

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

Science News Letter, April 1, 1944

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 loosing 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.

is not a single factor but actually a series of eight possible Rh types, of which seven have now been found. A person with one of these Rh types may become sensitive to another Rh type, Dr. Wiener's studies indicate.

Use of tests for these seven known Rh types would increase the accuracy of investigations of disputed parentage or

the identification of blood in criminal cases. With all these Rh types plus the more familiar blood types, there are altogether 126 different possible blood types. With this improvement in blood tests, a falsely accused man in a disputed parentage case now has a 40% chance of proving his innocence, Dr. Wiener says.

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MEDICINE

Hospital Train Trip

Wounded soldiers from overseas are speeded to hospitals near own home towns on "ward on wheels," where rank does not count and Army doctor is boss.

By WATSON DAVIS and
JANE STAFFORD

➤ WHEN Johnny comes rolling home, sick or wounded, from the fighting fronts, he travels in pretty grand style in a hospital on wheels, with nurses, ward attendants, gray ladies of the Red Cross, surgeons and all the trimmings.

The press by Army invitation joined one of the regular exoduses from Halloran General Hospital, Staten Island, now a routine and efficient railroad operation, that puts the boys from overseas into hospitals nearer their own home towns and their families.

Most of the 185 men and 12 officers who were patients on the hospital train had arrived within a fortnight from the overseas theaters of war, England, Italy and North Africa—and at least one from New Guinea. He was a colored boy from Georgia, glad to get going south again, because someone had routed him to Halloran near New York City presumably with the idea that New York was close to Georgia! This lad from Georgia has a busted arm, and its cast was covered with more signatures than on a world series' baseball and decorated with several large red hearts of the Valentine pattern.

There was no need of distributing

to the boys on this train that pamphlet on race that there is such a stew about, because the mere matter of skin color is ignored on a hospital train in a good G. I. way. But to get back to the train—

There are special hospital cars in which the patients sit and sleep, much as they would in a hospital ward. A few ambulatory patients that were not traveling overnight sat up in regular Pullmans, but most of the patients were in these special cars with regular Army beds, an upper and a lower, especially built in. There is no more privacy than there is in the Army generally, and there are card games going all over the place, a phonograph "shoo-shooing" or "Oh, Johnnying" and plenty of smokes and candy presented by the Chaplains' Corps at the hospital the men had just left.

Smoking is permitted except at night after lights out, and cigarettes and occasionally cigars seem to be good ammunition in the fight to get our wounded and sick back to health for further service at home or possibly in the war.

Most of the patients in this train were probably through with the war for one reason or another. Some of them were NP's (neuropsychiatric cases), those whose nerves had given way under the unusual stress of Army service. This happens far behind the fighting fronts in many cases, and being an NP in the Army does not necessarily mean that the soldier when discharged to civilian life will not make good in his old job or a new one.

The patients, many of them, did not look very sick. There were no gruesome cases. A gunner of a Flying Fortress who had a bad dose of flak in his right leg, a few bad backs, a few flushed faces, that was about all. Some more seriously wounded are returning, but they were not on this train.

Many of the youngsters we talked to had been across for nearly two years. They were all glad to be getting nearer home, but one or two were beginning to wish they could go on with the fight with the outfits they had left.

The rolling hospital is equipped for anything but usually little happens that is medically serious. There is a little emergency operating room at the end of every other car or so, but the most that happens there is an abscess opened or a dressing changed. If there should be need of a major operation, the train would simply stop and the patient would be shifted swiftly to a private or Army hospital somewhere en route.



FROM OVERSEAS—Army Medical Corpsmen and medical officers stand by as a wounded soldier is lifted onto one of the hospital ward cars at Staten Island, N. Y. This particular train proceeded from Halloran General Hospital to other hospitals in the East and South, leaving soldiers as near their home towns as possible. U. S. Signal Corps photograph.