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## CONCLUSIONS CONCERNING PSYCHIATRIC TRAINING AND CLINICS [1]

**Meeting of Consultants in Mental Hygiene, United States Public Health Service, September 6, 1945**

### I. PSYCHIATRIC TRAINING

A. *Undergraduate training*

1. *Premedical.*

It is recommended, in order to improve the psychiatric training of the general practitioner, that admission requirements for medical students include more instruction during the premedical years in the Humanities. It is also desirable that the use of the scientific method be fostered.

2. *Medical.*

(*a*) *Objectives.*—The following should be the objectives of undergraduate instruction:

(1) To teach fundamental concepts of human behavior; i. e., motivation, gratification, and conflict.

(2) To teach the emotional experiences of sick people. The student should also be made aware of his own emotional relationship to his patient.

(3) To teach that emotional disturbances as well as toxic, metabolic, or physical factors produce illness.

(4) To teach an understanding of illness associated with or caused by disturbed cerebral metabolism.

(5) To teach some classificatory knowledge of psychiatric diagnostic syndromes.

(6) To teach useful diagnostic and interviewing techniques.

(7) To assist the student in gaining insight into his own personality make-up and particularly his emotional biases, prejudices, and blind spots, preferably through intimate contact with the psychiatric teacher.

[1] From the Mental Hygiene Division, Bureau of Medical Services.

(8) To give a reasonable concept of methods of psychotherapy and an appreciation of his own potentialities and limitations in this regard.

(*b*) *Standards for teaching staff.*—To give acceptable training, a medical school should offer interdepartmental training in psychiatry, under the direction of a full-time professor of psychiatry and such additional staff members, including residents, as are indicated by the size of the student body. The nonpsychiatric staff should have a good understanding of psychiatry, and the psychiatric staff, in turn, must have a good understanding of general medicine.

(*c*) *Standards for clinical facilities.*—Minimum clinical facilities for adequate teaching are:

(1) Liaison with out-patient and in-patient services of other departments. Psychiatric examinations should be a routine part of the medical study.

(2) Modern, thoroughly equipped psychiatric hospital or in-patient, acute service of not less than 50 beds or 1 bed per senior student (whichever is the larger). These beds must be a part of the medical school facilities or in institutions in which the treatment of patients is under the control of a member of the medical school faculty and where the clinical material is suitable for undergraduate teaching.

(3) There should be out-patient facilities in connection with the medical school in which the case load is large enough to provide sufficient patients with psychiatric diagnostic and treatment problems so that all junior and senior students can work with at least two such cases.

(*d*) *Standards of curriculum:*

(1) It is recognized that the teaching of basic psychiatric understanding essential to the practice of medicine, even more than instruction in psychiatry as a specialty, has been severely limited by the lack of adequately trained teachers. It is recommended that, as instructors and facilities become available, the teaching of both phases of psychiatry be given a place in the curriculum consistent with the proportion of patients with psychiatric difficulties that the physician encounters in general practice.

(2) The undergraduate training curriculum should offer courses essential to psychiatric understanding in all years of the medical school.

B. *Interne training*

1. It is desirable that there be a rotating psychiatric in-patient and out-patient service or affiliation in connection with the hospital.

2. It is essential that there be clinical experience in out-patient and in-patient psychosomatic medicine in which psychiatric consultation is utilized.

C. *Graduate training*

*1. Prerequisite for graduate training:*

(*a*) Graduation from an approved medical school and completion of an approved interneship.

(*b*) Broad cultural and educational background.

(*c*) Good scholastic average in college and medical school.

(*d*) Demonstrated genuine ability and a sincere interest in psychiatry.

(*e*) Freedom from mental illness or psychopathy.

(*f*) In addition, it is desirable for applicants for training to have had at least one year of clinical experience after interneship.

2. *Objectives.*—The primary objectives of any institution giving graduate instruction shall be:

(*a*) To develop a psychiatric attitude.

(*b*) To provide training to meet the needs of psychiatrists in a wide variety of fields.

To satisfy these objectives, didactic instruction and/or supervised clinical experience must be provided in items *a* through *o* below. A knowledge of the other items listed should be acquired.

(*a*) The normal personality and interpersonal relationships

(*b*) Mental hygiene of children

(*c*) Psychopathology of adults and children

(*d*) Psychosomatic medicine

(*e*) Clinical psychiatry

(*f*) Psychotherapeutic techniques

(*g*) Orientation in the fields closely allied to psychiatry, including psychological tests and measurements

(*h*) Schools of psychiatric thought

(*i*) History of psychiatry

(*j*) Neuroanatomy

(*k*) Neurophysiology

(*l*) Neuropathology

(*m*) Clinical neurology

(*n*) Neuroroentgenology

(*o*) Basic psychiatric literature

(*p*) Sociology

(*q*) Nonpsychiatric literature basic to psychiatry

(*r*) Schools of philosophical thought

(*s*) Comparative religion

(*t*) Public speaking

(*u*) It is essential that out of the above experience the student be brought to a thorough understanding of himself.

3. *Standards for acceptable training centers:*

(*a*) General hospital facilities, including those in connection with medical schools, must have a special unit or department for the mentally ill, where a patient will be able to receive individual medical, psychiatric, nursing care and treatment, and individual service in the fields of occupational, recreational, physiohydrotherapy and allied therapies. Intensive psychotherapy, as well as any modern organic therapy must be considered the essence of the individual approach in each case. The size of such a unit or department should be related to the admission rate of such cases within a period of 2 or 3 months. This unit will have a small subunit for disturbed, acutely ill individuals who will receive the same individual care and treatment.

(*b*) Mental hospital facilities not in connection with medical schools should meet the standards of the American Psychiatric Association for psychiatric hospitals in order to serve as training centers for residents. A few exceptions to these standards are taken by the Mental Hygiene Consultants of the Public Health Service. These exceptions are given as footnotes to the American Psychiatric Association standards which follow.

## Standards for Psychiatric Hospitals

1. All hospitals should have a small unit or department [which will take the place of the present receiving ward][2] where patients upon admission will remain a brief period (usually not to exceed 2 weeks) to be classified and housed according to their condition. This unit will require the services of a psychiatrist for every 30 patients under observation; a graduate nurse for every 4 patients, and a trained attendant for every 6 patients under observation.

2. Approved hospitals should have a special unit or department for acutely mentally ill, where a patient will receive individual medical, psychiatric, nursing care and treatment, and individual services in the field of occupational, recreational, and allied therapy. Intensive psychotherapy, in conjunction with physiohydrotherapy, as well as modern organic therapy must be considered as indispensable in each case. The size of such a unit should accord with the admissions within a 3- to 6-month period. This unit will have a small subunit for disturbed, acutely ill individuals who will receive the same individual care and treatment.

All cases in the unit for acutely ill should be housed either in single rooms or in small dormitories. Such a unit will require a psychiatrist for every 30 patients; a graduate nurse for every 4 patients; a trained attendant for every 6 patients; a physio-hydrotherapist, an occupational therapist, and a recreational therapist for every 30 patients requiring such treatment, and any other service indicated.

3. Hospitals should have a unit or department for a convalescing group where a patient will receive somewhat similar care although not requiring as intensive treatment as in the unit for the acutely ill. The size of such a unit will be determined by the number of home convalescing patients during a period of six

[2] The phrase enclosed in brackets could well be eliminated according to the Mental Hygiene Consultants of the Public Health Service.

months.[3] Such a unit will require a psychiatrist for every 50 patients; a graduate nurse for every 10 patients; a trained attendant for every 7 patients; an occupational therapist for every 30 patients; a recreational therapist for every 50 patients, and any other service indicated.

4. Hospitals assuming responsibility for patients with a favorable prognosis but who require intensive prolonged treatment and care should have a unit or department for such patients. Such a re-educational service will require a psychiatrist for every 75 patients; a graduate nurse for every 25 patients; a trained attendant for every 8 patients; a physiohydrotherapist, an occupational therapist, and a recreational therapist for every 75 patients and any other service indicated. This unit will have a special subunit for chronic disturbed patients.

5. Hospitals receiving patients who require continued treatment should have a special unit or department [for such patients].[4] Such a unit will need a psychiatrist for every 200 patients; a graduate nurse for every 40 patients; a trained attendant for every 6 patients; a physiohydrotherapist for every 200 patients; an occupational therapist for every 50 patients; a re-educational therapist for every 50 patients; a recreational therapist for every 100 patients, and any other service indicated.

6. Hospitals receiving senile and arteriosclerotic patients should have a special unit or department for such patients. Such service will require a psychiatrist for every 200 patients; a graduate nurse for every 50 patients; a trained attendant for every 8 patients; an occupational-recreational therapist for every 100 patients and any other service indicated. This department will also include a special infirmary section with a graduate nurse in charge.

7. Hospitals should have a special unit known as medical and surgical department for patients who are actually physically ill, requiring either medical or surgical treatment. This unit will require well-trained physicians, who have had adequate experience in general medicine and general surgery, with some psychiatric background. This unit should meet minimal standards of the American College of Surgeons.

8. Mental hospitals receiving children under 16 years of age, will require a special unit or department known as the children's unit. Such a unit will require the Service of a psychiatrist, who has had training and experience in a child guidance clinic, and preferably pediatrics, for every 30 children; a graduate nurse for every 10 children; a trained attendant for every 7 children; a teacher for every 20 children; an occupational-recreational therapist for every 30 children; a physiohydrotherapist for every 30 children; and any other service indicated.

9. If a mental hospital receives alcoholics and/or other drug addicts, it should have a special unit or department for their care and treatment. Such a unit will require a psychiatrist for every 25 patients; a graduate nurse and a trained attendant for every 8 patients; a physiohydrotherapist for every 25 patients; an occupational therapist for every 50 patients; a recreational therapist for every 30 patients, and any other service indicated.

10. Mental hospitals should have a special unit or department for tuberculous patients. Such a unit will require the services of a physician experienced in the field of tuberculosis for every 75 patients and a psychiatrist for every 100 patients; a graduate nurse for every 5 patients; a trained attendant for every 6 patients; an occupational therapist for every 25 patients, and any other service indicated.

No institution can be considered a modern hospital unless it has adequate facil-

[3] The Mental Hygiene Consultants of the Public Health Service interpret this sentence to mean the number of patients likely to leave for home during a period of 6 months.

[4] The phrase enclosed in brackets was added by the Mental Hygiene Consultants.

ities for all types of physical examinations and tests required by the American College of Surgeons, including well-organized clinical and pathological laboratories under competent direction; a roentgenological department; and a medical library under supervision of the clinical director.[5]

Every approved hospital should be under the management and direction of a superintendent, who should be a well-qualified physician and experienced psychiatrist with administrative ability, whose appointment and removal should not be controlled by partisan politics. In hospitals with a population of more than 1,000 patients there should be an assistant superintendent, who should be an experienced and well-qualified psychiatrist as well as a good administrator.

Since adequate service can be rendered to the patients only through a competent staff, it should be imperative for every mental hospital to have a very well-trained and experienced psychiatrist as clinical director, who will be the coordinator and stimulating head of the medical staff, and who will organize a systematic instruction and rotation of service for the members of the staff. He should institute and supervise seminars for scientific discussions at frequent intervals. Staff meetings should be held at regular intervals, not less than once a week, under the direction of the clinical director.

It is desirable that the superintendent or medical director, the assistant superintendent and the clinical director should be diplomates of the American Board of Psychiatry and Neurology.

Salaries for the above positions should at least be comparable to those of specialists in other fields of medicine in the respective communities.

Every member of the staff of each hospital should be encouraged to devote a certain number of hours per week to research or scientific study and investigation.

It is desirable that every mental hospital have a well-organized department of clinical psychology.

All nursing, including attendants, in the mental hospitals must be placed under the director of nursing, who would be responsible to the individual medical authority of each service, to the clinical director and the superintendent of the hospital.

It is desirable that the director of nurses should be a graduate of an approved school of nursing affiliated with a general hospital, who has the degree of Bachelor of Science of Nursing Education or its equivalent, and who has had a postgraduate course in psychiatric nursing in a recognized hospital. She should have had at least 5 years' experience including special training in administration.

It is desirable that every mental hospital should have a training school for nurses wherever possible, as well as affiliate nursing courses.

Mental hospitals should attempt to have a larger corps of well-trained psychiatric nursing instructors. Many hospitals have been impeded and retarded in their educational programs for nurses and attendants by the scarcity of properly qualified instructors. It is suggested that every hospital should attempt to develop a postgraduate course for such instructors at the university level, wherever possible, and under the control of the universities using mental hospitals for practical training.

Every approved hospital should have a minimum of 1 trained social worker for every 100 annual admissions, under the direction of a chief, who will so organize the department that there will be adequate pre-admission, admission, and follow-up services.

Psychiatric social workers should be graduates of an approved school of social

[5] In the opinion of the Mental Hygiene Consultants of the U. S. Public Health Service, it is desirable that these facilities be present in the hospital, but the availability and use of a separate pathological laboratory is adequate. It is also their belief that facilities for autopsies should be available.

work with at least 800 hours of supervised work experience in a psychiatric agency.

The chief psychiatric social worker should have had 3 years' additional professional experience, at least 2 being in a psychiatric hospital and clinic.

Every mental hospital should have the services of a well-organized dental department, under the direction of a well-qualified dentist.[6]

Every hospital should have the services of a well-organized department of pharmacy.[7]

All nonmedical administration duties should be rendered through a special-service department, headed by the proper medical officer or business manager, under direction of the superintendent.

The medical record system in a mental hospital should be under the supervision of a medical records librarian, fully qualified and if possible accredited by the American Association of Medical Record Librarians.

Every hospital should have a regular library for the patients, under the direction of a librarian.

4. *Duration.*—The basic graduate training in psychiatry should consist of not less than 2 years of resident training, and preferably 3, which shall include both formal instruction and supervised clinical experience.

5. *Stipends.*—Stipends to residents and fellows must be adequate to permit completion of the required number of years of graduate study without undue financial sacrifice. The stipend should be in addition to maintenance and should be not less than $100 per month the first year, $150 per month the second year, and $200 per month for each additional year. Training centers must consider these stipends as educational subsidies and not as salaries for services rendered, and must not expect residents to replace a full-time physician. The educational program shall be considered remuneration to the resident in addition to his stipend and maintenance.

6. *Psychiatric subspecialties.*—At least 2 years of graduate psychiatric training shall be completed before entrance upon training in one of the psychiatric subspecialties. Approved subspecialty training should be for not less than 2 years or such period as may be established by a subspecialty board. The following shall be considered subspecialties in psychiatry:

(*a*) Psychoanalysis
(*b*) Child psychiatry
(*c*) Industrial psychiatry
(*d*) Public health
(*e*) Administrative psychiatry
(*f*) Medicolegal psychiatry
(*g*) Community, extramural psychiatry

[6] In the opinion of the Mental Hygiene Consultants of the U. S. Public Health Service, it is desirable that each hospital have a well-organized dental department, but the availability and use of qualified dentists is adequate.

[7] In the opinion of the Mental Hygiene Consultants of the U. S. Public Health Service, it is desirable that each hospital have a well-organized department of pharmacy, but the availability and use of a good outside pharmacy is adequate.

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D. *Refresher and short courses for physicians and other disciplines*

1. Orientation for general practitioners, nonpsychiatric medical specialists, or nonmedical specialists
2. Refresher courses for specialists in psychiatry
3. Brief general or special training for selected groups:
   (*a*) Didactic only
   (*b*) Supervised clinical experience only
   (*c*) Didactic and supervised clinical experience

E. *Necessity for and cost of additional training facilities*

1. The report of the Committee on Psychiatry in Medical Education to the American Psychiatric Association for 1936 shows that:

(*a*) Of 68 medical schools, 19 were reported as giving excellent psychiatric instruction; 30 were good in this respect; and 19 were indifferent or poor.

(*b*) Psychiatric faculty standards in regard to: (1) Training and experience; (2) number of hours spent in teaching; and (3) productivity, were excellent in 22 schools, good in 30, and indifferent to poor in 16.

(*c*) Clinical facilities were good in 25 medical schools, fair in 21, and inadequate in 22.

(*d*) There were 495 teachers of psychiatry or 7.28 per school.

(*e*) The Committee emphasized the need for greater stress on preclinical teaching.

2. *Deficit of psychiatrists.*—It has been calculated, as a conservative estimate, that the Nation needs approximately 10,000 psychiatrists. There are approximately 3,500 psychiatrists in the country at present. The fulfillment of this need cannot be attained in the immediate future because of the lack of teachers, facilities, and candidates. There is a deficit of 3,500 psychiatrists urgently needed for public service; i. e., mental hospitals, clinics, and teaching institutions.

There are 742 residences and fellowships in psychiatry listed by the American Medical Association. However, not all of these meet the requirements of the American Board of Psychiatry and Neurology Inc., for training leading to certification by that Board. The qualifications of the American Board of Psychiatry and Neurology for training centers are subscribed to by us. It would require approximately 100 years for the facilities qualified to give adequate training to fill the deficit. A reasonable goal is to meet this deficit of qualified psychiatrists within 24 years. In order to meet this goal, additional training centers will be required. However, pending the development of these additional training facilities necessary to give complete instruction to an adequate number of psychiatrists, short courses of instruction can be offered to equip men to perform limited specific

functions. These short courses can be given in the fully qualified training centers or in other institutions whose teaching facilities are limited to preparing men for specific phases of psychiatric practice.

Based on the Bureau of Census preliminary figures for 1943, it is estimated that there are 155,000 admissions to mental institutions of all types (includes Veterans' Administration facilities, but not military establishments). The great majority of these patients are psychotic. Allowing 3.5 such admissions a week for each resident, there is psychotic and severe neurotic clinical material enough for training 860 residents per year. This would allow for the graduation of 430 men a year, based on a 2-year training program. At this rate it would require 24 years to make up the deficit in psychiatrists, allowing for attrition. Better diagnostic and treatment facilities will increase the number of admissions, and hence the amount of clinical material, for a limited number of years. It is emphasized that the residents must have additional experience in treating much larger numbers of neurotic patients during their training period.

3. *Deficit of training facilities.*—Present facilities for postgraduate training will meet the needs of only one-third of the individuals desiring such training; i. e., those normally seeking to specialize in psychiatry plus those returning from the armed forces who have indicated a similar desire.

4. *Cost of personnel and facilities needed for proposed training:*

(*a*) It is desirable that residencies be fostered first in university hospitals for:

(1) The teaching staff and clinical material can be utilized for both graduate and undergraduate training; and

(2) The residents are highly valuable in undergraduate training and profit by their teaching experience.

(*b*) In medical schools where the instructional staff would divide its time between undergraduate and postgraduate students and where adequate physical facilities and clinical material are already available, but in which additional teaching personnel is required, it is estimated that a resident can be trained for $7,000 per year.

| | *Average amount each year for basic resident* | *Average amount each year for sub-specialty resident* |
|---|---|---|
| Stipends | $1,500.00 | $2,400.00 |
| Quarters, subsistence, and laundry | 630.00 | 630.00 |
| Travel | 300.00 | 300.00 |
| Teaching personnel (½ teacher per resident) | 3,500.00 | 3,500.00 |
| Teaching materials | 365.00 | 365.00 |
| | $6,295.00 | $7,195.00 |

This estimate is based on the assumption that the teaching personnel would participate in the instruction of both residents and medical students with all cost charged against resident training.

(*c*) In hospitals not training undergraduate students but where adequate physical facilities and clinical material are available, with the exception of sufficient teaching personnel, it is estimated that a resident can be trained for $5,000 per year.

| | *Average amount each year for basic resident* | *Average amount each year for subspecialty resident* |
|---|---|---|
| Stipends | $1, 500. 00 | $2, 400. 00 |
| Quarters, subsistence, and laundry | 630. 00 | 630. 00 |
| Travel | 300. 00 | 300. 00 |
| Teaching personnel (¼ teacher per resident) | 1, 750. 00 | 1, 750. 00 |
| Teaching materials | 365. 00 | 365. 00 |
| | $4, 545. 00 | $5, 445. 00 |

(*d*) Using $6,000 as a round figure for the cost of training the residents in basic and subspecialty work at university and other hospitals, the annual cost for 860 residents will be $5,160,000.

(*e*) In those schools and hospitals where physical facilities are available but in which there is inadequate clinical material, it will be necessary to provide for the cost of maintaining such patients in the hospital. At $5 per diem per patient (exclusive of salary of teachers) and allowing for 180 patients per year per resident and estimating 6 weeks of hospitalization for each patient, it will require $37,800 per year to care for the clinical material of one resident.

(*f*) In schools and hospitals where physical facilities for the care of mentally ill patients are lacking, new construction will be necessary. Where no additional major auxiliary facilities are needed, it is estimated that this construction can be provided at $7,000 per bed. If all auxiliary facilities are needed, the estimated cost per bed is 11,000 dollars.

F. ***Need for Federal assistance***

1. There is an urgent need for 3,500 psychiatrists for employment in State and Federal mental institutions and by mental health authorities in the several States for extramural service to communities. The present facilities for training are concentrated largely in populous and wealthy States, and are maintained and operated either by State governments or private endowments.

Existing institutions are under no obligation, either legal or ethical, to incur additional expenses for the education of psychiatrists essential for public service beyond the needs of their own community. Indeed, State universities would be severely condemned for adding an additional burden on the taxpayers of the State for the training of citizens

of other States. Furthermore, the progressive decline in interest rates is making serious inroads in the income of endowed institutions and, at present, the decline is not being offset by comparable increases in income-bearing capital.

Twenty-one States have no postgraduate training facilities within their borders. Most of these States have insufficient economic resources to justify the capital outlay for the physical facilities necessary for training, and in some cases are unable to provide adequate clinical material necessary for instruction. Therefore, training facilities must continue to be concentrated to a large extent in the more populous and wealthy areas. If present facilities are to be expanded or new construction undertaken for the purpose of providing trained personnel for the entire Nation, it is the responsibility of the Federal Government to provide the needed assistance.

2. The Federal Government is obligated for the psychiatric care of veterans but this cannot be met with the existing number of psychiatrists. This implies an obligation on the part of the Government to assist in training the needed personnel.

3. In the past, the Government has recognized its responsibility to train individuals in fields essential to the national welfare where the need is urgent.

### II. OUT-PATIENT CLINICS

A. *Standards*

We subscribe to the Standards for All-Purpose Out-Patient Psychiatric Clinics as set forth by the American Psychiatric Association. A few minor additions and deletions to these standards are given in footnotes which we believe are applicable to facilities organized under grants-in-aid to the States.

STANDARDS FOR ALL-PURPOSE OUT-PATIENT PSYCHIATRIC CLINICS

*Purpose*

a. It should be the policy of the clinic to accept for consideration persons presumed by the referring agent to be in need of psychiatric help, to elicit the necessary facts and to determine the extent and type of service needed.

b. It should be prepared to clarify the medical (psychiatric) disorder as to its genesis and characteristics (diagnosis) and to interpret these findings to persons or agencies who must cooperate in treatment.

c. In the case of a psychiatric disorder it should be prepared to offer appropriate out-patient treatment or else to help the patient secure such treatment. It should thus be all-purpose in its perspective.

d. If it has not reached an all-purpose capacity, provision should be made for the complementary services through other agencies. This all-purpose capacity should include the following diagnostic and therapeutic services:

1. Pre-hospitalization services
2. Examination and treatment of nonhospital cases, adult and child

3. Supervision and treatment of provisional discharged or convalescent post-hospitalization cases
4. Supervision of care and custody cases (depending upon state policy)
5. Supervision of boarded out cases (depending upon state policy)
6. Consultation for the community agencies

e. An educational program should be one of the functions of the clinic, which should undertake to add to the body of psychiatric knowledge.

*Auspices*

The auspices should be such as to promote continuity, collaborative community relationships and be flexible enough to allow for change.

*Quarters*

While the clinic may be centralized at a headquarters, it should, through branches if necessary, be brought close to the people it serves and should be on lines of transportation. The quarters should contain separate rooms for each of the professional staff, reception facilities and clerical record space adequate for the protection of records.

Clinics should be located preferably in connection with such institutions as general hospitals or public health centers.

*Financing*

The clinic should be operated on a budget sufficiently detailed to allow the calculation of case costs for the various services. Salaries should be adequate to maintain a stable staff of competent personnel, and should be not less than the average income of such specialists in the area served.

*Operation*

The clinic should have some morning, afternoon, and evening sessions. When several clinics serve a community they may share this coverage. Two such sessions a week is minimal for a clinic operating under one authority and budget.

Policies of intake in regard to type of patients, and financial limitations imposed upon admissions, should be defined and clearly made known to referring agencies. Admissions should be so limited that the psychiatrist's load can be handled in the time allotments specified above.

*Affiliations*

[Unless organized for profit],[8] the clinic should have an affiliation with a medical school, hospital, welfare, or public health department, or professional organization for the exchange of services, scientific advancement, and professional and administrative support. [If there is no such affiliation, as in the case of a clinic set up by a community fund or private resources, the clinic should have an organized board of directors.][9]

Case records should reflect close collaboration with other community agencies. Such agencies and physicians should be the chief sources of reference of cases.

*Staff*

a. The clinic should be under the direction of a psychiatrist, working at least one-half time in the case of a full-time clinic.

b. The assistant staff should consist of psychiatrists and psychologists in the ratio of one psychologist for each one to two psychiatrists on full-time basis and

[8] The phrase enclosed in brackets is not applicable to our policy and clinics organized for profit are not eligible for Federal assistance.

[9] This sentence is not applicable to our policy since assistance for clinics would be given to the State and determinations such as this would be made by the State.

two to three psychiatric social workers to each psychiatrist. There should be one clerical worker to each full-time psychiatrist. [10]

c. Qualifications.

Psychiatrists should have had (1) a general interneship, (2) at least 2 years of residency in psychiatry based upon a planned program of education, and (3) a year of supervised training in out-patient psychiatry with special emphasis on the neuroses; experience in clinical neurology, neuropathology, psychoanalysis, community education, and relevant laboratory procedures related to mental illness are desirable. The training in out-patient psychiatry should be in a clinic employing the coordinated services of a psychiatrist, psychologist, and psychiatric social worker. A chief psychiatrist should have had at least 5 years' experience in psychiatry including 2 years in a clinic and experience in clinic administration and community education.

Psychologists should have had a year of graduate study in psychology equivalent to that leading to a master's degree, including abnormal psychology, tests and measurements, statistics, educational psychology, remedial measures for learning disabilities, vocational counseling and supervised out-patient training of at least 1 year in a well-organized clinic, and 1 year of subsequent experience in such a clinic. This experience, dealing with both children and adults, should include delinquency, behavior problems, school maladjustments, physical handicaps, mental defect and disease, and vocational problems. A chief psychologist should have had 2 full years of graduate work and 5 years of experience including additional experience in a clinic with a psychiatrist and a psychiatric social worker.

Psychiatric social workers should be graduates of an approved school of social work with at least 800 hours of supervised field work experience in a psychiatric agency. A chief psychiatric social worker should have had 3 years' additional professional experience, at least 2 being in a psychiatric clinic employing a psychiatrist and psychologist.

d. Staff policy.

Full-time staff is preferable.

The director should give at least half time.

Staff should be large enough to ensure good clinical work.

New staff and especially trainees should be under a planned program of training including specific hours set aside for conference and supervision.

Social work staff should be full time.

Conferences should be scheduled weekly or oftener for the purpose of staff training, collective thinking on individual cases, and policy making. Conferences should be held between the members of the clinic staff and other social agencies.

e. There should be liaison and consulting arrangements with other agencies.

*Case policy*

Services should be varied and adjusted according to the needs of the case.

Services should be by appointment.

In general 1 hour should be allowed for each patient per visit.

Therapeutic activities by the nonpsychiatric staff should be delegated by the psychiatrist at his discretion and under his supervision and personal responsibility. The generally accepted functions of the psychologist and psychiatric social worker are carried as their professional responsibility.

Twenty treatment cases averaging one visit a week represent the maximum capacity per psychiatrist.

[10] We recommend not less than three clerical workers in any full-time clinic. Any clinic cooperating in research should have a record analyst in addition to other clerical help.

*Recording*

The important facts about a patient should be kept in typed permanent records in a locked file. This should be the combined record of all staff members on the case. [In addition to the above, we recommend the maintenance of standard records which are suitable and available for statistical evaluation.][11]

*Reports*

a. The content of a report should be adjusted to the purpose of the agency reported to, and in keeping with ethical practice.

b. In general a report should contain

1. A summary of the problems as referred and accompanying data.
2. Additional and confirming data resulting from clinic work.
3. A diagnosis in the form of a brief genetic reconstruction of the disorder.
4. The classification according to standard nomenclature.
5. Treatment given or required and recommendations and plans.
6. Prognosis and factors that will influence outcome.

The quality of records and reports is best determined by inspection of unselected samples.

*Education*

Education should be a part of the clinic function. This may include:

1. General public education regulated by policies designed to avoid waste of staff time
2. Professional education of related persons and agencies through work on cases and other means
3. Training of psychiatrists, psychologists, and psychiatric social workers within the clinic itself

*Types of service should include:*

a. Consultation
b. Diagnostic study and report
c. Reference of patient and other medical examinations and treatments, not provided at the clinic
d. Treatment
[e. Prevention through counseling, dissemination of information, etc.][12]

B. ***Annual cost of a clinic*** ***(See following schedule for details)***

| | |
|---|---|
| Personal services | $25, 700. 00 |
| Other services | 6, 490. 00 |
| Total | $32, 190. 00 |

### III. DEMONSTRATION PROJECTS

A. ***Types***

1. Clinics
2. Training
3. Psychiatric hospital care and teaching
4. Psychiatric care in general hospitals
5. Case finding and preventive psychiatry

[11] Added to the American Psychiatric Association's Standards by Mental Hygiene Consultants of the Public Health Service.

[12] Added to the American Psychiatric Association's Standards by Mental Hygiene Consultants of the Public Health Service.

6. Epidemiologic studies
7. Mental health education
8. Community organization for better mental health
9. Follow-up on paroled and discharged patients with emphasis on family care

B. *Selection of sites*

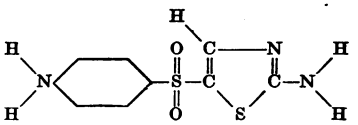
These should be in centers of population where there is considerable need, but where there is also evidence of prompt acceptance and use of such facilities, and where there is a strong hospital or university connection to insure continuity of service and especially stability of its educational functions. In negative terms, it is wise to avoid places where much persuasion and effort would be required in establishing the clinics, and where the enterprise might collapse after withdrawing initial support.

## PROMIZOLE TREATMENT OF LEPROSY

### A Preliminary Report [1]

By G. H. FAGET, *Medical Director*; R. C. POGGE, *Senior Assistant Surgeon (R)*; and F. A. JOHANSEN, *Senior Surgeon (R)*, *United States Public Health Service*

Promizole is the trade name for 2, 4′-diamino-5-thiasolylphenyl sulfone, which has the following structure:



It was synthesized [2] primarily for the treatment of mycobacterial diseases, since promin had been found too toxic for continuous oral administration in these diseases. In preliminary experimental and clinical tuberculosis, promizole did not produce sufficiently encouraging results to warrant further investigation; however, good results were obtained in tuberculosis of the skin (*1*). For this reason and because of its relative nontoxicity by mouth and its close resemblance to promin and diasone, which had been used with some success in the treatment of leprosy (*2*), (*3*), (*4*), (*5*), it was considered feasible to test the possible therapeutic effect of promizole on leprosy at the National Leprosarium.[3] The present preliminary report is published because clinical improvement in patients under treatment for leprosy seems to appear in some cases more rapidly with promizole than with

[1] From the U. S. Marine Hospital (National Leprosarium), Carville, La.

[2] By Parke Davis & Co.

[3] The promizole used in this experimental study was supplied gratis by Parke Davis & Co. through the courtesy of Dr. E. A. Sharp, Director of Experimental Research.

either promin or diasone. Past experiments with other sulfa drugs given orally, particularly sulfanilamide (*6*), have proved unsuccessful in this institution.

At present 7 of the original group of 11 patients have been under treatment with promizole for approximately 1 year. These patients were started on doses of 0.5 gm. three times daily, dosage being gradually increased to 2 gm. three times daily, over a period of several weeks.

In 2 of the original 11 patients it was necessary to discontinue the drug because of toxic reactions—general malaise in 1 patient, and repeated febrile episodes in the other. Discontinuance of medication in the other 2 patients was not incidental to the drug; 1 absconded from the institution, and the other died of a cerebrovascular accident.

After 6 months of treatment, objective clinical improvement was observed in some of the patients. Because of these encouraging results, 8 more patients were started on the promizole treatment, making a total of 15 under treatment at the present time. Others will be added when more of the drug becomes available. Some of the last 8 patients started on this treatment have already shown benefits (figs. 1 and 2), but for the most part it is as yet too early to evaluate the therapeutic effects of the drug in this latter group.

This report is, therefore, based primarily upon the effects of promizole in the group of seven patients who have undergone treatment for a period of at least 1 year. All of these patients have tolerated the drug well in doses up to 6 gm. daily. Brief clinical abstracts of these seven cases are included below.

## CASE REPORTS

*Case 1: Registered No. 1452.*—Mexican male, 35 years of age, had fairly early active mixed type of leprosy at beginning of treatment with promizole. The disease was of about 6 years' standing. Prior to April 1945, when promizole was begun, he had received only 11 intramuscular injections of chaulmoogra oil with benzocaine in 1941 and 16 in 1942 and chaulmoogra oil by mouth in doses of 25 minims three times per diem regularly from 1942 to the beginning of 1945. Promin had then been given intravenously for a period of 3 months but was discontinued because of the patient's dread of the needle. During this period his leprous lesions had not improved. When promizole was begun, the clinical findings were as follows: Discrete eruption of brown nodules over the face, ears, limbs, and body, becoming confluent in some areas over face and ears; and some areas of anesthesia over feet, ankles, and lower third of legs. Nasal and skin smears were positive for *Mycobacterium leprae.*

Promizole was administered in doses of 6 gm. daily after the first 3 months for a period of 11 months. Improvement was noted in the shrinking of all nodules. The patient was bacterioscopically negative in November and December 1945, and continues negative in the April 1946 test, no test having been made in the 3 months' interim.

October 1945.
(Before treatment.)

January 1946.
(After treatment.)

Right arm.

October 1945.
(Before treatment.)

January 1946.
(After treatment.)

Left arm.

**FIGURE 1.—Case No. 1285, illustrating rapid changes in lepromatous lesions after only 3 months of treatment with promizole.**

*Case 2: Registered No. 271.*—White male, 50 years of age, with advanced mixed type leprosy of about 25 years' duration. Clinical manifestations were total blindness; leprous laryngitis; nodules scattered over arms, legs and face; and many ulcerations on legs and plantar trophic ulcers. No improvement had been noted with oral and intramuscular injections of chaulmoogra over many years. Skin tests were positive for *M. leprae.*

Promizole was started in March 1945. There is definite improvement after 1 year of treatment. Voice is normal, all ulcerations are healed, and all nodules are considerably flattened, but bacterioscopy remains positive.

*Case 3: Registered No. 1691.*—White male, 28 years of age, with early mixed type of leprosy, of about 3 years' duration. Clinical manifestations were nodules of both ears; diffuse thickening of skin over face; and anesthesia in both legs and arms in scattered areas. He had taken no previous treatment. Skin smears were positive for *M. leprae.*

Promizole was given in doses increasing from 1.5 to 6 gm. daily for 1 year. There is slight evidence of flattening of nodules on ears, and skin over face is less thickened. Bacterioscopy remains positive.

*Case 4: Registered No. 1445.*—Filipino male, 42 years of age, with advanced mixed type of leprosy of about 10 years' duration. Clinical manifestations were many scattered nodules varying in size and occurring over face, limbs, and body; diffuse thickening of skin over face, brow, ears, hands, feet, and legs; extensive areas of anesthesia over legs and arms; small ulcers over lips and around nose; and atrophy of interosseous muscles of both hands. No improvement had been noted with oral or intramuscular injections of chaulmoogra oil. Skin and nasal smears always were positive for *M. leprae.*

Promizole was given in doses increasing from 1.5 gm. to 6 gm. daily for 1 year. There is a definite flattening of nodules, and ulcerations have healed. Bacterioscopy is still positive.

*Case 5: Registered No. 277.*—Colored male, 37 years of age, with advanced lepromatous leprosy of about 24 years' duration. Clinical manifestations were total blindness; much scarring over face and upper and lower extremities from old ulcerating nodules and trophic ulcers; scattered large nodular lesions of neck; and diffused infiltration of extremities. He had many different treatments during past years without benefit except from sulfathiazole, 1.5 gm. daily, which had resulted in healing of all ulcerations but had not affected nodular lesions or leprous infiltrations. At the time promizole was begun, all ulcerations had been healed. Skin smears were positive for *M. leprae.*

Promizole was given in daily doses increasing from 1.5 gm. to 6 gm. for 1 year. Nodular lesions have become smaller and flattened. Skin smears continue positive for *M. leprae.*

*Case 6: Registered No. 1690.*—Mexican male, 26 years of age, with early mixed type of leprosy of about 4 years' duration. Clinical manifestations were nodules over ears; a few scattered nodules over legs and arms; anesthesia in areas over legs and arms; a superficial ulcer on dorsum of right hand, and another, 2 x 3 cm., over left Achilles tendon. Skin smears were positive. He had taken no other treatment.

Promizole, starting with 1.5 gm. and increasing to 6 gm., was given daily for 1 year. Ulcers have healed, and there is a shrinking of nodules over ears, legs, and arms but skin smears remain positive.

*Case 7: Registered No. 1498.*—White male, 68 years of age, with moderately advanced lepromatous leprosy of about 7 years' duration. Clinical manifestations were many discrete nodules over ears, on arms to shoulders, and on both legs from knees to toes and thighs to hips. Some were slightly flattened. There

was also some thickening of skin over face, nose, forehead, hands, and arms. There were no ulcerations. Skin and nasal smears were positive for *M. leprae.*

Promizole was given in increasing doses from 1.5 gm. to 6 gm. daily for 1 year. Condition appears stationary. Possibly, thickening of skin over face is slightly improved. Bacterioscopy remains positive.

### CONCLUSION

No claim is made in regard to the ultimate value of promizole given orally in doses of 6 gm. daily in the treatment of leprosy. Attention is called to the fact that promizole is well tolerated by patients with leprosy and that clinical improvement occasionally can be demonstrated more quickly with promizole than with similar sulfones, such as promin and diasone. It is felt that the therapeutic results thus far obtained are sufficiently encouraging to warrant further clinical study, which will be necessary before a final evaluation of promizole in the treatment of leprosy can be given.

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## PRESENT STATUS OF DIASONE IN THE TREATMENT OF LEPROSY

**Brief Clinical Note** [1]

By G. H. FAGET, *Medical Director*; R. C. POGGE, *Senior Assistant Surgeon (R)*; and F. A. JOHANSEN, *Senior Surgeon (R)*, *United States Public Health Service*

The clinical improvement of patients suffering from leprosy when treated with diasone (disodium formaldehyde sulfoxylate diamino diphenyl sulfone (Abbott)) is well known (*1*), (*2*). The purpose of this present brief clinical note is to summarize the status of 104 patients treated at the National Leprosarium with 17,200 gm. of diasone over the past 2½ years. In all cases the drug has been used by mouth in daily doses varying for adults from 0.33 gm. to 1.00 gm. and for children from 0.17 gm. to 0.5 gm. The drug has an advantage over

[1] From the U. S. Marine Hospital (National Leprosarium), Carville, La.

the other sulfone drug, promin, which is being used in the largest number of patients at the National Leprosarium (*3*), in that diasone is well tolerated by mouth by most patients whereas promin usually has to be given intravenously because of its toxicity by mouth.

At the present time, 66 of the 104 patients (63.5 percent) have received treatment with diasone for 6 months or longer. Of these 66 treated patients, 74.2 percent were predominantly lepromatous cases, 20.4 percent were frankly mixed in type, and only 5.4 percent were neural. In 30 percent, leprosy was far advanced, and in 51 percent was moderately advanced; in 19 percent, the lesions were minimal in character.

At the present time, 24 percent of the diasone-treated patients are bacteriologically negative for *Mycobacterium leprae* in skin scrapings. This percentage compares favorably with the highly encouraging results that have been reported from the use of promin intravenously (*3*).

There is objective improvement in the specific leprous lesions (nodules and diffuse infiltrations) in 65 percent of the patients who have been treated for 6 months and longer. There is another 12 percent in whom the improvement is limited to changes in various nonspecific infections which appear to benefit from diasone therapy. In the remaining 23 percent the improvement is largely subjective, and no demonstrable change is claimed. There are no cases that are clinically worse.

There is an additional 6.7 percent of the group of 104 patients who have received diasone for less than 6 months. No comments are made on their clinical conditions, since 6 months appears to be the time needed for changes in the specific lesions to become manifest under diasone treatment.

The remaining 29.8 percent (31 patients) have discontinued diasone treatment for the following reasons:

| | *Percent* |
|---|---|
| Absconded from the institution (6 cases) | 5. 76 |
| Increased erythema nodosum, with fever (5 cases) | 4. 81 |
| Eczematoid dermatitis (5 cases) | 4. 81 |
| Gastric intolerance (5 cases) | 4. 81 |
| Hematuria (4 cases) | 3. 85 |
| Anemia (2 cases) | 1. 92 |
| Iridocyclitis (2 cases) | 1. 92 |
| Drug fever (1 case) | 0. 96 |
| Hypertension (1 case) | 0. 96 |
| Total | 29. 8 |

The following brief clinical abstracts, representative of a much larger group, will serve to demonstrate more clearly the therapeutic action of diasone in leprosy.

## CASE REPORTS

*Case 1: Registered No. 1619.*—Colored male, 7 years of age, with moderately advanced lepromatous leprosy of 3 years' duration. Clinical manifestations were: Multiple nodules scattered over the face; plaques on the right side of the forehead and the left cheek; infiltrated and scattered nodules of the forearms, hands, buttocks, thighs, legs, and feet; and evidence of leprous rhinitis. No improvement was noted with oral administration of chaulmoogra oil. Skin and nasal smears were always positive for *M. leprae.* Diasone was given in ⅓-gm. doses daily for a total of 127 gm. to date. Definite improvement after 2 years of treatment is shown in the illustrations (fig. 1). Skin smears are persistently positive.

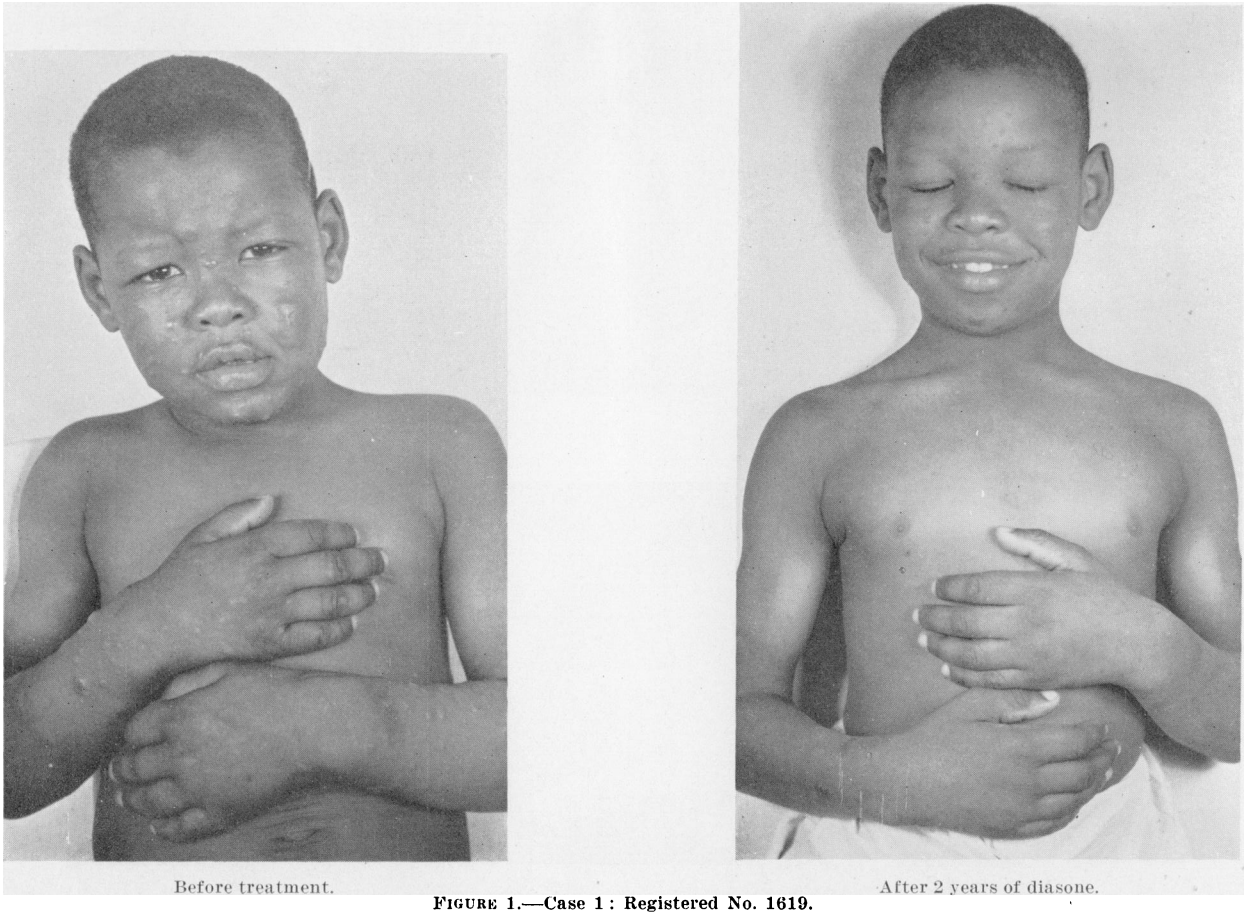
*Case 2: Registered No. 1369.*—Mexican female, 55 years of age, with moderately advanced mixed type leprosy of about 16 years' duration. Clinical manifestations were: Almost generalized nodular eruption, some of which occurred in discrete nodules but most in confluent nodular masses, over face, ears, dorsal surfaces of limbs, and back; and extensive areas of anesthesia over limbs to above knees and elbows. She had taken chaulmoogra oil both orally and intramuscularly over a period of 3 years. There had been at times some slight improvement in lesions over some areas but advancement in others, especially over back and legs, which became progressively worse. Skin and nasal smears were always positive for *M. leprae.* Diasone has been given since January 8, 1945, for a total of 358 gm. Definite improvement is shown in the illustrations (figs. 2, 2A). Skin smears are still positive.

*Case 3: Registered No. 1676.*—White male, 40 years of age, with moderately advanced mixed type of leprosy of about 10 years' duration. Clinical manifestations were: Diffuse infiltration and nodules over face, forehead, and ears; small discrete nodules scattered over legs, arms, and buttocks; pigmented macules up to 6 cm. in diameter over arms; diffuse pigmentation of forearms, hands, and legs; several annular macules of lower back; and anesthesia of macules on back, both legs distal to knees, ulnar surface of both forearms, and dorsum of left hand. Skin and nasal smears were positive for *M. leprae.* He was started on diasone shortly after admission and has taken a total of 209 gm. Definite improvement is shown in the illustrations (fig. 3). Skin smears continue positive.

*Case 4: Registered No. 1566.*—Colored male, 32 years of age, with moderately advanced lepromatous leprosy of about 6 years' duration. Clinical manifestations were: Multiple nodules scattered over forehead, ears, cheeks, and nose; and a few small nodules scattered over both arms and legs. No improvement was noted with chaulmoogra oil given orally and intramuscularly over a period of 2 years. Skin and nasal smears were always positive for *M. leprae.* Diasone was given for 17 months, totaling 338 gm. Definite improvement is to be noted in illustrations (fig. 4). There is no evidence at the present time of active lesions, and the patient has been bacterioscopically negative for 11 consecutive months.

## DISCUSSION

It would appear from our clinical observations that diasone has an action similar to that of promin, which has been reported in considerable detail (*3*). Treatment with diasone has the advantage that the drug is tolerated by mouth in doses up to 1.0 gm. daily for long periods of time. The reasons for stopping the drug have been listed. The number of patients in whom treatment was discontinued because of anemia is low, because many of the patients receive liver or iron prod-



Before treatment.

After 2 years of diasone.

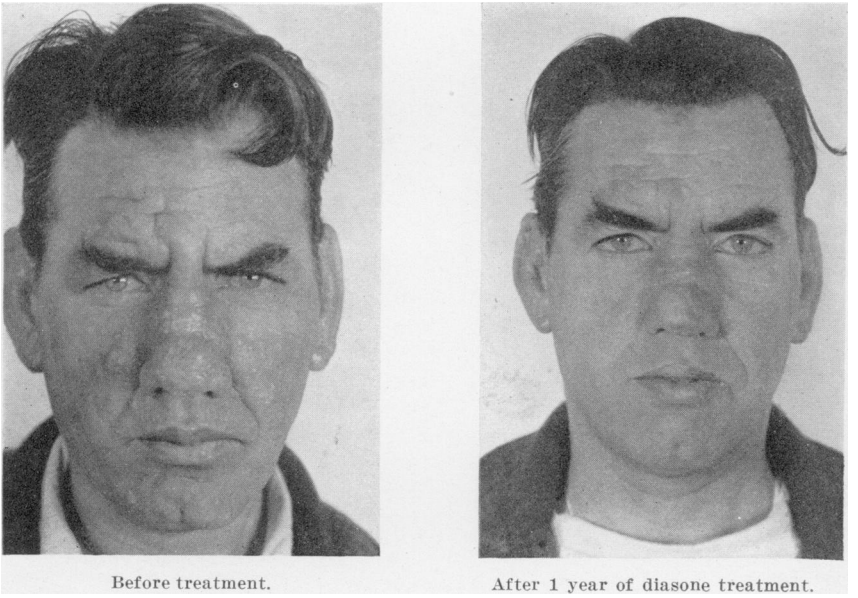
FIGURE 1.—Case 1: Registered No. 1619.

Before treatment. After 16 months of diasone treatment.

FIGURE 2.—Case 2: Registered No. 1369.

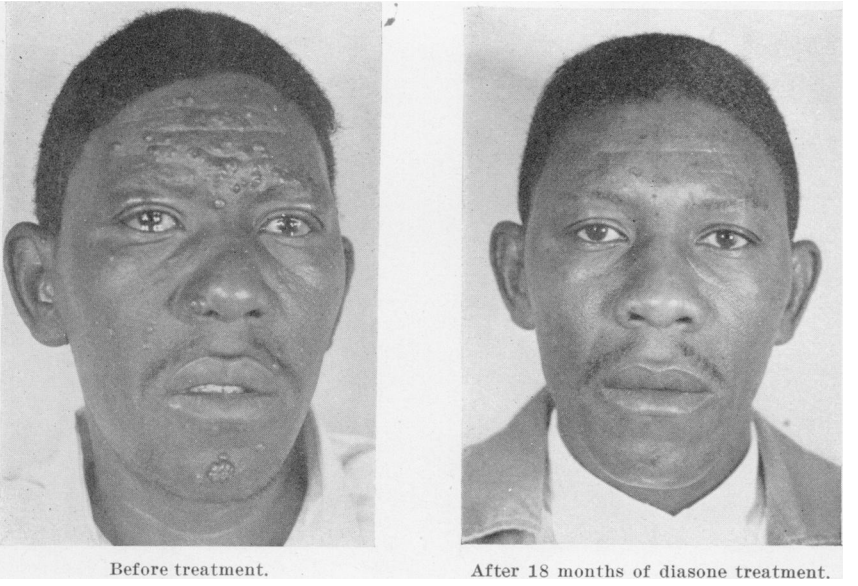
Before treatment. After 16 months of diasone treatment.

FIGURE 2A.—Case 2: Registered No. 1369.



Before treatment. After 1 year of diasone treatment.

FIGURE 3.—Case 3 : Registered No. 1676.



Before treatment. After 18 months of diasone treatment.

FIGURE 4.—Case 4 : Registered No. 1566.

ucts with the diasone. The number in whom treatment was discontinued because of hematuria is limited to four patients, who were started with doses of 1.0 gm. daily early in the study. At the present time diasone is administered in doses of 0.33 gm. daily for the first 2 weeks and then gradually increased to 1.0 gm. Since the adoption of this policy there have been no further cases of hematuria.

## CONCLUSION

Diasone, a derivative of diamino diphenyl sulfone, is suitable for oral administration in the treatment of leprosy. Patients with leprosy usually improve clinically within the first 6 months of treatment with diasone in adult doses of 1 gm. daily.

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# DEATHS DURING WEEK ENDED JUNE 1, 1946

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

| | Week ended June 1, 1946 | Corresponding week, 1945 |
|---|---|---|
| Data for 93 large cities of the United States: | | |
| Total deaths | 8,272 | 8,680 |
| Average for 3 prior years | 8,708 | |
| Total deaths, first 22 weeks of year | 213,417 | 207,714 |
| Deaths under 1 year of age | 614 | 555 |
| Average for 3 prior years | 602 | |
| Deaths under 1 year of age, first 22 weeks of year | 13,470 | 13,597 |
| Data from industrial insurance companies: | | |
| Policies in force | 67,201,982 | 67,350,674 |
| Number of death claims | 8,971 | 11,737 |
| Death claims per 1,000 policies in force, annual rate | 7.0 | 9.1 |
| Death claims per 1,000 policies, first 22 weeks of year, annual rate | 10.5 | 10.9 |

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### REPORTS FROM STATES FOR WEEK ENDED JUNE 8, 1946

**Summary**

A total of 161 cases of poliomyelitis was reported for the week, as compared with 145 last week and 92 for the corresponding week last year. The latter figure was the largest reported for a previous corresponding week in the past 11 years. States reporting 5 or more cases are as follows (last week's figures in parentheses): *Increases*—New York 6 (4), Kansas 7 (1), Florida 33 (31), Louisiana 9 (3), Texas 35 (26), California 15 (11): *decreases*—Alabama 15 (26), Colorado 5 (6). The total to date for the country as a whole is 1,195, as compared with 903 for the same period last year. Since March 16 (the approximate date of lowest weekly incidence in both years) 729 cases have been reported, as compared with 506 for the same period last year and a 5-year median for the period of 323.

No new case of smallpox was reported during the week in either California or Washington. Only 4 cases were reported for the country as a whole—1 each in Illinois, Iowa, Kansas, and Colorado. The total to date (of which 13 occurred in California and 68 in Washington) is 236, as compared with 224 for the same period last year and a 5-year median of 514.

A further slight decrease occurred in the incidence of measles. Of the total of 25,041 cases reported currently, as compared with 26,347 last week and a 5-year median of 14,662, approximately 68 percent occurred in the New England, Middle Atlantic, and East North Central areas. The total for the year to date is 567,487, as compared with 79,259 and 551,742, respectively, for the same periods of 1945 and 1944.

A total of 229 cases of diphtheria was reported, as compared with 290 last week. Both the current total and the cumulative figure (7,725) are above the respective corresponding figures of any of the past 6 years.

Deaths recorded during the current week in 93 large cities of the United States totaled 9,171, as compared with 8,272 last week, 8,890 and 8,360, respectively, for the corresponding weeks of 1945 and 1944, and a 3-year (1943–45) average of 8,818. The total to date is 222,588, as compared with 216,604 for the corresponding period last year.

*Telegraphic morbidity reports from State health officers for the week ended June 8, 1946, and comparison with corresponding week of 1945 and 5-year median*

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

| Division and State | Diphtheria | | | Influenza | | | Measles | | | Meningitis, meningococcus | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Week ended— | | Median 1941–45 | Week ended— | | Median 1941–45 | Week ended— | | Median 1941–45 | Week ended— | | Median 1941–45 |
| | June 8, 1946 | June 9, 1945 | | June 8, 1946 | June 9, 1945 | | June 8, 1946 | June 9, 1945 | | June 8, 1946 | June 9, 1945 | |
| **NEW ENGLAND** | | | | | | | | | | | | |
| Maine | 3 | 0 | 0 | ------ | ------ | ------ | 203 | 3 | 113 | 0 | 1 | 1 |
| New Hampshire | 0 | 0 | 0 | 1 | ------ | ------ | 57 | 3 | 5 | 0 | 0 | 0 |
| Vermont | 0 | 5 | 0 | ------ | ------ | ------ | 182 | 31 | 85 | 2 | 0 | 0 |
| Massachusetts | 1 | 4 | 2 | ------ | ------ | ------ | 2,596 | 354 | 877 | 1 | 7 | 7 |
| Rhode Island | 0 | 0 | 0 | ------ | 19 | ------ | 138 | 11 | 11 | 0 | 1 | 1 |
| Connecticut | 0 | 1 | 1 | 1 | 1 | ------ | 636 | 89 | 342 | 1 | 1 | 1 |
| **MIDDLE ATLANTIC** | | | | | | | | | | | | |
| New York | 29 | 10 | 8 | [1] 2 | [1] 2 | [1] 2 | 3,745 | 142 | 1,268 | 14 | 21 | 21 |
| New Jersey | 4 | 4 | 5 | 3 | 2 | 2 | 3,575 | 57 | 713 | 6 | 3 | 3 |
| Pennsylvania | 11 | 11 | 14 | ------ | 1 | ------ | 1,639 | 620 | 715 | 5 | 13 | 13 |
| **EAST NORTH CENTRAL** | | | | | | | | | | | | |
| Ohio | 6 | 4 | 4 | 3 | 4 | 3 | 888 | 53 | 315 | 5 | 14 | 14 |
| Indiana | 2 | 1 | 3 | 3 | 13 | 1 | 192 | 49 | 73 | 1 | 0 | 1 |
| Illinois | 11 | 4 | 19 | 7 | 7 | 7 | 585 | 401 | 401 | 5 | 10 | 10 |
| Michigan [2] | 6 | 9 | 5 | 1 | ------ | ------ | 785 | 251 | 461 | 4 | 5 | 5 |
| Wisconsin | 3 | 0 | 1 | 22 | 21 | 20 | 1,776 | 155 | 1,431 | 3 | 5 | 3 |
| **WEST NORTH CENTRAL** | | | | | | | | | | | | |
| Minnesota | 5 | 1 | 1 | ------ | ------ | ------ | 93 | 17 | 309 | 1 | 1 | 1 |
| Iowa | 3 | 4 | 3 | ------ | ------ | ------ | 244 | 63 | 97 | 0 | 1 | 0 |
| Missouri | 0 | 3 | 0 | 1 | 11 | ------ | 108 | 45 | 185 | 4 | 6 | 6 |
| North Dakota | 1 | 1 | 1 | ------ | 1 | 2 | 16 | 2 | 21 | 0 | 0 | 0 |
| South Dakota | 0 | 4 | 1 | ------ | ------ | ------ | 12 | 36 | 14 | 0 | 1 | 0 |
| Nebraska | 0 | 2 | 2 | ------ | ------ | 1 | 152 | 105 | 89 | 0 | 1 | 0 |
| Kansas | 13 | 2 | 3 | 2 | ------ | ------ | 215 | 41 | 177 | 1 | 1 | 1 |
| **SOUTH ATLANTIC** | | | | | | | | | | | | |
| Delaware | 0 | 0 | 0 | ------ | ------ | ------ | 24 | 4 | 10 | 3 | 0 | 0 |
| Maryland [2] | 13 | 12 | 6 | ------ | 1 | 1 | 717 | 25 | 204 | 1 | 0 | 8 |
| District of Columbia | 1 | 0 | 0 | ------ | ------ | ------ | 137 | 2 | 60 | 0 | 1 | 1 |
| Virginia | 4 | 3 | 3 | 71 | 76 | 76 | 653 | 32 | 219 | 2 | 3 | 3 |
| West Virginia | 1 | 1 | 2 | ------ | ------ | 1 | 150 | 6 | 33 | 3 | 2 | 2 |
| North Carolina | 16 | 2 | 4 | ------ | ------ | 2 | 287 | 29 | 262 | 1 | 2 | 2 |
| South Carolina | 3 | 7 | 3 | 136 | 74 | 80 | 378 | 32 | 77 | 0 | 1 | 1 |
| Georgia | 2 | 4 | 3 | 7 | 5 | 6 | 64 | 4 | 37 | 1 | 4 | 2 |
| Florida | 5 | 1 | 2 | 2 | ------ | 2 | 93 | 1 | 71 | 1 | 1 | 1 |
| **EAST SOUTH CENTRAL** | | | | | | | | | | | | |
| Kentucky | 5 | 0 | 2 | ------ | ------ | 2 | 71 | 13 | 42 | 0 | 1 | 1 |
| Tennessee | 1 | 0 | 2 | 9 | 23 | 16 | 186 | 63 | 77 | 2 | 6 | 6 |
| Alabama | 5 | 4 | 2 | 23 | 9 | 14 | 157 | 5 | 71 | 3 | 5 | 2 |
| Mississippi [2] | 6 | 5 | 3 | ------ | ------ | ------ | ------ | ------ | ------ | 4 | 1 | 1 |
| **WEST SOUTH CENTRAL** | | | | | | | | | | | | |
| Arkansas | 1 | 2 | 4 | 21 | 15 | 12 | 131 | 61 | 68 | 0 | 3 | 0 |
| Louisiana | 0 | 0 | 1 | 1 | ------ | 1 | 34 | 52 | 21 | 0 | 0 | 2 |
| Oklahoma | 1 | 9 | 2 | 13 | 31 | 23 | 94 | 33 | 38 | 3 | 2 | 0 |
| Texas | 24 | 28 | 22 | 256 | 393 | 287 | 1,000 | 271 | 271 | 3 | 3 | 3 |
| **MOUNTAIN** | | | | | | | | | | | | |
| Montana | 0 | 0 | 0 | ------ | 3 | 3 | 153 | 7 | 43 | 1 | 0 | 0 |
| Idaho | 1 | 0 | 0 | 8 | 3 | ------ | 58 | 2 | 29 | 0 | 0 | 0 |
| Wyoming | 0 | 0 | 0 | ------ | ------ | ------ | 19 | 12 | 15 | 0 | 1 | 0 |
| Colorado | 4 | 7 | 8 | 3 | 63 | 22 | 303 | 10 | 151 | 0 | 0 | 0 |
| New Mexico | 1 | 2 | 1 | 1 | ------ | 1 | 61 | 1 | 12 | 0 | 0 | 0 |
| Arizona | 3 | 1 | 1 | 32 | 33 | 33 | 138 | 11 | 64 | 0 | 1 | 1 |
| Utah [2] | 0 | 0 | 0 | ------ | ------ | ------ | 212 | 212 | 112 | 0 | 1 | 1 |
| Nevada | 0 | 0 | 0 | ------ | ------ | ------ | 1 | 4 | 13 | 0 | 0 | 0 |
| **PACIFIC** | | | | | | | | | | | | |
| Washington | 6 | 4 | 3 | ------ | ------ | 2 | 116 | 193 | 223 | 0 | 4 | 2 |
| Oregon | 1 | 5 | 1 | ------ | 7 | 7 | 205 | 89 | 89 | 1 | 0 | 2 |
| California | 27 | 11 | 16 | 8 | 13 | 42 | 1,762 | 1,458 | 1,458 | 11 | 9 | 9 |
| Total | 229 | 178 | 178 | 637 | 831 | 765 | 25,041 | 5,160 | 14,662 | 93 | 143 | 143 |
| 23 weeks | 7,725 | 6,115 | 5,897 | 186,516 | 64,459 | 76,675 | 567,487 | 79,259 | 466,940 | 3,701 | 5,020 | 5,020 |

[1] New York City only.

[2] Period ended earlier than Saturday.

*Telegraphic morbidity reports from State health officers for the week ended June 8, 1946, and comparison with corresponding week of 1945 and 5-year median*—Con.

| Division and State | Poliomyelitis | | | Scarlet fever | | | Smallpox | | | Typhoid and paratyphoid fever [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Week ended— | | Median | Week ended— | | Median | Week ended— | | Median | Week ended— | | Median |
| | June 8, 1946 | June 9, 1945 | 1941-45 | June 8, 1946 | June 9, 1945 | 1941-45 | June 8, 1946 | June 9, 1945 | 1941-45 | June 8, 1946 | June 9, 1945 | 1941-45 |
| **NEW ENGLAND** | | | | | | | | | | | | |
| Maine | 0 | 0 | 0 | 18 | 38 | 13 | 0 | 0 | 0 | 1 | 0 | 0 |
| New Hampshire | 0 | 1 | 1 | 17 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermont | 0 | 0 | 0 | 3 | 10 | 5 | 0 | 0 | 0 | 1 | 0 | 0 |
| Massachusetts | 0 | 1 | 0 | 112 | 312 | 251 | 0 | 0 | 0 | 0 | 5 | 4 |
| Rhode Island | 0 | 0 | 0 | 3 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Connecticut | 1 | 0 | 1 | 28 | 45 | 43 | 0 | 0 | 0 | 0 | 1 | 1 |
| **MIDDLE ATLANTIC** | | | | | | | | | | | | |
| New York | 6 | 11 | 4 | 398 | 526 | 344 | 0 | 0 | 0 | 4 | 7 | 7 |
| New Jersey | 0 | 0 | 0 | 155 | 112 | 112 | 0 | 0 | 0 | 1 | 1 | 2 |
| Pennsylvania | 3 | 1 | 0 | 209 | 412 | 219 | 0 | 0 | 0 | 5 | 4 | 6 |
| **EAST NORTH CENTRAL** | | | | | | | | | | | | |
| Ohio | 4 | 0 | 0 | 224 | 336 | 229 | 0 | 1 | 1 | 1 | 4 | 4 |
| Indiana | 1 | 1 | 0 | 37 | 64 | 54 | 0 | 0 | 0 | 3 | 1 | 0 |
| Illinois | 4 | 2 | 2 | 173 | 205 | 146 | 1 | 0 | 0 | 2 | 1 | 2 |
| Michigan [3] | 0 | 0 | 0 | 115 | 234 | 178 | 0 | 0 | 0 | 2 | 1 | 2 |
| Wisconsin | 0 | 0 | 0 | 76 | 176 | 151 | 0 | 0 | 0 | 0 | 0 | 1 |
| **WEST NORTH CENTRAL** | | | | | | | | | | | | |
| Minnesota | 3 | 0 | 0 | 45 | 77 | 40 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iowa | 1 | 0 | 0 | 33 | 28 | 14 | 1 | 0 | 0 | 0 | 0 | 0 |
| Missouri | 2 | 0 | 0 | 12 | 44 | 44 | 0 | 0 | 0 | 1 | 0 | 1 |
| North Dakota | 0 | 0 | 0 | 0 | 18 | 6 | 0 | 0 | 0 | 1 | 1 | 0 |
| South Dakota | 0 | 0 | 0 | 8 | 26 | 8 | 0 | 1 | 0 | 0 | 0 | 0 |
| Nebraska | 0 | 0 | 0 | 9 | 28 | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kansas | 7 | 0 | 0 | 23 | 43 | 27 | 1 | 0 | 0 | 0 | 0 | 1 |
| **SOUTH ATLANTIC** | | | | | | | | | | | | |
| Delaware | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Maryland [3] | 0 | 0 | 0 | 68 | 125 | 39 | 0 | 0 | 0 | 1 | 1 | 1 |
| District of Columbia | 0 | 1 | 0 | 13 | 21 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia | 0 | 2 | 0 | 43 | 65 | 20 | 0 | 0 | 0 | 2 | 0 | 3 |
| West Virginia | 1 | 1 | 0 | 20 | 36 | 18 | 0 | 0 | 0 | 1 | 2 | 2 |
| North Carolina | *2 | 2 | 0 | 16 | 41 | 17 | 0 | 0 | 0 | 1 | 3 | 3 |
| South Carolina | 3 | 3 | 1 | 11 | 12 | 4 | 0 | 0 | 0 | 10 | 1 | 1 |
| Georgia | 1 | 0 | 0 | 7 | 14 | 9 | 0 | 0 | 0 | 5 | 0 | 9 |
| Florida | 33 | 1 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 2 | 5 | 5 |
| **EAST SOUTH CENTRAL** | | | | | | | | | | | | |
| Kentucky | 0 | 0 | 1 | 16 | 25 | 25 | 0 | 0 | 0 | 6 | 5 | 4 |
| Tennessee | 3 | 2 | 1 | 11 | 31 | 28 | 0 | 0 | 0 | 1 | 1 | 4 |
| Alabama | 15 | 2 | 1 | 10 | 13 | 11 | 0 | 0 | 0 | 4 | 9 | 1 |
| Mississippi [3] | 1 | 0 | 0 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 2 |
| **WEST SOUTH CENTRAL** | | | | | | | | | | | | |
| Arkansas | 2 | 1 | 1 | 4 | 3 | 3 | 0 | 2 | 1 | 5 | 0 | 5 |
| Louisiana | 9 | 1 | 1 | 5 | 19 | 4 | 0 | 1 | 1 | 4 | 4 | 4 |
| Oklahoma | 2 | 1 | 1 | 5 | 23 | 10 | 0 | 0 | 0 | 1 | 1 | 3 |
| Texas | 35 | 42 | 1 | 25 | 40 | 26 | 0 | 0 | 0 | 13 | 9 | 9 |
| **MOUNTAIN** | | | | | | | | | | | | |
| Montana | 0 | 0 | 0 | 5 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| Idaho | 0 | 0 | 0 | 2 | 7 | 7 | 0 | 0 | 0 | 2 | 0 | 0 |
| Wyoming | 0 | 0 | 0 | 10 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colorado | 5 | 0 | 0 | 18 | 38 | 38 | 1 | 0 | 0 | 1 | 0 | 0 |
| New Mexico | 0 | 0 | 0 | 3 | 6 | 3 | 0 | 0 | 0 | 1 | 2 | 2 |
| Arizona | 1 | 0 | 0 | 4 | 8 | 8 | 0 | 0 | 0 | 1 | 2 | 1 |
| Utah [3] | 0 | 1 | 0 | 17 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nevada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **PACIFIC** | | | | | | | | | | | | |
| Washington | 1 | 2 | 1 | 19 | 47 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon | 0 | 0 | 0 | 26 | 17 | 12 | 0 | 1 | 1 | 0 | 1 | 1 |
| California | 15 | 13 | 9 | 150 | 326 | 173 | 0 | 0 | 0 | 5 | 8 | 3 |
| Total | 161 | 92 | 41 | 2,213 | 3,698 | 2,338 | 4 | 6 | 7 | 88 | 80 | 109 |
| 23 weeks | *1,195 | 903 | 586 | 77,487 | 120,416 | 87,636 | 236 | 224 | 514 | 1,268 | 1,401 | 1,790 |

[2] Period ended earlier than Saturday.

[3] Including paratyphoid fever reported separately, as follows: New York 1; Illinois 1; Michigan 1; Missouri 1; South Carolina 3; Georgia 2; Louisiana 3; California 1.

*Correction: North Carolina, week ended May 18, 1946, poliomyelitis, 2 cases (instead of 3).

*Telegraphic morbidity reports from State health officers for the week ended June 8, 1946, and comparison with corresponding week of 1945 and 5-year median*—Con.

| Division and State | Whooping cough | | | Week ended June 8, 1946 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Week ended— | | Median 1941–45 | Dysentery | | | Encephalitis, infectious | Rocky Mt. spotted fever | Tularemia | Typhus fever, endemic | Undulant fever |
| | June 8, 1946 | June 9, 1945 | | Amebic | Bacillary | Unspecified | | | | | |
| **NEW ENGLAND** | | | | | | | | | | | |
| Maine | 19 | 41 | 32 | | | | | | | | 1 |
| New Hampshire | 5 | | 2 | | | | | | | | 1 |
| Vermont | 38 | 32 | 7 | | | | | | | | 3 |
| Massachusetts | 100 | 171 | 171 | | | | 1 | | | | |
| Rhode Island | 28 | 16 | 27 | | | | | | | | |
| Connecticut | 65 | 41 | 53 | | | | | | | | |
| **MIDDLE ATLANTIC** | | | | | | | | | | | |
| New York | 145 | 210 | 241 | 3 | 6 | | 1 | 1 | | | 9 |
| New Jersey | 184 | 112 | 122 | | | 1 | | | | | 1 |
| Pennsylvania | 63 | 166 | 215 | | | | | 1 | | | 2 |
| **EAST NORTH CENTRAL** | | | | | | | | | | | |
| Ohio | 72 | 130 | 130 | | | | | | | | 2 |
| Indiana | 46 | 34 | 34 | | | | | | | | |
| Illinois | 97 | 48 | 102 | 5 | 1 | | 1 | | 1 | | 17 |
| Michigan [2] | 71 | 45 | 218 | 1 | 1 | | | | | | 2 |
| Wisconsin | 100 | 26 | 125 | | | | | | 1 | | 5 |
| **WEST NORTH CENTRAL** | | | | | | | | | | | |
| Minnesota | 9 | 11 | 22 | 2 | | | | | | | |
| Iowa | 14 | | 23 | | | | | | | | 16 |
| Missouri | 13 | 29 | 29 | | | | | | | | 1 |
| North Dakota | | | 8 | | | 1 | | | | | |
| South Dakota | | | 4 | | | | | | | | 2 |
| Nebraska | 1 | | 9 | | | | | | | | |
| Kansas | 26 | 31 | 55 | | | | | | 1 | | 2 |
| **SOUTH ATLANTIC** | | | | | | | | | | | |
| Delaware | 1 | 1 | 1 | | | | | 1 | | | |
| Maryland [2] | 26 | 88 | 88 | | | | | 2 | | | |
| District of Columbia | 6 | 3 | 11 | | | | | 1 | | | |
| Virginia | 76 | 132 | 65 | | | 50 | | | | | |
| West Virginia | 17 | 11 | 23 | | | | | | | | |
| North Carolina | 108 | 158 | 160 | | | | | 5 | | 3 | |
| South Carolina | 67 | 75 | 79 | | 68 | | | | | | |
| Georgia | 5 | 21 | 27 | 1 | 3 | | | | | 14 | 7 |
| Florida | 27 | 8 | 10 | | | | | | | 7 | 3 |
| **EAST SOUTH CENTRAL** | | | | | | | | | | | |
| Kentucky | 33 | 23 | 55 | | 1 | | | | | 1 | 1 |
| Tennessee | 25 | 33 | 51 | | | 1 | 1 | 1 | | | |
| Alabama | 45 | 67 | 55 | | | | | | | 5 | 2 |
| Mississippi [2] | | | | | | | | | 2 | 1 | 3 |
| **WEST SOUTH CENTRAL** | | | | | | | | | | | |
| Arkansas | | 18 | 42 | 3 | | | | | 2 | | 4 |
| Louisiana | | 5 | 5 | | | | 1 | | | 1 | 3 |
| Oklahoma | 8 | 9 | 9 | | | | | | | | |
| Texas | 180 | 266 | 266 | 19 | 303 | 88 | | | | 18 | 13 |
| **MOUNTAIN** | | | | | | | | | | | |
| Montana | 1 | 3 | 6 | | | | | | | | |
| Idaho | 14 | 1 | 1 | 1 | | | | 3 | | | |
| Wyoming | | 2 | 7 | | | | | | | | |
| Colorado | 19 | 40 | 29 | | 1 | | | 1 | | | 1 |
| New Mexico | 10 | 6 | 7 | | | | | | | | 2 |
| Arizona | 17 | 11 | 11 | 2 | | 66 | | | | | |
| Utah [2] | 12 | 25 | 62 | | | | | | 1 | | |
| Nevada | | | 2 | | | | | | | | |
| **PACIFIC** | | | | | | | | | | | |
| Washington | 29 | 17 | 60 | | | | | | | | |
| Oregon | 20 | 24 | 20 | | | | | | | | |
| California | 44 | 489 | 489 | 2 | 1 | | 2 | 1 | | 2 | 10 |
| Total | 1,886 | 2,679 | 3,778 | 39 | 385 | 207 | 7 | 17 | 8 | 52 | 113 |
| Same week, 1945 | 2,679 | | | 40 | 556 | 172 | 7 | 15 | 12 | 97 | 95 |
| Average, 1943–45 | 2,885 | | | 54 | 524 | 179 | 12 | [4] 21 | 20 | [4] 44 | |
| 23 weeks: 1946 | 42,905 | | | 897 | 7,597 | 2,710 | 200 | 105 | 400 | 1,067 | 1,973 |
| 1945 | 57,437 | | | 721 | 9,918 | 2,690 | 156 | 90 | 363 | 1,270 | 2,062 |
| Average, 1943–45 | 64,066 | | [4] 88,081 | 694 | 7,183 | 1,945 | 223 | [4] 106 | 345 | [4] 1,061 | |

[2] Period ended earlier than Saturday.
[4] 5-year median, 1941–45.

# WEEKLY REPORTS FROM CITIES

## *City reports for week ended June 1, 1946*

This table lists the reports from 87 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

| | Diphtheria cases | Encephalitis, infectious, cases | Influenza | | Measles cases | Meningitis, meningococcus, cases | Pneumonia deaths | Poliomyelitis cases | Scarlet fever cases | Smallpox cases | Typhoid and paratyphoid fever cases | Whooping cough cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases | Deaths | | | | | | | | |
| **NEW ENGLAND** | | | | | | | | | | | | |
| Maine: | | | | | | | | | | | | |
| Portland | 0 | 0 | ------ | 0 | 38 | 0 | 2 | 1 | 9 | 0 | 0 | 2 |
| New Hampshire: | | | | | | | | | | | | |
| Concord | 0 | 0 | ------ | 0 | ------ | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Vermont: | | | | | | | | | | | | |
| Barre | 0 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Massachusetts: | | | | | | | | | | | | |
| Boston | 0 | 0 | ------ | 0 | 326 | 1 | 7 | 0 | 39 | 0 | 0 | 9 |
| Fall River | 0 | 0 | ------ | 0 | 66 | 0 | 1 | 0 | 4 | 0 | 0 | 1 |
| Springfield | 0 | 0 | ------ | 0 | 115 | 0 | 0 | 0 | 4 | 0 | 0 | 3 |
| Worcester | 0 | 0 | ------ | 0 | 423 | 0 | 5 | 0 | 10 | 0 | 0 | 39 |
| Rhode Island: | | | | | | | | | | | | |
| Providence | 0 | 0 | ------ | 0 | 123 | 0 | 3 | 0 | 0 | 0 | 0 | 9 |
| Connecticut: | | | | | | | | | | | | |
| Bridgeport | 0 | 0 | ------ | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Hartford | 0 | 0 | ------ | 0 | 11 | 0 | 2 | 0 | 6 | 0 | 0 | 5 |
| New Haven | 0 | 0 | ------ | 0 | 50 | 0 | 1 | 0 | 1 | 0 | 0 | ------ |
| **MIDDLE ATLANTIC** | | | | | | | | | | | | |
| New York: | | | | | | | | | | | | |
| Buffalo | 11 | 0 | ------ | 1 | 29 | 0 | 3 | 1 | 3 | 0 | 0 | 8 |
| New York | 13 | 0 | ------ | 1 | 836 | 1 | 53 | 0 | 166 | 0 | 2 | 26 |
| Rochester | 0 | 0 | ------ | 0 | 147 | 0 | 0 | 0 | 10 | 0 | 0 | 2 |
| Syracuse | 0 | 0 | ------ | 0 | 13 | 0 | 2 | 0 | 4 | 0 | 0 | 2 |
| New Jersey: | | | | | | | | | | | | |
| Camden | 0 | 0 | ------ | 0 | 10 | 1 | 0 | 0 | 3 | 0 | 0 | 1 |
| Newark | 0 | 0 | 1 | 0 | 151 | 0 | 4 | 0 | 9 | 0 | 0 | 29 |
| Trenton | 0 | 0 | 1 | 1 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pennsylvania: | | | | | | | | | | | | |
| Philadelphia | 3 | 0 | ------ | 0 | 240 | 1 | 14 | 0 | 48 | 0 | 0 | 11 |
| Pittsburgh | 1 | 0 | 1 | 0 | 15 | 2 | 8 | 0 | 18 | 0 | 0 | 4 |
| Reading | 0 | 0 | ------ | 0 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 1 |
| **EAST NORTH CENTRAL** | | | | | | | | | | | | |
| Ohio: | | | | | | | | | | | | |
| Cincinnati | 1 | 0 | ------ | 1 | 20 | 0 | 2 | 0 | 9 | 0 | 0 | 1 |
| Cleveland | 0 | 0 | 3 | 1 | 162 | 0 | 7 | 1 | 34 | 0 | 0 | 17 |
| Columbus | 0 | 0 | ------ | 0 | 9 | 0 | 4 | 0 | 8 | 0 | 0 | 4 |
| Indiana: | | | | | | | | | | | | |
| Fort Wayne | 0 | 0 | ------ | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | ------ |
| Indianapolis | 1 | 0 | ------ | 0 | 45 | 0 | 5 | 0 | 7 | 0 | 0 | 1 |
| South Bend | 0 | 0 | ------ | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | ------ |
| Terre Haute | 0 | 0 | ------ | 0 | 28 | 0 | 0 | 0 | 1 | 0 | 2 | ------ |
| Illinois: | | | | | | | | | | | | |
| Chicago | 0 | 0 | ------ | 4 | 144 | 1 | 28 | 3 | 88 | 0 | 0 | 35 |
| Michigan: | | | | | | | | | | | | |
| Detroit | 3 | 1 | ------ | 1 | 67 | 0 | 15 | 0 | 49 | 0 | 0 | 31 |
| Flint | 0 | 0 | ------ | 0 | 8 | 0 | 5 | 0 | 5 | 0 | 0 | 2 |
| Grand Rapids | 0 | 0 | ------ | 0 | 90 | 0 | 0 | 0 | 6 | 0 | 0 | 4 |
| Wisconsin: | | | | | | | | | | | | |
| Kenosha | 0 | 0 | ------ | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | ------ |
| Milwaukee | 0 | 0 | ------ | 0 | 519 | 1 | 4 | 0 | 16 | 0 | 0 | 58 |
| Racine | 0 | 0 | ------ | 0 | 148 | 1 | 0 | 0 | 2 | 0 | 0 | 2 |
| Superior | 0 | 0 | ------ | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| **WEST NORTH CENTRAL** | | | | | | | | | | | | |
| Minnesota: | | | | | | | | | | | | |
| Duluth | 1 | 0 | ------ | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 1 | 15 |
| Minneapolis | 3 | 0 | ------ | 0 | 24 | 1 | 1 | 1 | 14 | 0 | 0 | 1 |
| Missouri: | | | | | | | | | | | | |
| Kansas City | 0 | 0 | 1 | 0 | 3 | 1 | 5 | 0 | 6 | 0 | 0 | 2 |
| St. Joseph | 0 | 0 | ------ | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| St. Louis | 0 | 0 | 1 | 0 | 113 | 0 | 10 | 0 | | 0 | 1 | 5 |

*City reports for week ended June 1, 1946*—Continued

| | Diphtheria cases | Encephalitis, infectious, cases | Influenza | | Measles cases | Meningitis, meningococcus, cases | Pneumonia deaths | Poliomyelitis cases | Scarlet fever cases | Smallpox cases | Typhoid and paratyphoid fever cases | Whooping cough cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases | Deaths | | | | | | | | |
| **WEST NORTH CENTRAL—continued** | | | | | | | | | | | | |
| Nebraska: | | | | | | | | | | | | |
| Omaha | 0 | 0 | ------ | 0 | 18 | 0 | 3 | 0 | 0 | 0 | 0 | ------ |
| Kansas: | | | | | | | | | | | | |
| Topeka | 0 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 5 | 0 | 0 | ------ |
| Wichita | 0 | 0 | 1 | 0 | 16 | 0 | 6 | 0 | 3 | 0 | 0 | 3 |
| **SOUTH ATLANTIC** | | | | | | | | | | | | |
| Delaware: | | | | | | | | | | | | |
| Wilmington | 0 | 0 | ------ | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Maryland: | | | | | | | | | | | | |
| Baltimore | 11 | 0 | ------ | 0 | 376 | 1 | 7 | 0 | 9 | 0 | 0 | 7 |
| Cumberland | 0 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 5 | 0 | 0 | ------ |
| Frederick | 0 | 0 | ------ | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| District of Columbia: | | | | | | | | | | | | |
| Washington | 0 | 0 | ------ | 1 | 168 | 0 | 6 | 0 | 8 | 0 | 0 | 10 |
| Virginia: | | | | | | | | | | | | |
| Lynchburg | 0 | 0 | ------ | 0 | 20 | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Richmond | 0 | 0 | ------ | 0 | 92 | 0 | 1 | 0 | 3 | 0 | 0 | 3 |
| Roanoke | 0 | 0 | ------ | 0 | 22 | 0 | 0 | 0 | 4 | 0 | 0 | ------ |
| West Virginia: | | | | | | | | | | | | |
| Charleston | 0 | 0 | ------ | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Wheeling | 0 | 0 | ------ | 0 | ------ | 0 | 1 | 0 | 1 | 0 | 0 | 15 |
| North Carolina: | | | | | | | | | | | | |
| Raleigh | 0 | 0 | ------ | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Wilmington | 1 | 0 | ------ | 0 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Winston-Salem | 0 | 0 | ------ | 0 | 9 | 0 | 0 | 0 | 3 | 0 | 0 | 9 |
| South Carolina: | | | | | | | | | | | | |
| Charleston | 0 | 0 | ------ | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| Georgia: | | | | | | | | | | | | |
| Atlanta | 0 | 0 | ------ | 0 | 37 | 0 | 5 | 0 | 1 | 0 | 0 | ------ |
| Brunswick | 0 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Savannah | 0 | 0 | ------ | 0 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Florida: | | | | | | | | | | | | |
| Tampa | 2 | 0 | ------ | 0 | 34 | 0 | 1 | 2 | 0 | 0 | 0 | 1 |
| **EAST SOUTH CENTRAL** | | | | | | | | | | | | |
| Tennessee: | | | | | | | | | | | | |
| Memphis | 1 | 1 | ------ | 0 | 25 | 0 | 4 | 0 | 1 | 0 | 3 | 12 |
| Nashville | 0 | 0 | ------ | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | ------ |
| Alabama: | | | | | | | | | | | | |
| Birmingham | 0 | 0 | ------ | 0 | 7 | 0 | 3 | 0 | 0 | 0 | 0 | 1 |
| Mobile | 0 | 0 | ------ | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | ------ |
| **WEST SOUTH CENTRAL** | | | | | | | | | | | | |
| Arkansas: | | | | | | | | | | | | |
| Little Rock | 2 | 0 | ------ | 0 | 10 | 0 | 0 | 0 | 2 | 0 | 0 | ------ |
| Louisiana: | | | | | | | | | | | | |
| New Orleans | 1 | 0 | ------ | 0 | 23 | 1 | 0 | 1 | 7 | 0 | 1 | 2 |
| Shreveport | 1 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 2 | 0 | 0 | ------ |
| Texas: | | | | | | | | | | | | |
| Dallas | 0 | 0 | ------ | 0 | 17 | 1 | 4 | 3 | 2 | 0 | 0 | 1 |
| Galveston | 0 | 0 | ------ | 0 | ------ | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Houston | 1 | 1 | ------ | 1 | 6 | 1 | 4 | 3 | 0 | 0 | 0 | ------ |
| San Antonio | 0 | 2 | ------ | 0 | 8 | 0 | 2 | 10 | 2 | 0 | 0 | 1 |
| **MOUNTAIN** | | | | | | | | | | | | |
| Montana: | | | | | | | | | | | | |
| Billings | 0 | 0 | ------ | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Great Falls | 0 | 0 | ------ | 0 | 21 | 0 | 1 | 0 | 0 | 0 | 0 | ------ |
| Helena | 0 | 0 | ------ | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Missoula | 0 | 0 | ------ | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 0 | ------ |
| Idaho: | | | | | | | | | | | | |
| Boise | 0 | 0 | ------ | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| Colorado: | | | | | | | | | | | | |
| Denver | 5 | 0 | 1 | 0 | 220 | 0 | 6 | 1 | 13 | 0 | 0 | 3 |
| Pueblo | 0 | 0 | ------ | 0 | 46 | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| Utah: | | | | | | | | | | | | |
| Salt Lake City | 0 | 0 | ------ | 0 | 65 | 0 | 2 | 0 | 5 | 0 | 0 | 4 |

*City reports for week ended June 1, 1946*—Continued

| | Diphtheria cases | Encephalitis, infectious, cases | Influenza cases | Influenza deaths | Measles cases | Meningitis, meningococcus, cases | Pneumonia deaths | Poliomyelitis cases | Scarlet fever cases | Smallpox cases | Typhoid and paratyphoid fever cases | Whooping cough cases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PACIFIC | | | | | | | | | | | | |
| Washington: | | | | | | | | | | | | |
| Seattle | 2 | 0 | ------ | 0 | 42 | 1 | 1 | 0 | 6 | 0 | 1 | 8 |
| Spokane | 0 | 0 | 1 | 0 | 8 | 2 | 1 | 0 | 0 | 0 | 1 | 1 |
| Tacoma | 2 | 0 | ------ | 0 | 4 | 0 | 0 | 1 | 6 | 0 | 0 | 11 |
| California: | | | | | | | | | | | | |
| Los Angeles | 2 | 0 | 6 | 0 | 192 | 0 | 1 | 3 | 39 | 0 | 0 | 8 |
| Sacramento | 0 | 0 | ------ | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | ------ |
| San Francisco | 0 | 0 | 1 | 0 | 79 | 1 | 5 | 0 | 7 | 0 | 0 | 3 |
| Total | 68 | 5 | 18 | 13 | 5,774 | 19 | 266 | 33 | 735 | 0 | 13 | 442 |
| Corresponding week, 1945 | 49 | ------ | 23 | 14 | 1,659 | ------ | 311 | ------ | 1,311 | 0 | 12 | 552 |
| Average, 1941–45 | 57 | ------ | 39 | [1] 14 | [2] 4,861 | ------ | [1] 301 | ------ | 1,123 | 2 | 18 | 959 |

[1] 3-year average, 1943–45.
[2] 5-year median, 1941–45.

*Dysentery, amebic.*—Cases: New York 1; Chicago 6; Baltimore 1; Little Rock 1; Los Angeles 1.
*Dysentery, bacillary.*—Cases: Syracuse 2; Chicago 1; Detroit 1; Charleston, S. C., 2; Nashville 1; Los Angeles 1; San Francisco 1.
*Dysentery, unspecified.*—Cases: Cleveland 1; Omaha 2; San Antonio 46.
*Rocky Mountain spotted fever.*—Cases: Philadelphia 1; Nashville 1.
*Tularemia.*—Cases: Duluth 1.
*Typhus fever, endemic.*—Cases: Atlanta 1; Birmingham 1; Little Rock 1; New Orleans 2; Houston 1; San Antonio 1.

*Rates (annual basis) per 100,000 population, by geographic groups, for the 87 cities in the preceding table (estimated population, 1943, 34,014,300)*

| | Diphtheria case rates | Encephalitis, infectious, case rates | Influenza case rates | Influenza death rates | Measles case rates | Meningitis, meningococcus, case rates | Pneumonia death rates | Poliomyelitis case rates | Scarlet fever case rates | Smallpox case rates | Typhoid and paratyphoid fever case rates | Whooping cough case rates |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New England | 0.0 | 0.0 | 0.0 | 0.0 | 3,019 | 2.6 | 57.5 | 2.6 | 191 | 0.0 | 0.0 | 180 |
| Middle Atlantic | 13.0 | 0.0 | 1.4 | 1.4 | 708 | 2.3 | 39.3 | 0.5 | 122 | 0.0 | 0.9 | 39 |
| East North Central | 3.1 | 0.6 | 1.8 | 4.3 | 764 | 1.8 | 43.5 | 2.5 | 142 | 0.0 | 1.8 | 96 |
| West North Central | 9.0 | 0.0 | 6.8 | 0.0 | 419 | 4.5 | 56.3 | 2.3 | 81 | 0.0 | 4.5 | 59 |
| South Atlantic | 22.9 | 0.0 | 0.0 | 1.6 | 1,291 | 1.6 | 42.5 | 4.9 | 56 | 0.0 | 0.0 | 77 |
| East South Central | 5.9 | 5.9 | 0.0 | 5.9 | 207 | 0.0 | 47.2 | 5.9 | 12 | 0.0 | 17.7 | 77 |
| West South Central | 14.3 | 8.6 | 0.0 | 2.9 | 184 | 8.6 | 28.7 | 48.8 | 46 | 0.0 | 2.9 | 17 |
| Mountain | 39.7 | 0.0 | 7.9 | 0.0 | 2,939 | 0.0 | 87.4 | 7.9 | 159 | 0.0 | 0.0 | 71 |
| Pacific | 9.5 | 0.0 | 12.7 | 0.0 | 631 | 6.3 | 12.7 | 6.3 | 92 | 0.0 | 3.2 | 49 |
| Total | 10.5 | 0.8 | 2.8 | 2.0 | 888 | 2.9 | 40.9 | 5.1 | 113 | 0.0 | 2.0 | 68 |

## PLAGUE INFECTION IN SAN LUIS OBISPO COUNTY, CALIF.

Plague infection was reported under date of May 31 to have been proved on May 27 in a pool of 393 fleas from burrows and in tissue from 5 ground squirrels, *C. beecheyi*, collected 1 mile north of Pozo, San Luis Obispo County, Calif., and received at the laboratory on April 23, 1946.

## TERRITORIES AND POSSESSIONS

### Panama Canal Zone

*Notifiable diseases—April 1946.*—During the month of April 1946, certain notifiable diseases were reported in the Panama Canal Zone and terminal cities as follows:

| Disease | Panama | | Colon | | Canal Zone | | Outside the Zone and terminal cities | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| Chickenpox | 5 | | 3 | | | | 1 | | 9 | |
| Diphtheria | 5 | | 1 | | 2 | | 1 | | 9 | |
| Dysentery: | | | | | | | | | | |
| Amebic | 2 | 1 | 2 | | 2 | | 2 | | 8 | 1 |
| Bacillary | | | | | 2 | 1 | 1 | | 3 | 1 |
| Malaria [1] | 2 | | 1 | | 14 | 1 | 45 | 1 | 62 | 2 |
| Measles | 3 | | | | 26 | | 5 | | 34 | |
| Meningitis, meningococcus | | | 1 | 1 | | | | | 1 | 1 |
| Mumps | 1 | | | | 3 | | 1 | | 5 | |
| Paratyphoid fever | 1 | | | | | | | | 1 | |
| Pneumonia | | 10 | | 3 | 30 | 3 | | | [2] 30 | 16 |
| Poliomyelitis | | | | | | | 1 | | 1 | |
| Scarlet fever | 1 | | | | 1 | | | | 2 | |
| Tuberculosis | | 26 | | 3 | 5 | 1 | | 9 | [2] 5 | 39 |
| Typhoid fever | 1 | | | | | | 2 | | 3 | |
| Whooping cough | | | | | 2 | | | | [2] 2 | |

[1] 13 recurrent cases.
[2] Reported in the Canal Zone only.

### Puerto Rico

*Notifiable diseases—4 weeks ended May 18, 1946.*—During the 4 weeks ended May 18, 1946, cases of certain notifiable diseases were reported in Puerto Rico as follows:

| Disease | Cases | Disease | Cases |
|---|---|---|---|
| Chickenpox | 55 | Syphilis | 169 |
| Diphtheria | 48 | Tetanus | 11 |
| Dysentery, unspecified | 4 | Tetanus, infantile | 1 |
| Gonorrhea | 173 | Tuberculosis (all forms) | 675 |
| Influenza | 58 | Typhoid and paratyphoid fever | 7 |
| Malaria | 203 | Typhus fever (murine) | 22 |
| Measles | 62 | Whooping cough | 136 |
| Poliomyelitis | 1 | | |

# FOREIGN REPORTS

## CANADA

*Provinces—Communicable diseases—Week ended May 11, 1946.*—During the week ended May 11, 1946, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

| Disease | Prince Edward Island | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Chickenpox | | 9 | | 188 | 272 | 21 | 35 | 12 | 136 | 673 |
| Diphtheria | | 4 | 2 | 20 | 11 | 1 | | | 1 | 39 |
| Dysentery: | | | | | | | | | | |
| Bacillary | | | | 1 | | | | | 1 | 2 |
| Unspecified | | | | | 3 | | | | | 3 |
| German measles | | | | 26 | 39 | | | 8 | 12 | 85 |
| Influenza | | 1 | | | 9 | 2 | 1 | | 7 | 20 |
| Measles | | 80 | 9 | 738 | 1,269 | 61 | 33 | 91 | 6 | 2,287 |
| Meningitis, meningococcus | | | | 2 | 3 | 1 | | | 1 | 7 |
| Mumps | | 1 | 1 | | 293 | 88 | 49 | 63 | 226 | 721 |
| Poliomyelitis | | | | | | | | 1 | | 1 |
| Scarlet fever | | 4 | 6 | 95 | 61 | 9 | 1 | 10 | 5 | 191 |
| Tuberculosis (all forms) | | 17 | 19 | 150 | 74 | 14 | 11 | 11 | 29 | 325 |
| Typhoid and paratyphoid fever | | | | 14 | 2 | | 1 | | 3 | 20 |
| Undulant fever | | | | | 1 | | | | | 1 |
| Venereal diseases: | | | | | | | | | | |
| Gonorrhea | | 11 | 32 | 85 | 139 | 42 | 50 | 40 | 104 | 503 |
| Syphilis | | 19 | 18 | 126 | 108 | 12 | 10 | 8 | 47 | 348 |
| Whooping cough | | 3 | | 54 | 63 | 9 | | 7 | | 136 |

## CUBA

*Habana—Communicable diseases—4 weeks ended May 25, 1946.*—During the 4 weeks ended May 25, 1946, certain communicable diseases were reported in Habana, Cuba, as follows:

| Disease | Cases | Deaths | Disease | Cases | Deaths |
|---|---|---|---|---|---|
| Chickenpox | 6 | | Poliomyelitis | 13 | 1 |
| Diphtheria | 8 | | Tuberculosis | 10 | 3 |
| Measles | 8 | | Typhoid fever | 14 | |

*Provinces—Notifiable diseases—4 weeks ended May 18, 1946.*—During the 4 weeks ended May 18, 1946, cases of certain notifiable diseases were reported in the Provinces of Cuba, as follows:

| Disease | Pinar del Rio | Habana [1] | Matanzas | Santa Clara | Camaguey | Oriente | Total |
|---|---|---|---|---|---|---|---|
| Cancer | 5 | 12 | 12 | 23 | 3 | 11 | 66 |
| Chickenpox | | 21 | | | 5 | 4 | 30 |
| Diphtheria | | 8 | 1 | 1 | 1 | | 11 |
| Hookworm disease | | 24 | | 1 | | | 25 |
| Leprosy | 2 | 5 | | | | 12 | 19 |
| Malaria | 9 | | | | 1 | 55 | 65 |
| Measles | | 5 | | | 2 | | 7 |
| Poliomyelitis | | 18 | 9 | 4 | 1 | | 32 |
| Tuberculosis | 4 | 51 | 8 | 45 | 18 | 69 | 195 |
| Typhoid fever | 9 | 49 | 9 | 42 | 7 | 57 | 173 |
| Whooping cough | | | | 2 | 1 | | 3 |

[1] Includes the city of Habana.

## NEW ZEALAND

*Notifiable diseases—4 weeks ended April 20, 1946.*—During the 4 weeks ended April 20, 1946, certain notifiable diseases were reported in New Zealand as follows:

| Disease | Cases | Deaths | Disease | Cases | Deaths |
|---|---|---|---|---|---|
| Actinomycosis | 1 | | Poliomyelitis | 23 | |
| Cerebrospinal meningitis | 9 | 1 | Puerperal fever | 5 | |
| Diphtheria | 140 | 6 | Scarlet fever | 126 | |
| Dysentery: | | | Tetanus | 5 | 1 |
| Amebic | 12 | | Trachoma | 1 | |
| Bacillary | 14 | | Tuberculosis (all forms) | 200 | 31 |
| Erysipelas | 24 | | Typhoid fever | 1 | |
| Food poisoning | 8 | | Undulant fever | 2 | |
| Malaria | 7 | | | | |

## WORLD DISTRIBUTION OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From medical officers of the Public Health Service, American consuls, International Office of Public Health, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

### CHOLERA

[C indicates cases]

NOTE.—Since many of the figures in the following tables are from weekly reports, the accumulated totals are for approximate dates.

| Place | | January–March 1946 | April 1946 | May 1946—week ended— | | | |
|---|---|---|---|---|---|---|---|
| | | | | 4 | 11 | 18 | 25 |
| ASIA | | | | | | | |
| Burma | C | 121 | 301 | | | | |
| Bassein | C | 7 | 2 | | | | |
| Moulmein | C | [1] 12 | 25 | | | | |
| Rangoon | C | 3 | | | | | |
| Ceylon | C | | 3 | 5 | | 9 | 14 |
| China: | | | | | | | |
| Fukien Province | C | 1 | | | | | |
| Hunan Province | C | 1 | | | | | |
| Hupeh Province | C | 80 | 114 | | | | |
| Kiangsi Province | C | | [1] 37 | | | [2] 42 | |
| Kwangtung Province | C | 302 | 261 | | | | |
| Canton | C | 302 | 207 | | | [3] 30 | |
| India | C | 10,823 | 11,757 | | | | |
| Calcutta | C | 655 | 434 | 94 | 117 | 63 | |
| Chittagong | C | 2 | 1 | | 3 | 1 | |
| Madras | C | 2 | | | | | |
| Indochina (French): Cochinchina | C | 18 | 495 | | [4] 88 | | |
| Chaudok | C | 10 | 11 | | | | |
| Mytho | C | 6 | 120 | | | | |
| Saigon-Cholon | C | | 14 | | | | |
| Straits Settlements: Singapore | C | [1] 1 | | | | | |
| Thailand (Siam) | C | 1,279 | | | | | |
| Bangkok | C | 308 | | | | | |

[1] Imported.
[2] Imported cases for the period Apr. 28 to May 20, 1946.
[3] For the period May 1–20, 1946.
[4] For the period May 1–10, 1946.

## PLAGUE

[C indicates cases; P, present]

| Place | | January–March 1946 | April 1946 | May 1946—week ended— 4 | 11 | 18 | 25 |
|---|---|---|---|---|---|---|---|
| **AFRICA** | | | | | | | |
| Algeria | C | 2 | | | | | |
| Bechuanaland | C | 10 | | | | | |
| Belgian Congo | C | 2 | | 1 | | | |
| British East Africa: | | | | | | | |
| Kenya | C | 7 | 6 | | | | |
| Uganda | C | 7 | 1 | 1 | 3 | | |
| Egypt | C | 26 | 26 | 11 | 8 | 12 | 10 |
| Alexandria | C | 14 | 14 | 10 | 4 | 6 | 5 |
| Ismailiya | C | 4 | 12 | | 3 | 1 | |
| Port Said | C | 1 | | | | | |
| Suez | C | 7 | | 1 | 1 | 5 | 5 |
| Madagascar | C | 115 | 11 | | 1 | | |
| Union of South Africa | C | | 1 | | | | |
| **ASIA** | | | | | | | |
| Burma | C | 276 | 222 | | | | |
| Rangoon | C | 48 | 29 | | | | |
| China: | | | | | | | |
| Chekiang Province | C | 52 | 82 | | | | |
| Fukien Province | C | 432 | 338 | 2 | | | |
| Foochow | C | 96 | 287 | | | [1] 87 | |
| Kiangsi Province | C | | [2] 66 | | | | |
| Kwangtung Province | C | 211 | 1 | | | | |
| Yunnan Province | C | 11 | 15 | | | | |
| India | C | 9,480 | 1,572 | | | | |
| Java | C | 16 | | | | | |
| Manchuria | C | [3] 52 | | | | | |
| Mukden | C | [3] 39 | | | | | |
| Palestine | C | 13 | | | | | |
| Thailand (Siam) | C | 16 | | | | | |
| **EUROPE** | | | | | | | |
| Great Britain: Malta | C | 2 | | | | | |
| Portugal: Azores | C | [4] 12 | 1 | | | | |
| **SOUTH AMERICA** | | | | | | | |
| Bolivia: | | | | | | | |
| Santa Cruz Department | C | 12 | | | | | |
| Tarija Department—Plague-infected rats | | P | | | | | |
| Ecuador: Loja Province | C | 6 | | | | | |
| Peru: | | | | | | | |
| Lambayeque Department | C | 8 | | | | | |
| Lima Department | C | 18 | | | | | |
| **OCEANIA** | | | | | | | |
| Hawaii Territory: Plague-infected rats | | [5] 4 | | | | | |

[1] For the period May 11–20, 1946.
[2] For the period Feb. 21 to Apr. 20, 1946.
[3] Pneumonic.
[4] Includes 2 cases of pneumonic plague.
[5] Plague infection was also proved positive in Hawaii Territory on Feb. 5, 1946, in a pool of 29 rats and on Apr. 13, 1946, in a pool of 54 fleas and 15 lice collected from 7 rats and 22 mice.

## SMALLPOX

[C indicates cases; P, present]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AFRICA** | | | | | | | |
| Algeria | C | 13 | | | | | |
| Basutoland | C | 6 | | 2 | | | |
| Belgian Congo | C | [1] 577 | [1] 134 | [1] 34 | [1] 52 | | |
| British East Africa: | | | | | | | |
| Kenya | C | 302 | 69 | 6 | 38 | | |
| Nyasaland | C | 56 | 79 | 8 | 11 | 11 | 13 |
| Tanganyika | C | 1,496 | 170 | | | | |
| Uganda | C | 242 | 47 | 14 | | | |
| Cameroon (French) | C | 40 | 19 | | | [2] 2 | |
| Dahomey | C | 809 | 140 | | | [2] 94 | |
| Egypt | C | 116 | 50 | 17 | | | |
| French Equatorial Africa | C | 122 | 6 | | | | |
| French Guinea | C | 367 | 175 | | | [2] 5 | |
| French West Africa: Dakar District | C | 30 | 6 | | | [2] 2 | |
| Gambia | C | 2 | | 2 | 1 | | |

See footnotes at end of table.

## SMALLPOX—Continued

[C indicates cases: P, present]

| Place | | January-March 1946 | April 1946 | May 1946—week ended— 4 | 11 | 18 | 25 |
|---|---|---|---|---|---|---|---|
| **AFRICA—continued** | | | | | | | |
| Gold Coast | C | 593 | 38 | | | | |
| Ivory Coast | C | 304 | 196 | | | [2] 145 | |
| Libya | C | 37 | 10 | | | | 2 |
| Mauritania | C | | 1 | | | | |
| Morocco (French) | C | 1,263 | 272 | | | [2] 142 | |
| Morocco (Int. Zone) | C | 129 | 32 | | | [2] 9 | |
| Nigeria | C | 2,575 | | | | | |
| Niger Territory | C | 246 | 79 | | | [2] 62 | |
| Rhodesia: | | | | | | | |
| Northern | C | 216 | 9 | 5 | | | |
| Southern | C | 1 | | | | | |
| Senegal | C | 63 | 5 | | | | |
| Sierra Leone | C | 213 | 16 | | | | |
| Sudan (Anglo-Egyptian) | C | 19 | 6 | 1 | 1 | 4 | |
| Sudan (French) | C | 1,543 | 171 | | | [2] 71 | |
| Togo (French) | C | 47 | 54 | | | [2] 38 | |
| Tunisia | C | 30 | | | | | |
| Union of South Africa | C | 71 | P | | P | | |
| **ASIA** | | | | | | | |
| Arabia | C | | 1 | | | | |
| Burma | C | 418 | 516 | | | | |
| Ceylon | C | 309 | 33 | | | | |
| China | C | 319 | 120 | | | [2] 84 | |
| India | C | 32,695 | 8,180 | | | | |
| Indochina (French): | | | | | | | |
| Cochinchina | C | 62 | 40 | | | | |
| Laos | C | 9 | | | | | |
| Iran | C | 21 | 3 | | | | |
| Iraq | C | 2 | 3 | | | | |
| Japan | C | 495 | | | | | |
| Malay States [3] | C | | | | | | 5 |
| Palestine | C | 1 | [4] 1 | | | | |
| Rhodes (Island of) | C | | | | [4] 1 | | |
| Straits Settlements | C | [4] 1 | | | | | |
| Syria and Lebanon | C | 7 | | | 1 | | |
| Thailand (Siam) | C | 7,271 | | | | | |
| Turkey (See Turkey in Europe). | | | | | | | |
| **EUROPE** | | | | | | | |
| Czechoslovakia | C | 24 | | | | | |
| France | C | 13 | | | | 1 | |
| Germany | C | | | | 1 | | |
| Gibraltar | C | 1 | 1 | 1 | | | |
| Great Britain: | | | | | | | |
| England and Wales | C | [5] 22 | 11 | | 1 | 5 | [5] 8 |
| Scotland | C | 2 | | | | | |
| Greece | C | 96 | 17 | | 1 | | |
| Italy | C | 205 | 62 | | | | |
| Portugal | C | 14 | 5 | | 1 | 1 | |
| Turkey | C | 10 | 1 | | | | |
| **NORTH AMERICA** | | | | | | | |
| Canada | C | 2 | | | | | |
| Guatemala | C | 54 | | | | | |
| Honduras | C | 3 | | | | | |
| Mexico | C | 130 | 88 | | | | |
| **SOUTH AMERICA** | | | | | | | |
| Argentina | C | 50 | 12 | | | | |
| Bolivia | C | 229 | | | | | |
| Brazil | C | [1] 11 | [1] 2 | | | | |
| Colombia | C | 309 | | | | | |
| Ecuador | C | 9 | | | | | |
| Peru | C | 38 | | | | | |
| Uruguay | C | 10 | | | | | |
| Venezuela | C | [1] 396 | [1] 86 | | | | [1] 22 |
| **OCEANIA** | | | | | | | |
| Hawaii Territory | C | [6] 1 | | | | | |

[1] Alastrim. [2] For the period May 1–20, 1946.

[3] For the week ended June 1, 1946, 128 cases of smallpox were reported in the Malay States; for the week ended June 8, 74 cases were reported.

[4] Imported. [5] Includes imported cases. [6] Off-shipping.

## TYPHUS FEVER*

[C indicates cases; P, present]

| Place | | January-March 1946 | April 1946 | May 1946—week ended— 4 | 11 | 18 | 25 |
|---|---|---|---|---|---|---|---|
| **AFRICA** | | | | | | | |
| Algeria | C | 21 | | | | | |
| Basutoland | C | 2 | 1 | | | | |
| Belgian Congo [1] | C | 1,380 | 174 | 87 | 20 | | |
| British East Africa: Kenya | C | 12 | 1 | 2 | | | |
| Egypt | C | 914 | 72 | 19 | | | |
| Eritrea | C | 185 | 81 | 12 | 6 | 4 | |
| Libya | C | 25 | 4 | 2 | 9 | 10 | 5 |
| Morocco (French) | C | 1,631 | 681 | | | [2] 381 | |
| Morocco (Int. Zone) | C | 23 | 23 | | | [2] 3 | |
| Morocco (Spanish) | C | 1 | | | | | |
| Nigeria | C | 24 | | | | | |
| Rhodesia, Northern | C | 1 | | | | | |
| Sierra Leone [1] | C | 3 | | | | | |
| Tunisia [1] | C | 126 | 51 | | | | |
| Union of South Africa [1] | C | 52 | P | | | | P |
| **ASIA** | | | | | | | |
| Arabia [3] | C | 1 | | | | | |
| China | C | 21 | 3 | | | [2] 2 | |
| India | C | 84 | 178 | | | | |
| Indochina (French) | C | 2 | | | | | |
| Iran | C | 68 | 7 | | | | |
| Iraq | C | 42 | 35 | 13 | 6 | 6 | 12 |
| Japan | C | 128 | | | | | |
| Palestine [3] | C | 21 | | | | 6 | |
| Straits Settlements | C | 1 | | | | | |
| Syria and Lebanon | C | 41 | 20 | 8 | 2 | 1 | 3 |
| Trans-Jordan | C | 11 | 3 | | | | |
| Turkey (See Turkey in Europe). | | | | | | | |
| **EUROPE** | | | | | | | |
| Austria | C | 27 | 3 | | | | |
| Bulgaria | C | 467 | 131 | 37 | 41 | | |
| Czechoslovakia [1] | C | 535 | 73 | | | | |
| France [1] | C | 11 | | 1 | | | |
| Germany | C | 1,743 | 51 | 9 | | | |
| Great Britain: Malta [3] | C | 7 | | | | | |
| Greece [1] | C | 86 | 118 | 9 | 12 | | |
| Hungary | C | 317 | 160 | 56 | 32 | 27 | |
| Italy | C | 6 | | | | | |
| Netherlands | C | 15 | | | | | |
| Poland | C | 1,719 | 295 | 136 | | | |
| Portugal | C | 2 | | | | | |
| Rumania | C | 2,102 | 613 | | | | |
| Spain | C | 1 | 1 | | 3 | | |
| Sweden [3] | C | | | 1 | | | |
| Turkey | C | 674 | 161 | 24 | 23 | 30 | 60 |
| Yugoslavia | C | 1,992 | [4] 227 | | | | |
| **NORTH AMERICA** | | | | | | | |
| Costa Rica [3] | C | 21 | 13 | 3 | 4 | | |
| Cuba [3] | C | 4 | | | | | |
| Guatemala | C | 184 | 124 | | | | |
| Jamaica [3] | C | 12 | 1 | | | | |
| Mexico | C | 344 | 121 | | | | |
| Panama (Republic) | C | 1 | | | | | |
| Puerto Rico [3] | C | 2 | 17 | 5 | 4 | 6 | 1 |
| Virgin Islands [3] | C | 1 | | | | | |
| **SOUTH AMERICA** | | | | | | | |
| Argentina | C | 1 | 1 | | | | |
| Bolivia | C | 67 | | | | | |
| Chile | C | 97 | | | | | |
| Colombia | C | 91 | | | | | |
| Ecuador [1] | C | 256 | 88 | | | | |
| Paraguay | C | 1 | | | | | |
| Peru | C | 107 | | | | | |
| Venezuela [1] | C | 37 | 6 | | | | |
| **OCEANIA** | | | | | | | |
| Australia [3] | C | 45 | 13 | | | | |
| Hawaii Territory [3] | C | 15 | 2 | | | | 1 |

*Reports from some areas are probably murine type, while others probably include both murine and louse-borne types.

[1] Includes cases of murine type.

[2] For the period May 1–20, 1946.

[3] Murine type.

[4] For the period Apr. 2–8, 1946.

## YELLOW FEVER

[C indicates cases; D, deaths]

| Place | | January-March 1946 | April 1946 | May 1946—week ended— | | | |
|---|---|---|---|---|---|---|---|
| | | | | 4 | 11 | 18 | 25 |
| AFRICA | | | | | | | |
| Nigeria: Ibadan | C | | 1 | | | | |
| SOUTH AMERICA | | | | | | | |
| Bolivia: Santa Cruz Department | D | [1] 40 | | | | | |
| Brazil: Para State | D | | 1 | | | | |
| Colombia: Caqueta Territory | D | 1 | | | | | |
| Venezuela: | | | | | | | |
| Tachira State | C | 4 | | | | | |
| Trujillo State | C | 4 | | | | | |
| Zulia State | C | 4 | | | | | |

[1] Deaths from suspected yellow fever of which 14 have been confirmed.

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