About the cover illustration

BOVINE TUBERCULOSIS: STILL A WORLD HEALTH PROBLEM

Bovine tuberculosis (TB) was a huge health problem in days of yore, and it may be attracting attention once again. At the turn of the 19th to the 20th century, infected milk had already been recognized as a source of animal and human disease, and the recently developed tuberculin skin test was entering use as a screening tool for the identification of infected cattle. An obvious method of control—killing or isolating animals that had positive skin tests—was a tough sell: the animals to be taken out of production were very valuable, and the loss could be devastating to any farmer whose herd had more than a few tuberculin-positive animals.

Pasteurization of milk rendered the tubercle bacilli non-infective, and protected those who obtained their milk from large dairies. But unpasteurized milk was commonly drunk in rural settings until the late 1940s, and eradicating the disease from the herds would improve the animals' health as well as provide an additional public health safeguard.

Federal funding for the eradication of TB in cattle began in 1917; uniform standards for such programs and accreditation of TB-control veterinarians began shortly thereafter. Opposition to slaughter-based control methods was vehement; in both Minnesota and Iowa (and perhaps in other states as well), militia protection was sometimes needed to ensure the safety of the veterinarians testing infected herds. A particularly dramatic example occurred in Cedar County, Iowa, in September of 1932. In what has sometimes been called "the Cow War," 400 angry farmers ravaged the car of two testing veterinarians, despite the presence of 65 law enforcement agents; a declaration of martial law ultimately ensued.

By the end of the 1930s, more than 95% of counties in the nation were free of infected cattle, and milk-borne TB was fading as a public health problem. In the 1960s, some physical diagnosis texts suggested asking about drinking unpasteurized milk in patients old enough to have done so before 1945.

The problem has not slipped completely into history, however. Bovine TB continues to be common in other countries, including Mexico; it is occasionally discovered in animals from herds that have shown no evidence of its presence for some time. It is a very difficult problem to address in countries without economic resources, especially where a cow or two may comprise a large proportion of a family's wealth. It is also difficult to effect control where large numbers of bovines roam free, or where social or religious views make slaughter an unacceptable option. It is among the organisms that may be particularly problematic in immunocompromised hosts, and is sometimes used as a target organism in studies of immune function in such diseases as AIDS. One such study appears in this month's issue (see page 330).

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Note: An excellent brief overview of the efforts to eradicate tuberculosis from domestic animals may be found in chapter 4 of the on-line history of the US Animal Health Association: http://www.usaha.org/history/century.html.