MEDICINE

Flu Research Was "Blind"

Biological warfare research team worked behind camouflage of much publicized studies on influenza. Defense developed against "centuries old killer."

➤WAS PNEUMONIC plague one of the diseases our military authorities expected the enemy to use against us along with V-bombs and other more conventional weapons of war?

The Navy's report of its share in our biological warfare research suggests that it was, although in this as well as in the War Department's report no specific germ weapons are mentioned by name.

Working behind a "blind" of much publicized studies on influenza, a Navy medical research team at the University of California developed a "Man from Mars" protective suit and other defenses against germ warfare, it is now announced.

To this team, Naval Medical Research Unit No. 1, headed by Capt. Albert Paul Krueger, was given the mission of investigating "the possible use by an enemy of a certain infectious disease."

The name of the disease is not stated but it is described as "centuries old and one of the greatest of killers." Elsewhere in the report are references to airborne diseases.

Airborne diseases include such relatively harmless if unpleasant ailments as chickenpox and the common cold and such centuries-old killers as smallpox, diphtheria, pneumonia, anthrax and pneumonic plague. Against smallpox and diphtheria we have potent weapons of defense in vaccination, toxoid and antitoxin. Since the discovery of sulfanilamide, pneumonia has no longer rated as a great killer. That leaves anthrax, whose spores can be spread through the air, and pneumonic plague.

Pneumonic plague is caused by the same germs as bubonic plague. In the latter, the germs are spread by fleas from infected rats, ground squirrels and other rodents. The pneumonic form spreads directly from a plague patient whose breath carries germs from his infected lungs to the air.

Strengthening the idea that plague may have been the disease NAMRU No. 1 studied is the fact that its commanding officer is on military leave from his position as professor of bacteriology at the University of California at whose Hooper Foundation studies of plague have long been going on.

Whether it was plague or some other disease, the Navy's research team escaped the killer it studied. No infections due to the organisms studied occurred among the investigators. Among the protective devices was an extensive modification of the apparatus devised for germ-free studies by Prof. J. A. Reyniers and associates at the University of Notre Dame. It consists essentially of a series of air-tight metal tanks fitted with sight and glove ports and built to contain all essential bacteriological equipment as well as experimental animals.

Before developing methods of defense against the disease, such as the "Man from Mars" suit for workers in prospective rescue or decontamination work, the Navy researchers investigated possible uses of the disease in offense. This involved development of new techniques for growing highly infective germs in great quantity and for ultimately dispersing them in mists.

Besides the rubberized protective suit with its own oxygen supply, the Navy researchers tested special anti-bacterial masks and vaccines, antibiotics (remedies of the penicillin class) and sulfa drugs. Summing up the 33 months of hard and dangerous work, the Navy reports that:

1. Considerable knowledge has been gained in mass defense against possible enemy employment of a certain disease, which is highly fatal.

2. Laboratory and field data have been gathered which demonstrate that a man-made epidemic as an instrument of war is a likely possibility.

3. A protective suit, with self-contained oxygen supply, has been devised for the use of workers in any prospective rescue or decontamination operation.

4. Conclusive information has been obtained which would be of great value not only for protection from bacterial attack but for control of communicable airborne diseases among a peacetime population.

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DIRECT RECORDING—This portable electrocardiograph inks its record of heart action directly on paper without photographic darkroom procedures. The inventor, Paul Traugott, president of the Electro-Physical Laboratories, Inc., explained that his cardiotron can be used in the home by the physician if necessary.