

TABLE 2. Adjusted Incidence Rate Ratios of Lyme Disease and Rocky Mountain Spotted Fever, by Climatic and Demographic Variables, Active Component Service Members, Contiguous U.S., 2000–2023

Climatic or Demographic Variable	Lyme Disease			Rocky Mountain Spotted Fever		
	aIRR ^a	95% LL	95% UL	aIRR ^a	95% LL	95% UL
Annual mean temperature	1.0	1.0	1.1	0.7	0.6	0.9
Annual minimum temperature	0.9	0.9	1.0	1.2	1.0	1.4
Annual maximum temperature	0.9	0.9	1.0	1.0	0.9	1.2
Annual total precipitation	1.0	1.0	1.0	1.0	1.0	1.0
Regional climate						
Northeast	Reference	–	–	0.2	0.1	0.3
Southeast	1.5	1.3	1.6	Reference	–	–
Northwest	0.2	0.2	0.3	0.0	0.0	0.1
Ohio Valley	0.7	0.7	0.8	0.4	0.3	0.6
Upper Midwest	0.4	0.3	0.4	0.1	0.0	0.2
South	1.0	0.9	1.2	0.6	0.5	0.7
Southwest	0.4	0.4	0.5	0.1	0.1	0.2
West	0.5	0.4	0.5	0.1	0.1	0.2
Northern Rockies and Plains	0.2	0.2	0.2	0.1	0.0	0.1
Age group, y						
<20	Reference	–	–	Reference	–	–
20–24	1.0	1.0	1.0	1.0	0.9	1.2
25–29	1.5	1.5	1.6	1.7	1.6	2.0
30–34	2.1	2.0	2.1	2.5	2.2	2.8
35–39	2.1	2.1	2.2	2.3	2.1	2.6
40+	2.3	2.2	2.4	2.6	2.3	3.0
Racial and ethnic group						
White, Non-Hispanic	Reference	–	–	Reference	–	–
Black, Non-Hispanic	0.4	0.4	0.4	0.4	0.4	0.4
Hispanic	0.6	0.6	0.6	0.5	0.5	0.6
Other / unknown ^b	0.7	0.7	0.7	0.6	0.6	0.7
Sex						
Male	Reference	–	–	Reference	–	–
Female	1.5	1.5	1.5	1.0	0.9	1.0
Service branch						
Army	Reference	–	–	Reference	–	–
Navy	0.9	0.9	0.9	1.4	1.3	1.5
Marine Corps	1.1	1.0	1.1	3.1	2.8	3.3
Air Force, Space Force	0.7	0.7	0.7	0.9	0.8	1.0
Coast Guard	1.9	1.9	1.9	1.5	1.4	1.8

Abbreviations: aIRR, adjusted incidence rate ratio; LL, lower limit; UL, upper limit; y, years.
^a Adjusted for annual mean temperature, annual minimum temperature, annual maximum temperature, annual total precipitation, regional climate, age group, racial/ethnic group, sex, and service.
^b Includes those of American Indian/Alaska Native, Asian/Pacific Islander, and unknown race/ethnicity.