

## PUBLIC HEALTH

# Far East 'Flu Will Come

Reports of an influenza epidemic in the Far East have alerted doctors and public health officers in the U. S. A number of precautionary measures are being taken.

► THERE IS NO way of preventing influenza now rampant in the Far East from popping up in the United States, an advisory committee of physicians and health officers have agreed.

Dr. Leroy E. Burney, surgeon-general of the Public Health Service, has said that "undoubtedly there will be cases and I suspect that there are some now that have been unreported."

The committee he established believes the U. S. can expect a few small, sporadic epidemics this summer, but no large-scale outbreaks. Dr. Burney explained further that approximately 1,000 to 1,800 persons arrive daily by air or ship from the western Pacific and it is difficult if not impossible to keep the new influenza strain from reaching this country.

The new strain is a variant of influenza type A prime and is not included in the usual vaccine now available. It has been estimated that more than 1,000,000 persons have been stricken with the 'flu in the Far East.

This particular strain is considered "mild," and in general has caused a death rate of less than five-tenths of one percent. It has stricken on the average of 18% of the population in each place it has occurred. Dr. Burney said that if an epidemic reached this proportion in the United States, it would be the worst epidemic since the big influenza killer epidemic of 1918. That outbreak, which hit the U. S. in three waves, affected close to 30% of the population, with an attendant death rate of 1.7%.

The committee recommended the Public Health Service continue its present precautionary steps to detect and fight a possible large-scale outbreak of what has been called "Oriental 'flu."

It was reported that the Department of Defense is considering placing an order with drug manufacturers for 4,000,000 cc of monovalent vaccine, the kind used to treat the new strain. It would take an estimated six to eight weeks to produce this amount. A pilot project has already produced a few thousand cc of the vaccine needed to fight the strain.

The advisory committee did not believe a possible epidemic this summer would be severe, because summer months normally are lowest in influenza incidence in the U. S. The disease is most prevalent in the fall and winter. Whether there will be a severe or mild epidemic of influenza this fall and winter is debatable, the advisory committee concluded.

Bed rest and aspirin are currently being prescribed as a cure for "Oriental 'flu,"

which lasts some three to four days. Dr. Burney pointed out that the reason influenza had been dreaded in the past was because of the bacterial "hitchhikers," or secondary illnesses such as pneumonia. The chances of secondary illness with antibiotics to combat the bacterial complications are considerably less today.

At present the Public Health Service has no definite policy on advising mass vaccinations for influenza, said Dr. C. C. Dauer of the Influenza Reporting Center. He added that while the vaccines have proved effective in the military the civilian population includes the young who have a stronger reaction to the vaccine than do adults.

All travelers arriving in this country by either plane or ship on the West Coast are being handed influenza warning slips by Public Health Service officials, reports Dr. Calvin B. Spencer, chief of the PHS division of foreign quarantine.

The warning slips are instructing all travelers who become ill within 10 days after their arrival to see a doctor immediately and report to him that they are recent arrivals from outside the country.

The advisory committee will meet again within six to eight weeks to take another look at the situation.

Science News Letter, June 22, 1957

## TECHNOLOGY

## Sun Powers Helmet Radios

► THE SUN beating down on an infantryman will be the source of energy to power the world's smallest transmitter-receiver built into the soldier's helmet. This is the promise of an experimental helmet radio developed by the U. S. Army Signal Engineering Laboratories, Fort Monmouth, N. J.

The helmet-housed radio has long, narrow clusters of tiny solar cells on either side of the crown. Exposed to sunlight, the tiny solar batteries can get all the power they need to run the radio for as long as a year. Silicon wafers, as the solar cells are called, power the radio for normal daylight operation.

The solar batteries are used in combination with a nickel-cadmium storage cell that takes over in case clouds or nightfall cut off the supply of solar energy. They make up the electrical power packet, which weighs less than a pound.

The four and one-half volts the solar-nickel-cadmium battery produces is raised to the radio's needed 50 volts by an all-transistor power converter housed in the helmet.

Similar devices are now under serious consideration for the walkie-talkie and other light field radios.

Work on the solar conversion of the helmet radio was done in the power engineering branch of the Signal Engineering Laboratories' power sources division, under the direction of George Hunrath. George Uchirin of the same branch designed and built the power converter.

Science News Letter, June 22, 1957



**SUN-POWERED RADIO** — The helmet, worn by SP3 David Sturck of Hamden, Conn., contains silicon wafers grouped on each side of the crown which provide all the power necessary for a year's use of the radio.