Tick-borne Disease Surveillance in Florida, 2002

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

Lyme disease

In 2002, sixty-one cases of Lyme disease were reported in Florida. As Figure 1 shows, 27 (44.3%) cases were acquired in Florida, 28 (45.9%) were acquired in the United States but not in Florida, 1 (1.6%) was acquired outside the United States, and for 5 cases (8.2%) the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (27 cases), 13 (48.1%) were female and 14 (51.9%) were male. The average age was 48.7 years old (range 6-79). Twenty-four cases (88.9%) were white non-Hispanic, 1 (3.7%) was white with unknown ethnicity, for 1 (3.7%) the race was unknown and the ethnicity was Hispanic, and for 1 (3.7%) the race and ethnicity were both unknown. The residential location of individuals varied with 11 (40.7%) residing each in the following regions*: northern and central, 4 (14.9%) residing in the panhandle region, and 1 (3.7%) residing in the southern region of Florida. All of the cases met the case definition for confirmed Lyme disease. As Figure 2 shows, 6 (22.2%) cases had an onset of symptoms that occurred in April, 5 (18.5%) occurred in July, 4 (14.9%) occurred in January, 3 (11.1%) occurred during each of the following months: March, and August, 2 (7.4%) occurred in May, and 1 (3.7%) occurred in each of the following months: February, June, September, and October.





Among the individuals that acquired Lyme disease in Florida (27 cases), symptoms were specified for one case. This case was described as having arthritis that is characterized by brief attacks of join swelling but was not diagnosed with erythema migrans, Bell's palsy or other cranial neuritis, radiculoneuropathy, lymphocytic meningitis, encephalitis/encephalomyelitis, or 2nd or 3rd degree atrioventricular block.

Rocky Mountain spotted fever

In 2002, fourteen cases of Rocky Mountain spotted fever (RMSF) were reported in Florida. As Figure 3 shows, 11 (78.6%) were acquired in Florida, 1 (7.1%) was acquired in the United States but not in Florida, and for 2 cases (14.3%) the location of where the disease was acquired is unknown.





Of the eleven cases acquired in Florida, 4 (36.4%) were female and 7 (63.6%) were male. The average age was 36.8 years of age (range 6-62). Five cases (45.4%) were white non-Hispanic, 2 (18.2%) were white with Hispanic ethnicity, 2 (18.2%) the race was unknown but the ethnicity was Hispanic, 1 (9.1%) was Black non-Hispanic, and for one case (9.1%) the race and ethnicity was unknown. Eight cases (72.7%) resided in both the northern and central regions*, 2 (18.2%) resided in the panhandle region, and the remaining individual resided in the southern region of Florida. A majority of the cases (63.6%) met the case definition for probable RMSF while 4 cases (36.4%) met the case definition for confirmed RMSF. Two cases experience symptom onset in the following months: April, May, June, and July months and one symptom onset (9.1%) occurred in each month of the following months: March, August, and September.

Human Monocytic Ehrlichiosis

In 2002, five cases of Human Monocytic Ehrlichiosis (HME) were reported in Florida with a majority (80%), acquired in Florida and 20% acquired in the United States but not in Florida. Of the four cases acquired in Florida, half were female and half were male. The average age was 53.5 years old (range 42-66). Three cases were white non-Hispanic and one was black non-Hispanic. Three cases (75%) resided in the northern region* while one (25%) resided in the central region of Florida. Three cases (75%) met the case definition for confirmed HME and one case met the case definition for probable HME. Two case (50%) had onset of symptoms occur in September and 1 (25%) each occurred in July and May.

Anaplasmosis

In 2002, one case of Anaplasmosis (formerly Human Granulocytic Ehrlichiosis) was reported in Florida this case was acquired in Florida. The case was a white, Hispanic male residing in the southern region of Florida. Disease onset occurred in 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.