Transmission of Virus Encephalitides

The present list of encephalitides, or viruses producing encephalitis, from the Americas includes western equine encephalomyelitis, eastern equine encephalomyelitis, St. Louis encephalitis, California, Ilheus, *Anopheles* A, *Anopheles* B, *Wyeomyia*, *Anopheles* I, Sabenthine I, an unnamed virus from *Psorophora ferox*, and Venezuelan equine encephalomyelitis. The first four occur in North America and the others in Central and South America. At present, the first three and the last of the encephalitides listed constitute health problems.

Public Health Monograph No. 23 attempts to summarize information on the relation of insects and arachnids to the transmission of viral encephalitis in the Americas. It is a handbook featuring tabulations based on reference data, including results of attempted virus isolations from arthropods in nature; results of attempted direct, and indirect, virus transmission by bite of an arthropod; results of testing naturally infected warm-blooded hosts for neutralizing antibodies in their serums; results of tests to find encephalitis virus in warm-blooded animals in nature; an index of various candidate virus hosts used in laboratory studies; and historical highlights. Data have been collated from 433 subject papers. The period covered extends through April 1952.

Varying significance is attached to the vector-borne virus encephalitides as a public health problem in American countries. In Central and South America, health authorities continue to be concerned with outbreaks of "sleeping sickness" among equines and usually related cases of encephalitis in man. Mosquitoes are highly suspected as disease vectors there since several encephalitogenic viruses have been isolated from them, including etiological agents found in jungle species. In the Caribbean area extensive outbreaks of encephalomyelitis among Cuban horses were reported for last year. The disease has an endemic status in the Dominican Republic, where it attacks both equines and man.

In those portions of the United States where

Public Health
MONOGRAPH

No. 23

The accompanying summary covers the principal findings presented in Public Health Monograph No. 23, published concurrently with this issue of Public Health Reports. The author is a public health parasitologist at the Public Health Service's Communicable Disease Center, Atlanta, Ga. He is at present engaged in schistosomiasis research at the center's Puerto Rico Field Station, San Juan.

Readers wishing the data in full may purchase copies of the monograph from the Superintendent of Documents, Government Printing Office. A limited number of free copies are available to official agencies and others directly concerned on specific request to the Public Inquiries Branch, Public Health Service. Copies will be found also in the libraries of professional schools and major universities, and in selected public libraries.

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Ferguson, Frederick F.: Biological factors in the transmission of American arthropod-borne virus encephalitides. Public Health Monograph No. 23 (Public Health Service Publication No. 372). 37 pages. U. S. Government Printing Office, Washington, D. C., 1954. Price 30 cents.

irrigation agriculture is practiced on a large scale, and in areas where very extensive acreage is planned for such usage, epidemic encephalitis has become a significant regional health problem. The chief indicted mosquito vector of encephalitis in western United States, *Culex tarsalis*, thrives in waste waters attendant upon poor irrigation methods, as well as in a variety of other places. The present range of the vector species covers principally those States west of the Mississippi River—a range coincident with the irrigation belt. Thus, with the decline in malaria as a health problem, epidemic encephalitis has emerged as the most significant presently active mosquito-borne disease in North America.

In the United States the present distribution of the three important types of encephalitis virus—eastern, western, and St. Louis—in mosquitoes, in warm-blooded host animals, or in man is discontinuous geographically. Mortality from these diseases in the United States has ranged from 5 to 60 percent. At present encephalitis has a relatively low endemic status, in horse or man, but can rapidly become a problem of public alarm in certain States, such as California, where vast sums of money are expended annually in attempts to reduce mosquito production.

It would seem that continued research in the epidemiology and ecology of encephalitis in selected irrigated areas of western United States would be most productive of information of value to public health organizations. Another region worthy of investigation is the Caribbean where viruses are active in mosquitoes which are produced the year round, and where outbreaks in equines and man may be expected with a fair degree of regularity. For example, since eastern equine encephalomyelitis is endemic in the Dominican Republic, information obtained there by sustained investigations may aid in solving problems of transmission of this strain in the United States.

There are no problems satisfactorily solved with respect to the epidemic encephalitides in the Americas. A concerted effort by epidemiologists, clinicians, and medical entomologists will undoubtedly continue for many years before the problems of encephalitis control and vector containment are solved to the benefit of public health.

Roswell Park Memorial Institute Adds New Wing

A new $9.5 million wing at the Roswell Park Memorial Institute in Buffalo, N. Y., was opened October 14, 1954, expanding the State's facilities for research into the causes, treatment, and cure of cancer.

Maintained by the New York State Department of Health, the institute has as its purpose an integrated attack on the problem of cancer through basic research, clinical laboratory research, clinical investigation, and patient treatment. Being planned are laboratories for basic research in the fields of biochemistry and biology.

To be eligible for admission, a patient must be a resident of New York, must be suspected of having or known to have a malignant or premalignant lesion, and must be referred by a New York physician. During 1953, diagnostic and treatment services were provided for approximately 23,406 patients. The expansion will permit the admission of a greatly increased number of patients.

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VD Fact Sheet

Public Health Service Publication No. 341. December 1953. 21 pages; tables.

Designed to serve as a ready source of basic statistics on venereal diseases in the United States, this publication presents data on trends in venereal disease incidence and prevalence for the past several years that are indicative of the results of the control program. Other statistics include the estimated annual costs of uncontrolled syphilis, loss of life expectancy due to syphilis, mortality and insanity due to syphilis.

The information is current as of December 1953 and supersedes any previously published data.

A Better Chance for Mental Health for Children in Smaller Communities

By Robert H. Felix. (Public Health Service reprint from The Child, vol. 16, No. 9, May 1952.) 10 pages; illustrated. 10 cents.

The need for mental health clinic services in a complete child health program is emphasized in this pamphlet, but it advises that such services are not the only available means by which a community can help its children toward mental health. Numerous common "subclinical" difficulties often can be handled by parents, teachers, physicians, public health nurses, social workers, and other local people—if these individuals have a basic understanding of mental health concepts.

In some cases, when children present problems that call for intensive diagnostic study, the smaller community can make arrangements to secure clinic services from a traveling clinic team, either from a nearby university or the State mental health agency. In some instances the community can arrange to send children to a nearby guidance clinic upon referral by a physician or by an agency.

This article outlines ways of bringing mental health to the attention of professional people and the public through speeches and discussions in meetings of professional societies, civic and service clubs, and church groups; mental health workshops; radio scripts; plays designed for amateur presentation; and mental health films.

The Nurse in the United States Public Health Service

Public Health Service Publication No. 361. Revised April 1954.

The opportunities available to a graduate nurse for a career in the United States Public Health Service are discussed in this booklet. Two ways of obtaining a position—by civil service appointment and by appointment to the commissioned corps—are described, with requirements of each outlined.

The publication tells of the nurse's place in the Public Health Service hospital and field activities and of the many opportunities offered for broad experience and continued education in health activities. The workweek, leave regulations, promotions, transfers, and retirement benefits are discussed.

Well-prepared nurses with supervisory and teaching experience, the pamphlet points out, are sought for nursing and educational assignments abroad—in Latin America, in the Near East, Middle East, and Far East, in Africa, and in southeast Asia—to assist the peoples of the underdeveloped countries in establishing and improving their own health programs. In many instances of foreign assignment, special allowances augment the regular salary.

The 16 Public Health Service hospitals, their location, type, and bed capacity are listed in the booklet. A short description of the opportunities offered to the nurse at the Clinical Center at Bethesda, Md., is also included.

The Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio

Public Health Service Publication No. 354. 1954. 18 pages; illustrated.

Briefly defined in this pamphlet is the scope of the problems being studied at the Robert A. Taft Sanitary Engineering Center. A history of the center is given and its present activities and technical services are described. The facilities of the center are outlined and a description of its standard laboratory unit is supplied.

Identification of Some Internal Parasites of Laboratory Animals

Public Health Service Publication No. 343. 1954. By Robert T. Habermann, Fletcher P. Williams, Jr., and William T. S. Thorp. 29 pages; illustrated. 20 cents.

This publication is designed to assist in readily identifying internal parasites of laboratory animals so that measures may be taken to rid the animals of their parasites before being used in experiments. It notes that parasitism is often difficult to diagnose because of the injury produced by the parasites and the accompanying chronic diseases and malnutrition.

The authors have based their evaluations of the anthelmintic treatments on clinical and critical tests made on National Institutes of Health animals, including mice, rats, guinea pigs, rabbits, monkeys, cats, and dogs. The direct smear method and the salt flotation centrifuge

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method for diagnosing parasitism in individual animals are described. The composite sample technique, also described, is recommended to determine the kinds of intestinal parasites in cages of laboratory animals.

For each of the various parasites—roundworms, tapeworms, protozoa, coccidia, ascarids, and others—the morphology, life cycle, pathology, incidence, diagnosis, control, and treatment are outlined.

Photomicrographs are shown of actual cases of parasitism and of helminths obtained at necropsy.

An Industrial Waste Guide to the Milk Processing Industry

Public Health Service Publication No. 298. 1953. 14 pages; illustrated. 15 cents.

As in many other industries, control and disposal of wastes are a major concern of the dairy industry. Optimum utilization and reduction of wastes are essential for economic production; wastes which cannot be eliminated must be disposed of in a manner that will protect the Nation's limited water resources for maximum use.

The first of a series of Industrial Waste Guides to be prepared by the National Technical Task Committee on Industrial Wastes for the Public Health Service, this guide is intended primarily to aid operators of milk processing and handling establishments to utilize, reduce, and otherwise suitably dispose of their wastes. The guide includes descriptions of the various processes and raw materials used in the industry and its products. Sources, quantity, and composition of wastes are discussed. Methods for utilization of dairy byproducts and for waste saving are outlined. In cases where waste prevention and byproduct recovery are not sufficient to prevent stream pollution, methods of waste treatment are suggested. A bibliography on milk wastes is appended.

The guide was prepared by the Subcommittee on Dairy Waste Disposal of the Dairy Industry Committee. It was submitted to the Public Health Service through the dairy industry representative of the National Technical Task Committee on Industrial Wastes.

The Role of the Police in Mental Health

Public Health Service Publication No. 360. 1954. By Rhoda J. Milliken. 5 pages. 5 cents.

The police, because of their duties, have an opportunity to make a real contribution in the mental health field. In juvenile delinquency cases, the arresting officer may help the young person gain in understanding from the experience, or increase his hostility toward the community. This leaflet discusses what the police can do and are doing in many communities to help. A list of pamphlets and films on juvenile delinquency, understanding children, and special problems are included.

Instructor's Guide—Sanitary Food Service

Public Health Service Publication No. 90. Revised 1953. 209 pages; illustrated. $1.50. (Also issued as joint Army, Navy, and Air Force publication TM 8-525/NAVMED P-1333/AFM 146-7.)

This revised manual—designed for health departments and management to use in training food-service personnel in the principles and application of safe food service and published originally in 1946 as the Guide to Safe Food Service—coordinates the experience and knowledge gained since the publication of the first edition with the old tried and true.

The manual gives to the instructor an improved method of instruction and a new approach to better human relations. The principles of training employed have been proved valuable by extensive practical field trials. The comprehensive bibliography and detailed guides for utilization of training aids make the manual adaptable to any teaching situation by offering many choices from the audiovisual field. Each instructor should tailor his training course to the specific needs of his group.

Although the manual likely will not meet all individual training problems or contain all necessary technical data needed in the field of food sanitation, it is expected to serve a variety of purposes: State and local health departments can use it as a basis for training food-service personnel; State and local distributive education specialists will find it useful in conducting classes in food service and sanitation; divisions of the armed services concerned with the prevention of foodborne disease will find it a valuable guide in organizing and conducting classes for military food-service personnel; and owners and managers of eating and drinking establishments can use it for their in-service training programs.

This section carries announcements of all new Public Health Service publications and of selected new publications on health topics prepared by other Federal Government agencies.

Publications for which prices are quoted are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington 25, D. C.

The Public Health Service does not supply publications issued by other agencies.
