

PUBLIC HEALTH

Checking Spread of V. D.

A plan that will help prevent venereal disease from becoming widespread as a result of the return of soldiers from war is announced by Dr. Parran.

➤ MALARIA and other tropical diseases may be spread through this country by returning troops as they re-enter civilian life but the spread of syphilis which so often follows the return of soldiers from war will be checked.

A joint Army-Public Health Service plan to accomplish this was announced by Surgeon General Thomas Parran at the conference of state and territorial health officers in Washington.

Every soldier at the time of his demobilization, according to this plan, will be given a blood test. If he has syphilis, he will be treated by the Army until he is non-infectious before he is discharged. After discharge, treatment will be continued if necessary.

State health departments will play an important part in this coordinated program, Dr. Parran said.

The entire approach to the treatment of syphilis and gonorrhea may be altered by the discovery that penicillin may prove a cure for syphilis as it is for gonorrhea, Dr. Parran pointed out.

The number of Rapid Treatment Centers has increased from 13 to 47 in the past year. These centers with a bed-capacity of 6,100 are now serving 20 states, the District of Columbia, Panama, Puerto Rico and the Virgin Islands.

Of the estimated 200,000 new cases of syphilis per year, three-fourths are now being treated by private physicians, in public clinics and the military medical services. The remaining 50,000 could be cured or made non-infectious, Dr. Parran said, if five infectious cases can be found and brought to the centers for treatment for every one now treated.

Health officers were urged to swifter action to reassess and make known the needs of their communities for physicians and dentists so that the relocations provided for by the existing law can be accomplished promptly.

"Often action is slowest in the very communities where needs are greatest," Dr. Parran declared.

The supply of available personnel for health departments will continue to diminish as the demands of the armed forces and war industries increase, Dr. Parran warned. He urged health de-

partments to follow the Public Health Service's policy of recruiting available personnel and conducting a program of in-service training for them to make up for the lack of professionally trained men and women.

Science News Letter, April 1, 1944

Typhus Fever Threat

➤ TYPHUS FEVER, known to Americans chiefly through war correspondents' reports from Italy and North Africa, is a serious threat to health and manpower in the United States, it appears from the report of Dr. C. R. Eskey, medical director, U. S. Public Health Service, to the Conference of State and Territorial Health Officers in Washington.

Cases have increased sharply in the last five years and, unless the disease is checked, "will reach appalling figures," Dr. Eskey declared.

The disease "ranks first among all diseases as a cause of adult disability in the southern part of this country," he stated.

Typhus fever in the United States is a much milder disease than the European variety and seldom kills its victims. They are, however, completely disabled for work for an average of two months, a recent analysis of over 150 reported cases shows.

A total of 4,473 cases of typhus were reported in the United States during 1943. Probably not even half the cases treated by physicians are reported, however. Dr. Eskey, who is in charge of the typhus control unit of the U. S. Public Health Service, with headquarters in Atlanta, Ga., estimates that more than 10,000 cases actually occurred in the southern states during 1943.

In the last five years, 75% more cases were reported than during the preceding five years, Dr. Eskey said. Cases have been reported from 33 states and the District of Columbia, but 97% of all cases reported in the last five years occurred in the southern endemic area.

States in this area are Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Lou-

isiana and Texas. Another focus of infection exists in California, while Arkansas and Oklahoma have been reporting enough cases in recent years to warrant inclusion in the southern endemic area.

The typhus fever we have in this country is spread by rats and rat fleas. It is not necessary, however, to be bitten by an infected rat flea to get the disease. The germs are discharged in the body wastes or excreta of both rats and rat fleas. These germs may then be inhaled in dust, may get on hands and fingers or on food prepared for human consumption.

Two outbreaks of typhus fever, one in an Army camp, were traced to eat-

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ing places where infected food was probably the source of the trouble.

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Tropical Diseases

► THE DANGER that exotic tropical diseases will be spread widely through this country by returning service men is not great, Dr. R. E. Dyer, director of the National Institute of Health, U. S. Public Health Service, told state and territorial health officers at their conference in Washington.

Besides malaria, our troops serving in the tropics are exposed to trypanosomiasis, one form of which is the deadly African sleeping sickness; leishmaniasis; schistosomiasis; and filariasis.

Malaria and filariasis, however, are the only two over which health officers in the U. S. need be concerned, Dr. Dyer said. While malaria is endemic, that is, always present, in certain parts of the South and a few other places, there probably will be opportunity for the temporary spread of the disease in other areas through the return of infected service men.

Malaria and filariasis probably will not become a public health problem in this country through the establishment of foci or centers of infection. It is important, however, for physicians to watch

for signs of infection in discharged troops, Dr. Dyer warned, so that proper treatment of the infected persons can be instituted.

Few American physicians except those now serving with the forces in the tropics have ever seen a case of filariasis, and many physicians are not familiar with malaria. They may, therefore, mistake these diseases for other conditions and suitable treatment may not be given and suitable precautions against spread of the diseases may not be taken.

The danger of filariasis ever becoming established in this country is slight, Dr. Dyer believes. Small foci of infection in areas where it has not previously existed may develop after the return of service men who have the larval worms in their blood and are bitten by the kinds of mosquitoes that transmit the parasites.

These foci will die out, Dr. Dyer believes, just as the one in Charleston, S. C., has. Filariasis existed there for 150 years without ever becoming established in other parts of the country, he pointed out.

While opportunities for the establishment of these exotic diseases are distinctly limited, Dr. Dyer cautioned health officers to be alert to the possibility and to be prepared to undertake measures for their control.

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MEDICINE

Preventing Infant Deaths

Hope raised by research that way may be found to keep Rh blood factor from causing childless marriages. Factor present in 85% of white individuals.

► NEW HOPE that science may some day develop a way of preventing one of the most serious causes of infant deaths and childless marriages is provided in a report by Dr. Alexander S. Wiener, Miss Eve B. Sonn and Mrs. Ruth B. Belkin, of the Office of the Chief Medical Examiner, New York City (*Journal of Experimental Medicine*, March 1)

The hopeful suggestion, which may some day prevent countless family tragedies, comes as a result of studies of a factor only recently discovered in human blood, called the Rh factor. (*See SNL*, Nov. 27, 1943) The distribution of this blood factor seems to differ in different human races, but in the white race it is present in the blood of about 85% of individuals.

The Rh factor is harmless in itself,

but if blood containing the Rh factor is mingled with blood not containing it, then serious difficulties may arise. Dr. Wiener believes that the person lacking Rh may become sensitized to the Rh blood factor in a way similar to that in which some persons are allergic to ragweed pollen. A way may be found, Dr. Wiener hopes, to desensitize such persons just as hayfever patients are desensitized by injections of the materials to which they are sensitive.

If a mother has blood not containing Rh and her unborn baby has inherited the Rh factor from the father, then anti-Rh antibodies may be built up in the blood of the mother that may result in the sickness or death of this baby and any Rh-positive babies resulting later from the same marriage.

About one in 50 of the mothers lacking Rh become thus sensitized to Rh when they carry a baby with the Rh blood, Dr. Wiener has found. In case such a sensitized mother should be given a blood transfusion containing Rh blood, the mother would be in serious danger and might die. Many such double tragedies of mother and infant deaths occurred before the Rh blood factor was known, it is believed. Now Rh-negative blood is used in such a case.

At present, no way is known to prevent the sickness or death of the unfortunate babies who have Rh fathers and Rh-negative mothers. But, Dr. Wiener believes, the possibility exists that some method may be developed for desensitizing mothers so that the baby may be saved. Research based on this hope has already been started with the aid of a grant from the United Hospital fund.

Study of the blood of 97 families with 275 children and 135 mother-child combinations, reported by Dr. Wiener and his associates in the *Journal of Experimental Medicine*, confirms the theory previously developed that the Rh factor



AIR WAVES—The part these two WAVES are playing, in manning the shore jobs so that men can be released for the fighting fronts, is a highly technical one. The aerographer's mate (left) is losing a pilot balloon at the Naval Air Station, Anacostia, D. C., while the officer aerologist (right) prepares to follow the path of the balloon with a theodolite. Their study of atmospheric conditions is essential for maintenance of an air station. Official U. S. Navy photo.