study to see whether the sanatorium beds that would be available could be used to eet the pressing demand for hospital beds for the treatment of non-tuberculous conditions. the main, patients to be admitted to these wards would be those requiring extended periods hospital treatment.

Along the same lines, the Government has asked the Sanatorium Board of Manitoba to nstruct and operate a Rehabilitation Hospital in Winnipeg. An Agreement respecting the lministration and financing of this hospital has now been completed with the Province and e work is going forward. Sketch plans have been prepared and the organization of the spital is under extensive study by a special committee.

These new developments mean that the duties and responsibilities of the Sanatorium Board Manitoba have been broadened very considerably and we hope that in these new fields e will be able to make a contribution to the public welfare equal to that which we have been le to achieve in the field of tuberculosis control.

With respect to the Rehabilitation Hospital, an Advisory Planning Committee, the edical members of whom were approved by the Manitoba Medical Association, has been tablished as follows: Dr. F. Hartley Smith, Chairman; Dr. L. G. Bell, Dean, Faculty of edicine, University of Manitoba; Dr. C. D. Lees, Workmen's Compensation Board; Dr. E. Ross, Sanatorium Board of Manitoba; Mr. Walter N. Boyd, Co-ordinator of Rehabilitation rvices, Province of Manitoba; Dr. M. R. Elliott, Department of Health & Public Welfare; r. T. A. J. Cunnings, Executive Director, Sanatorium Board of Manitoba.

Finance

The Executive Director, Mr. Cunnings, will report in detail regarding the Board's financial position. On the whole, however, it can be pointed out that the financial affairs of the Board have moved forward satisfactorily during the year and working capital position has been somewhat improved.

The sale of Christmas Seals during the year amounted to $173,122.10 which exceeded the amount realized in any previous year. The Christmas Seal Fund, together with contributions of $7,000 from the Brandon Club, Associated Canadian Travellers, and $9,400 from the Winnipeg Club, Associated Canadian Travellers, has continued to provide almost the total cost of the tuberculosis preventive services and has materially aided the Rehabilitation and Health Education Services.

From time to time we receive requests and special gifts from interested persons, to provide special needs for patients, hospital equipment and other services for which no provision is otherwise made. All such donations over $500 are listed on a permanent memorial page in the published annual report. They are very gratefully acknowledged by the Board.

Substantial assistance to the tuberculosis program is provided by the National Health Grants and the Board is most appreciative of this support by the Minister and Officers of the Department of National Health and Welfare.

Appreciation

The Chairman's report would be far from complete if it did not make special note of the appreciation of the Board to its Medical Director, Dr. E. L. Ross, and its Executive Director and Secretary-Treasurer, Mr. T. A. J. Cunnings. The re-organization and the extension of our facilities during the past year have thrown an added burden on their shoulders and I would be remiss in my duties if I did not make special mention of their untiring work and the efficient way in which they handle the day to day business of the Board.

The Board is similarly grateful to its Committee Chairmen and members who give so freely of their time and knowledge in the continuation of our work.

The success of our operations in the past year has been due, in no small measure, to the loyalty and devotion to their duties of the medical superintendents, doctors, nurses, and staff at each of the hospitals under the Board's jurisdiction. To these very important members of our team I would like to add my personal thanks.

Respectfully submitted,

J. W. SPEIRS,
Chairman of the Board.

Buy and Use

Christmas Seals

Help Fight TB

UNNINGS

REPORT OF THE EXECUTIVE DIRECTOR

For the Year Ended December 31st, 1958

THE following report summarizes the financial and operating affairs of the Board for the year 1958.

Assets and Liabilities

At December 31, 1958, assets held by the Board, including Special Funds, but not including buildings and equipment at Brandon and Clearwater Lake owned by the Government of Canada and not carried as fixed assets in our books of account, totalled $2,339,699. This is a reduction of $64,533 as compared to the previous year, which is almost totally brought about by the reduction in the Treatment Account receivable from the Province of $62,400. During 1958 we were able to complete an arrangement with the Province under which tuberculosis treatment accounts would be paid monthly instead of quarterly, so that the year end receivable represents one months treatment service rather than three months. This has brought about a valuable improvement in our financing.

Liabilities at December 31, 1958, not including reserves, totalled $343,633, a decrease of $201,959 as compared to the previous year.

At the year end bank loans totalled $26,438, a decrease of $134,926 from the corresponding date last year. This figure includes the balance of $6,500 of the Special Loan for renovation and improvement of the laundry at Ninette. This loan will be completely repaid during 1959. Balance of the borrowing represents operating advances with respect to Manitoba Sanatorium and the Central Tuberculosis Clinic.

Working capital for Manitoba Sanatorium and Central Tuberculosis Clinic was increased by $6,512 during the year. The capital account in Endowment Fund No. 1 was increased $4,690 and in Endowment Fund No. 2, $33,157.

Apart from about $25,000 spent on renovation and improvements at Manitoba Sanatorium (mainly on the infirmary wards) there were no major items of construction during 1958.

Rates and Income for Treatment

During 1958 the Province of Manitoba tuberculosis treatment rate was fixed at $6.80 per patient day. This rate was also in effect for Treaty Indians at Brandon. The rate at Clearwater Lake Hospital was $7.00 per patient day.

Treatment days for patients who are the responsibility of the Province of Manitoba were reduced by 10,917 as compared to 1957, to a total of 137,762 days. This is a reduction of 7% during the year and is a measure of our continued progress in the control of tuberculosis.

Treatment days for Treaty Indians, Eskimos, patients from other provinces and others totalled 182,036 in 1958, a reduction of 10,989 as compared to the previous year. The total reduction of 21,906 days represents a saving of more than $150,000 in tuberculosis treatment costs, with a corresponding reduction in income for the tuberculosis treatment institutions.

Treatment Costs

Per diem treatment costs continued to rise in 1958.

TREND OF PER DIEM COSTS—1958

Assiniboine Hospital—increase 57c per patient day to $6.35.
Central Tuberculosis Clinic—increase 96c per patient day to $9.49.
Clearwater Lake Hospital—increase $1.27 per patient day to $7.73.
Manitoba Sanatorium—increase 95c per patient day to $8.16.

The per diem costs shown are gross figures, with income from staff quarters, cafeteria, etc., shown on our statements as revenue.

Comparative Expense

Total operating expenditures for treatment, preventive and rehabilitation services directly operated by the Board amounted to $2,026,512 in 1958.

In the food services the number of meals served to patients numbered 699,286, a decrease of 43,359 from 1957. Sales in the staff cafeterias totalled $48,167. Raw food costs decreased $9,404 to $231,624.

Expenditures for fuel and heating services remained almost constant at $66,191, despite an increased unit cost of fuel due to the rise in freight rates. Gross laundry cost was $60,066 an increase of $1,782.

In the Diesel Electric Plant at Clearwater Lake Hospital output increased 118,300 K.W.H. to 1,076,400 K.W.H. Production cost was 3.7c per K.W.H., a slight decrease from the previous year. Negotiations have been underway with the Manitoba Power Commission to install services from their generator in the town of The Pas and it is expected that they will be able to supply us with electric power by the fall of 1959. Our present plant will be kept as a stand-by unit.

Preventive and Rehabilitation Services

The direct expenditure on preventive services in 1958 was $179,579, about $3,000 less than the previous year. This includes:

Chest X-ray Surveys (Community and Industrial, Indian Clinics and Travelling Clinics)	$100,888
Chest X-Rays for Patients Admitted to General Hospitals	76,724
B.C.G. Vaccinations	1,967
Total	$179,579

Expenditure on Rehabilitation Services for 1958 amounted to $60,781 as follows:

Salaries, supplies and travel	$20,971
Fees for courses and allowances to Rehabilitants	9,278
Indian Rehabilitation Service	30,715
	$60,964
Deduct—Proportion of fees paid by Rehabilitants	183
	$60,781

This is an increase of about $24,000 over last year and is accounted for by the undertaking by the Board of the full operation of the Indian Rehabilitation Service as at April 1, 1958, on a reimbursible cost basis under agreement with Indian Affairs branch.

Inventories

As at December 31, 1958, supplies on hand including commissary stores, engineering and maintenance supplies, fuel, diesel fuel oil, bunker fuel oil, drugs, and miscellaneous supplies, totalled $132,381, a decrease of $5,295 as compared to the previous year. All inventories are valued at cost and all materials are in current demand.

National Health Grants

The appropriation available for the fiscal year 1958-59 under the National Health Grants to assist in tuberculosis control in Manitoba was $224,368. Expenditures are subject to approval of acceptable projects.

Expenditures in the calendar year 1958 were:

Streptomycin and Other Antibiotics	$ 19,404
Post-Sanatorium Pneumothorax	90
Assistance to Rehabilitation Division	16,105
X-raying of Admissions to General Hospitals	76,724
Assistance to Sanatorium Board of Manitoba	14,835
Extension of Industrial and Other Chest X-ray Surveys	8,759
Assistance to St. Boniface Sanatorium	18,080
Extension of Manitoba Travelling Clinic Services	3,233
Assistance to Manitoba Sanatorium	43,703
Extension of B.C.G. Vaccination Program	1,967
Assistance to Central Tuberculosis Clinic	551
Post Graduate Training	1,592
	$205,043

Insurance

Fire insurance, with cover for supplemental perils, was continued in force on buildings and equipment at Ninette and the Central Tuberculosis Clinic in the amount of $1,285,000. In accordance with government policy no fire insurance is carried on buildings and equipment at Brandon or Clearwater Lake.

Motor vehicle insurance covers public liability and passenger hazard and property damage a limit of $100,000, collision on the basis of $100 deductible, and the usual fire and theft. o fire, theft and collision cover is placed on vehicles at Assiniboine Hospital or Clearwater ake Hospital. Other insurance is carried in force as detailed in last year's report.

Personnel

At December 31, 1958, the staff of the Sanatorium Board numbered 500, an increase of as compared to a year earlier. A shortage of staff continues to be experienced in the rsing department but otherwise there have been no special problems.

Under the bursaries established by the Board in 1957, we are now assisting two student rses through grants totalling $400 each, and a third application for the bursary is pending. e are also assisting one Licensed Practical Nurse to take her training, by way of a bursary.

At the end of the year there were 409 persons participating in our Group Insurance Plan, increase of 37 as compared to a year previously. These members of the staff are insured r $672,500 of life insurance and $9,117.50 weekly accident and sickness indemnity. Cover included for surgical expense up to $250 for any one operation and payment of anaesthetic es is insured. One hundred and thirty-eight members also have surgical coverage on their pendents. Claims were a little higher in 1958, totalling $17,980 as compared to $11,984 1957.

Funds on deposit in the Board's Retirement Annuity Plan totalled $219,365 as at July 31, 58, the anniversary of the contract. This is an increase of $8,963 during the year.

Employees who were members of the Retirement Annuity Plan and who retired or left e service during the year ended July 31, 1958, received either cash refunds or paid-up per- nal annuities to a total present value of $31,230.

Expanded Services

As the Chairman of the Board has pointed out in his report, it became clear early in 1958 at another milestone would be achieved in the control of tuberculosis in Manitoba, and it uld be possible to utilize a number of beds formerly required for the treatment of tuberculosis tients, for other purposes. At the request of the Minister of Health, officers of the Board rticipated, along with representatives of the Manitoba Medical Association and the Govern- ent, in a study of the need for special hospitals to care for patients requiring long periods of eatment. As a consequence of these studies, and on recommendation of the Committees, e Government asked the Board to make available a proportion of beds at Brandon and The s for extended treatment care; and in Winnipeg to construct and operate a rehabilitation spital. The Board, of course, has had a long experience in the care of patients requiring ngthy periods of treatment, and has been a pioneer in the establishment of rehabilitation rvices. Consequently it is possible to extend our service into these new areas without too uch difficulty. Negotiations were completed with the Manitoba Hospital Services Plan to ovide for the payment for treatment of non-tuberculous patients in the extended treatment rds. It became necessary, to comply with the requirements of the hospital insurance islation, to change the names of the institutions at Brandon and The Pas and these are w designated Assiniboine Hospital, Brandon, and Clearwater Lake Hospital, The Pas.

On April 1, 1958, at the request of the Indian Affairs Branch of the Department of Citizen- ip and Immigration, and the Indian and Northern Health Services, the Board undertook operate on a cost reimbursement basis a program of rehabilitation for Indians with some ysical handicap. As part of this program a rehabilitation unit was established at the siniboine Hospital, Brandon. This experimental or demonstration program is proving be quite successful and is arousing a great deal of interest. Details of the program will be ven in the report of the Rehabilitation Services.

Appreciation

Again it remains to record my gratitude for the sustained interest, and the advice of the airman and Vice Chairman of the Board and the Chairman and members of the several ministrative committees. It is a pleasure to record also the cordial relationships enjoyed roughout the year with the Medical Director and the medical officers of the Board; officials the Provincial and Federal Governments; the officers and members of the Advisory Board St. Boniface Sanitorium; and hospital administrators throughout the Province.

Respectfully submitted,

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

STATEMENT OF TREATMENT DAYS—TUBERCULOSIS SANATORIA—1958

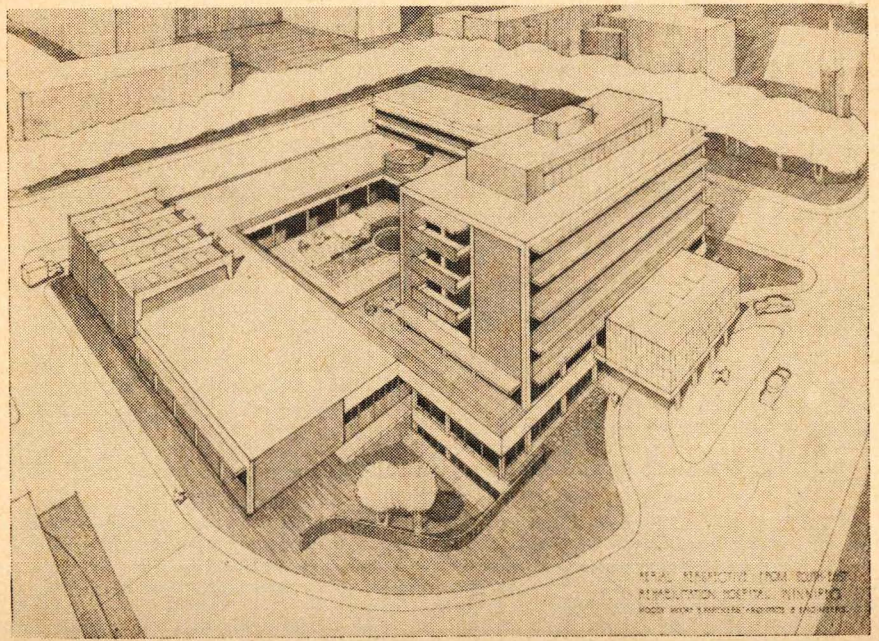
Province of Manitoba Cities, Municipalities and Unorganized Territory	City of Brandon	City of Portage la Prairie	City of St. Boniface	City of Winnipeg	Other Organized Municipalities	Unorganized Territory	Total
Assiniboine Hospital	126	—	—	27	55	984	1,192
Central Tuberculosis Clinic	—	123	495	4,273	3,722	1,787	10,400
Clearwater Lake Hospital	—	—	—	—	737	4,269	5,006
Manitoba Sanatorium	1,325	1,288	434	11,328	22,470	11,932	48,777
St. Boniface Sanatorium	—	1,497	2,083	28,018	26,005	14,784	72,387
	1,451	2,908	3,012	43,646	52,989	33,756	137,762

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 Territory and Other	Reciprocal Agreements with Other Provinces	Total
Assiniboine Hospital	—	82,353	—	—	16	—	82,360
Central Tuberculosis Clinic	517	1,352	—	506	76	209	2,660
Clearwater Lake Hospital	—	51,820	—	—	50	—	51,870
Manitoba Sanatorium	3,696	24,618	225	496	260	934	30,229
St. Boniface Sanatorium	3,103	6,112	259	254	71	5,109	14,908
	7,316	166,255	484	1,256	473	6,252	182,036

TOTAL TREATMENT DAYS—1958

Province of Manitoba, Cities, Municipalities and Unorganized Territory	137,762
Government of Canada, Yukon Territory and other Provinces	182,036
	319,798

Shown here is a sketch of the new Rehabilitation Hospital soon to be constructed in the Winnipeg General Hospital area. The building, which will face on Sherbrook Street, will be operated by the Sanatorium Board of Manitoba and will be an important new facility for the care of the sick and the injured in Manitoba. It will accommodate 150 in-patients and up to 200 out-patients a day, and will include a School of Physiotherapy and Occupational Therapy as well as the Central School for Licensed Practical Nurses. The Architects are Moody and Moore.



. ROSS

REPORT OF THE MEDICAL DIRECTOR

PROGRESS has continued in reducing the menace of tuberculosis, both to the individual and in the province as a whole, but before reporting on the present situation and on the various aspects of the Board's medical services I should make some general remarks on trends, policy, and extended services.

For a number of years there has been a gradual reduction in the number of treatment days in the tuberculosis hospitals in Manitoba. This has been due partly to fewer requiring treatment but mainly to more effective treatment which requires a shorter period of hospitalization. The result is that year by year more and more beds have become vacant in our sanatoria. You recall that in 1954 the King Edward Hospital in Winnipeg was utilized for other purposes. The continuation of this trend also led to a consolidation of treatment facilities hat permitted the closing of Dynevor Indian Hospital in 1957. The bed capacity was further educed by removing one of the original pavilions at Manitoba Sanatorium. However, by the nd of December, 1958, there were still nearly 200 vacant beds.

The care and treatment of patients with chronic disease other than tuberculosis, which equires lengthy hospitalization, have become a problem. The provincial government requested the Sanatorium Board to utilize vacant beds for non-tuberculous cases. Therefore, hree wards containing 60 beds in Brandon Sanatorium and 58 beds at Clearwater Lake anatorium, The Pas, have been designated as Extended Treatment General Hospital sections. Iore Indian and Eskimo patients will be treated at Manitoba Sanatorium, Ninette, and it is lanned that eventually all or nearly all beds in Brandon Sanatorium will be used for patients

SUMMARY

1. The reduction in treatment days results in a continued increase in vacant beds in sanatoria amounting to 200 by the end of December, 1958.

2. Whereas the care and treatment of patients with chronic disease other than tuberculosis is a problem in Manitoba, the Provincial Government has requested the Sanatorium Board to utilize vacant beds for non-tuberculous cases. Therefore, wards containing 118 beds in two sanatoria have been designated as Extended Treatment General Hospital sections. These sections will be further extended.

3. The number of tuberculosis deaths in 1958 is the lowest ever recorded annually in Manitoba. The new low rate is 4.7 per 100,000 population, which represents 41 deaths. This compares with 65 deaths in 1957, 181 in 1950 and 314 in 1945. This reduction is gratifying but as it is only a partial reflection of the total tuberculosis problem, disarmament and complacency are far from justified.

4. New cases of tuberculosis are decreasing at a much slower rate than the deaths.

5. Identifying sources of infection is of primary importance and requires periodic tuberculin testing and X-raying of all people. The Board continued to carry out a vigorous program in this respect, examinations in 1958 totalling 234,436 by its various agencies.

6. There were 799 patients in sanatoria on December 31, 1958, which is a decrease of 141, compared to December 31, 1957. Treatment days for Province of Manitoba patients decreased 7.3% compared to 4.4% in 1957. This is due partly to fewer patients but also to more effective and shorter treatment.

7. An active rehabilitation program is in operation for both non-Indian and Indian patients.

8. Progress has continued in reducing the menace of tuberculosis and the outlook is more hopeful today than ever, although it has taken 50 years of organized and determined effort. Control and eradication have only been partially accomplished. Gains can be lost quickly by relaxation. Aggressive and intensive preventive and treatment programs are still necessary for continued and greater success.

with non-tuberculous chronic illness. It is considered that sufficient beds for non-Indian tuberculous cases are available in St. Boniface Sanatorium and the Central Tuberculosis Clinic.

To avoid confusion I should mention a change of name, becoming effective January 1, 1959, for two of the sanatoria, and throughout the remainder of this report the new names will be used. The new names are Assiniboine Hospital (formerly Brandon Sanatorium) and Clearwater Lake Hospital (formerly Clearwater Lake Sanatorium). The word "Sanatorium" is not used because these institutions will be treating diseases other than tuberculosis.

Tuberculosis Deaths

Year	Whites and Indians Combined		Whites		Indians	
	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
1950	22.8	181	12.8	102	438	79
1955	8.5	72	6.8	56	80	16
1956	7.2	61	4.9	41	100	20
1957	7.5	65	5.4	46	90.4	19
1958	4.7	41	3.8	33	38.1	8

(The figures for 1958 are tentative and based on the estimated population for Manitoba of 870,000, which includes 21,000 Indians.)

The number of tuberculosis deaths during 1958 is the lowest ever recorded annually in Manitoba. Indeed, the death rate is one of the lowest for the provinces of Canada. The new low rate is 4.7 per 100,000 population, which represents 41 deaths. This is particularly striking when compared with previous years. You will note as recently as 1950 there were 181 deaths and just five years before that 314 deaths. A number of factors are responsible for this but it cannot be denied that the most important has been the anti-tuberculosis drugs which were first used clinically between 1945 and 1950. Between 1950 and 1955 the administration and effect of these drugs was better understood and a new and even better drug introduced. During that period there was another decided drop in deaths.

Of interest also is the age of death and the sex. Tuberculosis has become more serious for older people, especially men. Of the 41 deaths, 30 were males and 20 of these were over 60 years of age. One-fourth of all deaths were males over 70. Six deaths occurred under the age of nine and four of these were due to meningitis. Although tuberculosis used to take its greatest toll among younger people, in 1958 there were only five deaths between the age of 10 and 40. The reduction in deaths is very gratifying but is only a partial reflection of the overall tuberculosis picture. Unfortunately and understandably, it has a disarming effect and may lead to unjustified complacency.

New Active Cases

Year	Whites Active T.B.	Indians Active T.B.	Total
1940	438	147	585
1945	438	134	572
1950	364	239	603
1955	231	101	332
1956	268	108	376
1957	239	118	357
1958	239	92	331

The figures reviewed concerning tuberculosis deaths indicate that the threat to life by this disease has been greatly reduced. However, the same cannot be said about the threat of tuberculosis to health. You will note considerable improvement in the number of new cases compared to 1950 (from 603 to 331) but little change during the last four years. Among non-Indians the pulmonary cases, which are the most dangerous in spreading infection, decreased by twenty-nine. Non-pulmonary cases increased by this number and the organs involved and other details appear in the statistical section. Of the 69 with non-pulmonary disease, 35 had tuberculous glands of the neck, compared to 17 in 1957, and there were twice as many cases among females as males. I do not know how to account for this increase.

More complete analysis of the new cases is important. Of the 239 non-Indian cases, 175 were admitted to sanatorium, which is all but one of those recommended for such treatment. Why was sanatorium treatment not advised for the 64 others? The reason was that the indications did not seem too pressing and/or there were extenuating circumstances. Only 16 of the 64 had pulmonary disease, all minimal, mostly of doubtful activity and after subsequent review considered inactive. Many of the non-pulmonary cases were glandular, quite a number genito-urinary, and treatment at home on the anti-tuberculosis drugs by private physician

vas considered safe and adequate. Every effort is made to admit infectious patients, by ommitment, if necessary.

The tendency of tuberculosis to relapse has always been a major obstacle in its control. Recurrence of activity usually means also recurrence of infectivity. A relapse in many espects is as significant as a new case. Re-admissions to sanatorium do not give a true picture f the number of actual relapses, so the re-activated cases were analyzed separately. Drugs nd surgery provide more definitive treatment and have markedly reduced the relapse rate f those adequately treated—down to about 7%. However, it is significant that in 1958 there vere 119 patients at home whose disease became re-activated. This is 26% of all cases de-eloping active disease, but only 3.7% of the non-sanatorium tuberculous cases carried on the ollow-up files of the Central Tuberculosis Registry. This does not necessarily mean a failure n treatment because one-third of the reactivations among non-Indians had no previous reatment. However, as they were earlier considered to have inactive lesions, exhaustive nvestigation and critical appraisal of the activity of originally discovered disease is obviously nportant, as is close follow-up and periodic examination. Possibly anti-tuberculosis drug herapy for "inactive" cases should be considered. Two-thirds of the relapses had previous reatment, most within five years and all within the present treatment era. Forty-four per cent ad had chemotherapy; 6.7% had resection surgery.

Besides those found or reported with active tuberculosis, there were 151 new diagnoses f inactive disease. They do not require treatment but are examined periodically along with amily contacts. This group decreased by 15% in 1958.

Notification of death also accounts for a few cases which were previously not known to ave tuberculosis. There were eight during the year, compared to 15 in 1957. Seven of the ight died in hospital after a short illness, with a diagnosis of tuberculosis established after eath by biopsy or autopsy.

A geographical record is kept by municipalities of all new cases. This is essential in lanning the distribution and intensity of the Board's case-finding activities. There are 147 unicipalities in Manitoba apart from the cities, and during 1958 no new case of tuberculosis vas reported in 77 of them.

Treatment Facilities

	Bed Capacity		Bed Occupancy		
	Tuberculosis	Non-Tb.	Tuberculosis 1957	Tuberculosis 1958	Non-Tb. 1958
Manitoba Sanatorium	250	—	212	173	—
Central Tuberculosis Clinic	46	—	38	29	—
St. Boniface Sanatorium	284	—	250	230	—
Clearwater Lake Hospital	127	58	192	114	23
Assiniboine Hospital	167	60	248	194	36
Total	874	118	940	740	59

You will note the steady drop in treatment days during the past five years and in 1958 a urther decrease of 21,906. The reduction for the Province of Manitoba patient days in 958 was 10,917, which is a 7.3% drop compared to 4.4% decrease in 1956 and 6% in 1957.

On December 31, 1958, there were 799 patients in sanatoria, a decrease of 141 compared o December 31, 1957. There are some non-treaty people in the Indian sanatoria and a umber of Treaty Indians in the non-Indian institutions, but wherever they were the number n treatment at the end of the year was 799—379 non-Indian (down by 59), 273 Indian down by 25), and 147 Eskimos (down by 57).

Admissions and Discharges

The number of tuberculous patients admitted to sanatorium was 788, compared to 878 in 957. Of the first admissions (380) in 1958, there was a reduction of those in the far advanced tage (22%, compared to 2. % in 1957). Forty-four per cent had minimal disease. About ne-third of the re-admissions had advanced disease.

Of the 760 tuberculous patients discharged (excluding reviews) from all sanatoria, classi-cations were as follows:

Inactive	64%
Active Improved	27%
Active Unimproved	5%
Dead	4%

The average length of sanatorium treatment for all discharged tuberculous patients, with ne exception of those from the Central Tuberculosis Clinic, was 490 days, compared to 567 1957. This figure of 490 days is more than that reported by each sanatorium as it represents otal treatment, which may have been carried out in two or more institutions because of ransfers for surgery or other reasons.

Treatment

There was no special change in treatment. The anti-tuberculosis drugs continued to be of paramount importance, with a greater appreciation of their prolonged use. Although treatment time in sanatorium was reduced, chemotherapy was kept up longer, which is indicated by an increasing number continuing on drug treatment at home—51% in 1958, compared to 29% in 1957.

Pulmonary tuberculosis usually improves on rest and proper drug treatment. Often it will clear almost entirely, but in quite a number of cases residual disease needs to be removed surgically to give greater assurance of permanent cure. As a result of a better understanding of the indications for resectional surgery there has been some decrease in this type of surgery. It seems almost heresy to minimize our traditional concept of the importance of rest in treating tuberculosis. Yet we must admit that such is happening, especially regarding intense and prolonged rest. On drug treatment the early disappearance of symptoms and regaining of well being has created problems in management, mainly disciplinary and by refusal to remain on treatment for an adequate period. Evidence of this is an increase in the number of patients leaving sanatorium against medical advice—8% in 1958, compared to 6% in 1957.

Rehabilitation

The return of the patient to self support and a useful and satisfying place in the community is the main object of treatment. Inactivity for many months usually is necessary for physical recovery, but otherwise can have detrimental effects. Adjustment or change of occupation may be necessary to ensure continued health. During recent years the number of patients have increased who have little knowledge of basic educational subjects, so academic teaching has wide application. With shorter and more effective treatment there is less opportunity and less need for acquiring new positions, although through study old ones can often be improved. The fundamental factors in rehabilitation are vocational counselling, vocational training, including post-sanatorium training in technical school, assistance in job placement and follow-up. The Board's rehabilitation structure is co-ordinated with an overall provincial rehabilitation program. This helpful relationship is deeply appreciated.

Teaching and handicraft programs in sanatoria for Indians and Eskimos have been interesting and worthwhile but not specifically vocational. Apart from technical training in keeping with aptness and physical fitness, job placement and stability depend also on social acceptance and an appreciation of occupational responsibility. In recognition of this need a special unit was provided at Assiniboine Hospital (apart from the patient section) for more concentrated evaluation of capabilities and teaching and experience necessary for acceptance into an urban society. This special rehabilitation program for Indians, now in operation since February, 1957, was modified in April, 1958, with the opening of the Rehabilitation Evaluation and Social Orientation Unit at Brandon. The results have been encouraging.

The Central Tuberculosis Registry

The Central Tuberculosis Registry is the medical accountancy department. It records and analyzes medical and social data pertaining to all phases of the prevention and treatment of tuberculosis.

Information about 4,360 tuberculous patients was on file in the registry on December 31, 1958, which includes 1,204 Indians and 402 Eskimos. Records on all sanatorium patients and their contacts are readily available as are data on all known cases, whether or not they have had treatment. Details are also recorded about surveys, new cases and deaths. The registry follows up all medical recommendations.

Appreciation

I sincerely thank the Chairman of the Sanatorium Board, chairmen of all committees and members for their advice and direction throughout the year. Correlation of medical and non-medical administration is essential and I appreciate the co-operation and help of the Executive Director. The fine work by the Medical Superintendents, department heads and all staff members of all institutions is evident, and I wish them to know that I do appreciate their able and devoted service. I acknowledge the co-operation and assistance of the Provincial Department of Health and Municipal Health Agencies, and also the contribution made by the Department of National Health and Welfare. I join with the Chairman in thanking the Associated Canadian Travellers and the thousands of people in Manitoba who make possible the preventive program by their purchase of Christmas Seals.

Respectfully submitted,

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

Preventive Services
Headquarters
Central Tuberculosis Clinic

Prevention

PREVENTIVE SERVICES

From the Report of the Medical Director

Tuberulosis is contagious. Prevention is therefore based on preventing the spread of fection by early discovery and treatment. Identifying and isolating sources of infection are primary importance and require periodic tuberculin testing and X-raying of all people d particularly among segments of the population with a greater known prevalence of berculosis. It is evident by the following table that the Sanatorium Board has carried out a gorous X-ray program by its various agencies over a number of years.

Due to the low incidence of infection in children under 15 years of age, routine chest X-rays those below this age were discontinued in 1958 in favor of a wider application of the tuberlin test. As a beginning, 11,045 people were tuberculin tested, mostly high school and niversity students. The over-all tuberculin positive rate was 14.2%. For high schools e average was 9.7% (urban 10.6% and rural 5.7%).

The X-ray survey policy for 1959 will further curtail mass X-raying. Tuberculin testing ll be incorporated into our survey program, everyone being tested. Under 40 years of e only those with a positive test will be X-rayed. Over forty everyone will be X-rayed cause of the additional possibility of other lung disease. The Heaf method for mass tuberlin testing will be adopted.

Examinations by Clinics, Hospitals, and Surveys

Year	Stationary Clinics	Travelling Clinics	Hospital Admission X-rays	X-ray Surveys	Total
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
1955	8,830	5,894	93,812	215,806	324,342
1956	9,339	5,093	99,232	212,060	325,724
1957	9,559	3,690	103,485	190,753	307,487
1958	8,392	1,874	86,714	137,456	234,436
	98,565	43,970	749,564	2,067,358	2,959,457

Chest X-ray Surveys

During 1958, 137,456 chest films were taken on surveys; 120,799 non-Indians, 15,845 dians, and 812 Eskimos. The main feature is a reduction of about 55,000 X-rays of non-dian people. This was due mainly to excluding those under 15 years of age. Even by leaving out the younger age group the finding of new active disease was low—one in 5,752 among non-Indians but one in 1,218 Indians X-rayed. Approximately one in 3,100 non-Indians were found with inactive disease, which is potentially dangerous and requires further investigation.

X-ray surveys were held in 52 municipalities, using two large mobile units at 335 operational sites. Our policy has been to survey each community every two years but by 1958 some had not been surveyed for three or more years because we concentrated on areas where the prevalence of tuberculosis was highest. Some have been surveyed yearly.

I have mentioned that tuberculin testing is being incorporated into X-ray surveys, and I might add that the public showed considerable interest in the introduction of this test. Some reduction in survey attendance no doubt was a result of the publicity given to the possible danger of radiation.

Apart from industrial and community surveys in 1958, units were set up for the following surveys:

Red River Exhibition	2,566
Brandon Fair	2,501
Brandon Mental Hospital	1,654
Civilian workers and dependents at five Air Force and Military Camps	1,233
Manitoba Teachers College	501
Professional Summer School	306
Teachers Summer Camp, Gimli	133
Manitoba Technical Institute	624
Success Business College	300
University of Manitoba and Affiliated Colleges	5,280
Headingly Jail	2,267
Canada Packers Ltd.	961
Swift Canadian Co. Ltd.	684

The above figures are included in the survey total but I thought mentioning these special surveys would be of interest. In the appended statistics all business firms surveyed are listed.

Travelling Chest Clinics

This type of clinic has a different function than the X-ray surveys. It provides a consultation service, large X-ray films, and an attending doctor. The general population is not X-rayed and examinations are confined to suspects referred by doctors, to those who have had contact with tuberculosis, and to follow-up reviews of ex-sanatorium and known cases.

During 1958, 44 clinics were held at 24 centres, compared with 66 clinics at 38 sites in 1957. The total number examined was 1,874, about half that of the year before. The greater use of local hospital X-ray facilities accounts for most of this reduction. Travelling clinics examined 1,257 contacts and 251 patients who have had tuberculosis. Altogether two out of the 1,874 examined were found to have active disease. Although there has been a steady reduction in our travelling clinics I think we should consider some re-expansion of this service in 1959, since X-ray surveys will not provide as extensive coverage.

Stationary Clinics

These are the out-patient clinics of each sanatorium and the Central Tuberculosis Clinic. They were responsible for finalizing the diagnosis in 38% of all new active cases in the province. I say "finalize" because for many, referral was initiated by private physicians whose role in case-finding is of great importance. During 1958 these out-patient clinics made 8,392 examinations, of which 3,118 were patients with known old tuberculosis and 3,125 were tuberculosis contacts.

The Central Tuberculosis Clinic

The Central Tuberculosis Clinic is primarily a centre for the diagnosis of tuberculosis and other chest diseases and for the periodic examination of known tuberculous cases, ex-sanatorium patients and contacts. Fifty-three beds are used for observation and temporary treatment and assessment regarding the need for continued treatment. There were 449 patients admitted to the wards for an average of 29 days and 4,917 referred as out-patients for diagnosis and advice. An out-patient clinic for chemotherapy is also conducted. The Central Clinic is the headquarters for the preventive program from which travelling clinics and X-ray surveys emanate. Here all films are processed, interpreted and reported upon including admission films from 58 rural hospitals. It is also a teaching centre for medical students and nurses and provides a consultation service for hospitals. A total of 151,893 films were interpreted at the clinic during the year.

General Hospital X-ray Program

	1957	1958
Number of Hospitals	70	
Number of admissions X-rayed	82,037	67,984
Number of out-patients X-rayed	13,002	10,559
Number of hospital staff X-rayed	8,446	8,171
	103,485	86,714

Routine chest X-ray of patients admitted to general hospitals was initiated in 1949 ecause this considerable segment of our population (15%) was known to have a higher revalence of tuberculosis than others in the community. This project is financed by Do- inion Government Health Grant. As with other case-finding programs fewer cases of ctive tuberculosis are being found. In 1956, one in 1,145 X-rayed had active tuberculosis; n 1957, one in 1,065; and in 1958, one in 1,837. Even yet this is three times the incidence iscovered by community surveys. It must also be kept in mind that a high rate of cardiac nd non-tuberculous chest conditions are drawn to attention, often for the first time.

The hospitals are urged to X-ray all admissions but there are several reasons why many ay not be X-rayed, such as, extreme illness, repeat admissions, and children under 15 years f age who are not included. However, according to quarterly reports to the Board, only 1% of the people admitted to 70 general hospitals in Manitoba in 1958 had a routine chest lm. This compares with 68% in 1957, and it causes me some concern. However, we believe ere are further factors responsible for this reduction. The year 1958 was the first complete ear that children were omitted; also, concern about radiation no doubt had some bearing s well as the all-inclusive hospital rates which encouraged physicians to order more standard ze films. They were not reported as part of the program.

We do need to keep under constant review and assessment all case-finding programs and do think hospital admission X-rays make a worthwhile contribution toward the control of uberculosis and to the betterment of health generally.

X-ray Findings

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

1. Of the 67,984 admissions X-rayed, 37, or *one in 1,837*, had apparently active tuberculosis.
2. 492, or *one in 136*, had tuberculosis that was considered inactive.
3. 112, or *one in 606*, had probable tuberculosis of doubtful activity.
4. 303, or *one in 224*, were considered tuberculosis suspects.
5. Taking into account all the above, 994, or *one in 68*, had evidence of present, past or suspected tuberculosis.
6. Of the 10,559 out-patients, 14, or *one in 754*, had apparently active tuberculosis.
7. The value of this program, and, indeed, all our surveys is not confined to discovering tuberculosis. Many other abnormalities are drawn to attention and referred to the private physician. This is evident by the fact that among 67,984 patients X-rayed on admission, 4,260 (*one in 16*) had non-tuberculous chest conditions, and 4,113 (*also one in 16*) had suggested cardiac abnormalities.
8. Among 8,171 hospital staff X-rayed, 8 had apparently active tuberculosis.

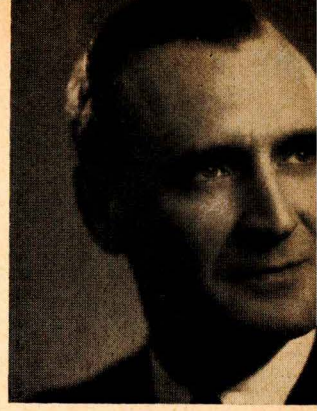
Vaccination with B.C.G.

B.C.G. has not the specific effect that some vaccines have against other diseases but rovides some degree of protection if a person later becomes infected with the tubercle bacillus. he infection rate is now low in Manitoba so B.C.G. vaccination has been recommended only r those who may not be able to avoid infection, such as those listed below. The total number f vaccinations has been about the same for the past few years. An aggressive B.C.G. vac- nation program carried out by Indian and Northern Health Services among Indians has no oubt contributed to the marked reduction in tuberculosis among these people.

B.C.G. VACCINATIONS—1958

Tuberculosis Contacts	238	
Medical Students	33	
Student Nurses (General Hospital)	355	
Student Nurses (Mental Hospital)	91	
Student Nurses (Practical)	47	
Nurses' Assistants	51	
Sanatorium Staff	69	
Laboratory Technicians	20	
Others	18	922
By Indian and Northern Health Services		1,947
Total		2,869

Report of the Medical Superintendent Central Tuberculosis Clinic and Preventive Services



DR. D. L. SCOTT

Central Tuberculosis Clinic

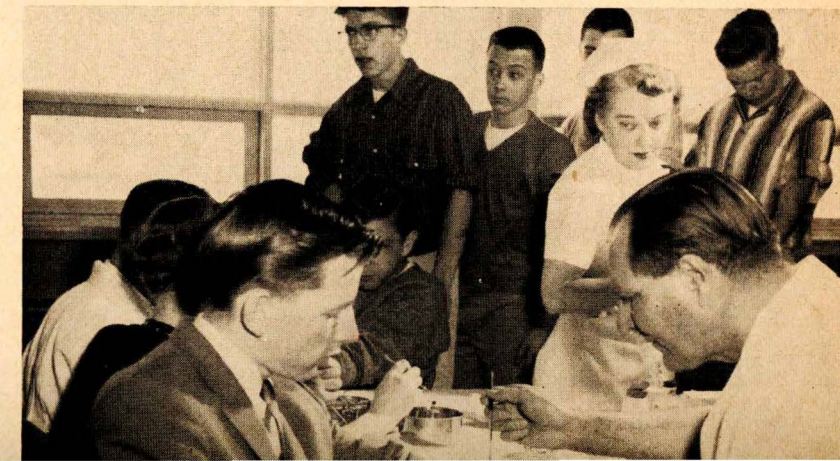
THE Central Tuberculosis Clinic is the chief stationary clinic in the province for the diagnosis of tuberculosis. It is a centre for the examination of patients who are referred by their own doctor, for those who have been in contact with tuberculosis, and for old cases from sanatoria who are seen and advised concerning their activities and future examinations. There are 50 beds for the care of patients and problems in diagnosis. We manage most of the travelling clinics for the province and the mass X-ray and tuberculin surveys. As well, 58 of the 70 participating hospitals send their admission X-ray films to us for interpretation. The Central Clinic, because of its proximity to the Medical School and the Winnipeg General Hospital, has become a centre for teaching medical students and nurses-in-training in all the larger Winnipeg hospitals the care, prevention and diagnosis of tuberculosis.

Out-patient Department—Total visits last year were 7,310, compared to 7,788 in 1957 and 9,515 in 1953, which was our peak year. Since then there has been a gradual levelling off. New discoveries in 1958 numbered 135, which is the same as for 1957 but considerably less than 20 years ago. In 1938, with fewer case-finding programs in operation, there were 245 new discoveries. Of the 7,310 visits, 4,906 were for examination or diagnosis, yielding one case of tuberculosis for every 36.3 examinations. Twenty-seven of the new cases were 50 years of age and over.

Of the new discoveries, 117 were considered to be active and in need of treatment; 60 of these had active pulmonary tuberculosis, and in 48 tubercle bacilli were found.

Treatment—In the ward there were 449 admissions and 456 discharges. This gives a total of 13,116 treatment days which is 337 fewer than in 1957. The average length of stay was 29 days. The 449 admissions consisted of 269 cases of respiratory tuberculosis and 47 cases of non-pulmonary tuberculosis. Of this total of 316, 148 were bacillary. The non-tuberculous cases numbered 133. There were 456 persons discharged; 179 went home on medical advice, five left against medical advice, 49 continued chemotherapy at home, 185 were transferred to sanatoria, 23 went to general hospitals, and 14 died.

Clinical Laboratory—In the laboratory there were 22,075 procedures, totalling 191,111 units. The latter is a new system in Canada for evaluating work done, each procedure being worth a specified number of units. The increase of almost 10,000 procedures is accounted



During 1958 it was decided that tuberculin testing be incorporated into the mass X-ray surveys. As a beginning, 11,045 tuberculin tests were done, mostly in city and rural high schools and at the University of Manitoba. The results were of great value and it is planned to administer the test on a wider scale in 1959, everyone being tested in each survey. The Heaf method of tuberculin skin testing has been adopted.

r by tuberculin surveys of high school and university students, carried out by our laboratory aff. There were 11,045 tuberculin tests done; in the city high schools **10.6%** were positive nd in rural schools **5.7%**. Two cases of tuberculosis were found as a result of the high school rvey, one a student and one the mother of a student. The university students yielded a ightly higher number of positive reactors (**21.5%**), and the average for our surveys was **4.2%**. One case of tuberculosis was found at the university. We have continued with the .C.G. vaccination program; there were 150 fewer vaccinations than in 1957. As in past ears tuberculin for testing was prepared and sent to all hospitals and doctors requesting it nd to all health units.

Operating Room—The function of the operating room has changed since pneumothorax no longer a method of treatment. It is now a dressing and sterilizing room. Sixty-seven arious procedures, apart from the regular sterilizing, were carried out.

X-ray Department—Due to the continued publicity about radiation some alteration as made in our technique of taking X-ray films. The filtration of X-rays was increased, the lo voltage was raised in order to cut down the time of exposure, and a lead cone was added front of the tube so that only the actual part of the body being X-rayed receives any radia- on. In the opinion of our radiographic staff this now makes it safe for X-raying at any age. he X-ray is still an important part of our diagnostic work and in this department 5,294 ms were made, mostly of the chest.

Preventive Services

Travelling Clinics—In the province there were 44 travelling clinics held at 24 centres, 874 persons, including 67 Indians, being examined and two active cases found. The Central linic staff were responsible for 38 of these clinics, examining 1,608 persons and finding one ew active case and six new inactive cases. Of importance also is the reviewing of ex-patients nd advising them concerning future treatment.

Mass X-ray Surveys—There were 137,456 X-rays made, with 114 new diagnoses, 14 of iem bacillary and 23 active but non-bacillary. Of this total, 126,137 films were read and eported on from the Central Clinic.

Hospital Admission X-ray Program—Fifty-eight hospitals sent X-ray films to us for ading and reporting. Altogether 25,756 were sent. Sixteen cases were suspected of having uberculosis in an active state, which is one case out of 1,609 X-rays. These are reported to ie patient's own doctor and the local hospital, and to the health unit if the patient belongs a health unit area.

I wish to take this opportunity of thanking the entire staff for their participation in this rogram of treatment and prevention.

Respectfully submitted,

D. L. SCOTT, M.D.,
Medical Superintendent.

X-ray surveys
ld in 52 muni-
es using the
rge mobile
hown here, at
erational sites.
ther, in 1958,
chest films
ken on the var-
-ray surveys.

CITY OF WINNIPEG

TUBERCULOSIS CONTROL 1958

Continued progress in the control of tuberculosis in Winnipeg is reflected in the following report of the Tuberculosis Division of the City Health Department.

Death Rate—There were 16 deaths in Winnipeg due to tuberculosis. This corresponds to a death rate of 6.3 per 100,000 and compares favourably with the results of the last six years.

Year	Number of Deaths	Rate per 100,000 Population
1940	52	23.
1950	21	8.8
1954	17	7.
1955	17	7.
1956	12	4.7
1957	22	8.7
1958	16	6.3

Hospitalization—A monthly average of 148 patients were hospitalized in the various sanatoria during the year 1958. This is a slight increase over the figures for 1956 (147) and 1957 (139) but well below the figures for 1954 (191) and 1955 (166).

Ninette	44
St. Boniface Sanatorium	88
Central Tuberculosis Clinic	16
Total	148

X-ray Surveys—It is the practice of the City Health Department to include in the chest X-ray survey (4x5) civic employees, public welfare clientele, needletrade employees, etc., every other year. As this was carried out in 1957, the number of 4x5 X-rays taken in 1958 was 7,272, which is almost half the number of X-rays taken in 1957. It is envisaged that the above group of the population will be X-rayed again in 1959.

The number of individuals X-rayed by the 70 mm. unit was also reduced by almost half as children under the age of 15 years were no longer included in surveys. Likewise, only those university students who demonstrated positive tuberculin tests were given a chest X-ray.

Industrial Surveys

A total of 478 business and industrial concerns were provided with an opportunity to have their employees X-rayed at one of the 85 sites where X-ray machines were set up. Of the employees of these business concerns 84.8% attended. The table below lists the activities of the X-ray units.

Mobile Units

No. of operational sites	85	
No. of industries X-rayed	478	
Average attendance	84.8%	
No. of industrial X-rays taken		23,033
No. of X-rays taken at separate schools and colleges		924
No. of X-rays taken at Nursing Homes		1,158
Total 70 mm. X-rays		25,115

Unit at City Hall

No. of survey, contact and patients X-rayed	3,866	
No. of pre-employment X-rays	3,406	
Total 4x5 X-rays		7,272
TOTAL X-RAYS TAKEN DURING 1958		32,387

Seven new cases of pulmonary tuberculosis were discovered during the year. This is 12.7% 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
1953	74	26	35.1%
1954	67	17	25.4%
1955	48	11	22.9%
1956	49	9	18.3%
1957	61	8	13.1%
1958	58	7	12.7%

There was a ratio of one new case discovered for every 4,627 individuals X-rayed. The ogress in eradicating this disease is evident in the following table.

Active Cases of Pulmonary Tuberculosis Discovered Annually by Surveys

Year	Number of X-rays	Total Active Cases	Active Cases Rate per 1,000 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
1955	49,150	11	.2 or 1 every 4,468 X-rays
1956	58,422	9	.1 or 1 every 6,491 X-rays
1957	61,064	8	.1 or 1 every 7,633 X-rays
1958	32,387	7	.2 or 1 every 4,627 X-rays

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

The table below shows the source of active cases discovered by the Health Department. should be noted that there were 921 individuals referred to the city hall by private physicians r chest X-rays, and that one new active case was discovered among this group. These ferrals were mainly for pre-natal chest X-rays, routine chest X-rays in conjunction with a ysical examination, or suspect lung pathology. Once again over half of the seven new ses discovered during the year were discovered by the X-ray unit at the city hall among 272 X-rays, while only three new cases were discovered by the mobile units in a total of ,115 X-rays.

Source of Active Cases Discovered by the Health Department

Surveys	3
Referred by Private Physician	1
Individuals	2
Pre-employment	1
Total	7

According to the next table, tuberculosis discovered on surveys continues to be found nong those individuals who are in the most productive years of their lives. Of the seven ew cases 71.5% were discovered in the 20 to 60 age group.

ctive Cases Discovered Through X-rays Taken on Survey 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
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
1955	2	17	4	36	4	36	1	9	11
1956	2	22	6	67	1	11	-	-	9
1957	-	—	6	75	2	25	-	-	8
1958	2	28.5	3	43	2	28.5	-	-	7

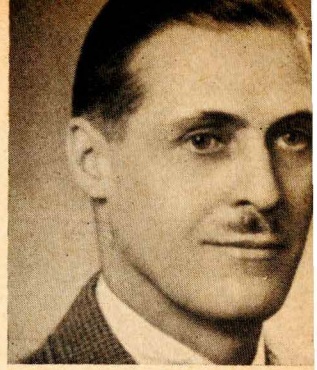
The extent of disease on discovery for the seven new cases found was:

Extent	No. of Cases 1957	No. of Cases 1958
Minimal	3	3
Moderately Advanced	3	3
Far Advanced	2	1

In conclusion the co-operation and assistance extended to the City Health Department the various agencies concerned with the treatment or control of tuberculosis has been eatly appreciated. In particular we are grateful to the Manitoba Sanatorium Board through e Central Tuberculosis Clinic for organizing survey programs; for the loan to the City Health epartment of technical staff when required; for the interpretation of X-ray films, and of rious equipment and supplies.

J. E. DAVIES, M.D.,
Assist. Medical Health Officer.

Treatment



DR. A. L. PAINE

MANITOBA SANATORIUM

THE year 1958, the 49th of operation of Manitoba Sanatorium, saw no radical change in treatment policy or patient composition. Many admissions were of Indian blood, mainly transfers from sister institutions, but at the year's end Whites still outnumbered combined Indian and Metis, 55 to 45. Males outnumbered females by almost two to one. Chest surgery continued to play a major role as an admission cause, both in Whites and Indians, and to contribute heavily to the work, expenditure and interest of the institution.

Sanatorium upkeep has been good and at no time has so much been done to improve the outward appearance. The great expanse of weather-beaten shingle siding on the infirmary and nurses' home was replaced with white stucco facing and green trim. The main building was repainted. Inside, the redecoration program of the last few years has continued. Some of the larger projects were new tile floors laid in all east infirmary wards, repainting throughout and corridor ceilings covered with acoustic tile. In West I infirmary a big ward was converted into smaller units with common room and bathroom facilities.

Staff conditions on the whole were good for 1958. However, in the late summer a shortage of graduate nurses developed which, as yet, has not abated.

Patients

Patient days totalled 79,006, an increase of 937 over 1957. However, the census dropped steadily in the last few months of the year, standing at 173 on December 31st. Plans were on foot for utilizing empty beds. Early in 1959 this resulted in the transfer of quite a number of tuberculous patients to Ninette from the Assiniboine and Clearwater Lake Hospitals to make room for non-tuberculous chronic disease patients in these institutions.

Admissions and Discharges

Total admissions were 340, of which 172 were for treatment of tuberculosis and 168 for review or diagnosis. Of the latter, 43 proved non-tuberculous.

Of the 172 admitted for treatment of tuberculosis, 23 were first admissions, 26 were re-admissions, mainly with relapse, nine returned for further treatment after absence elsewhere, and 114 were transfers. In 138 disease was considered active and in 88, bacillary. Of those with pulmonary tuberculosis, 34% were minimal, 35% moderately advanced and 31% far advanced. Four patients had pleural effusion and one, primary tuberculosis. Those with non-pulmonary tuberculosis included adenitis, nine; bone and joint, five; empyema, two; genito-urinary, one.

Total discharges were 375, of which 212 were from treatment of tuberculosis and 163 from review or diagnosis. Of the latter, 41 with non-tuberculous conditions received treatment along with diagnostic procedures and had an average length of stay of 75 days. Of discharges from treatment of tuberculosis, 63.2% completed treatment, 19% transferred to other institutions, 7% left against medical advice, 8% had disciplinary discharges and 2.8% died. Eight patients taking irregular discharge were bacillary; of these, six have been re-admitted. There were eight deaths, as compared to 23 the previous year. Three were from tuberculosis, three from other causes in tuberculous patients and two in-patients who proved to be non-tuberculous. Autopsies were performed in six, or 75%.

Out-Patients

Total examinations in the out-patient department were 1,229. Of these, 372 were old patients back for review. One discovery of tuberculosis was made and 34 patients had non-tuberculous chest conditions.

Treatment

Prolonged rest in sanatorium is still considered essential treatment in all patients with active disease; even with minimal involvement. Most stay for approximately one year. All patients receive anti-microbial therapy while in hospital, and Whites continue with drugs at home for a total treatment period of two years or more. So far Indians have not been given drugs at home, but tend to be kept longer in hospital. The combination of streptomycin, 1 gram twice weekly, and PAS, 12 grams daily, is still favoured while in hospital,

ith INH reserved for home treatment along with PAS. However, many transfers are on ther drug combinations on admission and are allowed to continue so that the use of the three rugs has been about equal in the past year. Sick patients may be given all three drugs at nce, or a combination of streptohydrozide and PAS. Drug resistant patients are treated ith pyrozinamide, seromycin or viomycin, the latter being preferred.

Surgery is still used extensively in treatment, but to a lesser extent in Whites than Indians here prevention of relapse is a more common surgical indication. Last year we did more pace filling thoracoplasties combined with resection than previously, and usually in advance f the resection. Also, an increasing number of collapse procedures were done as primary eatment in poor risk patients. Major chest operations totalled 112, as compared to 97 in 957. Of these, 68 were some form of resection or thoracotomy, and 35 were collapse pro-edures. There were no operative deaths. A complete list of major and minor procedures appended.

X-ray and Laboratory Departments

Work in both departments has continued on a high standard. The X-ray department id 4,718 radiographic examinations. Electrocardiographs were done on all operatives. Coloured photographs were taken of 67 resection specimens. A new mobile X-ray machine, urchased during the year, greatly facilitated the portable work.

During the year laboratory work increased over 1957 by 4.6% in the number of tests erformed, and by 15.7% in terms of standard work units. Two new tests were added during he year: the estimation of plasma proteins and the Coomb's test for detection of dangerous ntibodies in the blood of patients receiving blood transfusion.

Statistics for both departments are tabulated elsewhere.

Physiotherapy Department

The Physiotherapy Department is a valuable addition to our treatment facilities. Many uberculous patients, especially in older age groups with associated arthritis and rheumatic onditions, benefitted. Its special use in chest surgery is increasing breathing capacity, elping to raise sputum, improving posture and regaining normal shoulder movement, has een most helpful. Altogether, 117 patients started treatment during the year.

Education and Study

The Department of Rehabilitation continues to play an important role in badly needed rimary education, and in preparing some patients for future occupation. Equally important, t is a stabilizing and uplifting influence in a patient body gradually becoming lower in social onduct, general behaviour and in potential for keeping themselves busy with acceptable and vorth-while activities.

We have been without an instructress of nurses since June, but the affiliate course in uberculosis nursing has been carried on well by other nursing staff. Medical, laboratory and ietetic staff have helped with lectures. Nurses' attendants were also given lectures and ard training.

Publications

1. Empyema Complicating Pulmonary Tuberculosis
   By Dr. A. L. Paine and Dr. W. Zajcew.
   Published in Am. Rev. of T.B. and Chest Diseases—August, 1958.

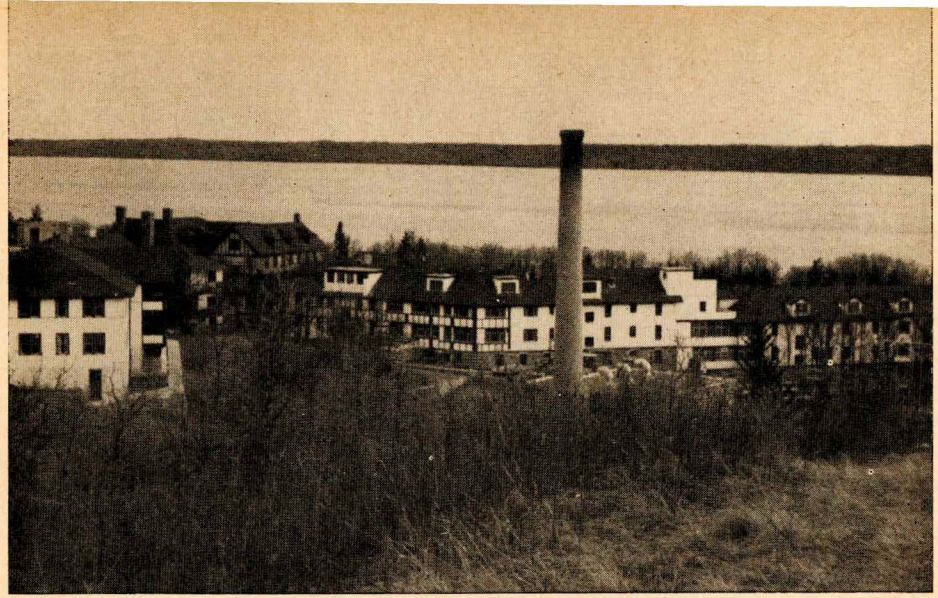
2. Streptomyces and Antibiotics
   I. The Genus Streptomyces.
   II. Production of Antibiotics from Streptomyces.
   By Joseph M. Scott. Published in the Canadian Journal of Medical Technology, September and December, 1958.

Appreciation

The writer wishes to thank all staff, and especially older members, for much good work, leasant relations and loyalty during the year. The Chairman of the Board, the Chairman f the Administration and Finance Committees, the Executive Director, and all members f the Sanatorium Board have continued to give understanding consideration and much ime to our problems. I wish to express appreciation to the Medical Director of the anatorium Board, the Superintendents of the institutions and the Department of Health.

Respectfully submitted,

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



Manitoba Sanatorium overlooks Pelican Lake at Ninette, Manitoba. Much was done to improve the outward appearance of the buildings in 1958. The main building was repainted and the infirmary and nurses' residence were covered with white stucco facing and trimmed with green.

Work in the sanatorium laboratory increased over 1957 by 4.6% in the number of tests performed, and by 15.7% in terms of standard work units. J. M. Scott, extreme right, one of the top laboratory technicians in Canada heads the unit.

Miss Mitzi Newmark, standing in the background, gives instruction in old and new crafts to an occupational therapy class at Manitoba Sanatorium. A number of these crafts are displayed each year at the Manitoba Wheat Pool Exhibition held in Winnipeg.

NCLAIR

ST. BONIFACE SANATORIUM

FOLLOWING the trend of recent years, the St. Boniface Sanatorium had a fair number of empty beds during the summer months. During the winter, or peak period of occupancy, the beds have been filled to capacity and sometimes even beyond a comfortable margin of occupancy. Patients do not relish over-crowding and are quick to suggest that they can do better at home. This tends to increase the number of premature discharges. A recent article indicates that patients discharged against medical advice have a relapse rate of 46% compared to five or six percent which is normal for patients completing medical requirements for discharge. Patients being discharged from St. Boniface Sanatorium go to a home convalescent period of treatment during which time the chemotherapy is continued. In fact, many patients are advised to continue chemotherapy even when having returned to full work.

Regarding the effectiveness of home chemotherapy, a report given to a Sectional Meeting of the College of Chest Physicians, found that in one series 10% of the patients took edicine full time, 10% failed to take it at all and the other 80% took it so haphazardly that eatment was not considered effective. This is only one series and may be an extreme example.

During 1958 the St. Boniface Sanatorium rendered 87,295 treatment days which is 85.4% our full bed capacity of 280. This is a decrease of 4,291 treatment days compared to the evious year. Total patients admitted stood at 216 compared to 252 a year ago. Only ree patients were admitted for review examination.

Treatment

The number of patients receiving treatment for pulmonary tuberculosis was 185 or .5%. The extent of disease varied little from the previous years: 15.7% had minimal; .3% moderately advanced; 36.8% far advanced tuberculosis.

The average length of treatment, according to diagnosis, is shown in the following table:

	1958	1957	1956
Pleurisy with effusion	123 days	116 days	270 days
Plumonary tuberculosis, minimal	329 days	393 days	293 days
Pulmonary tuberculosis, moderately advanced	340 days	463 days	351 days
Pulmonary tuberculosis, far advanced	337 days	514 days	518 days
Average for all discharges	335 days	435 days	405 days

Pulmonary resection in its various forms is done on the premises. The increased average e of our patient population has prevented surgery in some cases, thus preventing complete re. These patients must remain in sanatorium permanently and will tie up an increasing mber of beds. There was no surgical mortality during 1958 following pulmonary resection.

Non-Pulmonary Tuberculosis

Tuberculosis elsewhere in the body appears to be decreasing or probably is not finding way to the sanatorium. In any event we are seeing less. We also find that the response non-surgical treatment is better than formerly. For example, a tuberculous hip or tuberlous spine does not necessarily require surgery but can heal by regeneration if treatment is rted before the disease has advanced too far.

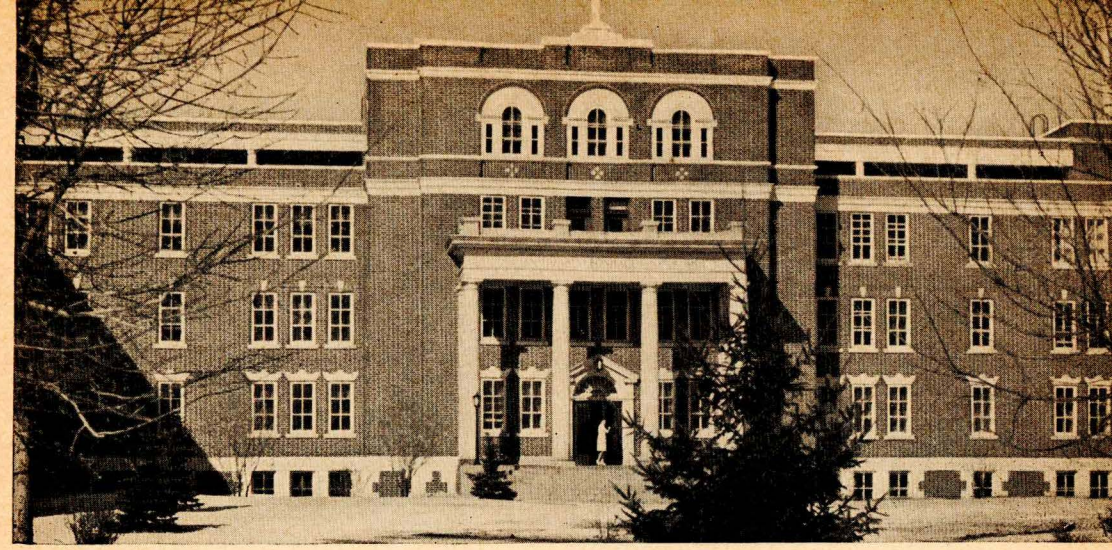
Of the total admissions to sanatorium, 25 (11.5%) came for treatment of extra-pulmonary berculosis. The distribution of these was as follows:

Cervical Adenitis	12%	Hip	8%
Genito-Urinary Tb	28%	Pott's disease	32%
Meningitis	4%	Shoulder	4%
Skin	4%	Wrist	4%
Fobula with sinus	4%		100%

Discharges

There were 236 discharges in 1958 as compared to 255 in 1957. The reason for discharge s as follows:

	1958	1957	1956
Treatment completed	76.7%	72.5%	68.9%
Transferred to other institutions	1.3%	6.3%	2.9%
Against medical advice	10.2%	10.2%	19.2%
Disciplinary discharge	2.9%	.8%	2.5%
Deceased	8.9%	10.2%	6.5%



St. Boniface Sanatorium, Main Entrance.

The results in 201 pulmonary discharges are as follows:

Inactive	72	— 35.8%
Active improved	107	— 53.3%
Active unimproved	3	— 1.5%
Deceased	19	— 9.4%

Ten post mortems were done during 1958, or 47.6% of all deaths.

X-ray Department—X-rays of the chest are taken on all patients on admission, on discharge, at three-monthly intervals and at such other times as found necessary. X-rays of the other parts of the body for special procedures are done on medical order. A total of 2,787 X-rays were processed during the year, as compared to 2,865 in 1957. These figures include radiography for the Out-Patient Department.

Out-Patient Department—In the Out-Patient Department a total of 898 examinations was carried out on 630 individuals. The number of patients enrolled increased by 120 to 1,762. These patients return for examination at various intervals averaging from four to six months, depending on their condition and stage of treatment. Review examination consists of an interview by a doctor, physical examination when indicated, routine laboratory procedures and radiography to the part of the body being observed. There were 135 persons examined as contacts to open tuberculosis and five patients were referred for examination by private doctors. Other procedures of note included 175 fluoroscopies, 168 pneumothorax refills on old pneumothorax cases, 50 tuberculin tests, 14 vaccinations against tuberculosis and 48 cultures for tubercle bacilli. Five new discoveries of tuberculosis were made during the year and 24 were admitted from the Out-Patient Department to the Sanatorium for further treatment.

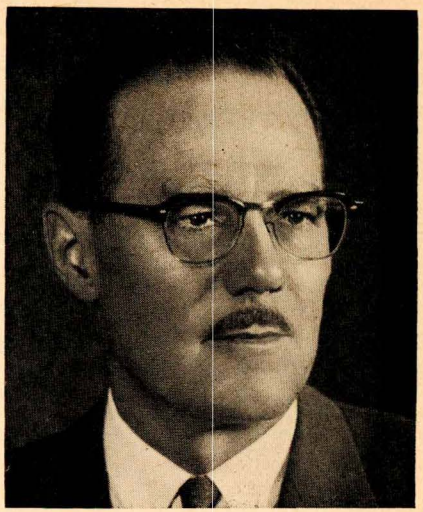
Rehabilitation Department—The Rehabilitation Department was very busy during the year. Its main function is to prepare patients for return to useful lives and especially to assist them in becoming re-established as bread winners. Incidentally, patients who are busily occupied through the Rehabilitation Department are seldom discouraged and are usually very good patients.

Donations—Donations totalling $210.00 towards a denture fund were received from the following clubs: Riverside Lions Club, St. Vital; Blue Bird Service Club, Brooklands; Manitoba Forest Service, Head Office; Manitoba Government Employees Association, Department of Mines and Natural Resources Section. A separate bank account was set up to handle these monies and the donations are greatly appreciated. Special thanks goes to a former patient, Mr. Eric Marner, who was responsible for raising the money.

Hospital Accreditation—Dr. Arnold L. Swanson, on September 23, 1958, conducted a survey of the Sanatorium and, as a result of his recommendation, we were given full accreditation by the Board of Commissioners of the Joint Commission on Accreditation of Hospitals.

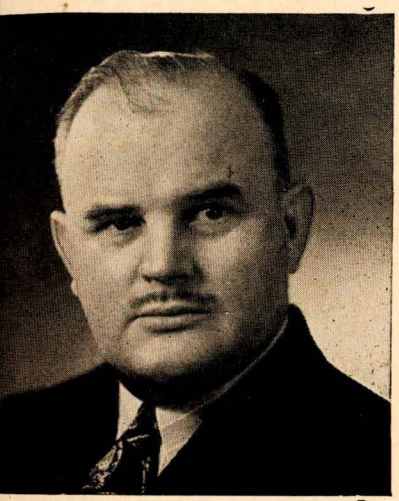
Respectfully submitted,

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



HON. J. WALDO MONTEITH,
Minister of National Health and Welfare

NATIONAL HEALTH AND WELFARE PHOTO



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

NATIONAL FILM BOARD PHOTO

Statement
by the
HON. J. WALDO MONTEITH
Minister of National Health and Welfare
for publication in the
1958 Annual Report of the
SANATORIUM BOARD OF MANITOBA

Once again, I am pleased to acknowledge the work of the Sanatorium Board of Manitoba. ver the years, this voluntary organization has chalked up a notable record in combatting uberculosis and it is encouraging to see that its success has continued to mount during 1958.

Of particular interest to me were the further signs of progress in our joint effort in relation Manitoba's native population. In the past twelve months, the new rehabilitation program ndertaken at the Assiniboine Hospital has gone ahead rapidly, exceeding the expectations all concerned. Then too, the decreasing number of Indian patients both at this institution nd at the Clearwater Hospital has made it possible for the Department to help remedy the ortage of beds available to non-native residents of the surrounding areas. I might say at we were most happy to be of service in this regard and to reciprocate in some measure e splendid co-operation extended us so generously by the Sanatorium Board of Manitoba.

The conquest of tuberculosis among Indians and Canadians generally moves nearer ith every passing year. On behalf of the Department of National Health and Welfare, ay I congratulate the Sanatorium Board of Manitoba on its outstanding part in hastening e day of final victory.

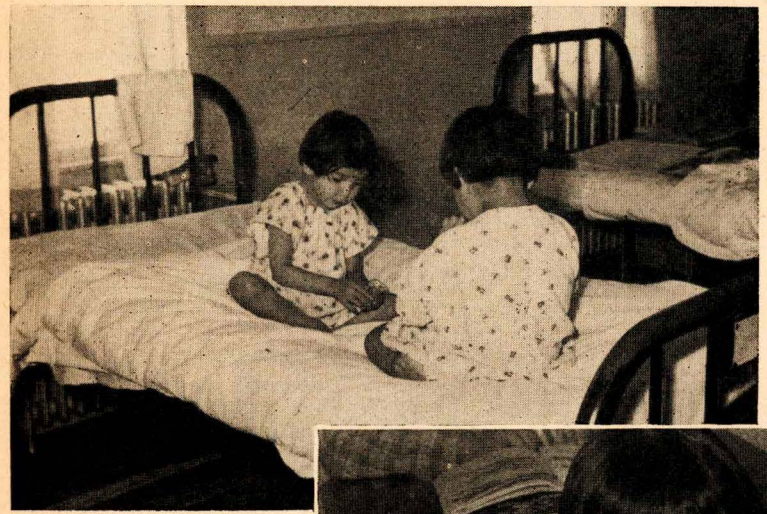
Care of Indian Patients

From the Report of the Medical Director

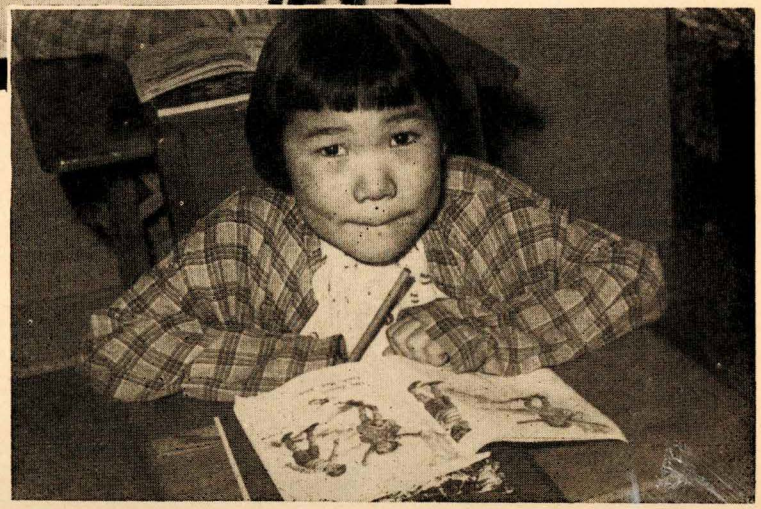
THE Sanatorium Superintendents and the Regional Superintendent of Indian and Northern Health Services have reported on case-finding and treatment of Indians and Eskimos. There are also appended statistics so I will refer to only a few features. The most striking is the reduction in tuberculosis deaths, there being only eight for the year. This eight compares with 19 in 1957, 79 in 1950, 129 in 1945 and 166 in 1940. There was also a 22% reduction in new active cases in 1958, compared to 1957 (118 to 92). The Indian population is estimated at 21,000. In 1958 X-ray examinations of Indians and Eskimos totalled 16,081 and 818 respectively. These surveys are organized by Indian and Northern Health Services and carried out by the Board's medical and technical staff.

On December 31, 1958, 273 Indians and 147 Eskimos (total 420) were in sanatoria. All did not have tuberculosis, as many with non-tuberculous pulmonary conditions can benefit from our medical and surgical services. Actually, nearly half the admissions did not have tuberculosis. After January 1st, 1959, these non-tuberculous patients who are residents of Manitoba are chargeable to the Manitoba Hospital Services Plan. The reduction in the need of treatment beds for tuberculosis, as I have previously reported, made possible in Clearwater Lake Hospital and Assiniboine Hospital the designation of sections as general hospital wards.

The fine working relationship between the Board and Indian and Northern Health Services in all phases of the program has been a great factor in the progress and co-ordination of the anti-tuberculosis programs for both Indians and non-Indians.



Two Little girls at play . . .



A third at study.

WOOD

Report of the Regional Superintendent

INDIAN HEALTH SERVICES

THE tuberculosis situation in the Indians of Manitoba continues to improve. The improvement can be realized better if we compare the situation in 1958 with that of 1948.

There were 139 Indian deaths from tuberculosis in 1948. In 1958 there were eight. The death rate of Whites in Manitoba was 19 in 1948 compared with 139 in Indians. If that rate had continued to the present there would have been 1,400 Indian deaths instead of 500.

A better gauge of progress is the discovery of new active cases. In 1948 there were 535 new cases. In 1958 there were 94. However, the morbidity rate of Whites (27 per 100,000) and Indians (443 per 100,000) indicates that we have a long road to travel.

In 1958 we X-rayed nearly 16,000 Indians on surveys. If we add all the X-rays taken on hospital admissions we estimate at least 90% had an X-ray during the year.

We found one new case in 337 X-rays on surveys. In White surveys one is found in 387 X-rays. We consider that mass X-rays is still the preferred method in discovering new ses. Due to the isolated position of reserves, difficulties of travel, relative lack of personnel, d widespread exposure to tuberculosis, we are not substituting tuberculin tests as a pre- inary screen except in some selected residential schools.

There is no evidence of shift of new cases to older age groups:

58% of cases were under 20 years of age.
84% of new cases were under 35 years of age.
80% of new cases were pulmonary.
20% of new cases were non-pulmonary.

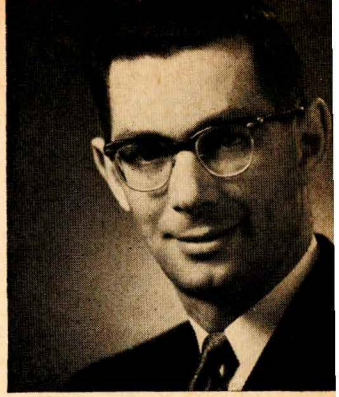
Unfortunately we had 48 cases of re-activated tuberculosis which may be a reflection low living standards.

There is much work to be done. One-fortieth of the population of Manitoba supplies e-third of T.B. cases. We would never have made the progress we have without the help the Sanatorium Board of Manitoba.

Respectfully submitted,

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

A group of Indian patients get together for a session of music-making, western style.



DR. A. H. POVAH

ASSINIBOINE HOSPITAL

ASSINIBOINE HOSPITAL is a 227 bed hospital located in Brandon, Manitoba. Until January 1, 1959, patients were Indians and Eskimos suffering from tuberculosis or other disease of lung, bone and joints. The Medical Director will be reporting that during the 12 years of operation of this hospital the death rate from tuberculosis among Indians and Eskimos has dropped from 129 deaths a year in 1945, or 793 per 100,000 population, to eight deaths in 1958 or 38 per 100,000 population. This decline in tuberculosis has meant that beds become available for other purposes. By the end of 1958 arrangements with the Federal and Provincial governments were completed whereby, on December 1, 1958, the name of the hospital was changed from Brandon Sanatorium to Assiniboine Hospital and on January 1, 1959, beds on three of the 10 wards, approximately 57 beds, were designated as general hospital beds for extended treatment patients. The arrangements were made to relieve the shortage of active beds in general hospitals. It is anticipated that to relieve the shortage an active chest service will be continued, along with acute and chronic diseases and orthopaedic conditions among Indians and Eskimos who may be referred to this hospital for treatment. The program has been well received by the medical practitioners in this area who, in most cases, have continued the medical care of their patients rather than delegate it to the resident medical staff.

Patients

Patient days during 1958 amounted to 83,545 as compared to 86,455 for 1957.

During the year one ward was renovated and turned into a rehabilitation unit, reducing the bed capacity from 256 to 227. The hospital has operated near capacity throughout the year.

Out-Patients

A total of 932 Whites was examined in the Out-Patient Department during the year as well as 183 Indians and four Eskimos. Three active cases of tuberculosis were found.

A tuberculin survey of all students registered at Brandon College was conducted and all reactors X-rayed. The routine X-raying of school teachers, Royal Canadian Mounted Police, admissions to the Old Folks Homes and new inmates of the Brandon Gaol was continued.

Admissions

During the year 1958, a total of 303 patients were admitted to Assiniboine Hospital. Of these, 121 were admitted for the first time, 49 were re-admissions, many of these for the treatment of non-tuberculous conditions, and 113 were transferred from other institutions. Of the 303 admissions, one-third were under 14 years of age, approximately one half were between the ages of 15 and 39 and the remaining one-fifth were over 40 years of age. Of the 303 admissions, 201 were admitted for the treatment of tuberculosis and of these, 47 or 27% were bacillary.

Of the 201 tuberculous admissions, 174 were admitted for the treatment of pulmonary tuberculosis and of these 71 or 40% had minimal disease, 59 or 33% had moderately advanced disease and 27 or 15% far advanced disease. This is the first time that admissions of far advanced disease have reached such a low figure, a most encouraging sign. Twenty-seven patients were admitted with non-pulmonary tuberculous disease and 102 patients or nearly one-third of admissions were admitted for the treatment of conditions other than tuberculosis.

Discharges

The average length of treatment of all cases was 333.24 days as compared with 393.24 days in 1957. This is significant in view of the fact that one of the discharges had been on treatment seven years and a second nine years. Many of the Eskimos have to be kept on treatment longer than necessary because if they are considered ready for discharge during the winter, they must continue on treatment until transportation is available in the summer. Treatment of the Eskimos is also kept up longer because they frequently return to strenuous living conditions and usually cannot be followed after discharge.

Of the 323 discharges, 245 or 75% were discharged because treatment had been completed, 16 or 4.95% were discharged against medical advice or went A.W.O.L. Of these non-medical

scharges, nine had been on treatment for tuberculosis. Out of these only one is unaccounted , the remainder have been re-admitted or have had disease which was considered to be tisfactorily arrested.

There were eight deaths during the year. None were due to pulmonary tuberculosis. ıe death was due to renal tuberculosis and uremia, and the remaining seven were due to uses other than tuberculosis.

Of the 323 discharges 174 had been treated for pulmonary tuberculosis. Of these three ere bacillary on discharge. One of these was the death mentioned above, one transferred d the third re-admitted. Thus none of the discharges might be considered a public health enace. Of the pulmonary tuberculosis cases discharged 116 or 66.6% were inactive, 27% ere still active but, as noted, most of these were transfers to other hospitals. Only one of e discharges might have been considered to have unstable disease. She is the patient who ent A.W.O.L. and is still unaccounted for.

Treatment

Thirty-two lung resections were performed during the year. There were no thoraco- asties. Bronchograms were done on 85 patients and a significant number were found to ve residual bronchiectasis of tuberculous origin which would contribute to the possibility relapse of disease if not resected. This bears out one of Overholt's early statements that th initial infection permanent lung damage is produced. This is a further reason why oracoplasty is infrequently indicated since residual bronchiectasis beneath a thoracoplasty ay cause relapse of disease. Post-operative complications in the 32 resections were three onchial leaks which were treated successfully with closed intercostal drainage. Of 101 sections done in the last two years there have been no deaths. The only complications were onchial leaks in six and one wound infection which responded to treatment. One patient ho had a segmental resection done in 1957 has positive sputum and will require a second eration to remove the involved bronchial stump.

Twenty-two bronchoscopies were performed. Dr. Tucker performed 16 major ortho- edic operations during the year.

X-ray Department—During the year 5,211 examinations were performed as compared th 6,211 X-ray examinations during 1957.

Laboratory—During 1958, 35,986 units of work were performed, an increase of some 00 units over the previous year. There has been an increased amount of bacteriology and ochemistry. The laboratory staff undertook the tuberculin survey of students of Brandon llege and also assisted with the survey of University of Manitoba students in Winnipeg. e hope this year to add blood-gas studies to the procedures performed in our laboratory. is will give us a better laboratory investigation of respiratory diseases.

Rehabilitation—The new Rehabilitation Unit was opened on April 1, 1958. In this it suitable candidates for rehabilitation obtain social and educational indoctrination before oceeding with their rehabilitation program either in Brandon or in Winnipeg. This is a uch needed step from the hospital or reserve to the job in the city and here any misfits can found and excluded before an expensive program is undertaken. Twelve patients ready for scharge have been referred to the Rehabilitation Unit. During the year 158 patients have ceived academic instruction from the teaching staff.

Physiotherapy—On April 1, 1958, an active physiotherapy department was introduced d shared with Ninette. Mr. Prendiville, the physiotherapist, spends two days a week in andon and three at Ninette. His services have been invaluable and are only hampered the lack of equipment, space and time which we hope will be remedied soon.

During the 76½ days spent in Brandon, 1,512 units of remedial exercises and 80 units massage have been given to 128 patients. The nurses have cooperated excellently in this rk and continue the exercise during the days the physiotherapist is at Ninette.

Appreciation

I would like to take this opportunity to express my deep appreciation of a fine staff who ve taken on a new type of patient, new medical record forms, new admitting procedures d a rapid turnover of patients as a matter of course. We also appreciate the fine associations, lp and guidance we have had from our own hospital committee, all the members of the ard, especially the Medical and Executive Directors, the staff of Indian and Northern ealth Services, and their field workers and the superintendents of the other institutions.

Respectfully submitted,

A. H. POVAH, M.D.,
Medical Superintendent.

An aerial view of old Brandon Sanatorium, now Assiniboine Hospital. It will be an important Extended Treatment Hospital Centre for Western Manitoba, providing special medical and nursing care to those patients with long term, non-tuberculous illness and to certain respiratory and orthopedic cases.

In April, 1958, the Rehabilitation Evaluation and Social Orientation Unit was opened at Assiniboine Hospital for disabled Indians and Eskimos. The purpose of the program is to introduce the ex-patients to a satisfying role in urban society in a gradual manner. The experiment showed promising results. Of the 25 persons admitted to the unit during the year, 21 of them have either been placed in jobs or are taking vocational training. Here a group of the rehabilitants relax in the unit's attractive lounge.

CAREY

CLEARWATER LAKE HOSPITAL

THE diligence and effectiveness of case finding programs throughout Manitoba has led to a sharp reduction in the bed requirements for the treatment of tuberculosis, and has released valuable space for the care of long-stay patients. On December 31, 1958, 59 beds were set aside for the care of general patients, existing facilities were supplemented, and the name of the institution was changed to Clearwater Lake Hospital.

It is particularly gratifying to present this 14th Annual Report during this transition phase.

Admissions

A total of 336 patients were admitted throughout the year, and received 56,876 days of treatment. Although 187 (55.6%) new cases were admitted, only 83 of these were berculous, whereas 104 (30.6%) were non-tuberculous. Nevertheless, primary pulmonary berculosis occurred in 28 cases, with minimal disease manifesting itself in 28 others. Pul- nary tuberculosis in an advanced disease category was demonstrated in 18 instances. This uld indicate, of course, that children are still being infected with tuberculosis, and that the casional nest of active disease is still being uncovered.

Children below the age of 14 years constituted 40.5% of all admissions, while 15.2% re beyond the age of 50. In the ethnic grouping, fewer Eskimos were admitted than eviously, but some intended for Clearwater may have been directed elsewhere.

The "General Hospital" trend had already appeared in 1957, when approximately 30% all admissions were non-tuberculous. This became more obvious during 1958.

Treatment was administered to patients with a diversification of diagnoses, ranging from rcinoma of the bronchus to interstitial pneumonia, and, as noted above, patients with n-tuberculous diseases entering the hospital for the first time outnumbered new discoveries tuberculosis by 21!

Of all admissions, re-admissions constituted 20.5%. However, only 13.1% were admitted th re-activation of tuberculosis, a slightly higher figure than during the past two years.

A total of 69 patients was re-admitted, with 25 proving to be non-tuberculous. Most of ese were suffering from acute and chronic pulmonary conditions. Of the 44 tuberculosis admissions, 21 were still considered to have minimal disease, although 19 others had relapsed o an advanced category.

Discharges

During 1958, discharges numbered 391, with 108 tuberculosis cases completing sanatorium atment, and 135 non-tuberculous patients returning home as improved or cured. There re no discharges against medical advice.

Transfers to other institutions numbered 98, which is far in excess of any previous year. ese were mainly referred for surgery and it is interesting to note that even among these, were non-tuberculous.

Deaths

The death rate was extremely low (1.3%) and of the five deceased, suicide was the cause one instance; far advanced pulmonary tuberculosis in the second, and cardiac failure follow- chicken-pox in the third. One child died within 48 hours of admission of interstitial eumonia, while the other succumbed to tuberculous meningitis within 31 days. In each e an autopsy was performed.

Treatment

Treatment days:

Active days stay (for all cases), 171.2
Average days treatment for all cases of active tuberculosis, 371.7.
The average number of days spent in the treatment of tuberculosis was 70 less than in 1955.

Treatment, Chemo-therapeutic and Diagnostic—The various chemo-therapeutic nts again were used to great advantage, with 217 patients receiving streptomycin and S, 210 INH and PAS, and 73, triple therapy. D. Cycloserine was employed in six cases advanced pulmonary tuberculosis, but the results were disappointing. One suicide may ve been attributed to its usage, while mental changes and epileptiform-type convulsions veloped in the others. Treatment had to be abandoned.

After attending the National Tuberculosis Association meeting in Philadelphia and realizing that cortisone was being used in the treatment of tuberculosis, it was decided to test its effectiveness in three classifications of disease. In homeopathic dosages it appeared to be definitely advantageous in the treatment of tuberculous meningitis and pleurisy with effusion. In far advanced disease the results were disappointing.

Minor surgical measures were carried out throughout the year, but the use of the operating room was mainly confined to diagnostic procedures. Six bronchoscopic examinations were carried out, six laryngoscopies, 54 bronchographic studies, and nine cystoscopies.

Pre- and post-natal examinations were followed on four women and in each case the delivery was uneventful and the babies thrived. Each infant remained at Clearwater for an average of 10.3 days.

Medical Departments

X-ray Department—Institutional film totals were less than the year before, although all staff received routine chest films according to schedule and all admissions were X-rayed. Fluoroscopic examinations, associated with bronchographic procedures, numbered 61, and consequently stringent safety regulations were enforced to protect both staff and patients from the dangers of secondary radiation.

Travelling Clinics—The X-ray Department at Clearwater is involved in a vast travelling clinic program, and undertakes the processing, filing and recording of all films arriving for interpretation. There is no doubt that the decrease in active tuberculosis case findings can be directly attributed to these intensive X-ray surveys.

In co-operation with the Department of Indian Health Services and Department of Northern Affairs, all areas in Northern Manitoba are surveyed throughout the year, including the Central and Eastern Arctic. In addition, X-ray films are received at least monthly for interpretation from Fort Churchill Military Hospital, Chesterfield Inlet Hospital, Norway House Hospital and the Baker Lake Nursing Station. St. Anthony's Hospital in The Pas is visited twice weekly, with 3,364 hospital admission films being read during 1958. From these, 24 active or suspect cases of tuberculosis emerged and were referred to Clearwater for investigation.

Organized clinics totalled 50, and 12,693 persons derived the benefit of this free X-ray service. Eskimo clinics numbered five, White clinics 22, and Treaty Indian 23. It can be readily seen that these programs are most comprehensive and serve as a rich source of case findings, both of a tuberculous and non-tuberculous nature.

The grand total of films received at Clearwater during 1958 numbered 20,150, a larger total than ever before.

Out-Patient Department—The patients examined in this department are from a selective group, mainly ex-sanatorium cases. The examinations are consequently complete.

Of the 319 persons attending the Out-Patient Department in 1958, nine cases of active tuberculosis were discovered.

Laboratory—Admission of non-tuberculous disease calls for laboratory tests of a more specialized nature. This resulted in a definite increase in the number of procedures carried out within the department, and in the referrals to outside laboratories. The routine monthly tuberculosis investigations continued as before.

Two technicians performed 9,417 individual examinations, representing 20,799 units of work—a most commendable performance.

Medical Staff—The daily average patient occupancy was 156, and all tuberculosis cases were reviewed and examined at intervals of three months. Naturally, the non-tuberculous admissions required considerably more attention. At the end of December, 59 beds within the permanent Ward "H" were allotted to the care of long-stay and non-tuberculous patients. It was a credit to all that the changeover occurred so efficiently and rapidly.

New record sheets covering all phases of medical work were mutually agreed upon by the superintendents during the various meetings of the Medical Records Committee, and it was decided at Clearwater that these forms would be adopted and put into immediate use.

Nursing Staff—Despite periodical shortages in staff the more exacting nursing care occasioned by the admission of general hospital cases was undertaken with great efficiency. Patient care was at a high level, and it can be truthfully said that whatever the staff lacked in quantity, it was overshadowed by quality.

Academic Teaching and Occupational Therapy

The Occupational Therapy Department did not function with its usual efficiency but is currently in the process of reorganization. Academic teaching under the capable management of two teachers was well organized, and 127 pupils were enrolled, with 84 commencing Grade I,

d 43 others undertaking studies from Grades II to IX. In the adult age group, 38 patients er the age of 16 were taught.

Pupils were drawn from the Eskimo, Indian, Metis population and the majority (70) re Eskimos. Tuition was carried out in two classrooms and bedside teaching was abandoned.

Engineering and Maintenance

With the buildings showing signs of age, maintenance problems have become increasingly ficult. Therefore only major changes are recorded.

The electrician completed the wiring in the newly erected, two-storey, four-suite apartment ck, in readiness for occupancy by sanatorium staff. This was the second block to be npleted within two years.

Sidewalks to the new block were completed and a concerted effort was made to improve landscaping. Outside walls of the laundry were replaced by a cement-type block and out- e windows, by glass brick tile. The dishwash room was completed; the walls and floors re covered with tile.

Several residences were decorated, and two holes were cut in the boiler room ceiling and f in preparation for the installation of two 70-foot, 27-inch steel chimney stacks.

A 60,000 gallon steel water tower was constructed under contract by the Department of ansport, with the Sanatorium Board sharing the cost. The new tank is 104 feet in height, d 24 feet in diameter.

Administration

Mr. C. Christianson arrived at Clearwater on August 14th, 1945, and remained in service tially as accountant and finally as Business Manager until May 15th, 1958, when he trans- rred to Assiniboine Hospital. Over the years he gave invaluable service to the institution.

Appreciation

The invaluable assistance of the Medical Director and Executive Director is hereby cognized and the support and interest of the Chairman and members of the Sanatorium ard of Manitoba are greatly appreciated.

As in the past years, the spirit of co-operation of the superintendents within the institutions d of all those working towards our ultimate goal throughout Manitoba has continued with e same sense of fellowship.

Respectfully submitted,

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

earwater Lake Hospital, operated by the Sanatorium Board at The Pas, Man., is now an Extended eatment Centre for northern Manitoba and the central Arctic. On December 31, 1958, 59 of its 180 ds were set aside for the care of general patients. The other beds are maintained for the tuberculous.

MISS MARGARET C. BUSC

REPORT OF THE REHABILITATION DIVISION

SUCCESSFUL rehabilitation of the tuberculous begins with diagnosis and ends when the patient has regained his independence in a normal community. The problems of a patient are not all either medical, psychological, economic, social or vocational, but may be a combination of any or all of these phases of rehabilitation. This past year has brought an ever-increasing awareness of this complexity, both while the patients are in a sanatorium, and segregated from their usual environment, and also following discharge, when the adjustment to life outside of an institution must be made. The medical aspect of rehabilitation is still the most important one in the initial stages of this service, and continues as a guide for all decisions throughout the process. As the patient improves in health, his dependence on the medical phase lessens, and he becomes more interested in vocational counselling, vocational training and guidance in placements.

In-Sanatorium Training Program

As soon as medical permission is granted a realistic appraisal of each individual's capacities and abilities is made by the Director of Rehabilitation Services. The opportunity for self-improvement is given to all patients while in our sanatoria regardless of the role they expect to play when they leave. A total of 507 in-sanatorium interviews was held during the past year, with 201 follow-up office interviews.

At Manitoba Sanatorium with more Indian and Eskimo admissions during the year, the need for pre-vocational courses was predominant. The 211 students registered during the year completed 284 subjects, and of these 258 were at a Grade VIII or lower level. Thus fewer patients could avail themselves of the opportunity to enrol in vocational courses.

In both Manitoba Sanatorium and St. Boniface Sanatorium the variety of vocational courses including Elementary Bookkeeping, Typewriting, Shorthand, Fundamentals of Advertising, Architectural Design and Drawing, Carpentry, Duct Design, Home Management, Watch Repair and others were studies with the objective of self-improvement in a skill or preparation for a new vocation.

From January 1st, 1958 to December 31st, 1958, enrolments in the two sanatoria were as follows:

	Manitoba San.	St. Boniface	Total
Pre-vocational	211	113	324
Vocational	38	25	63
Occupational Therapy	296	209	505
Shop Work	—	100	100
			992

Manitoba Sanatorium Personnel

We are pleased to report that the personnel in the Rehabilitation Division at Manitoba Sanatorium remained stable during 1958. Miss Gertrude Manchester efficiently supervised the division and was assisted by instructors, Miss Gladys Motheral and Mrs. S. V. Hastings. They teach pre-vocational subjects and give guidance to those enrolled in vocational courses.

Miss Mitzi Newmark and her assistant, Mrs. Edna Esquiash, continued teaching old and new crafts in the Occupational Therapy Department, and have charge of a well-stocked craft shop. Crafts were displayed at the Manitoba Wheat Pool Exhibition in Winnipeg.

St. Boniface Sanatorium Personnel

There was one change on the instructors' staff in the Rehabilitation Division of St. Boniface Sanatorium in July, 1958, when Miss Iris Kuyansoo replaced Miss Jean Pokrant. The other instructor, Mrs. Yvette Rickard, gave excellent service during the year with Mrs. E. Leggett, a former staff member, again assisting during the summer vacation period.

Miss A. Hargreaves, the occupational therapist, and Mr. Alex Vermette, who is in charge of the work shop, continued to give capable direction in their respective departments.

Miss Hargreaves and Miss Newmark had a fine display of hand-made articles from their respective sanatoria at the Manitoba Teachers' Convention at the Royal Alexandra Hotel in April, 1958. This display received many favourable comments and we are indeed grateful to the Manitoba Educational Association for the privilege of setting it up.

Post-Sanatorium Program

The patients who were active participants in either pre-vocational, vocational, or occu-tional therapy courses for self-improvement or for diversional purposes only, do not, as a neral rule, need rehabilitation services following discharge. These cases are kept on active , however, until it is known if they are well established at home and able to carry on in ir previous occupations.

Another group, usually those who for some reason do not avail themselves of the oppor-nities offered and have no homes, need help in establishing welfare assistance until such time they are available for work. In some instances these people are eligible for unemployment urance benefits, if no work is available.

Another group, those who use the time in sanatorium profitably, with a definite goal mind, also usually avail themselves of the post-sanatorium rehabilitation services. They y need additional counselling, training, financial assistance, job placement, and so on.

Those in training under Schedule "R" during 1958	33
Those who completed training during the year	18
Discontinued training	5
Those still in training on December 31st, 1958	10

Those who completed their training are all gainfully employed in the following occupations:

Clerical work	5	Barbering	6
Radio and T.V.	1	Hairdressing	1
Teaching	1	Upholstery	1
Architectural Drafting	2	Lab. technician	1

Of the five who discontinued training, one was because of ill health, and the other four all employed at the present time.

It is difficult at times to assess just where the rehabilitation services begin or end. In 47 a lad of 14 years was admitted to Manitoba Sanatorium, and enrolled in Grade VI. 1950 he had completed Grade X, with an average of 92% before he was discharged. In fall of 1951 he was admitted as a patient and in spite of having to have surgery, he com-ted his Grade XII with an average of 83%. He had shown considerable aptitude in thematics, and it was planned that he take an apprenticeship in accountancy upon his charge, and in preparation for this he also took a course in elementary bookkeeping and ewriting. It was particularly gratifying to have him telephone in December, 1958, to that he had successfully completed his examinations in Chartered Accountancy, and has a d position with the Department of National Revenue. Thus, 10 years elapsed before this e could be closed satisfactorily.

The other extreme in the time required for training before becoming employable can be nd in a case where a young girl had learned typewriting before admission to St. Boniface natorium, and studied shorthand during her stay there. Following discharge she took a month's refresher course through Schedule "R" at a business college to increase her speed her skills, and then was employed. She is happy in her work, and her case is also now sed.

This past year Schedule "R" is financially assisting a university student, now in his l year of pharmacy at the University of Manitoba, and a young student in her second year medicine. The latter began her high school education at Manitoba Sanatorium.

I am grateful to the Sanatorium Board of Manitoba for their grant of a $500 loan to ther worthy ex-Manitoba Sanatorium patient to enable him to register in his final year of -medicine at the University of Manitoba. He completed several second year university jects while he was a patient, as preparatory work for Third Year Arts.

The annual rehabilitation fund donated by the Winnipeg Zonta Club, to financially ist indigent patients who wish to enrol for vocational courses, is again sincerely appreciated.

The Special Placement Branch of the National Employment Service have again co-rated in job placement. The number of placements made by the National Employment vice and others during 1958 was 25.

The Messenger of Health

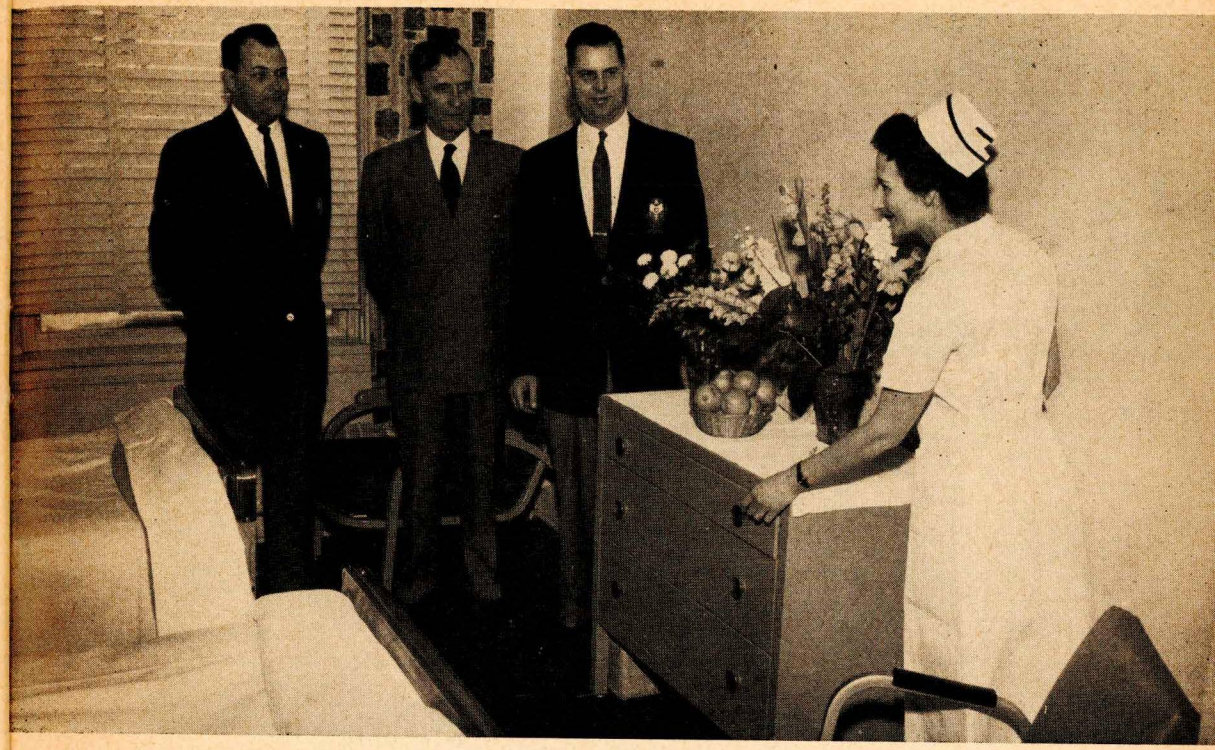
The Messenger of Health continued in its service of publishing current news of tuberculosis atment, rehabilitation and patients.

Appreciation

I would like to acknowledge the co-operation of Dr. E. L. Ross, Medical Director, Sana-ium Board of Manitoba, Mr. T. A. J. Cunnings, Executive Director, and the many other ple who have assisted in the work of the Rehabilitation Division during the past year.

Respectfully submitted,

MISS M. C. BUSCH,
Director of Rehabilitation Services.



The Associated Canadian Travellers of Winnipeg and Brandon contribute a great deal to tuberculosis preventive services. In addition to their $9,400 contribution in 1958, the Winnipeg Club also donated new furniture for a two-bed room at the Central Tuberculosis Clinic. The Brandon Club donated $7,000 to the Sanatorium Board during the year. Pictured here, looking over the new furniture, are, left to right: Ian Robertson, Winnipeg A.C.T.; Dr. D. L. Scott, medical superintendent of the C.T.C.; Gordon MacDonald, president, Winnipeg A.C.T., and Mrs. P. Torgerson, superintendent of nurses.

ASSOCIATED CANADIAN TRAVELLERS

THE Associated Canadian Travellers of Winnipeg and Brandon continued to support the tuberculosis preventive services in 1958. They held "Search for Talent Broadcasts" in many Manitoba towns and the Brandon club conducted a house to house canvass in Brandon in the fall.

Time for the broadcasts was again contributed by Radio Station CJOB in Winnipeg and CKX in Brandon.

During the year the Travellers turned over to the Board $16,400.

This makes a total of $297,174 contributed to the tuberculosis preventive fund through activities of the Associated Canadian Travellers since they began their assistance in 1945.

The Sanatorium Board of Manitoba is deeply grateful for the enthusiastic and whole-hearted assistance of the Associated Canadian Travellers, and the generous support of Radio Stations CJOB and CKX. Their efforts merit the grateful thanks of the people of Manitoba.

REHABILITATION OF THE INDIAN AND ESKIMO

In-Hospital Services

Rehabilitation of the Indian and Eskimo not only implies physical restoration to the maximum of former usefulness, but also involves his social development to a point where he can take his place alongside Canadians of other racial origins. The needs of the disabled vary with the individual and are often complex, requiring the services of a number of persons with a diversity of skills. During the process of restoration the patient's needs in one area may take precedence over those in other areas, but at no time can one particular need be entirely divorced from the others. Those providing services must therefore function as a team. This team work exists not only in the individual hospitals operated by the Board, but extends from one to the other, and beyond to the Rehabilitation Unit and the community.

During 1958 co-operation between the medical staffs and the teaching staffs was excellent; and an increased interchange information has resulted in greater understanding of the patient's total problem. There has en a growing interest among the patients toward post-hospital training, which has been mulated and encouraged by the staff. As the majority of Indian and Eskimo patients quire additional schooling, it is important that they begin studying at the earliest possible int. The Medical Superintendents have been most considerate of this fact, and their interest the patients' schooling has been most encouraging and rewarding.

Assiniboine Hospital

There were some changes in the teaching staff during the year. Mrs. Deroche, who had ovided excellent service in past years, was transferred to the Indian Day School at Griswold. r. T. Daigle transferred from Clearwater Lake Hospital and, with the capable support of iss Bromley and Mrs. Aimes, maintained the standard of academic tuition. A total of 8 students took advantage of their services.

The Occupational Therapy Department once again functioned smoothly under the pable direction of Mrs. V. Davidson. Many fine examples of native craft were produced, a mber of which were exhibited at Brandon, Carberry and Toronto fairs. Mrs. Davidson so undertook a number of speaking engagements in rural communities, where her talks not ly resulted in an increased demand for the articles produced by the patients, but also assisted making a greater number of people aware of the efforts being made to rehabilitate the dian and Eskimo.

Clearwater Lake Hospital

There were changes in both teaching departments. Following Mr. Daigle's transfer to randon, Miss C. Wiebe was promoted to the position of Principal, and Mr. J. Zurbec was lded to the staff. Through their efforts academic instruction was provided to 126 patients, number of whom were transferred during the year to other hospitals where they were able further their schooling.

We were most sorry to accept the resignation of Miss Elsie D'Arcis as handicrafts in- ructor, but are pleased to report that her health is improving rapidly. The position of ndicrafts instructor was filled by Mrs. H. Playford who, before commencing her duties, was ovided with a short course at the St. Boniface Sanatorium.

Post-Hospital Service

In order that the rehabilitant may plan and achieve a realistic goal enabling him to live full a life as possible, he must be assisted to gain an understanding of the opportunities hich lie within the scope of his capabilities. He must learn what will be expected of him ould he choose to live off the reservation, so he may develop a pattern of social behaviors rmitting him to function comfortably and effectively in his new surroundings. During the tter part of 1957 plans were outlined for the establishment at Brandon of a rehabilitation it through which Indian and Eskimo rehabilitants might achieve this social awareness in a adual and more natural manner. On April 1st the renovation of one wing of Assiniboine ospital was completed, and the admission of the first group of rehabilitants to this new unit arked the beginning of our present program.

From the outset it has been the policy to take advantage of existing facilities, and the location of the Rehabilitation Unit at the Assiniboine Hospital, with its proximity to the city of Brandon, has proven to be extremely advantageous in this respect. Not only has it been possible to use the facilities of the hospital for medical purposes, but also for simulated job situations, providing valuable practical assessment. In addition to this type of practical assessment, we have been fortunate in obtaining, through the co-operation of Dr. Stewart Schultz, Medical Director, Brandon Mental Hospital, the services of Mr. Neil Hildebrand, Resident Psychologist. The information obtained as a result of the psychometric tests he has administered has proven to be of immense value.

Visits to industries and informal talks given in the unit by local businessmen have further stimulated interest among the rehabilitants, providing them with a knowledge of vocational opportunities, and impressing them with the need for good work habits—punctuality, reliability, and self-discipline. An active program at the Y.M.C.A. has improved not only their physical health but their mental outlook. The response of the community has been most gratifying, and the rehabilitants have not lacked invitations to participate in community activities. This has resulted in their being introduced to urban society at a good level.

Much of the success of the program to date is due to the enthusiasm and high degree of motivation shown by the students themselves, the majority of whom have been most appreciative of the confidence and trust placed in them. There has developed in each of these students a sense of pride in the unit, and I am pleased to report that, of the 25 persons who have resided in the unit during the nine months of its operation, only four have been discharged for lacking sufficient interest.

The Rehabilitation Unit at Brandon is, however, only one phase of the post-hospital program. Those persons with the essential qualities have, on leaving the unit, been assisted to take advantage of their right to equal opportunity with the non-Indian group for vocational training. However, in many cases formal training simply is not feasible. In these instances, or where the individual has completed training and is ready for placement, he is registered with the National Employment Service. Personal contact with employers by the rehabilitation officer has also been utilized extensively in securing suitable employment.

Follow-up

Although the rehabilitant leaves the unit at Brandon with an increased understanding of how to deal with the problems he will meet in the urban community, it is only natural that situations will arise with which he is unable to cope. For this reason, close contact is maintained during the first year of employment, or for as long as it is felt necessary. The door is always left open and, although encouraged to rely on his own resources, the rehabilitant knows that he may at any time seek guidance and understanding from the rehabilitation staff. Every disabled person cannot be returned to full productivity, but it is the objective of any rehabilitation program to restore and develop each to his maximum usefulness. All persons referred by other agencies, and all patients in the hospitals operated by the Board are screened, relative to rehabilitation. However, only those who, following preliminary screening, evidence a reasonable chance of achieving some measure of economic independence are listed as accepted cases.

Disposition of Cases

Accepted cases in 1958	118
Closed, lacking interest or otherwise unsuitable	27
Closed, no longer requiring services	9
Carried over to 1959	82
Post-hospital prevocational academic training	36
Attended Public Schools	2
Attended Special Schools	2
Attended Residential Schools	2
Commercial College (academic)	6
Vocational Training (in school)	14
Vocational Training (on the job)	1
Completed Vocational Training	11
Job Placements	26
Still Employed	24

Of the 26 individuals placed in employment in 1958, five were students referred by the Department of Northern Affairs and National Resources and are now considered to require our services no longer.

Number employed full time in 1957	21
Number employed full time in 1958	26
Number employed part time in 1958	7
Total number for whom employment has been found to date	54
Number known to be still employed as of December 31st, 1958	45

Of those placed in employment, three are now married and maintaining homes of a standard equal to that of the average non-Indian citizen in the same wage bracket. There have also been some signs of the program snowballing. In one instance an employer expressed

is satisfaction with the performance of a lad whom we had placed by employing the boy's rother and cousin. In another instance a lad successfully employed for over a year and a alf has offered to pay his brother's transportation from Island Lake to Brandon, providing re will help him secure employment. It is also interesting to note that eight out of the nine nembers of the executive of one of the two Indian club groups in Winnipeg are graduates of ne rehabilitation program.

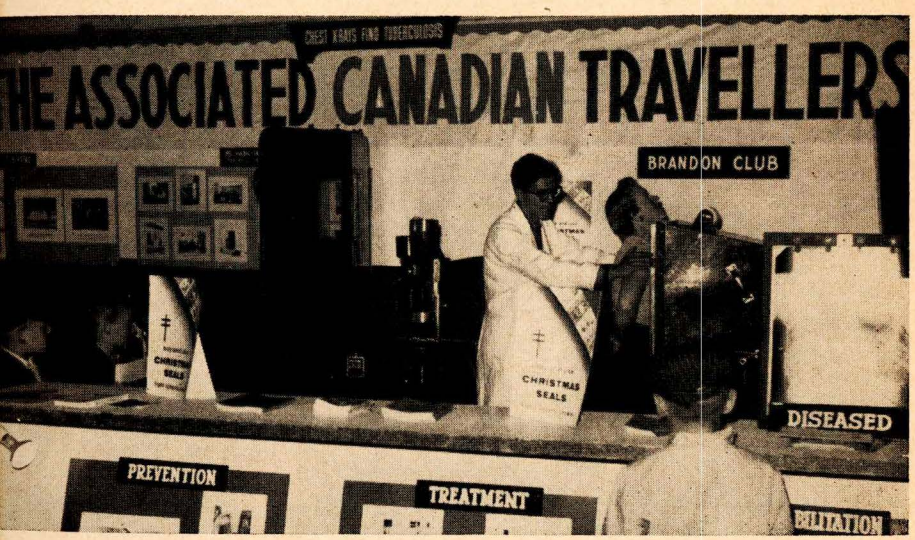
It is still too early to draw any definite conclusions as to whether or not the program bringing about the social changes envisioned, but the evidence to date is promising.

Appreciation

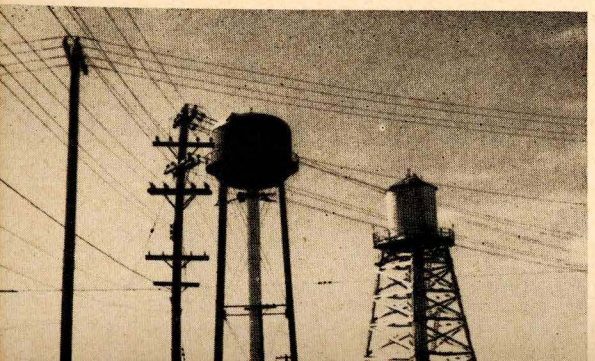
I should again like to take advantage of the opportunity to express my most sincere hanks to all the staff for their co-operation throughout the year. Special thanks is extended o Miss Ruth Snuggs for her capable supervision of the Rehabilitation Unit. Appreciation also extended to the many others whose interest and assistance have been of such help.

Respectfully submitted,

EDWARD LOCKE,
Rehabilitation Officer.

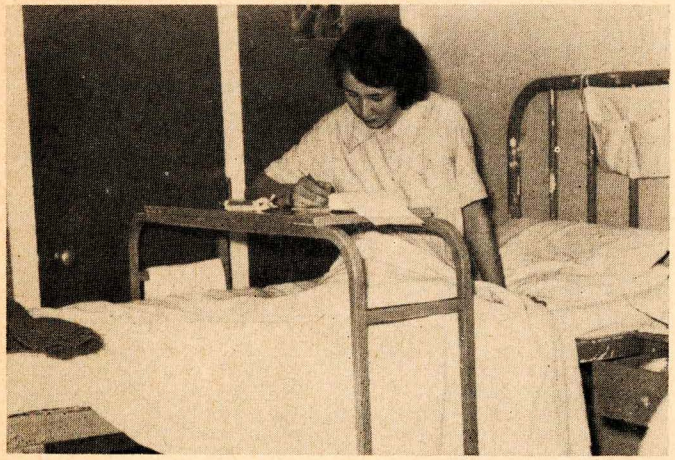


very year the Associated Canadian Travellers, Winnipeg and Brandon Clubs, set up colorful booths t the Red River Exhibition and the Brandon Fair to show their part in the TB preventive program. ree chest X-rays are also offered at these booths as well as pamphlets on tuberculosis control.



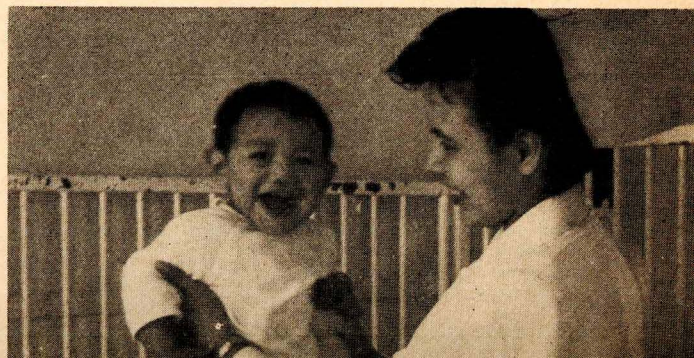
The new 60,000 gallon steel water tower at Clearwater Lake Hospital looms above the old one. The tank is 104 feet in height, and 24 feet in diameter.

Over 100 volunteer workers contributed their services to the Christmas Seal campaign for 1958. For six weeks in the fall these women spent many hours folding the seals and stuffing envelopes. Their efforts were well rewarded, for the Seal Sales in 1958 amounted to $173,122.10, a sizeable increase over all other previous years. Miss Mary Gray (not shown here) has charge of this department.



The opportunity for self-improvement is given to all patients in the Sanatorium Board's institutions. Besides pre-vocational courses, a variety of other courses are offered, including Elementary Bookkeeping, Typewriting, Shorthand, Architectural Design and Drawing, and Home Management.

An in-service education program for nurses' assistants does much to alleviate the nursing shortage in the tuberculosis hospital. Here a young girl from the North cheers up a smaller patient.



ecords . . .

CENTRAL TUBERCULOSIS REGISTRY

	Whites		Reported as: Indians		Eskimos	
	1957	1958	1957	1958	1957	1958
Patients on File, Dec. 31	3,017	2,754	1,241	1,204	362	402
Primary type	79	95	63	69	41	63
Re-infection type	2,938	2,659	1,178	1,135	321	339
New Cases Diagnosed in Manitoba January 1—December 31	364	340	175	142		
Primary type	34	27	22	16		
Re-infection type	330	313	153	126		
Of these, New Active Cases—Classified	239	239	118	92		
Primary type	34	27	22	16		
Minimal	60	53	30	32		
Moderately advanced	47	39	13	15		
Far advanced	47	40	23	9		
Pulmonary tuberculosis, extent not stated	8	5	2	1		
Tuberculosis pleurisy	17	20	9	5		
Non-pulmonary tuberculosis	26	55	19	14		
New Diagnoses admitted to Sanatoria	198	166	104	80		

TATIONARY AND TRAVELLING CLINICS AND SURVEYS

	Whites	Indians	Eskimos
MINATIONS at all clinics and surveys			
January 1—December 31, 1958	141,868	16,081	818
tionary Clinics	8,217	169	6
avelling Clinics	1,807	67	—
rveys	131,844	15,845	812
/ CASES of tuberculosis diag. at Clinics and Surveys	201	75	
tionary Clinics	126	27	
avelling Clinics	8	1	
rveys	67	47	
hese, new cases of Primary Infection type	19	6	
tionary Clinics	16	2	
avelling Clinics	1	—	
rveys	2	4	
Cases of Re-infection type	182	69	
tionary Clinics	110	25	
avelling Clinics	7	1	
rveys	65	43	
tacts examined at clinics	4,335	47	
tionary Clinics	3,102	23	
avelling Clinics	1,233	24	
Tuberculosis patients reviewed	4,025	1,086	
tionary Clinics	3,072	46	
avelling Clinics	240	11	
rveys	713	1,029	

INSTITUTIONAL STATISTICS

	Whites		Reported as: Indians		Eskimos	
	1957	1958	1957	1958	1957	1958
PATIENTS IN SANATORIA as at December 31	438	379	298	273	204	147
PATIENTS ADMITTED TO SANATORIA January 1 to December 31	722	667	382	401	140	131
Of these, the number found to be tuberculous	550	507	259	223	69	58
FIRST ADMISSIONS	247	224	145	107	55	49
Primary type	27	14	22	14	10	20
Re-infection						
Minimal	61	55	43	36	22	18
Moderately advanced	62	52	22	27	8	7
Far advanced	54	44	31	7	4	4
Tuberculous pleurisy	16	23	9	5	3	—
Non-pulmonary tuberculosis	27	36	18	18	8	—
RE-ADMISSIONS	152	151	92	80	14	8
Primary type	1	3	1	2	2	2
Re-infection						
Minimal	21	31	39	32	5	4
Moderately advanced	39	46	21	22	2	2
Far advanced	70	50	21	10	3	—
Tuberculous pleurisy	4	4	—	2	1	—
Non-pulmonary tuberculosis	17	17	10	12	1	—
PATIENTS ADMITTED FOR REVIEW	151	132	22	36	—	1
TUBERCULOUS PATIENTS TRANSFERRED	227	183	142	140	83	51
PATIENTS DISCHARGED FROM SANATORIA January 1 to December 31	791	744	374	431	136	182
TUBERCULOUS PATIENTS DISCHARGED	618	562	264	252	85	109
Discharged after review	150	127	21	35	—	1
Discharged with inactive tuberculosis	35	208	97	176	38	103
Discharged with arrested tuberculosis	272	—	108	—	41	—
Discharged with active improved tuberculosis	110	176	17	27	2	3
Discharged with active unimproved tuberculosis	16	28	3	8	—	2
Discharged dead	35	23	18	6	4	—
NUMBER DISCHARGED AGAINST MEDICAL ADVICE	45	46	12	27	—	—

TREATMENTS AND OPERATIVE PROCEDURES

	Manitoba Sanatorium	St. Boniface Sanatorium	Central Tuberculosis Clinic	Assiniboine Hospital	Clearwater Lake Hospital
TREATMENTS					
Streptomycin (patients)	278	266	310	349	290
P.A.S. (patients)	260	63	130	349	500
I.N.H. (patients)	274	275	441	253	283
Streptohydrozide (patients)	14	—	—	—	—
Seromycin (patients)	9	4	—	7	6
Pyrazinamid (patients)	6	—	—	—	—
Viomycin (patients)	30	3	—	2	—
Thoracoplasty	21	9	—	—	—
Lobectomy	16	19	—	16	—
Pneumonectomy	—	—	—	1	—
Resection (wedge and segmental)	48	17	—	15	—
Cavernostomy	—	—	—	—	—
Paraffin pack	6	—	—	—	—
Decortication	1	1	—	—	—
Schede	2	—	—	—	—
Pneumothorax (patients)	—	1	2	—	—
Pneumoperitoneum	—	1	—	—	—
Pneumolysis	—	—	—	—	—
Excision sinus	—	—	—	—	—
Thoracotomy	4	1	—	—	—
Nephrectomy	—	—	—	2	—
Lymphadenectomy	—	1	—	2	—
Orthopaedic operations	—	9	—	20	—
Laparotomy	—	—	—	—	—
Appendectomy	—	2	—	1	—
Tonsillectomy	—	—	—	11	—
Other operations (minor)	59	7	—	12	30
Bronchoscopy	86	3	—	22	6
Cystoscopy	4	2	—	3	9
Plaster casts	6	7	—	—	6
Spinal puncture	—	3	1	31	23
Aspirations	98	31	39	26	15
Biopsies	24	6	—	2	—
Confinements	—	—	—	—	4
Autopsies	6	10	5	3	6

SANATORIUM BOARD

BALANCE SHEET as at

ASSETS

stitutional Accounts:		
Cash on hand and in bank	$ 33,290.00	
Accounts receivable	233,522.00	
Inventories and prepaid expenses	140,839.00	
nd, buildings, plant and equipment, net (after deducting accumulated depreciation of $868,767.00)	423,082.00	$ 830,733.00
e above amount does not include buildings and equipment at Brandon and Clearwater owned by the Government of Canada.		
neral Account:		
Cash in bank	50,961.00	
Accounts receivable	110,794.00	161,755.00
dowment Funds:		
Cash on hand and in bank	87,848.00	
Canada Trust Company, deposit account	57,513.00	
Accounts receivable	20,467.00	
Investments at par	$182,955.00	
Accrued interest on investments	2,079.00	185,034.00
Bequests, at nominal value	2.00	
Inventories and prepaid expenses	1,913.00	
hicles and equipment net (after deducting accumulated depreciation of $77,782.00)	13,388.00	366,165.00
nployees' Emergency Funds:		
Cash in bank	926.00	
Investments at par	$ 13,500.00	
Accrued interest on investments	133.00	13,633.00	14,559.00
		$1,373,212.00

OF MANITOBA

31st DECEMBER, 1958

LIABILITIES

Institutional Accounts:		
Bank of Montreal, demand loan	$ 6,500.00	
Accounts payable	113,559.00	
Patients' store and contingent accounts	13,931.00	
Capital surplus	174,754.00	
Reserves for special instruction	60,146.00	
Surplus	461,843.00	$ 830,733.00
General Account:		
Old Age Assistance trust fund	4,650.00	
Accounts payable	157,105.00	161,755.00
Endowment Funds:		
Accounts payable and accrued liabilities	27,950.00	
Capital accounts	338,215.00	366,165.00
Employees' Emergency Funds:		
Capital accounts		14,559.00
		$1,373,212.00