

PUBLIC HEALTH

Costs of Syphilis Tests

► A TEST for syphilis can cost from 10 cents to \$35, depending on where done and the kind of test.

For the usual serological blood test done in public health laboratories all over the U. S., the cost per test is 10 to 50 cents, depending on the number of tests run by the laboratory.

The \$35 price is charged by a commercial laboratory for a TPI test, the letters meaning *Treponema Pallida Immobilization*. The laboratory, located in Philadelphia, is the only commercial one doing this test. Even at the \$35 per test figure, the laboratory is reported to be "losing its shirt" and wishes it could get out of this test business.

Among reasons for the high cost is the need to use live rabbits in which to grow the spirochetes.

In between the 10-cent and the \$35 tests is another, called TPCF, which costs about \$3 per test. The letters TPCF mean *Treponema Pallida Complement Fixation*.

The serological tests, of which the old Wassermann is perhaps the best known, are considered among the most accurate of laboratory tests for any disease. At present the serological tests most often used are the Kahn and the VDRL, named for the Public Health Service's Venereal Disease Research Laboratories. For premarital, prenatal, Armed Forces induction and public health population screening tests, these are considered adequate. They are based on the fact that syphilis, as most other infectious diseases do, develops several antibodies in the patient's body. One of these is called reagin and that is what the serological tests detect.

In population groups where there is very

little syphilis, these tests occasionally give a false positive reaction. In such cases, the TPI or TPCF test might be used. The U. S. Navy since 1951 has required a TPI test for personnel suspected of having syphilis and giving a doubtful or positive serological test.

This test is based on the differential reaction of live syphilis spirochetes, cultured in rabbit testes, to serum from a person who has had syphilis compared to that from a person who has not had it.

The TPCF test is based on the blood serum reaction with a protein fraction from the spirochete instead of a synthetic protein as used in the older serological tests.

This latter test or one like it may in two or three years be used by state health department laboratories.

Sidewalk Blood Tests

► POSSIBLY UNIQUE in mass disease detection methods is the sidewalk blood testing for syphilis carried on in Philadelphia. Known as "Operation Streetcorner," it was conducted in three areas known to have a high prevalence of the disease.

The testing was made at street corners of heavy pedestrian traffic for eight weeks. During this time 35,282 persons got blood tests. Of these, 11% were reactive.

From this and a second blood testing program known as "Operation Doorbell," in which 8,892 persons were tested, a total of 1,798 persons were discovered who needed treatment for syphilis.

The two programs were reported by Dr. John William Lentz of the Department of Public Health, Philadelphia.

Science News Letter, June 16, 1956

the people seek out a holy-mouth-man once or twice a year. These practitioners have an impressive set of paraphernalia, consisting of a variety of augers, awls, probes and prods. The use of these objects in the exorcism of the evils of the mouth involves almost unbelievable ritual torture of the client.

"The purpose of these ministrations is to arrest decay and to draw friends. The extremely sacred and traditional character of the rite is evident in the fact that the natives return to the holy-mouth-men year after year, despite the fact that their teeth continue to decay."

Science News Letter, June 16, 1956

SCIENCE NEWS LETTER

VOL. 69 JUNE 16, 1956 NO. 24

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N. W., Washington 6, D. C., North 7-2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1956, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283) authorized February 28, 1950. Established in mimeographed form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation, Advertising Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, Eldorado 5-5666, and 435 N. Michigan Ave., Chicago 17, Superior 7-6048.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Paul B. Sears, Yale University; Karl Lark-Horowitz, Purdue University; William W. Rubey, U. S. Geological Survey. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; George W. Corner, Rockefeller Institute for Medical Research; Edward U. Condon, Berkeley, Calif.; Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; Jerome Hunsaker, Massachusetts Institute of Technology; I. I. Rabi, Columbia University. Nominated by the Journalistic Profession: Michael A. Gorman, Flint Journal; Neil H. Swanson, Ruxton, Md.; O. W. Riegel, Washington and Lee University. Nominated by the Scripps Estate: John T. O'Rourke, Washington Daily News; Charles E. Scripps, Cincinnati, Ohio; Edward J. Meeman, Memphis Press-Scimitar.

Officers—President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, Marjorie Van de Water, Ann Ewing, Howard Simons, Dorothy Schriver, Helen M. Davis. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410.

ANTHROPOLOGY

U. S. Society Described

► A DESCRIPTION of people in the United States in the manner of anthropologists describing primitive people by Dr. Horace Miner of the University of Michigan appears in *American Anthropologist* (June).

This "as yet undescribed tribe" he calls "Nacirema." (Try reading it backward.)

"Nacirema culture is characterized by a highly developed market economy," Dr. Miner reports, "which has evolved in a rich natural habitat. While much of the people's time is devoted to economic pursuits, a large part of the fruits of these labors and a considerable portion of the day are spent in ritual activity, the focus of which is the human body, the appearance and health of which loom as a dominant concern in the ethos of the people."

Each home, he says, has at least one shrine devoted to these rituals. Center of

the shrine is a "charm box" built into the wall. This box is usually full to overflowing with magical packets of curative drugs. Beneath the charm box is a font.

Each day every member of the family in turn enters the shrine room, bows his head before the charm box and proceeds with a brief rite of ablution.

"The daily body ritual performed by everyone includes a mouth-rite. Despite the fact that these people are so punctilious about care of the mouth, this rite involves a practice which strikes the uninitiated stranger as revolting.

"It was reported to me that the ritual consists of inserting a small bundle of hog hairs into the mouth, along with certain magical powders, and then moving the bundle in a highly formalized series of gestures," Dr. Miner says.

"In addition to the private mouth-rite,