Tick-borne Disease Surveillance in Florida, 1999

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Lyme disease

In 1999, fifty-four cases of Lyme disease were reported in Florida. As Figure 1 shows, 20 (37%) were acquired in Florida, 32 (59.4%) were acquired in the United States but not in Florida, 1 (1.8%) was acquired outside the United States, and for 1 case (1.8%) the location were the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (20 cases), 12 (60%) were female and 8 (40%) were male. The average age was 39.7 years old (range 11-81 years). Of the cases, 18 (90%) were white non-Hispanic, 1 (5%) was American Indian non-Hispanic, and for one (5%) the race and the ethnicity was unknown. A little over half (60%), of the individuals resided in the northern region* of Florida, 5 (25%) resided in the central region, and 3 (20%) resided in the panhandle region of Florida. All cases met the case definition for confirmed Lyme disease. Of the cases acquired in Florida, 4 (20%) occurred in each of the following months: May and June, 3 (15%) occurred during August, 2 (10%) each occurred in the following months: April and September, and 1 (5%) occurred in each of the following months: April and November (Figure 2).





Among the cases, 13 (65%) were diagnosed by a physician as having erythema migrans (EM) of at least 5cm in diameter, 6 (30%) were not diagnosed with EM, and in 1 case (5%) it was not specified (Table 1). Eleven cases (55%) were described as having arthritis that is characterized by brief attacks of joint swelling, 7 (35%) did not have these symptoms, for 1 (5%) case it was unknown if these symptoms were present, and for 1 case (5%) it was not specified. Of the cases, 16 (80%) were not diagnosed with Bell's palsy or other cranial neuritis, 1 (5%) was diagnosed with Bell's palsy or other cranial neuritis, 1 (5%) was diagnosed with Bell's palsy or other cranial neuritis, for 2 cases (10%) it was unknown if the individuals experienced these symptoms, and for 1 case it was not specified. Over half (65%) of the cases were not diagnosed with radiculoneuropathy, 4 (25%) were diagnosed, for 2 cases (10%) it was unknown if the symptoms occurred, and in 1 (5%) it was not specified. For lymphocytic meningitis and encephalitis/encephalomyelitis, 17 (85%) of the cases were diagnosed as not having these conditions, for 2 cases (10%) it was unknown, and in 1 case it was not specified. In 17 (85%) of the cases there was no 2nd or 3rd degree atrioventricular block, in 2 cases it was unknown, and in 1 case it was not specified.

Symptom	Present	Not present	Unknown	Not specified
Erythema Migrans	13 (65%)	6 (30%)	0	1 (5%)
Arthritis	11 (55%)	7 (35%)	1 (5%)	1 (5%)
Bell's Palsy or other cranial	1 (5%)	16 (80%)	2 (10%)	1 (5%)
neuritis				
Radiculoneuropathy	4 (25%)	13 (65%)	2 (10%)	1 (5%)
Lymphocytic meningitis	0	17 (85%)	2 (10%)	1 (5%)
Encephalitis/encephalomyelitis	0	17 (85%)	2 (10%)	1 (5%)
2 nd or 3 rd atrioventricular block	0	17 (85%)	2 (10%)	1 (5%)

Table 1.

Rocky Mountain spotted fever

In 1999, seven cases of Rocky Mountain spotted fever were reported. As Figure 3 shows, 5 (71.4%) were acquired in Florida, 1 (14.3%) was acquired in the United States but not in Florida, and for one (14.3%) the location of where the disease was acquired was unknown.



Of the five cases acquired in Florida, all of the individuals were male. Three cases (60%) were white non-Hispanic, 1 (20%) was white Hispanic, and for one (20%) the race and ethnicity was unknown. The average age was 38.8 years of age (range 4-65 years). Two cases (40%) resided in each of the panhandle* and northern regions of the state. The remaining individual resided in the central region of Florida. A majority of the cases (60%) met the case definition for probable Rocky Mountain spotted fever while 40% met the case definition for confirmed Rocky Mountain spotted fever. Forty percent of the cases experienced symptom onset in June and one symptom onset (20%) occurred in each of the following months: January, May, and August.

Human Ehrlichiosis

In 1999, eight cases of Human Ehrlichiosis were reported in Florida. As Figure 4 shows, 6 (75%) of those cases were acquired in Florida, 1 (12.5%) was acquired in the United States but not in Florida, and for one (12.5%) the location of where the disease was acquired was unknown.

Figure 3





Of the six cases that were acquired in Florida, 83.3% were male and 16.7% were female. The average age of the individuals was 45.3 years old (range 12-66). More than half (66.7%), were white non-Hispanic individuals, 1 (16.7%) was white Hispanic, and 1 (16.7%) was black non-Hispanic. Half of the cases resided in the central region of Florida, 2 (33.3%) resided in the northern region, and 1 (16.7%) resided in the panhandle region of Florida. More than half of the cases (66.7%) met the case definition for probable Human Ehrlichiosis while 2 (33.3%) met the case definition for confirmed Human Ehrlichiosis. Two cases (33.3%) each occurred during the months of May and June, 1 (16.7%) occurred in the following months: April and July.

*For the purpose of this analysis, Florida counties were divided into regions as follows:

North- Alachua, Baker, Bradford, Citrus, Clay, Columbia, Dixie, Duval, Flagler, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Madison, Marion, Nassau, Orange, Pasco, Putnam, Seminole, St. Johns, Sumter, Suwannee, Taylor, Union, Volusia.

Central- Brevard, DeSoto, Hardee, Highlands, Hillsborough, Indian River, Manatee, Okeechobee, Osceola, Pinellas, Polk, Sarasota, St. Lucie.

South- Broward, Charlotte, Collier, Glades, Hendry, Lee, Martin, Miami-Dade, Monroe, Palm Beach.

Panhandle- Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, Washington.