

PUBLIC HEALTH

Dog May Transmit Disease

A SICK DOG may have been responsible for the death of a man following a month-long bout with the disease North American blastomycosis.

The circumstantial evidence points to the transmission of the relatively rare disease from dog to human, a team of University of Minnesota researchers reports in the *Journal of the American Medical Association* (171, 2185, Dec. 19, 1959).

They suggest that the incidence of this disease is probably greater than realized and that physicians might investigate the relationship between the disease in animals and man. Some 16 cases of blastomycosis had been reported in the veterinary literature as of 1952. The total has since risen to 77, Drs. Robert M. Schwartzman, Ramon M. Fusaro and Milton Orkin point out.

The disease organism, *Blastomyces dermatitidis*, appears to be identical in several respects for man and dog; it does not spread from man to man. In support of the disease's transmission from dog to man, the researchers say both cases occurred in a small community. Also, the canine infection preceded the human by three months and friends of the patient owned the involved dog.

Both cases were similar as far as symptoms were concerned. These included

fever and "tiredness," cough, difficult or labored breathing, skin lesions and ulcers. In both patients, examination showed lung nodules and the presence of granulomas.

Examination of the family that owned the dog was not too informative, the researchers report. However, the mother did show a positive blastomycin skin test as might be expected since she fed the dog.

It is imperative, they conclude, that when a physician diagnoses North American blastomycosis in a patient, he follow this up with a request for a veterinarian to examine thoroughly pets and livestock for the disease.

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GENERAL SCIENCE

Air Force Takes Guess Out of Fitting Clothes

THE AIR FORCE has taken a sharp look at 4,000 men and devised a sizing system for flight clothing that eliminates extreme misfits.

Based only on the relationship between a man's height and weight, the new sizing system has already proved itself workable in experimental tests. Using partial-pressure suits, "get-me-down" protective suits and anti-gravity suits, Air Force researchers

properly fitted 96% of 226 men by knowing only their heights and weights.

Proper fitting of these skin-tight suits is critical. A poor fit could spell disaster for the wearer under today's high-speed, high-altitude flight conditions.

The sizing system was worked out by Irvin Emanuel and Milton Alexander of the Aero Medical Laboratory, Wright-Patterson Air Force Base, Ohio, and Edmund Churchill and Bruce Truett of Antioch College.

The experimenters said the height-weight system gives a better fit for the crewman, from both protective and comfort standpoint, for two reasons. First, the fit no longer "depends on the fitter's questionable skill as an anthropometrist." Second, the sizing information compiled in the study will give clothes designers a more accurate knowledge of body proportions and their variability.

Other advantages cited: simpler garments, better fits while in the field, minimum alterations with a saving in money, fewer sizes needed for some garments, and easier to keep the right stocks on hand.

Test results on the MC-4A, a partial pressure suit, showed that 43 of 48 men were properly fitted to receive protection by the suits at altitudes of 65,000 feet or above. The men ranged in age from 19 to 44 years old, in height from five feet four inches to six feet four inches and in weight from 123 to 225 pounds. Three of the remaining five "unfitted" men were fitted with suits one size larger, and the remaining two men were judged to be improperly fitted. Alterations were required to fit one of these two men, and the other was fitted with an extra-long large suit that he said was uncomfortable.

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ZOOLOGY

Kelp Crab Weaves "Love Nest" of Seaweed

DOES THE kelp crab use seaweed to weave a communal "love nest?"

"Yes," is the answer Drs. Richard Boolootian of the University of California, Los Angeles, and A. C. Giese, A. Farmanfamaian and J. Tucker of Stanford University's Hopkins Marine Station, suspect.

While studying the reproductive habits of the kelp crab, the West Coast zoologists found this species of crab occurred in large numbers only in bundles of kelp in which stalks had been woven together.

It is possible that the weaving was the result of wave action, the investigators reported. But the pattern suggests the crabs themselves may have done the weaving.

"The more solid structure of woven bundles of seaweed might tend to attract the crabs in large numbers," Dr. Boolootian said. "Thus mating would be more frequent than that resulting from chance meetings of individual males and females in scattered areas."

The UCLA zoologist said this was the first reported evidence he knew of, suggesting nesting habits in crabs.

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SUN-PROOF IGLOO—A rigid polyurethane plastic foam igloo developed by the Atlantic Research Corporation and the Army Quartermaster Corps can be used as a low cost and disposable field shelter for troops. The foam is sprayed on the spot from easily portable ingredients onto an inflated canvas hemisphere. The self-rising foam hardens in less than one hour to a weather-proof surface. The foam can be cut easily with a bayonet, as was the door shown above. The six-foot high, 12-foot in diameter shelter, which weighs less than 200 pounds, is said to be a better insulator than cork.