

COLORADO STATE DEPARTMENT OF PUBLIC WELFARE LIBRARY

COLORADO STATE DEPARTMENT OF PUBLIC WELFARE  
DIVISION OF TUBERCULOSIS HOSPITALIZATION

Report for 1950

by

Edward N. Chapman, M.D., Director

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The year 1950 has been one of continued progress as the tables that follow indicate. A new high in the number of cases of tuberculosis hospitalized under the state care program has been reached. 442 individuals who are afflicted with this disease and are unable financially to provide for themselves have been given care during 1950.

Table I indicates how the number of cases has increased during the past five years. This does not necessarily indicate an increase in tuberculosis in Colorado, but rather it is an indication of a more efficient case-finding program--an earlier discovery of the disease by the medical profession and the health authorities. 56 percent of cases admitted to the state program in 1950 had far advanced tuberculosis (using the National Tuberculosis Association classification) at the time of admission. This represents an improvement over 1949 when 63 percent were in this category. Needless to say, the earlier the stage of the disease at the time it is discovered, the better the chance of an arrest and the shorter the time of treatment.

Table I  
Total Number of Cases Given Care for Tuberculosis

1946.....	338
1947.....	343
1948.....	379
1949.....	413
1950.....	442

222 cases were under care as of January 1, 1950.

A total of 220 applications were approved during the year and the individuals placed under care in one of the institutions listed below. Each of these institutions has been approved by the Director of Tuberculosis Hospitalization and by the State Board of Public Welfare and is licensed by the Colorado State Department of Public Health. The director makes frequent visits to these institutions in order to consult with the staffs regarding treatment, time of discharge or transfer of patients, and on other matters important in the patients' care.

Colorado General Hospital, Denver  
Cragmor Sanatorium, Colorado Springs  
Craig Colony, Lakewood  
Glockner-Penrose Hospital, Colorado Springs  
Lutheran Sanatorium, Wheatridge  
Mennonite Hospital, La Junta  
Mesa Vista Sanatorium, Boulder  
National Jewish Hospital, Denver..(children only)  
St. Francis Sanatorium, Denver  
Sunnyrest Sanatorium, Colorado Springs  
Swedish National Sanatorium, Englewood

Of the pulmonary cases hospitalized, 17 percent were in the minimal stage of the disease at the time of entrance, 23 percent were moderately advanced and 56 percent were far advanced. Almost half the cases came from Denver County, which is

a higher proportion than usual and is a result of the intensive chest x-ray program carried on in this city recently during which approximately 80 percent of the adult population was x-rayed.

Of the 220 cases admitted in 1950, approximately 10 percent were patients who had been discharged from the program in past years with disease arrested or quiescent and whose disease had later relapsed. This number (21 cases) does not seem unduly high when the poor home conditions and nutrition of this group of individuals is also taken into consideration. The rest of the cases listed as "re-opened" or "readmitted" in the statistical summary that follows on later pages of this report were either cases that were brought in for check-up, were patients who had left against advice, or were temporarily being cared for by other agencies.

195 cases were terminated during the year. At the year's end, approximately 260 cases were under care of which 17 were out-patients. The condition on discharge of the 195 cases terminated in 1950 was as follows:

Discharged with disease arrested or apparently arrested...	52%
Discharged with disease quiescent.....	3%
Discharged with disease improved.....	5.5%
Discharged from Out-Patient with disease arrested.....	6%
Discharged unimproved.....	0.5%
Left against advice.....	16.5%
Died.....	14.5%
Disciplinary discharge.....	1%
Discharged as non-tuberculous.....	1%

Table II below shows the great improvement in the percentage of our cases discharged from the sanatoria and Out-Patient Department with their disease arrested, quiescent, or improved and is indicative of the improvement in treatment which has taken place in recent years. This improvement is the result of drugs such as streptomycin and para amino salicylic acid, the very fine surgery given without compensation by the staff of the chest surgical service at Colorado General Hospital and finally, to better care within the institutions. This includes not only better medical and nursing care, but such additions as medical social service and rehabilitation, both quite important to the peace of mind of patients.

Table II  
Percent of Cases Discharged as Arrested, Quiescent or Improved

1946.....	34%
1947.....	34.6%
1948.....	45%
1949.....	50%
1950.....	67.5%

In 1946 only 9 percent of cases were discharged with their tuberculosis arrested or apparently arrested. In 1950 this figure had risen to 52.5 percent, which is really a remarkable change.

Along with this improvement has gone a rapid decline in the percent of deaths as shown in Table III, which indicates that the death rate among our tuberculous patients has been more than cut in half in the past five years. This is indicative of more effective treatment, since there has been no such decline in the percent of far advanced cases admitted to the program.

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Table III  
Deaths as a Percentage of Total Discharges

1946.....	35%
1947.....	31%
1948.....	23%
1949.....	23%
1950.....	14.5%

Tables II and III suggest that, for the average patient with tuberculosis, eligible and willing to enter the Colorado Tuberculosis Hospitalization program, there is twice the chance of getting well that there was five years ago, and also only half the chance of dying that existed five years ago.

Table IV shows the percentage of patients leaving the program against advice in each of the past five years. Our present rate of leaves against advice appears to be about half the national average. This is an important advantage, since the case that leaves against advice can usually be counted as a failure, both from a therapeutic and an epidemiologic point of view. This is perhaps due to the fact that our patients are placed in small home-like institutions where a personal interest is taken in each.

Table IV  
Percent of Cases Leaving Against Medical Advice

1946.....	28 %
1947.....	17 %
1948.....	18 %
1949.....	22.4%
1950.....	16.5%

Our medical social service department has expanded during the past year. Miss Elizabeth Naughton joined this staff in April, 1950 to furnish service to some of our patients in the Colorado Springs sanatoria. Every state patient is seen regularly by a medical social worker, and the county welfare departments are informed of their progress, as is the State Department of Public Health. Discharge plans are being made for each patient in co-operation with county welfare departments and other agencies.

There has been no waiting list this past year. A preliminary report of a survey of known active cases of tuberculosis in Colorado not hospitalized, now being made by the State Department of Public Health, indicates that very few cases eligible for the State Program are not under care. There will always be a group of individuals that will refuse to leave home for one reason or another in any state, but in Colorado this group appears to be very small.

The chief complaint against the program as now conducted seems to be that there are not sufficient beds in Denver sanatoria to hospitalize all cases originating in that city. The great majority of Denver cases are hospitalized either in Denver or within a radius of 25 miles of the city (17 miles when the new highway to Boulder is completed), but some cases have to be sent to the Colorado Springs institutions. Actually it would be just as reasonable for patients in every town and city in Colorado to demand that sanatorium care be furnished in their home locality. No one wants to leave home but frequently better rest and better results are obtained when the patient is removed by distance from the major or minor problems that arise daily in any family and of which he is constantly appraised if he is too close to his home.

Dr. Robert K. Brown has given valuable service as Acting Director of the program since December 1, 1950, during the absence of the Director due to illness. The invaluable service of Miss Gertrude Loos in supervising the administrative work of the central office as well as her own duties has allowed the program to continue without interruption.

The total net cost of the Colorado Tuberculosis Hospitalization program in 1950 was \$474,751.92, which cost was divided equally between the state and the counties from which the patients originated.

I wish to acknowledge the help and co-operation of the Colorado Tuberculosis Association, the State Department of Public Health, and the Denver Health Department. Also the staff of the Colorado School of Medicine has been most helpful in solving some of our more difficult diagnostic and therapeutic problems. In this regard, the time and professional advice of Dr. James A. Waring, given generously throughout the year, has been very valuable and deserves special mention.

COLORADO STATE DEPARTMENT  
Public Welfare Library  
458 Capitol Annex  
Denver 2, Colorado

SUMMARY OF TUBERCULOSIS ASSISTANCE

Year ending December 24, 1950

PART I -- APPLICATIONS

Pending -- January 1, 1950 . . . . .	9
New applications, never previously hospitalized. . . . .	8
Applications for readmission . . . . .	0
Applications for reopening . . . . .	1
Received during 1950 . . . . .	257
New applications, never previously hospitalized . . . . .	197
Applications for readmission . . . . .	21
Applications to re-open case . . . . .	39
	<u>266</u>
Disposed of during 1950. . . . .	260
Placed under care . . . . .	220
New applications, never previously hospitalized . . . . .	166
Applications for readmission . . . . .	18
Applications to re-open case . . . . .	36
Not placed under care. . . . .	40
Applications withdrawn by county . . . . .	17
Patient died before approval of hospitalization . . . . .	2
Disapproved . . . . .	7
Refused hospitalization . . . . .	14
Pending December 24, 1950 . . . . .	6



PART II -- CASES UNDER CARE

Cases under care in Santoria January 1, 1950 . . . . .	222
Placed under care during the year . . . . .	220
New cases - never before hospitalized . . . . .	166
Readmissions - previously hospitalized . . . . .	54
Total . . . . .	442
Cases terminated during the year . . . . .	195
Discharged . . . . .	121
Arrested . . . . .	100
Quiescent . . . . .	6
Improved . . . . .	11
Unimproved . . . . .	1
Cured . . . . .	2
Not tuberculous . . . . .	1
Died . . . . .	28
Left against advice . . . . .	32
Transferred to Out-patient Department . . . . .	12
Disciplinary . . . . .	2
Cases under care December 24, 1950 . . . . .	241*
In Sanatoria . . . . .	241

\*File adjusted for 6 cases

SUMMARY OF OUT-PATIENT DEPARTMENT

Cases in Out-patient Department January 1, 1950. . . . .	7
Cases transferred to Out-patient Department during the year . . . . .	12
Placed directly into Out-patient Department . . . . .	0
Cases in Out-patient Department terminated during the year . . . . .	2
Discharged . . . . .	1
Readmitted to Sanatoria . . . . .	1
Cases in Out-patient Department December 24, 1950 . . . . .	17

TUBERCULOUS PATIENTS RECEIVING CARE IN SANATORIA AND OUT-PATIENT DEPARTMENTS  
 COLORADO STATE DEPARTMENT OF PUBLIC WELFARE, BY COUNTIES, 1950

	: JANUARY 1, 1950 :		: PLACED DURING 1950 :		: TOTAL 1950 :	
	SANATORIA	OUTPATIENT	SANATORIA	OUTPATIENT	SANATORIA	OUTPATIENT
Adams	8		6	1	14	1
Alamosa	1				1	
Arapahoe	6		6	1	12	1
Archuleta	1		1		2	
Bent		1	1		1	1
Boulder	6	1	11		17	1
Chaffee	1		1		2	
Clear Creek	1		2		3	
Conejos			1		1	
Costilla	2				2	
Delta	5			2	5	2
Denver	81		103	3	184	3
Douglas			1		1	
El Paso	30		11	2	41	2
Garfield	4		3		7	
Grand			1		1	
Huerfano	3		7	1	10	1
Jefferson	5		5		10	
Lake	1		1		2	
La Plata			5		5	
Larimer	9		4		13	
Las Animas	9		6		15	
Logan			2		2	
Mesa	5				5	
Montrose	2		2		4	
Morgan			2		2	
Otero	4	2	3	1	7	3
Ouray			1		1	
Prowers	3		7		10	
Pueblo	19		9	1	28	1
Rio Grande	2	1			2	1
Saguache	1				1	
San Miguel			1		1	
Sedgwick			1		1	
Weld	12	2	15		27	2
Yuma	1		1		2	
TOTAL	222	7	220*	12	442	19

\*Including 16 cases which were discharged and readmitted during year.

TUBERCULOUS PERSONS PLACED UNDER CARE  
 COLORADO STATE DEPARTMENT OF PUBLIC WELFARE  
 BY AGE AND STAGE, 1950

Age	TOTAL CASES	PULMONARY						EXTRA PULMONARY				
		Total Pulmonary	Minimal	Moderately Advanced	Far Advanced	Miliary	Silico	Bone	Glandular	Renal	Peritonitis	
Total	220	206	35	49	116	2	4	5	4	3	2	
0 - 9	7	6	4		2				1			
10 - 19	9	9	2		7							
20 - 29	57	52	11	16	24	1		1	1	1	2	
30 - 39	47	42	8	8	25		1	2	1	2		
40 - 49	45	44	8	8	27		1		1			
50 - 59	23	22	2	7	11	1	1	1				
60 - 69	24	24		8	16							
70	8	7		2	4		1	1				

OCCUPATION OF NEW PATIENTS HOSPITALIZED IN 1950  
 (SIX HIGHEST CLASSIFICATIONS)

Housewives	33.2
Unskilled	15.5
None	14.5
Semi-skilled	11.6
Food handlers and service	11.4
Office and sales people	9.1



**SURGICAL AND SPECIAL DIAGNOSTIC PROCEDURES PERFORMED ON TUBERCULOUS PATIENTS**  
**COLORADO STATE DEPARTMENT OF PUBLIC WELFARE**  
**1950**

<u>PROCEDURE</u>	<u>NUMBER</u>	<u>PROCEDURE</u>	<u>NUMBER</u>
Thoracoplasty (multiple stage)	24	Spinal fusion	5
Pneumonectomy	7	Confinement	3
Lobectomy	4	Cystoscopy	3
Exploration of chest	3	Appendectomy	2
Drainage of old thoracoplasty sinus	1	Sterilization	4
Bronchoscopy	49	Back cast	2
Pneumolysis	3	Esophageal dilation	5
Phrenic crush	17	Excision of Trochanteric bursa	2
Sacroiliac	2	Cholecystectomy	1
Laminectomy	1	Cholelithotomy	1
Knee fixation	1	Ligation ureter	2

**EXPENDITURES**  
**DIVISION OF TUBERCULOSIS HOSPITALIZATION**  
**COLORADO STATE DEPARTMENT OF PUBLIC WELFARE**  
**1950**

Total amount expended for patients in sanatoria . . . . .	\$481,980.78
Amount expended for Out-Patient Department. . . . .	\$1,095.16
Amount expended for transportation. . . . .	791.62
Amount expended for burials . . . . .	900.00
	2,786.78
Total gross amount expended . . . . .	484,767.56
Patient days . . . . .	86,102
Cost per person per day . . . . .	\$5.63
Partial reimbursement by patients and relatives . . . . .	10,015.64
Total net amount expended . . . . .	\$474,751.92