

ing in the abdomen, nausea, vomiting and diarrhea.

The characteristic symptoms of botulism, however, are those showing disturbance of the central nervous system. Among these are double vision, drooping of the upper eyelids from paralysis and dilated pupils. Soon the patient will have trouble in swallowing and talking. There is usually no fever. Even though

the patient may be unable to talk, his mind usually is clear up to a short time before he dies and he can often write his wishes or needs.

Death usually comes from failure of the breathing apparatus and usually occurs within three to six days after eating the poisoned food. Some patients do recover.

*Science News Letter, December 25, 1943*

MEDICINE

## Penicillin Helps Wounds

Reports from Army hospitals show 164 out of 209 patients improved. Mold chemical fails to have beneficial effects against malaria.

► RESULTS of penicillin treatment of infected wounds in U. S. Army hospitals in the United States where the potent germ-killer from mold has been used since April 1, 1943, are summarized in a report by Major Champ Lyons, M.C., A.U.S. (*Journal, American Medical Association, Dec. 18*)

Of 209 patients treated, 164 improved, 13 died and in 32 the treatment had no effect.

Hope that penicillin might prove a potent weapon against malaria is not borne out by the report. The mold chemical failed in four cases of malaria due to *Plasmodium vivax*, and two other patients developed recurrent malaria under treatment.

Penicillin can produce "dramatically successful" results in treating septic gunshot fractures but, Major Lyons emphasized, its position is supplemental in the overall surgical program. To get these dramatically successful results, the surgeon must combine penicillin with effective blood transfusions and conservative surgical procedures according to the condition of each patient.

Important advantage of penicillin is that it helps fight anemia in chronically infected battle casualties. Part of this seems to be due to the increased appetite the patient develops while under penicillin treatment, enabling him to eat more blood-building food, and part to the fact that penicillin controls the infection.

This regeneration of hemoglobin, the blood's red coloring matter, proceeds too slowly under penicillin treatment alone, however, in view of the need to economize on penicillin and to reduce the time the patient must spend in the hospital. Consequently blood transfusions must be resorted to. Whole blood is best for this and the quantities needed for each patient are estimated at from one and one-half to three quarts.

The results reported by Major Lyons cover experiences with penicillin in 11 Army hospitals where every detail of the treatment was studied with great care so that as much as possible might be learned about the drug, effective doses, conditions that would be helped and those that would not, and the like.

*Science News Letter, December 25, 1943*

PUBLIC HEALTH

## Weather Won't Check Flu

► THE POPULAR notion that the present cold weather over most of the country will check the influenza epidemic might well be called "wishful thinking," for there does not seem to be any scientific evidence to support it. Nor is there any reason to suppose that milder weather will affect the course of the epidemic.

During the 1918 pandemic, influenza

was prevalent at about the same time in such widely separated regions as the United States, Brazil, India, South Africa and New Zealand. This "is sufficient to prove a high degree of independence of the weather," wrote the late Edwin O. Jordan, University of Chicago professor who made an exhaustive study of the 1918 pandemic.

Fine autumn weather prevailed in

many of the Army camps in September and October, 1918, during the very days when the number of influenza cases was shooting rapidly toward the peak, he pointed out.

While weather conditions seem to have little if any effect on influenza itself, they may influence liability to and gravity of complications caused by germs that invade in the wake of the influenza virus, this same authority stated.

Further evidence of how little the weather affects influenza is seen in mortality figures he cited. These showed

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