MEDICINE

War Against Disease Won

With the aid of vaccines, Army scores almost 100% victory against ills for which inoculation can be used.

THE United States Army has won in almost 100% battle for its overseas troops in combating diseases against which the Medical Corps has been able to use inoculations.

Reports to the War Department covering periods up to the year ending in July from the Middle East, North Africa and China-Burma-India Theaters of Operations show this remarkable record:

CBI Theater: Cholera, tetanus, smallpox — no cases. Typhus — 1 case, no death. Typhoid — 12 cases, one death.

Middle East and North Africa Theaters: Typhus — 4 mild cases, no deaths.

The report from North Africa and the Middle East dealt only with typhus, scourge of armies down through history. It was particularly revealing inasmuch as these two areas are fertile breeding places for typhus which is flea-borne and house-borne. Several severe epidemics of typhus were reported among civilians in these two theaters where many communities were "100% lousy." American troops, however, remained singularly free of the disease although their operations often forced them to mingle closely with the natives.

Colonel Harry Plotz, specialist on infectious diseases, spent the last seven months in the Near East working primarily on typhus and, on his return to the United States, brought back 69 new living strains of the typhus germ and 4,000 types of serum from civilian patients recovering from the disease. This material will be used in various laboratories for possible development of better vaccines.

Colonel Plotz pointed to the immunity of American forces today as against civilian and military records of the last war which he said showed 10,000,000 known cases of typhus in Europe with 5,000,000 deaths.

Medical authorities in the CBI Theater are particularly proud of their record against cholera, which is always dreaded in the Orient; but they are just as proud of the typhus record.

As in other theaters, protection of troops does not stop at inoculations. There is a constant program of protective and preventive measures. Water supplies are watched and either boiled or chlorinated; unsanitary places are placed off-limits, messes are regularly checked and food handlers inspected; and every effort is made to keep to a minimum the growth and spread of insects and vermin.

Not long ago tetanus was the most common complication of a battle wound, caused principally by contamination from soil. Now, tetanus vaccines and prompt surgical treatment are saving hundreds of lives and restoring soldiers to full health with great rapidity. Every soldier gets three tetanus vaccines when he enters the Army and regular booster shots thereafter.

In the fight against cholera, the soldier going overseas receives two injections seven days apart and as long as he remains in an area where cholera may be prevalent he is given a stimulating shot every six months. Typhoid vaccines, too, are given immediately upon a soldier's entrance into the Army and a stimulating shot is given every six months while he is in a typhoid area.

Three injections are given for typhus and a stimulating shot then given every six months.

All in all, the health of American troops overseas has been excellent and, under ordinary battle conditions, may be expected to improve as new protective and preventive measures are tried out and put into practice.

MILITARY SCIENCE

"Bazooka" Rocket Gun Now Supplied in Quantity

See Front Cover

THE "BAZOOKA," a gun whose rocket projectile is effective against any enemy tank which has been in action against United Nations' forces, is now being supplied in quantity by the United States to American and other United Nations' troops, the War Department has announced.

The "Bazooka" has been in action for several months on various foreign fronts, and is effective against thick brick walls, rock masonry, structural steel and railroad rails as well as against enemy tanks.

During the recent North African campaign, "Bazookas" of one United States Army division alone destroyed at least six enemy tanks.

The "Bazooka" launcher, or gun, is a metal tube somewhat more than 50 inches in length and less than three inches in diameter. It is open at both ends. Attached to the tube are a shoulder stock and front and rear grips for the firer, together with sights and an electric battery which sets off the rocket-propelling charge when the launcher trigger is squeezed. There are also safety devices.

The launcher is operated by a two-man soldier team—one the firer, the other the loader. When the launcher is

"BAZOOKA" ROCKET—Plainly a rocket, with fins like an aircraft bomb, is this projectile used in the new "Bazooka" gun. This photograph, taken by Fremont Davis, Science Service staff photographer, shows the rocket as it was exhibited by the Army in Washington, D. C.