Tick-borne Disease Surveillance in Florida, 1996

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Lyme disease

In 1996, forty cases of Lyme disease were reported in Florida. As Figure 1 shows, 17 (42.5%) were acquired in Florida, 22 (55%) were acquired in the United States but not in Florida, and 1 (2.5%) was acquired outside the United States.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (17 cases) there were more females (76.5%) than males (23.5%). The average age was 44.2 years old (range 3-84). Of the cases, 16 (94.1%) were white non-Hispanic and 1 (5.9%) was white with unknown ethnicity. Five cases (29.4%) resided in each the southern, northern, and panhandle regions* of Florida. Two cases (11.8%) resided in the central region of the state. All seventeen cases met the case definition for confirmed Lyme disease. Four cases (23.5%) were acquired in the month of September, 3 (17.6%) in August, 2 (11.8%) each in March and July, and 1 (5.9%) in each February, April, May, November, October, and June (Figure 2).





Among the individuals that acquired Lyme disease in Florida (17 cases), 14 (82.4%) were diagnosed by a physician as having erythema migrans (EM) of at least 5cm in diameter. Eight (47%) cases were described as having arthritis that is characterized by brief attacks of joint swelling. Fourteen cases (82.4%) were not diagnosed with Bell's palsy or other cranial neuritis, radiculoneuropathy, lymphocytic meningitis, or encephalitis/encephalomyelitis while in 3 cases (17.6%) it was unknown if they experienced these symptoms. In 15 (88%) of the cases there was no 2nd or 3rd degree atrioventricular block and in 2 cases (12%) this was unknown.

Rocky Mountain spotted fever

In 1996, thirteen cases of Rocky Mountain spotted fever (RMSF) were reported. Ten cases (76.9%) were acquired in Florida and 3 (23.1%) were acquired in the United States but not in Florida. Of cases acquired in Florida, 7 were male and 3 were female. The average age was 30.7 years of age (range 4-67). Seventy percent of the cases were white and non-Hispanic, while 2 (20%) were Black non-Hispanic and 1 (10%) was Asian/Pacific Islander and non-Hispanic. Four cases met the case definition for confirmed RMSF while 6 cases (60%) met the case definition for probable RMSF. Forty percent of the cases resided in northern region* of the state, 3 (30%) resided in the panhandle region, 2 (20%) resided in the central region, and 1 case (10%) resided in the southern region of Florida. Of the cases acquired in Florida, 2 (20%) occurred in each of the following months: April, May, and August and 1 (10%) occurred in each of the following months: February, July, October, and December (Figure 3).





Human Ehrlichiosis

In 1996, ten cases of Human Ehrlichiosis were reported in Florida. Of those, 9 (90%) were acquired in Florida and 1 (10%) was acquired in the United States but not in Florida. Among Human Ehrlichiosis cases acquired in Florida (9 cases) there were more males (66.7%) than females (33.3%). The average age was 36.4 years old (range 6-54). All of the cases were white and non-Hispanic. Five cases (55.6%) resided in the northern region* of Florida, 3 (33.3%) resided in the panhandle region, and 1 (11.1%) resided in the central region of Florida. Five of the cases (55.6%) met the case definition for confirmed Human Ehrlichiosis and 4 (44.4%) met the case definition for probable Human Ehrlichiosis. Of the cases that were acquired in Florida, 4 (44.4%) of them occurred in May, 3 (33.3%) occurred in June, 1 (11.1%) occurred in each April and October (Figure 4).





*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.