

PUBLIC HEALTH

California Case of Plague Second Boy To Die There

Summer's Deaths Called Examples of What Happens When Rodents Are Allowed To Live Near Human Homes

A CASE of plague in a human victim has been reported by California health authorities to the U. S. Public Health Service.

This report follows closely on a warning issued by the American Medical Association that war conditions might cause a frightful epidemic of plague to sweep the United States (*See SNL*, Aug. 9)

Plague is prevalent on the Pacific Coast in fleas, rats, ground squirrels and marmots.

Recently it was reported spread to North Dakota in the fleas that infest squirrels there.

Although the little boy who died in Siskiyou County, California, of the dread disease plague is the second case that has occurred in that state this summer, there is no need for undue fear of a major epidemic in the opinion of Dr. Karl F. Meyer, director of the Hooper Foundation of the University of California, who has made a special study of this disease.

These two cases are the first since 1938 in California, Dr. Meyer said in response to an inquiry from Science Service. One case occurred last year in Idaho.

These accidental infections, he said, were examples of what may happen when, in an endemic plague area, rodents are permitted to live and nest near homes.

"The environmental factors so conducive to plague in the Middle Ages—the British manor—were reproduced on the ranch where the first case occurred," he said.

Suppressive measures against rodents, which carry the disease, are being taken, he said, but will have to be maintained for years to come. It will be difficult, he predicted, to educate everybody to beware of fostering squirrels, chipmunks and other wild rodents as pets in a region where plague is raging among such animals.

Both plague cases in California this summer took the lives of boys.

"The first case occurred in June on a ranch about five miles outside Yreka,"

Dr. Meyer said in answer to Science Service's inquiry.

"I made the diagnosis on the specimens which were sent to me. The patient died on the tenth day of his illness before the nature of the disease was actually recognized. It is strange that again a human case served as an indicator for the existence of rural plague in a county which was considered free from the disease.

"The infection of the boy was probably due to a flea bite contracted in the barn of the ranch. Personal investigation disclosed an open wooden grain bin and horse feeding troughs readily accessible to all kinds of rodents. The ground of the hallway between the bin and the stalls was teeming with fleas. An epizootic (epidemic among animals) disease was active on the ranch killing squirrels and rabbits, and thus it is apparent that infected rodents were attracted to the human habitations by the feed storage.

"Subsequent survey studies conducted by the California State Department of

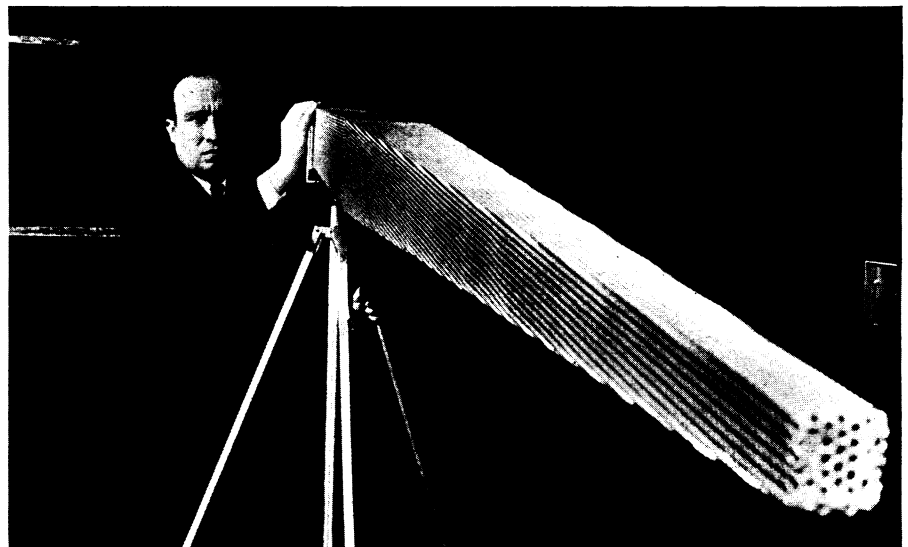
Public Health yielded infected fleas from squirrels and marmots shot on the ranch and in the vicinity. For the first time in the history of plague in California, a Douglas squirrel (*Citellus beecheyi Douglasii*) with the lesions of bubonic plague was found. Likewise two squirrels with tularemia were encountered in the same area. Thus plague and tularemia were responsible for the rodent deaths.

"The second case was seen by the writer on August 10. A five-year-old boy had died after an illness of three days. Shortly before death the swelling in the right groin was suspected as a plague bubo, and the attending physician proved the diagnosis by microscopic examination of the juice extracted from the gland. This case occurred about 40 miles south from the first case, at Mt. Shasta City.

"The family lives in an outlying newly opened tract of the town where chipmunks, squirrels, etc., were constantly attracted by garbage thrown in the back yard or rabbit hutches furnished readily accessible food to a variety of rodents.

"Dead squirrels were found a few hundred yards from the cottage. This case illustrates the risk for man to contract plague when he lives under primitive conditions with little concern relative to environmental sanitation. In an endemic plague area, rodents carrying infected fleas are thus brought close to man.

"Just as in South Africa, the Kraal



FOR SOUND PERSPECTIVE

This long-shot microphone designed in RCA Laboratories is 10 feet long and sensitive and directional. It can be used "out front" in a position similar to that which would be occupied by an audience to bring realism to radio, the movies and television.

rather than the outside veld is the important source of infection. So is the ranch house or the cottage of a recreational area the place where plague may be contracted, when man permits rodents to inhabit the premises.

"It will be the duty of the public health agency to make the people conscious of these facts, and to provide for the means to keep the rodent population away from the home and the community."

Science News Letter, August 30, 1941

MEDICINE

Boy, Tall as Grown Man, Saved From Giantism

A BOY who was becoming a giant (5 feet 8½ inches at 11 years) has been saved from that unhappy fate by treatment with a male sex hormone, Dr. F. P. Currier, Dr. C. H. Frantz and Dr. Ray Vander Meer of Grand Rapids, Mich., report. (*Journal, American Medical Association, Aug. 16*).

The patient was "born tall"; he was a half-inch over two feet in length at birth. By the time he was two, he stood 3 feet 2 inches in height. He had to be treated several times for troubles arising from his too-rapid growth, which appeared to be due to over-activity of one part of the pituitary gland, whose secretion promotes growth.

Finally, when giantism was an apparent danger, he was placed on the hormone treatment. Researches with laboratory animals, as well as clinical experience, indicate that the sex glands secrete a substance that operates against the growth-promoting hormone of the pituitary.

The patient, after two years of periodic injections with the sex hormone known as testosterone propionate, had his growth definitely checked. He will be an unusually tall man in any case; at 13, his height is 6 feet 1¼ inches. But there is reason to hope he will not be that unhappiest of humans, a giant.

Science News Letter, August 30, 1941

Germany is reported to be conscripting for military service all *dogs* more than 20 inches tall.

A colorless component of ragweed pollen, believed to be one of the major causes of *hay fever*, has been isolated for the first time by Harold A. Abramson and D. H. Moore of the Columbia University School of Medicine and H. H. Gettner of Mount Sinai Hospital, New York City.

PUBLIC HEALTH

Sleeping Sickness Gaining Rapidly In North Dakota

340 New Cases Reported Within a Single Week; Infantile Paralysis Cases Also Climbing

THE SLEEPING SICKNESS (encephalitis) outbreak is gaining ground rapidly in North Dakota and Minnesota, according to reports received by the U. S. Public Health Service.

In North Dakota, new cases reported for the week ending Aug. 16 had mounted to 340 as compared with 178 the previous week.

Another potential danger in this state is seen by health officials in an outbreak of sylvatic plague found in fleas from ground squirrels. This disease has been known to spread to human victims.

Minnesota, doubly troubled with both sleeping sickness and infantile paralysis, reported 121 cases of sleeping sickness as against 65 the previous week, and an increase from 12 to 14 cases of infantile paralysis.

In neighboring Manitoba, across the Canadian border from North Dakota and Minnesota, 22 sleeping sickness cases have been reported as occurring recently. This region had previously reported an outbreak of infantile paralysis. Health officials in Washington feel that there may be some significance in the doubling up of infantile paralysis and sleeping sickness there and in Minnesota. The two diseases are similar in some ways; both affect the nervous system. It is possible it may be discovered that both can be acquired from the same or related sources.

In South Dakota the number of sleeping sickness cases went down from 61 to 44.

Reports from various parts of the nation of infantile paralysis cases show the same rate of increase for the week ending Aug. 16 as during the previous week. Although the percentage increase remained the same, the actual number was larger, however. The jump was from 422 for the week ending Aug. 9 to 549 in the week ending Aug. 16, exclusive of West Virginia which had not yet reported. Figures for the week of Aug. 2 were 326. This means an increase of 127 cases for the week ending Aug. 16 compared with an increase of 96 cases for

the week before—just about 30% in both periods.

The largest number of cases are still concentrated in the south Atlantic and east south central states where Alabama reported 82, Tennessee 37, Kentucky 15, Georgia 69, North Carolina 16, South Carolina 11, Maryland 16 and the District of Columbia 8. Increases were not very large there, however.

Most significant increases were in New England where the number jumped from 7 to 22, in New York with an increase from 30 to 49, Pennsylvania from 17 to 45, Ohio from 27 to 37, Illinois from 8 to 18, Michigan from 10 to 16, and Wisconsin from 1 to 5. Iowa reported five cases and Missouri four. Neither of these two states had cases in the previous week.

Science News Letter, August 30, 1941

GENERAL SCIENCE

Science in a Democracy Must Be Distributed

SCIENCE in a democracy must become the property of the people, lest both science and democracy be lost. This, in effect, is a warning contained in *The Road of a Naturalist*, a new book by the well-known naturalist-author Donald Culross Peattie. (*Reviewed, SNL, Aug. 23*.)

Says Mr. Peattie: "What science has discovered is common property, and should be made easily available to all. This is not always remembered by a great many scientific writers who have never spoken outside of classrooms where attendance and attention are compulsory, never written a book which they could not order their students to buy. If the scientists practicing inside the college close are not always and widely understood, they may not be always and widely supported. They take that support for granted, along with their intellectual liberties. They had better look across the seas and ask themselves just how secure they are."

Science News Letter, August 30, 1941