# Tick-borne Disease Surveillance in Florida, 2005

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## Lyme disease

In 2005, forty-two cases of Lyme disease were reported. As Figure 1 shows, 11 (26.2%) of the cases were acquired in Florida, 29 (69%) were acquired in the United States but not in Florida, 1 (2.4%) was acquired outside the United States, and for 1 (2.4%) the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired the disease in Florida (11 cases) there were more females (54.5%) than males (45.5%) The average age of the individuals was 36.5 years old (range 7-77 years). Of the cases, 5 (45.4%) were white non-Hispanic, for 3 (27.3%) both the race and ethnicity were unknown, 1 (9.1%) was black non-Hispanic, 1 (9.1%) was white with unknown ethnicity, and 1 (9.1%) was Hispanic with unknown race. Seven cases (63.6%) resided in the central region\* of Florida, 2 (18.2%) resided in the southern region, 1 (9.1%) resided each in the northern and panhandle region of Florida. All of the cases met the case definition for confirmed Lyme disease. As Figure 2 shows, 4 (36.4%) cases experienced symptom onset in July, 3 (27.2%) onsets occurred in May, and 1 (9.1%) occurred each in the following months: January, June, August, and October.





Among the eleven individuals that acquired Lyme disease in Florida, 7 (63.6%) reported having erythema migrans (EM) of at least 5cm in diameter, 3 (27.3%) did not have EM, and for 1 case it was unknown (Table 1). Eight cases (72.7%) reported arthritis characterized by brief attacks of joint swelling, and 3 (27.3%) did not. Ten cases did not report Bell's palsy or other cranial neuritis, radiculoneuropathy, lymphocytic meningitis, or encephalitis/encephalomyelitis, and for one case it was unknown. In nine (81.8%) of the cases there was no 2<sup>nd</sup> or 3<sup>rd</sup> degree atrioventricular block and in 2 cases it was unknown.

Symptom	Present	Not present	Unknown	Not specified
Erythema Migrans	7 (63.6%)	3 (27.3%)	1 (9.1%)	0
Arthritis	8 (72.7%)	3 (27.3%)	0	0
Bell's Palsy or other cranial	0	10 (90.9%)	1 (9.1%)	0
neuritis				
Radiculoneuropathy	0	10 (90.9%)	1 (9.1%)	0
Lymphocytic meningitis	0	10 (90.9%)	1 (9.1%)	0
Encephalitis/encephalomyelitis	0	10 (90.9%)	1 (9.1%)	0
2 <sup>nd</sup> or 3 <sup>rd</sup> atrioventricular block	0	9 (81.8%)	2 (18.2%)	0

Table 1.

### **Rocky Mountain spotted fever**

In 2005, twelve cases of Rocky Mountain spotted fever were reported. Of these, 9 (75%) were acquired in Florida, for 2 (16.7%) the location where the disease was acquired is unknown, and 1 (8.3%) case was acquired outside the United States. Of the nine cases acquired in Florida, 3 (33.3%) were female and 6 (66.7%) were male. The average age was 45.3 years old (range 10-80 years). For 4 cases (44.4%) both the race and ethnicity were unknown, 2 (22.2%) were white non-Hispanic, 1 (11.1%) was white with unknown ethnicity, 1 (11.1%) was black with unknown ethnicity, and 1 (11.1%) was white and Hispanic. Four cases resided in the northern region\* of the state, 3 resided in the panhandle region,

and 2 (22.2%) resided in the central region of Florida. Over half (77.8%), of the cases met the case definition for probable Rocky Mountain spotted fever and 2 (22.2%) 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 in each of the following months: February, April, and December, and 1 (11.1%) occurred in each of the following months: June, July, and August.





# **Human Monocytic Ehrlichiosis**

In 2005, six cases of Human Monocytic Ehrlichiosis (HME) were reported in Florida. Half of those cases were acquired in Florida, 2 (33.3%) were acquired in the United States but not in Florida, and for 1 (16.7%) the location of where the disease was acquired is unknown. Of the three cases acquired in Florida, all were male. The average age of the individuals was 51 years old (range 40-58 years). One individual was white non-Hispanic, 1 (33.3%) was white with unknown ethnicity, and 1 (33.3%) was American Indian/Alaskan Native and non-Hispanic. All of the individuals resided in the northern region\* of Florida and all cases met the case definition for probable HME. One case (33.3%) occurred in each of the following months: April, May, and October.

# Anaplasmosis

In 2005, there was one case of Anaplasmosis (formerly Human Granulocytic Ehrlichiosis) reported in Florida and that case was acquired outside the United States.

\*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.