Tick-borne Disease Surveillance in Florida, 2001

Colleen O'Fallon, MPH candidate, University of Florida; Rebecca Shultz, MPH, Florida Department of Health

Lyme disease

In 2001, sixty-four cases of Lyme disease were reported in Florida. As Figure 1 shows, 22 cases (34.4%) were acquired in Florida, 33 (51.5%) were acquired in the United States but not in Florida, 1 (1.6%) of the cases was acquired outside the United States, and for eight cases (12.5%) the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (22 cases), 15 (68.2%) were female and 7 (31.8%) were male. The average age was 37.1 years old (range 8-86 years). Nineteen cases (86.4%) were white and non-Hispanic, 2 (9.1%) were white but the ethnicity was unknown, and for one case (4.5%) the race and ethnicity were unknown. Eleven individuals (50%) resided in the northern region* of Florida, 7 (31.8%) resided in the central region, 3 (13.6%) resided in the southern region, and 1 (4.6%) resided in the panhandle region of Florida. All cases met the case definition for confirmed Lyme disease. Four cases (18.2%) each had onset of symptoms occur in July and August, 3 (13.6%) occurred in the following months: May and June, 2 (9.1%) occurred each in September, October and December, and 1 (4.3%) each occurred in January and November (Figure 2)

Figure 2.



Rocky Mountain spotted fever

In 2001, nine cases of Rocky Mountain spotted fever were reported with all of them being acquired in Florida. Six cases (66.7%) were male and 3 (33.3%) were female. The average age was 48 years of age (range 20-71 years). Six individuals (66.7%) were white non-Hispanic, 1 (11.1%) was white with Hispanic ethnicity, 1 (11.1%) was white with the ethnicity unknown, and 1 (11.1%) the race and ethnicity was unknown. The largest portion (44.4%), of the individuals resided in the northern region*, 2 (22.2%) of the individuals resided in each of the following regions: central and panhandle, and 1 (11.1%) resided in the southern region of Florida. Slightly over half (55.6%), of the cases met the case definition for probable Rocky Mountain spotted fever while 4 (44.4%) of the cases met the case definition for confirmed Rocky Mountain spotted fever. As Figure 3 shows, 2 (22.2%) cases had an onset of symptoms that occurred each in August and October, and 1 (11.1%) occurred in each of the following months: February, March, May, June, and September.





Human Ehrlichiosis

In 2001, eight cases of Human Ehrlichiosis were reported in Florida. Of those cases, 7 (87.5%) were acquired in Florida and 1 (12.5%) was acquired in the United States but not in Florida. Of the seven cases that were acquired in Florida, 4 (57.1%) were female and 3 (42.9%) were male. The average age was 47 years old (range 4-82). All of the individuals were white non-Hispanic. Slightly over half (57.1%), of the individuals resided in the panhandle region*, 2 (28.6%) resided in the central region, and 1 (14.3%) resided in the northern region of Florida. Six cases (85.7%) met the case definition for confirmed Human Ehrlichiosis and 1 (14.3%) met the case definition for probable Human Ehrlichiosis. Two cases (28.6%) occurred in May and 1 (14.3%) occurred in each of the following months: March, April, June, July, and August.

*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.