Tick-borne Disease Surveillance in Florida, 1998

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Lyme disease

In 1998, seventy-three cases of Lyme disease were reported in Florida. As Figure 1 shows, 23 (31.5%) were acquired in Florida, 48 (65.7%) were acquired in the United States but not in Florida, 1 (1.4%) occurred outside the United States, and for 1 case (1.4%) the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (23 cases), 17 (73.9%) were female and 6 (26.1%) were male. The average age was 39 years old (range 1-88 years). Nineteen cases (82.7%) were white and non-Hispanic, 2 (8.7%) were black and non-Hispanic, 1 (4.3%) was Asian/Pacific Islander and non-Hispanic, and 1 (4.3%) was white and Hispanic. Nine cases (39.1%) resided in each the central region* and northern region of Florida, 4 (17.4%) resided in the panhandle region, and 1 case (4.4%) resided in the southern region of Florida. All cases met the case definition for confirmed Lyme disease. As Figure 2 shows, 5 (21.7%) symptom onsets occurred in April, 4 (17.4%) in March, 3 (13%) in each January and October, 2 (8.7%) occurred in the following months: February, June, and September, and 1 (4.4%) occurred in the following months: May, July, August, and December.





Among the twenty-three individuals that acquired Lyme disease in Florida, 13 (56.5%) were diagnosed as having erythema migrans of at least 5cm in diameter, 6 (26.1%) were not diagnosed, and for 2 (8.7%) it was unknown if they showed signs of erythema migrans (Table 1). Eleven (47.9%) of the cases were diagnosed with having arthritis that is characterized by brief attacks of joint swelling, 7 (30.4%) were not diagnosed with arthritis, for 3 (13%) it is unknown if they possessed these symptoms, and for 2 (8.7%) it was not specified if the case had these symptoms. Of the cases, 13 (56.6%) were not diagnosed with Bell's palsy or other cranial neuritis, 5 (21.7%) were diagnosed with Bell's palsy or other cranial neuritis, in 3 (13%) it is unknown if these symptoms were present, and in 2 (8.7%) it was not specified. Fifteen cases (65.2%) were not diagnosed with radiculoneuropathy, 1 individual was diagnosed, in 5 (21.7%) cases it was unknown if symptoms were experienced, and in 2 (8.7%) it was not specified. Of the cases, 16 (69.6%) were not diagnosed with lymphocytic meningitis, 5 (21.7%) were diagnosed, and in 2 (8.7%) diagnosis of lymphocytic meningitis was not specified. Encephalitis/encephalomyelitis was not diagnosed in 15 (65.2%) of the individuals, in 2 (8.7%) it was diagnosed, in 4 (17.4%) it was unknown if the individual did have encephalitis/encephalomyelitis, and in 2 (8.7%) it was not specified. In eighteen (78.3%) of the cases there was no 2nd or 3rd degree atrioventricular block, in 3 cases it was unknown if this occurred, and in 2 cases it was not specified.

Symptom	Present	Not present	Unknown	Not specified
Erythema Migrans	13 (56.5%)	6 (26.1%)	2 (8.7%)	2 (8.7%)
Arthritis	11 (47.9%)	7 (30.4%)	3 (13%)	2 (8.7%)
Bell's Palsy or other cranial	5 (21.7%)	13 (56.6%)	3 (13%)	2 (8.7%)
neuritis				
Radiculoneuropathy	1	15 (65.2%)	5 (21.7%)	2 (8.7%)
Lymphocytic meningitis	5 (21.7%)	16 (69.6%)	0	2 (8.7%)
Encephalitis/encephalomyelitis	2 (8.7%)	15 (65.2%)	4 (17.4%)	2 (8.7%)
2 nd or 3 rd atrioventricular block	0	18 (78.3%)	3 (13%)	2 (8.7%)

Table 1.

Rocky Mountain spotted fever

In 1998, three cases of Rocky Mountain spotted fever were reported. Of these, two were acquired in Florida and one was acquired in the United States but not in Florida. Of the two cases both resided in the panhandle region* of Florida, and were male, white, and non-Hispanic. One case met the case definition for confirmed Rocky Mountain spotted fever and the other met the case definition for probable Rocky Mountain spotted fever. One case occurred in July and the other occurred in October.

Human Ehrlichiosis

In 1998, two cases of Human Ehrlichiosis were reported in Florida with both cases acquired in Florida. Of the two cases one was female while the other was male and both were white and non-Hispanic. One individual resided in the northern region* while the other resided in the southern region of Florida. One met the case definition for confirmed Human Ehrlichiosis and the other case met the case definition for probable Human Ehrlichiosis. Both cases occurred during the month of May.

*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.