

Tularemia in Sheep and Sheep Handlers

Tularemia occasionally appears as an epizootic and highly fatal disease of range sheep in western United States. The first such epizootic was studied and diagnosed in 1928 in Idaho. Other epizootics are known to have occurred in Montana, 1934; Alberta, Canada, 1942; and in Idaho in 1949 and 1952.

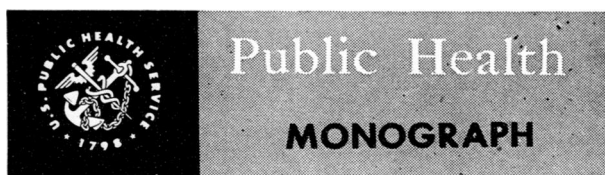
The epizootics are always associated with heavy infestations of the Rocky Mountain wood tick, *Dermacentor andersoni* Stiles, a recognized vector of the disease. Because of the sharply seasonal activity of the ticks, outbreaks are always in the spring. Affected flocks are found grazing in sagebrush areas which are favorable tick habitats. Rodents and rabbits dead of tularemia, indicating a concurrent epizootic in these reservoirs, can usually be found in the epizootic area.

The authors of the monograph have records of 183 cases of tularemia in persons employed in the sheep industry. These cases, from sheep contact or tick bite, were inclined to be severe and at least 7 were fatal. There is no record or suspicion of tularemia in man attributable to eating meat from affected sheep. The occupational incidence within the industry is divided among sheepshearers, 64 cases; sheep owners, 54 cases; shepherders, 42 cases; and all others, 23 cases. Herders are exposed to ticks and deerflies, both known vectors of ticks, in their daily care of the flocks. Shearers are often bitten by wood ticks from sheep and become contaminated from macerated ticks and tick feces in the wool. In these groups, the ulceroglandular type of infection predominates with 73 cases; 25 were recorded as glandular, 4 as oculoglandular, and 35 as typhoidal tularemia. There were 46 for which data were unavailable.

Surveys of sheepshearers, who cover the western United States in itinerant crews, were made in Montana in 1950 and in Idaho in 1951. These showed that 16 percent and 12 percent,

respectively, had experienced enough tularemia infection recently to still give a positive agglutination test. Diagnosis of tularemia had been established in very few individuals at the time of illness though some gave a clinical history consistent with tularemia infection.

The geographic distribution and seasonal



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The accompanying summary covers the principal findings presented in Public Health Monograph No. 28, published concurrently with this issue of Public Health Reports. The authors are with the Rocky Mountain Laboratory, Public Health Service, Hamilton, Mont.

Readers wishing the data in full may purchase copies of the monograph from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. A limited number of free copies are available to official agencies and others directly concerned on specific request to the Public Inquiries Branch of the Public Health Service. Copies will be found also in the libraries of professional schools and of the major universities and in selected public libraries.

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Jellison, William L., and Kohls, Glen M.: Tularemia in sheep and in sheep-industry workers. Public Health Monograph No. 28 (Public Health Service Publication No. 421). 17 pages. Illustrated. U. S. Government Printing Office, Washington, D. C., 1955. Price 20 cents.

incidence of tularemia in sheep-industry employees, and the epizootic nature of the disease in sheep, characterize an epidemiological entity distinct from but closely related to tickborne

tularemia. The economic loss, the number of human cases, and their severity, warrant the consideration of this epidemiological type as a veterinary-medical and public health problem.

Cancer Morbidity in the United States

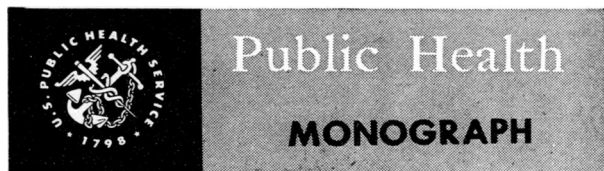
This study of cancer morbidity is probably the most elaborate ever conducted. It covered 10 large metropolitan areas in 2 surveys separated by an interval of 10 years (1937-39, 1947-49). The areas surveyed are Atlanta, Birmingham, Dallas, New Orleans, San Francisco, Denver, Chicago, Detroit, Philadelphia, and Pittsburgh.

A statistical analysis of the thousands of cancer cases examined in these 10 large population centers was made to determine cancer morbidity trends. Some of the important conclusions of the study are:

1. The risk of developing cancer is 60 percent greater for men than for women if genital and breast cancer are excluded. This greater risk is related, in part, to the survey findings that cancer of the lung and bronchus occurs more than 5 times as frequently, and laryngeal cancer 12 times as frequently in men as in women.

2. The death rate from cancer is now definitely higher for men than for women in the white population. This reversal of the relative standing of the sexes, which had existed for whites until a few years ago, is also expected to occur soon in the nonwhite population, in which the margin of female deaths over male is rapidly narrowing.

3. There is a positive correlation between cancer incidence and chronological age—the older the person the greater the likelihood of cancer. Half of the people diagnosed with cancer were between 50 and 70 years of age. However, large variations exist between men and women relative to the parts of the body where cancer is found and the ages at which the disease manifests itself. Men appear more susceptible to cancer than women in the first two and the last



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Part II of this monograph is in preparation. When it is completed, a publication will be issued combining both parts, together with a summary and an index. This publication will carry the same Public Health Monograph number, Public Health Service Publication number, and Library of Congress Catalog Card number as part I.

A limited number of free copies of part I are available to official agencies and others directly concerned on specific request to the Public Inquiries Branch of the Public Health Service. Copies will be found also in the libraries of professional schools and of the major universities and in selected public libraries.

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Dorn, Harold F., and Cutler, Sidney J.: Morbidity from cancer in the United States. Part I. Variation in incidence by age, sex, race, marital status, and geographic region. Public Health Monograph No. 29 (Public Health Service Publication No. 418). 121 pages. Illustrated. U. S. Government Printing Office, Washington, D. C., 1955. Price 65 cents.