The Evolving Mosaic of Tick-Borne Rickettsioses in the United States

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recognized spotted fever group rickettsioses.

Conference Lecture Summary

Many fundamental principles regarding tick-borne rickettsioses in the North America have required re-examination since the beginning of the 21st century. As recently 2002, all tick-borne rickettsiosis in the United States and other continents of the western hemisphere was attributable to infection with a single pathogen, Rickettsia rickettsii. Unique species or strains of pathogenic Rickettsia, including many that were isolated from ticks during preceding decades but remained uncharacterized until the advent of molecular techniques, have now been characterized and are likely to influence the epidemiology of spotted fever group rickettsiosis in various regions of the United States. Collectively, these processes emphasize the dynamic nature of tick-borne rickettsioses, and the necessity to continuously consider the fluid and varied ecological, social, and temporal interactions among humans, ticks, vertebrate hosts and Rickettsia in the emergence and epidemiology of these diseases.