Translated Readings

The following items have been culled from the CIA Scientific Information Reports, distributed by the Office of Technical Services, U.S. Department of Commerce. Numbers following each item refer to the issue and item, in that order. All issues are from the PB 131891 T series.

Immunization

A series of reports reviewing techniques of immunization against a variety of infections has been initiated by the *Zhurnal Mikrobiologii*, *Epidemiologii i Immunobiologii*, beginning with June 1960. The first includes a reference to the "needleless injector" developed in the United States (53, 78).

Oncology

I. M. Peysakhovich describes results of experiments with fluorbenzoyldiethylene triamide of phosphoric acid used to treat tumors in mice, rats, and rabbits ((53, 91)).

Fly Bait

An organophosphorus preparation described by V. A. Lineva and others not only is lethal to flies, effective against both imago and larvae, but also attracts the flies, apparently by its odor (53, 114).

Radiation

Tests over a 5-year period on 437 persons exposed to external radiation not exceeding 0.2 r a week, in comparison with 210 people exposed only to ordinary background radiation, indicated effects of radiation on the nervous system, it is reported by A. A. Danilin and others (53, 118).

Drug Production

Criticism of the lack of cooperation between scientists and the pharmaceutical industry is voiced by V. Timakov, Vice President of the Academy of Medical Sciences, U.S.S.R., who asserts that of 14 drugs approved by the Institute of Experimental Medicine only 2 are in production; of 16 synthesized by the Academy's Institute of Experimental Medicine, only 3 are manufactured. He also cited a 7-year lag between the synthesis of mycerin, an antibiotic, and its general availability (53, 138).

Measles

A report by A. A. Smorodintsev and others on isolation of measles virus strains has been translated into English (53, 133).

Obstetrics

A phonoelectrocardiograph apparatus is being tested for its utility in determining the position of the fetus in the womb (53, 137).

Chronic Diseases

A diagnostic test for cancer, based on the time it takes for blood serum to discolor methylene blue, is described by N. A. Konovalova, Novocherkassk. He placed 0.2 ml. of an 0.15 percent aqueous solution of methylene blue and one ml. of blood serum in a test tube, mixed them carefully, and recorded the time required for complete discoloration with the tube in a bath of boiling water. The reaction was considered negative if discoloration occurred in 8-9 minutes, doubtful, if 9-10 minutes, and positive if more than 10 minutes were required. Results were 93 percent positive, 7 percent negative with cancer patients; positive in 85 percent, negative in 10 percent, and doubtful in 5 percent of patients suspected of having malignant neoplasms; and 14.8 percent positive, 73.6 percent negative, and 11.6 doubtful in presumably healthy patients. The total tested was 92 (32, 101).

L. Larionov, Moscow, discusses cancer chemotherapy (45, 111).

Hormonal treatment of prostate cancer is described as having advantageous results by N. I. Shapiro and V. I. Rozhdestvenskiy, Leningrad-Moscow (32,94).

A relatively high incidence of cancer mortality among workers employed in processing smoked foods is reported by B. D. Kaufman et al., Moscow-Leningrad (36, 61). Methods of preparing smoked fish, which affect concentrations and distribution of 3,4benzpyrene are detailed by N. D. Gorlova et al., of Moscow and Leningrad (45, 110).

Carcinogenesis

Special measures have been ordered for the safe handling of dichlorobenzidine, dicyclohexamine, 2-acetylaminofluorine, and other chemicals, as a result of a study which concludes that carcinogenicity is linked with molecular structure. The chemicals studied were divided into substances acting locally, those which are resorptive and selective, and which may act at a location remote from the point of application, and those which may produce tumors at several parts of the organism, it is reported by L. M. Shabad, Moscow (47, 112).

The absence of riboflavin as one of the diagnostic indicators of the presence of a malignant tumor is suggested by Ya. A. Kagan, Vitebsk (47, 113).

Homeopathy

Members of the U.S.S.R. Academy of Medical Sciences, in a letter to Izvestia, have denounced the trend to homeopathic medicine in the Soviet Union. Homeopathy has been officially recognized in the U.S.S.R; homeopaths have their own clinics and dispensaries, and it has been proposed that municipal clinics and staffs be linked with homeopathic facilities The Academicians say that and personnel. homeopathy has no scientific basis and its practitioners no scientific training. They criticize the Ministry of Health for permitting physicians, trained at public expense, to turn to homeopathy, frequently out of mercenary considerations. The popularity of homeopathy with the patients is ascribed by the writers to shortcomings of other medical services available. To equate medicine with homeopathy, they conclude, is to equate astronomy with astrology (47, 148).

Intoxicating Honey

An unspecified number of intoxications, marked by asthenia, headaches, dizziness, nausea, vomiting, motor disorder, and spasms of hands and feet, were linked to honey gathered in the Khabarovsk area, where late springs led the bees mainly to seek bryophyta, heather, and wild rosemary. The nectar of these plants contains poisons, it is reported by V. M. Bauman and V. Sh. Shatayev (48, 100).

Water Pollution

To determine the presence of cyanides in waste waters of coke-chemical plants and gasgenerating stations, F. G. Detlovítskaya proposes that the cyanides be distilled from a weak acid medium in the presence of lead nitrate, and converted into thiosulfides by heating in a solution of sodium tetrathionate in an alkaline medium. Colorimetric determination is said to be sensitive to 0.5 mg. of CN per liter, with a margin of error of 2–6 percent (48, 109).

Cybernetics

A scientific council on cybernetics has been organized within the Academy of Medical Sciences, U.S.S.R., with biological and medical sections, to deal with problems of diagnosis, therapy, prophylaxis, and public health organization. Cybernetic methods are expected to improve statistical measures of morbidity and to facilitate evaluation of preventive measures and therapy. A report by V. Parin and D. Menitskiy describes apparatus now employed to utilize cybernetic techniques and future plans (48, 119).

Aseptic Technique

On the basis of experiments with the colloidal properties of bacterial aerosols, employing *Staphylococcus albicans*, V. V. Vlodavets, Moscow, recommends use of a four-layer gauze mask, rather than a two-layer mask, by medical personnel. A 3-5 mm. layer of cotton inserted evenly in the gauze is recommended for situations requiring special caution, such as neurosurgical or long, cavitary operations. The use of a wire frame for the masks is proposed to facilitate breathing (49, 71).

Brucellosis

A cutaneous method of inoculation against brucellosis was recommended at an All-Union Conference for "widespread introduction into medical practice." The method was developed at the Institute of Regional Pathology, Academy of Sciences, Kazakh S.S.R. (49, 74).

Federal Publications

Tuberculosis Beds in Hospitals and Sanatoria, April 1, 1959. PHS Publication No. 801; by Stanley Glaser and Sara B. Pearson; 43 pages; 35 cents. Provides information on the nationwide status of hospital beds set aside for tuberculosis patients. Presents data on tuberculosis beds as of April 1, 1959, and shows some adjustments made to the change in need for these facilities since 1954.

Reported Tuberculosis Data. *PHS Publication No.* 638; 1960; by Lawrence W. Shaw and Arthur W. Wyman; 50 pages. Summarizes trends in tuberculosis morbidity, mortality, and X-ray casefinding for the period 1953 through 1958. Compares the extent of the tuberculosis problem in various geographic areas and population groups.

Mental Health Motion Pictures. A selective guide. PHS Publication No. 218; revised 1960; 98 pages; 35 cents.

Three hundred and seventy-five films which are being used in mental health programs are listed alphabetically.

Information given for each film includes producer, principal distributor, year produced, suggested audience, and a short description of the content. Addresses of film distributors and agencies designated as State mental health authorities are also given.

A subject index groups the films in 19 categories.

Health Statistics From the U.S. National Health Survey. Cooperation in health examination surveys. *PHS Publication No. 584–D2; 1960; 38 pages; 35 cents.*

The problem of persuading people to cooperate in a health examination survey was investigated in 1958 through use of two supplemental questions in connection with the regular health interview questionnaire of the U.S. National Health Survey. The sample, representative of the civilian noninstitutional population of the United States, consisted of about 5,000 households comprising 11,000 adults.

Patients in Mental Institutions. Part II: Public hospitals for the mentally ill. PHS Publication No. 781; 1960; 72 pages. Provides basic data on numbers and characteristics of hospitalized mental patients, movement of patient population, and certain administrative data.

A Preliminary Directory of Medical Groups in the United States, 1959. PHS Publication No. 817; 1961; by S. David Pomrinse and Marcus S. Goldstein; 246 pages.

A questionnaire to all known groups or possible groups has provided data on 1,154 multispecialty groups and 392 single specialty groups of three or more full-time physicians. The directory gives name and location of the group, date of organization, number of physicians and dentists (if any of the latter), names of medical director and clinic manager, and type of specialty if a single specialty group.

The information should be of use to medical care plans, public health departments or agencies, and physicians interested in joining medical groups in particular, as well as the medical profession in general.

So You're Going Abroad. Health hints for travelers. *PHS Publication No.* 748*A*; 1960; *leaflet*; 5 cents, \$3.75 per 100. General information on how to guard against disease. Specific information on vaccination for various areas given in:

HEALTH INFORMATION FOR TRAVEL IN EUROPE. PHS Publication No. 748; 1960; leaflet; 5 cents, \$3.75 per 100.

HEALTH INFORMATION FOB TRAVEL IN MEXICO, CENTRAL AND SOUTH AMEBICA, AND THE CABIBBEAN. PHS Publication No. 748B; 1960; leaflet; 5 cents, \$3.75 per 100. HEALTH INFORMATION FOR TRAVEL IN ASIA, INCLUDING JAPAN, INDO-NESIA, THE PHILIPPINES, AUSTRALIA, AND NEW ZEALAND. PHS Publication No. 748C; 1960; leaflet; 5 cents, \$3.75 per 100.

HEALTH INFORMATION FOR TRAVEL IN AFRICA, INCLUDING MALAGASY REPUBLIC AND NEIGHBORING ISLANDS. PHS Publication No. 748D; 1960; leaflet; 5 cents, \$3.75 per 100.

Gonococcus. Procedures for isolation and identification. *PHS Publication No.* 499; revised 1960; 35 pages.

Techniques described are those which have been most practicable and reliable. Descriptions cover successive operations, from obtaining the specimen to final identification of *Neisseria gonorrhoea* by isolation and biochemical procedures and by the rapid fluorescent antibody method.

Also included is a previously unpublished standard procedure for determining penicillin sensitivity of gonococci.

Annual Report, U.S. Department of Health, Education, and Welfare. *HEW Publication (unnumbered);* 1960; \$14 pages; \$1. Report of each operating agency's activities during fiscal year 1960.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, 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, Office of Information, Public Health Service, Washington 25, D.C.

The Public Health Service does not supply publications other than its own.