1956

Report on the Study of Tuberculosis in Maine by the Governor's Committee on Tuberculosis, 1956

Governor's Committee on Tuberculosis

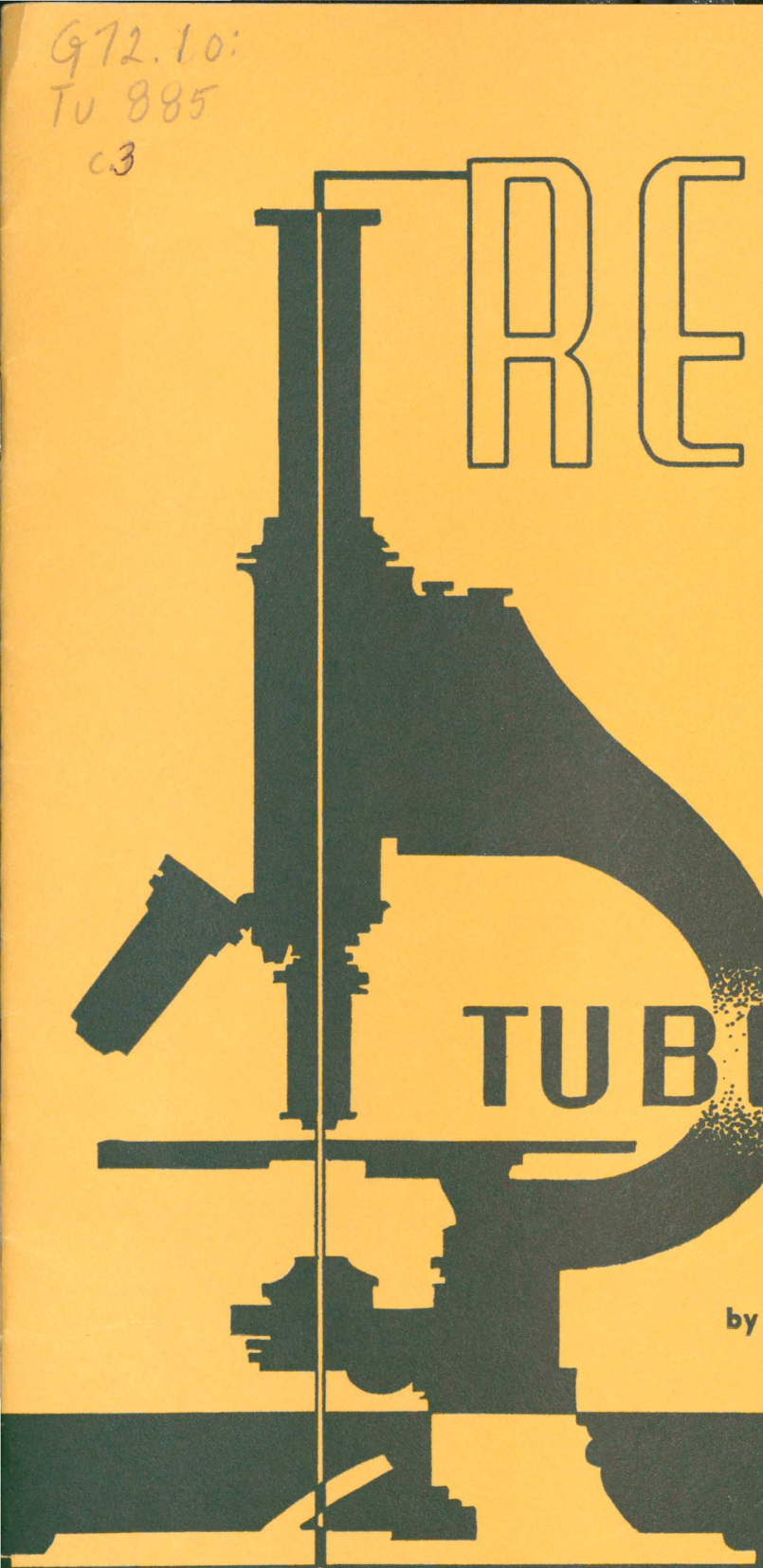
REPORT

on the study of

TUBERCULOSIS

in Maine

by the Governor's Committee on Tuberculosis



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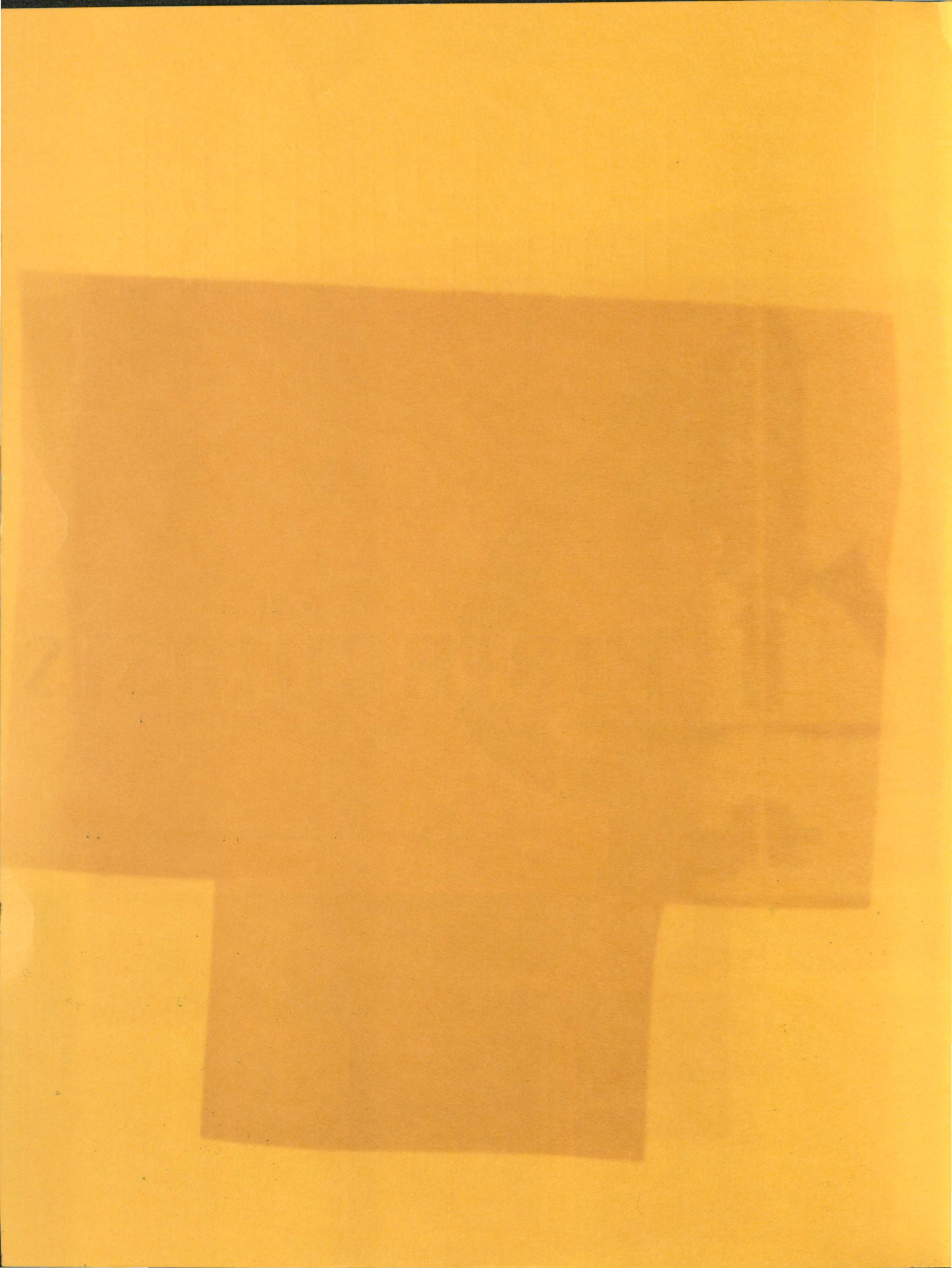

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TUBERCULOSIS STUDY COMMITTEE
Augusta
Maine

To the Honorable Edmund S. Muskie
Governor of the State of Maine

The committee appointed by the Executive Office to make a detailed study of tuberculosis in Maine together with recommendations for action leading to better ultimate control of the disease is glad to submit this report.

Although highly qualified professional consultants in the field of tuberculosis control were secured to advise the committee, the final recommendations are the considered opinions of the committee as a whole.

The committee is indebted to a number of officials in public health and private health agency circles for valued assistance and sustained interest.

In the preparation of this report and recommendations, the committee has tried to maintain an objective and long-range viewpoint with the best interests of the people of Maine as its only consideration.

BRINTON T. DARLINGTON, M. D.
for the Tuberculosis Study Committee

October 11, 1956

STATE OF MAINE
OFFICE OF THE GOVERNOR
AUGUSTA

EDMUND S. MUSKIE
GOVERNOR

November 13, 1956

Doctor Brinton T. Darlington
Tuberculosis Study Committee

Dear Doctor Darlington:

My sincere thanks to you and the members of your committee for the thought and effort which they made in the preparation of their report on tuberculosis in Maine.

Certainly, it is worthy of the attention of all people who are interested in the ultimate control of this disease.

Sincerely,

Edmund S. Muskie

Edmund S. Muskie

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Preface

TUBERCULOSIS continues to be a health problem of great importance to the people of Maine and to their state government.

Tuberculosis is a changing problem in Maine and throughout the nation. Improvements in chemotherapy and chest surgery have altered patterns of tuberculosis control and are gradually changing tuberculosis from a killing to a chronic disease. But in this process of conversion, the disease still handicaps many victims and creates emotional and financial problems of great magnitude to those afflicted and their families as well as an economic problem of real significance to the state.

However, the death rate continues to fall and there is a gradual decline in the number of new cases being found. A change in admissions to the three state sanatoria has occurred. These facts indicate that this study of the problem in view of changing circumstances was warranted and that continuing study is desirable. Only in this way can changing trends and idiosyncrasies of the disease be readily recognized and programs and services be quickly adapted to meet altered needs and provide maximum benefit to the people of the State of Maine.

In December 1954, a committee was appointed by Governor Burton M. Cross to study the problems of tuberculosis in Maine and to outline plans for ultimate control of the disease. This committee was continued by Governor Edmund S. Muskie.

In February 1955, Doctor William G. Childress, Physician in charge of Tuberculosis Services, Grasslands Hospital, Valhalla, New York, and Doctor Leon D. Hetherington, Chief, Bureau of Tuberculosis, State Department of Health of Maryland, were selected by the committee to make a survey of tuberculosis problems in Maine and report to the committee.

The findings and the recommendations of these consultants along with other information and facts were reviewed by the committee, and the following report with recommendations is submitted for the guidance of those responsible for developing and maintaining tuberculosis control programs.

The recommendations are not necessarily those of the consultants but reflect the opinion of the entire committee.

The Facts in Maine

TUBERCULOSIS can be controlled. It is in the best interest of all the citizens of Maine to prevent this waste of human manpower and of suffering. It is a practical investment for all taxpayers to prevent this economic loss. The progress of past years shows that this can be done.

Tuberculosis remains the most costly infectious disease today. The cost to Maine taxpayers for treatment and loss of efficiency is high, but this tangible price is greatly overshadowed by the immeasurable and tragic cost to persons stricken with the disease who pay in disability, despair and sometimes death. Families of these persons are also too often its victims, directly or indirectly.

In 1954, the most recent year for which we have available completed statistical studies, there were 73 reported tuberculosis deaths. This gives Maine a death rate of 7.8 per 100,000 people in comparison with a national rate of 10.0 per 100,000. There has been a steady decline in the number of deaths each year with dramatic reductions occurring during the past years.

This decline in deaths is due to a combination of factors (1) the accumulated results of past control efforts, (2) the finding of new chemotherapy agents (drugs) and their use, and (3) improvements in surgical techniques. It is still too early to determine if the gain in lessening the number of deaths is a permanent gain or merely the postponement of death in many cases. The immediate effect of chemotherapy is demonstrated, the long-range result is unknown.

Of greater importance is the morbidity rate (newly reported cases). 299 new cases were reported in 1954 giving this state a case rate of 31.2 per 100,000 population. This figure is again lower than the national figure of 48.8 per 100,000, but it may not reflect less tuberculosis for it may be due to less effective case-finding and complete reporting. (For instance, in the same year, 10.1 per cent of the national population was x-rayed while in Maine only 6.9 per cent of the population was reached by chest x-ray.)

That case-finding in Maine needs improvement is shown by information on the form and extent of disease of newly reported active and probably active cases (1954) in comparison with national averages. The figures below (U.S.P.H.S. Reported Tuberculosis Data, Calendar Year 1954) show that generally cases of tuberculosis are being found in Maine in later stages of disease than is the case for the nation as a whole.

	Total with extent specified	Minimal	Moderately Advanced	Far Advanced
Maine	100.0%	20.6%	47.6%	31.8%
United States	100.0%	21.9%	40.7%	37.4%

One of the more recent noticeable trends in tuberculosis is the shift from its being primarily a disease of young people and females to one of older age groups and males. This is shown in the following two tables:

A. *Specific case rates by sex of newly reported active and probably active cases*

	Total (white)	Male	Female
Maine	31.3	41.4	21.4
United States	40.5	54.6	26.7

B. *Specific case rates of newly reported active and probably active cases by age groups*

	All ages	Under 5	5-14	15-24	25-44	45-64	65 and over
Maine	31.2	8.6	5.1	31.5	37.6	51.3	47.4
United States	48.8	14.7	8.8	44.4	60.8	74.2	83.4

The central case register of the Division of Tuberculosis shows that there are approximately 2,000 tuberculosis cases in the state requiring some degree of medical care or observation. It is a further known fact that there are many existing unknown cases of active tuberculosis in our population, many with infectious disease. These must be found and placed under treatment.

Of serious concern are those persons proved to be active infectious cases of tuberculosis for whom hospitalization is indicated and who either will not accept sanatorium treatment or, who having accepted it, leave prematurely against medical advice.

Of key importance to the entire tuberculosis control program are the services of public health nurses. In 1954, the state public health nurses made 1,298 tuberculosis visits to 715 diagnosed cases. (Although there are approximately 2,000 patients on the central case register, state public health nurses do not have responsibility in many areas served by local community or private agency nurses.) These visits represent an average of 1.8 visits per case. The average number of public health nursing visits for the other New England states is 4.7 per diagnosed tuberculosis case. This indicates a great need for additional public health nursing service throughout the state.

Facilities for Tuberculosis Control

THE proved elements of a tuberculosis control program are public health education, case-finding with emphasis on early diagnosis, isolation of persons with infectious disease and treatment, good medical and nursing follow-up, rehabilitation and research. These services are all of great importance in the effort to combat the disease.

These elements of necessary program are inter-related and highly dependent upon one another. It is therefore desirable as far as is possible that they be administered by a single branch of state government. This would facilitate the flow of information and records, planning programs and the establishment of uniform policies, all of advantage to both tuberculosis patients and the public.

The only exceptions from this would be the Division of Vocational Rehabilitation, State Department of Education, whose services to the tuberculous would be coordinated by workers in the tuberculosis hospitals and the public health nurses in the field; and the unofficial voluntary citizen groups carrying out anti-tuberculosis activities (the Maine Tuberculosis Association and its affiliated local tuberculosis and health associations). These groups provide supplementary and supportive assistance to the official agencies concerned as well as health education, demonstration, legislation, rehabilitation and research activities not logically or legally the responsibility of state government.

The main tuberculosis control facilities in the state at the present time are:

A. Division of Tuberculosis Control

This division has the responsibility for administration and coordination of tuberculosis work in the health department. It is responsible for the recording of reported cases and maintenance of a central clearing house for information regarding all tuberculosis cases.

The division operates a survey film case-finding program in the industries and communities of the state. It operates a mobile unit taking 4″ x 5″ films and a bus unit taking 70 mm. films. In 1954, 64,412 x-rays were taken totaling 6.9% of the population; 21,047 were taken in general hospitals, 43,365 by the Tuberculosis Control Division.

1,245 suspects were found but only 26 new cases were reported by the end of the year from this effort. These reported cases were only 2% of the suspects and 14 cases per 1,000 x-rays taken. The survey x-rays yielded 8.7% of the total new cases reported for the year. The division supplies chest x-ray service to 25 clinics throughout the state particularly in areas where no other facilities are available. These clinics x-ray both patients and contacts. 14″ x 17″ x-ray films are used. No service other than x-ray study is offered. Film readings are forwarded to the patient's own physician. Sputum containers are issued for submitting specimens to the state laboratory. No physical examination or consultation is given. This is the only service offered in many of the rural areas of the state. In 1954, 1,411 x-rays were taken.

The division assists those hospitals which operate small film x-ray admission units by supplying the necessary film.

B. Division of Public Health Nursing

The public health nurse is the community representative of the official tuberculosis control program. Her efforts in tuberculosis control are part of a generalized public health nursing program.

The individual nurse is responsible to her supervisor in each district office. The supervisor is responsible to the district health officer and the State Division of Public Health Nursing.

The nurse visits the newly reported cases to help them understand the infectiousness of their illness. She arranges for patch testing of contacts and x-ray of adults and tuberculin positive children. In this service, she works with the individual's own physician. She does a general health education job in the community through individual instruction and community health committees. The nurse visits tuberculosis patients as often as is necessary depending on the need and cooperation of the family. She encourages and arranges for follow-up x-ray and clinic studies as well as encouraging the patient to accept recommended treatment.

The state division of public health nursing does not cover the entire state. In some areas the tuberculosis nursing service is carried on by city nursing services or voluntary nursing services.

C. *Bureau of Social Welfare*

This bureau provides financial assistance to needy patients and their families through its program of Public Assistance. Particularly related to the problem of tuberculosis are the programs of Aid to the Disabled and Aid to Dependent Children.

In the Aid to the Disabled category, the disability must be both permanent and total and this decision is based upon both medical and social information.

Dependent children who have been deprived of the support of one or both parents by reason of total incapacity or hospitalization may be eligible for Aid to Dependent Children grants.

D. *Maine Tuberculosis Association*

This organization is the state affiliate of the National Tuberculosis Association.
The state organization serves local communities where no local tuberculosis association is organized. There are 13 local organizations serving the greatest part of the state.

The state association is an administrative and consultation service to local units. It is a lobbying agent in regard to health legislation. It provides educational services and material on a statewide basis, and sponsors programs of medical and social research.

The local organizations support tuberculosis programs in individual communities. Some maintain tuberculosis clinics or support chest clinics in hospitals or health departments. Others supply nursing service of a general nature and some a tuberculosis nursing service. Local organizations support the sanatorium blood bank and aid in chest x-ray survey programs in general hospitals.

Chest clinic services are provided in Augusta, Bangor, Caribou and Lewiston. X-ray services, supplementary to those provided by the Division of Tuberculosis Control, are provided throughout the state in cooperation with local general hospitals. Both the state and local organizations have promoted and augmented the rehabilitation program for the sanatoria by providing supplies and services.

E. *Department of Education*

Division of Vocational Rehabilitation

This division conducts a generalized program of vocational rehabilitation serving the entire state. Tuberculosis cases vary from 12% to 16% of the total caseload.

At the present, 52 tuberculosis patients are carried as active rehabilitation cases. 55 tuberculosis patients are on a referred status, not yet ready for a program or not completely evaluated for a rehabilitation plan.

In 1954, 23 tuberculosis patients were closed out as rehabilitated. The total in 1955 was 29. This figure is expected to increase.

The greatest tuberculosis rehabilitation caseload occurred when a rehabilitation worker was employed at Central Maine Sanatorium.

F. Central Maine Sanatorium—Fairfield

Beds 219. 173 Available.

Patients beds at present used are Downs Building 24 beds, Hardy 85 beds, Young 64 beds.

The Jewell Building, which requires some renovation, would add 46 beds. These buildings except for the modern Young Building opened in 1955, are of the wooden type porch buildings. The Jewell Building was formerly used to house offices, x-ray and surgery which are now located in the Young Building.

All chest surgery of a major nature is done at Fairfield. Patients are transferred from the other two sanatoria for surgical procedures after consultation with the surgical staff. The Young Building is equipped with modern x-ray equipment and good laboratory facilities. Consultation in most medical specialties is available from nearby Waterville. Thoracic surgery is performed by Dr. Lloyd Brown, Bangor, and Dr. George Young, Skowhegan, assisted by Dr. John Reynolds, surgeon, and Dr. Valentine Moore, anesthetist, both of Waterville.

G. Northern Maine Sanatorium—Presque Isle

Beds 120.

Medical staff—superintendent and one assistant.

The three patient buildings are of the obsolete porch type and of wooden construction. The Wilson Building (females), 48 beds, was completed in 1922. The Powers Building (male), 30 beds, was the first building of the sanatorium group (1920). The most recent children's building (Knight), 42 beds, was completed in 1924.

During the year 1954, 117 patients were admitted—approximately 10% minimal, 15% moderately advanced, 39% far advanced, 30% primary. A daily average of 97.1 patients were hospitalized. 103 different patients received chemotherapy. The average stay was slightly less than 6 months.

H. Western Maine Sanatorium—Hebron

Beds 118.

Medical Staff—superintendent and two physicians.

The patient buildings are of wooden construction erected in the period 1903–1908 and of the outdoor porch type.

The average census was 86.8 patients.

Patients are transferred to Central Maine General Hospital for surgical treatment other than chest surgery.

Recommendations of the Tuberculosis Study Committee

THE following recommendations are based on the findings of the Tuberculosis Study Committee. They are a result of studies conducted by the committee including reports of consultants—Dr. Leon D. Hetherington and Dr. William Childress—who independently interviewed a considerable number of well-informed professional and lay individuals. They visited the tuberculosis institutions interviewing personnel and inspecting facilities. These studies covered the entire problem of tuberculosis in Maine.

Recommendations and brief comments: The basic principles of tuberculosis control have been and will continue to be 1) case-finding; 2) proper isolation; 3) adequate treatment, including hospitalization, chemotherapy and necessary special services; 4) rehabilitation to the fullest extent possible initiated immediately following diagnosis and continued in the sanatoria; 5) adequate follow-up after discharge from the sanatoria. In brief, the goal in an active case of tuberculosis is to remove this person from intimate contact with others, treating him until he is non-infectious and inactive and rehabilitating the patient so that he may return to the community as a useful, self-sustaining and respected citizen.

1. TRANSFER THE STATE TUBERCULOSIS SANATORIA FROM THE DEPARTMENT OF INSTITUTIONAL SERVICE TO THE DEPARTMENT OF HEALTH AND WELFARE.

   The committee believes that since tuberculosis is primarily a Health and Welfare responsibility that it would be best to transfer the institutions to that department, already staffed and partially equipped to expand and carry out a better control program. Such organization will permit total treatment without interruption. The committee, with the consent of the Governor, appeared by request before the legislative committee considering this matter and gave them the preliminary results of our study. The Legislature in 1955 enacted into law this recommendation.

2. ESTABLISH A POSITION FOR A PHYSICIAN WELL VERSED IN THE CLINICAL ASPECTS OF TUBERCULOSIS AND TUBERCULOSIS CONTROL METHODS AS DIRECTOR OF THE DIVISION OF TUBERCULOSIS IN THE DEPARTMENT OF HEALTH AND WELFARE.

   This physician should assume the leadership in control of tuberculosis in all its phases: case-finding, isolation and treatment, rehabilitation, and follow-up program.

   He should review the procedure and standards of the sanatoria for the purpose of establishing uniform high standards in all the institutions; the superintendents of the sanatoria to be directly responsible to him, including business practices.

   Provision was made by the Legislature in 1955 for the implementation of this recommendation and the Department of Health and Welfare is presently searching for a physician to fill this post. This task is made difficult by the salary range available for this position. A need for uniformity of policy in all phases of treatment and business practice has been demonstrated. A single individual with the authority to direct policy and medical practice would eliminate inconsistencies now existing. It seems obvious that the same high standards of service should be available to all citizens of the State regardless of physical location.

3. RECRUITMENT OF COMPETENT PHYSICIANS AND NURSES TO ADEQUATELY STAFF THE SANATORIA.

At the present time, there is no physician in any of the sanatoria qualified to replace the present superintendents if replacement of a superintendent became necessary. There is need for a well-trained surgical resident at Central Maine Sanatorium to supervise the critical post-operative period following chest surgery.

The important factors in personnel recruitment are: (1) increase pay for professional personnel to level of competing positions in New England; (2) offer modern equipment and facilities for the best type of medical care; (3) co-workers of outstanding professional reputation to attract young persons of ability; (4) recognition by professional colleagues outside the department. All these are interrelated and each one tends to increase (or the absence to decrease) the total effect.

4. INCREASE USE OF CONSULTANT SERVICES AVAILABLE IN NEARBY COMMUNITIES.

This will improve the diagnosis and treatment of patients and promote better relationship with the medical profession. All physicians should be encouraged to make rounds with the sanatoria staff and exchange ideas on patient care. The professional staff of the sanatoria should be urged to take part in medical meetings and to submit articles of interest to the Maine Medical Journal.

5. CONFIRMATION OF DIAGNOSIS AND INTERIM REPORTS ON PROGRESS SHOULD BE MADE TO THE PATIENT'S OWN PHYSICIAN ON ALL PATIENTS DISCHARGED, A DISCHARGE SUMMARY CONTAINING TOTAL INFORMATION AS TO TREATMENT, PROBLEMS ENCOUNTERED, WORK TOLERANCE, AN ESTIMATE AS TO TYPE OF EMPLOYMENT AND TIME OF EMPLOYMENT, SHOULD BE INCLUDED.

It is of importance for the physician to have a clear knowledge of the patient's treatment and recommendations to advise and treat him following discharge.

Since the Division of Tuberculosis Control, the regional Health Officer, and the Public Health Nurse are responsible for preventing contagion following discharge, it is imperative that they have full information regarding all cases.

6. THE ESTABLISHMENT OF MEDICAL, SOCIAL AND REHABILITATION SERVICES IN THE SANATORIA.

The one social service worker at the CMS has demonstrated the usefulness of this service in improving patient morale and furthering good relations between the sanatorium and the communities it serves. To promote the most rapid return of the patient to productive work within his capabilities, a rehabilitation program should be instituted shortly after admission. This cannot be handled by the Division of Vocational Rehabilitation at the present time. A rehabilitation worker would be able to screen patients for services of the Division of Rehabilitation and initiate rehabilitation training indicated. An education program to instruct the patient about tuberculosis should be initiated on admission and continued throughout his stay.

7. THE "MEANS TEST" SHOULD BE ABOLISHED.

Most frequently, tuberculosis strikes those with low incomes. The necessity for paying for any part of hospital or clinic care could prevent treatment and isolation of an infectious person.

The system of billing towns for individuals unable to pay while not legally pauperizing the individual may do so in the eyes of his neighbors and prevent or delay his accepting hospitalization. The number of patients refusing treatment because of cost can never be determined but if only one case is prevented the community will profit by the underwriting of the cost of sanatorium treatment.

8. OUTPATIENT CLINICS SHOULD BE ESTABLISHED TO SERVE AS CONSULTATION AND DIAGNOSTIC CENTERS FOR REFERRAL OF PATIENTS BY PRIVATE PHYSICIANS, AND DISCHARGED PATIENTS.

Regional x-ray clinics as now conducted by the Division of Tuberculosis Control should be replaced by regional chest clinics under the direction of competent physicians with training in chest diseases. These regional clinics should provide x-ray services, physical examinations, laboratory and consultation service. They also should serve as a center for post-sanatorium outpatient chemotherapy.

These clinics could best be established using local facilities such as a general hospital. The physicians in charge could be paid as part-time staff members of the sanatoria. This would assure standard practices of diagnosis and treatment.

The sanatoria outpatient service should be expanded and facilities improved.

9. CONTINUE THE OPERATION OF THE CENTRAL MAINE SANATORIUM WITH CONTINUED CONCENTRATION OF FACILITIES AT THIS INSTITUTION AS THE CENTER FOR TUBERCULOSIS TREATMENT.

10. CONTINUED UTILIZATION OF NORTHERN MAINE SANATORIUM SINCE IT IS IMPROBABLE THAT TUBERCULOSIS CASES IN THAT VICINITY WOULD BE WILLING TO BE HOSPITALIZED AS FAR AWAY FROM HOME AS FAIRFIELD.

The medical staff should be strengthened. In addition to its use as a diagnostic, treatment, and an evaluation center, a rehabilitation center for certain types of chronic illness might be considered for the future. Active participation by the medical profession in that vicinity should be solicited and encouraged.

11. CONTINUE WESTERN MAINE SANATORIUM UNTIL THE PATIENT LOAD CAN BE ACCOMMODATED SATISFACTORILY AT CENTRAL MAINE SANATORIUM.

Long term use of the Western Maine Sanatorium would require an extensive replacement and building program. Such expenditure in an isolated area, without public transportation and limited fire protection, is not recommended. Only those capital expenditures necessary to patient care and protection should be made. This includes improving fire hazards to conform with recommendations of the State inspectors.

Recent changes in the trend of sanatorium population indicates a present need for Western Maine Sanatorium. If the general trend of decreased demand for sanatorium beds resumes and the patient census falls to a level which could readily be absorbed at Central Maine Sanatorium, patients, staff, and equipment should be transferred.

At the present time the Central Maine Sanatorium cannot absorb the patient load without considerable capital expenditure which will require legislative action.

The transfer of personnel to Central Maine would strengthen that institution and allow more complete services in the fields of vocational rehabilitation, occupational therapy, social serv-

ice and library aids as well as improved laboratory facilities and pulmonary function equipment.

The farm program at Western Maine Sanatorium does not contribute to patient care. It offers no significant opportunity for patient activity or rehabilitation.

12. TRANSFER THE TUBERCULOSIS LABORATORY FACILITIES IN THE STATE LABORATORY IN AUGUSTA TO THE CENTRAL MAINE SANATORIUM.

Since the laboratory specimens are submitted by mail, no delay in service to any part of the State would result. The transfer of personnel and responsibility would strengthen the laboratory at the Central Maine Sanatorium. Enlargement of the laboratory would make culture studies more readily available to the sanatoria and sensitivity studies could be made. Good laboratory studies including sensitivity tests are essential to good treatment. This has had increased importance since the use of chemotherapy in the treatment of tuberculosis.

13. THE CHEST SURVEY UNITS SHOULD CONTINUE X-RAYING IN THE AREAS OF KNOWN HIGHEST PREVALENCE OF TUBERCULOSIS WITH EMPHASIS ON THE ELDERLY AGE GROUP, ESPECIALLY MALES; PENAL INSTITUTIONS, AND INDUSTRIES.

Analysis of recent survey results indicates poor follow-up of suspected cases. This area may best be improved by strengthening of outpatient clinic facilities.

14. THE X-RAYING OF ALL CASES ADMITTED TO GENERAL HOSPITALS SHOULD BE EXPANDED. THE TUBERCULOSIS DIVISION SHOULD GIVE THIS PROGRAM HIGH PRIORITY.

The general hospital population consistently yields a higher proportion of pulmonary tuberculosis than community surveys. Facilities are readily available for further studies and diagnostic procedures. This is the most economical of case-finding programs.

15. TUBERCULIN TESTING OF CONTACTS SHOULD BE CONTINUED. TESTING OF SELECTED GROUPS TO DETERMINE THE INCIDENCE OF TUBERCULOSIS INFECTION IN COMMUNITIES SHOULD BE STUDIED.

As the incidence of tuberculosis decreases, the tuberculin test becomes of greater importance as a case-finding method in both children and adults. This may become a screening procedure preceding x-ray surveys in the future. Studies in selected areas give information regarding incidence of tuberculosis which is helpful in planning survey programs.

16. OUTPATIENT ANTIBIOTIC THERAPY SHOULD BE INSTITUTED IN THE SANATORIA.

Certain cases with suitable home conditions, after a six to twelve months (optional figure) institutional training, and therapy, might be continued under therapy on an outpatient basis. (Under present conditions, most patients receive approximately 18 months of therapy and some longer.) The highly emotional, mentally unstable and recalcitrant individuals could be considered for outpatient therapy if all other methods of persuasion fail. It is acknowledged that the majority of the latter group are not likely to recover but they might be rendered noninfectious or at least their infectivity reduced to some degree.

Drugs should be supplied without cost to those in financial need following discharge from sanatoria or to needy patients for whom hospitalization would not be indicated as in some nonpulmonary disease.

17. THE SANATORIA SHOULD BE ESTABLISHED AS CENTERS FOR INSTRUCTION OF PHYSICIANS, NURSES, AND RELATED FIELDS.

18. RECOMMEND THAT A COMPULSORY COMMITMENT LAW FOR RECALCITRANT PATIENTS BE STRENGTHENED AND MADE MORE PRACTICABLY APPLICABLE.

We strongly oppose compulsory confinement except for recalcitrance, since persuasion usually will accomplish the desired result of isolation. The law was strengthened by the Legislature in 1955. The study of results should continue.

19. THE TUBERCULOSIS ASSOCIATIONS SHOULD BE ENCOURAGED TO PARTICIPATE AS A MEMBER OF THE TEAM, RECOGNIZING THAT THE DEPARTMENT OF HEALTH AND WELFARE HAS THE RESPONSIBILITY BY LAW AS THE OFFICIAL AGENCY. THE ASSOCIATIONS SHOULD PARTICIPATE ACTIVELY IN THE CONTROL AND CASE-FINDING PROGRAM AS WELL AS IN HEALTH EDUCATION AND COMMUNITY LEADERSHIP.

As voluntary organizations, tuberculosis associations are particularly effective in arousing public interest and promoting health education. Their flexible budgeting allows more experimental activities leading to more effective programs and filling in areas not covered by the health department.

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