

# Tick-borne Disease Surveillance in Florida, 2004

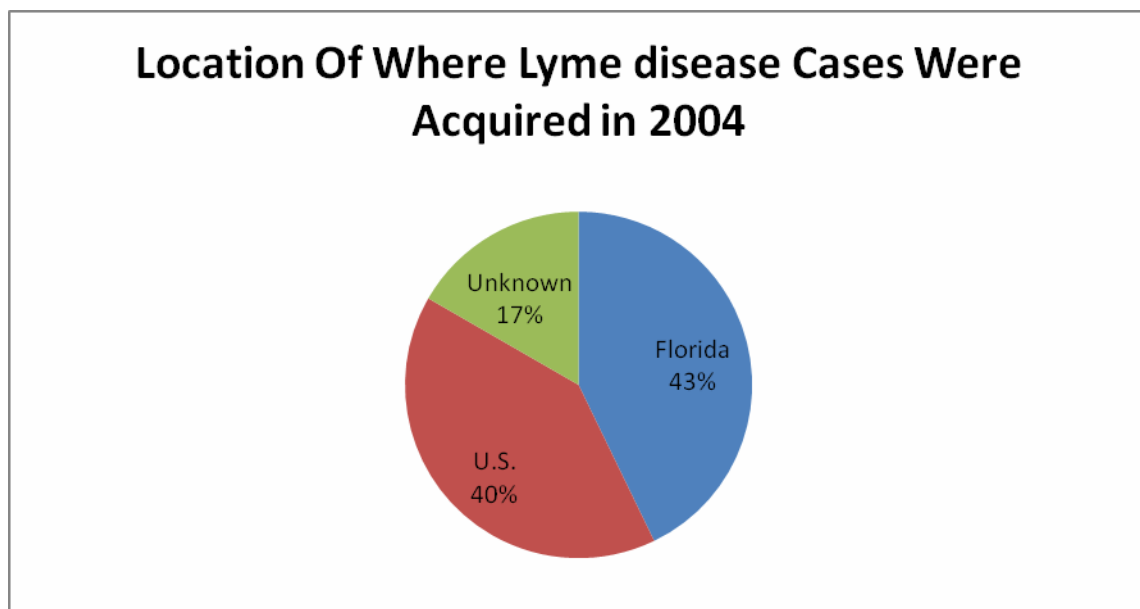
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## Lyme disease

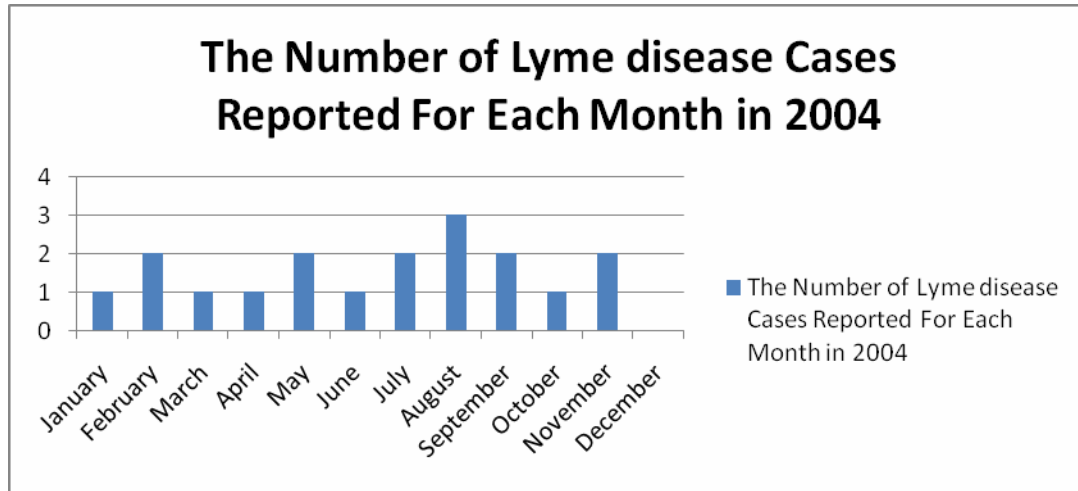
In 2004, forty-two cases of Lyme disease were reported in Florida. As Figure 1 shows, 18 (42.8%) cases were acquired in Florida, 17 (40.5%) were acquired in the United States but not in Florida, and for 7 (16.7%) cases the location where the disease was acquired is unknown.

Figure 1



Among the individuals reported as having acquired Lyme disease in Florida (18 cases), 13 (72.2%) were female and 5 (27.8%) were male. The average age of the individuals was 38.9 years old (range 10-70 years). Fourteen cases (77.6%) were white non-Hispanic, 1 (5.6%) was black non-Hispanic, 1 (5.6%) was white with the ethnicity unknown, 1 (5.6%) was Hispanic with the race unknown, and 1 (5.6%) was non-Hispanic with the race unknown. Of the cases, 9 (50%) resided in the northern region\* of Florida, 5 (27.8%) resided in the central region, and 4 (22.2%) resided in the southern region. All of the cases met the case definition for confirmed Lyme disease. Three cases (16.7%) had onset of symptoms occur in August, 2 (11.1%) cases occurred each in the following months: February, May, July, September, and November, and 1 (5.6%) case occurred each in the following months: January, March, April, June, and October (Figure 2).

Figure 2



Among the eighteen individuals that acquired Lyme disease in Florida, 9 (50%) were diagnosed as having erythema migrans (EM) of at least 5cm in diameter, 8 (44.4%) did not have EM, and for one case it was not specified (Table 1). Ten (55.5%) of the cases were diagnosed with having arthritis that is characterized by brief attacks of joint swelling, 6 (33.3%) did not have arthritis, for one case (5.6%) it is unknown, and for one case it was not specified. Of the cases, 2 (11.1%) reported having Bell’s palsy or other cranial neuritis, 15 (83.3%) did not, and for 1 case it was not specified. Two (11.1%) individuals were diagnosed with radiculoneuropathy and 16 (88.9%) were not. For both lymphocytic meningitis and encephalitis/encephalomyelitis there were 17 (94.4%) individuals who did not have these symptoms and for one case it was not specified. One case was diagnosed with 2<sup>nd</sup> or 3<sup>rd</sup> degree atrioventricular block, and seventeen (94.4%) cases were not.

Table 1.

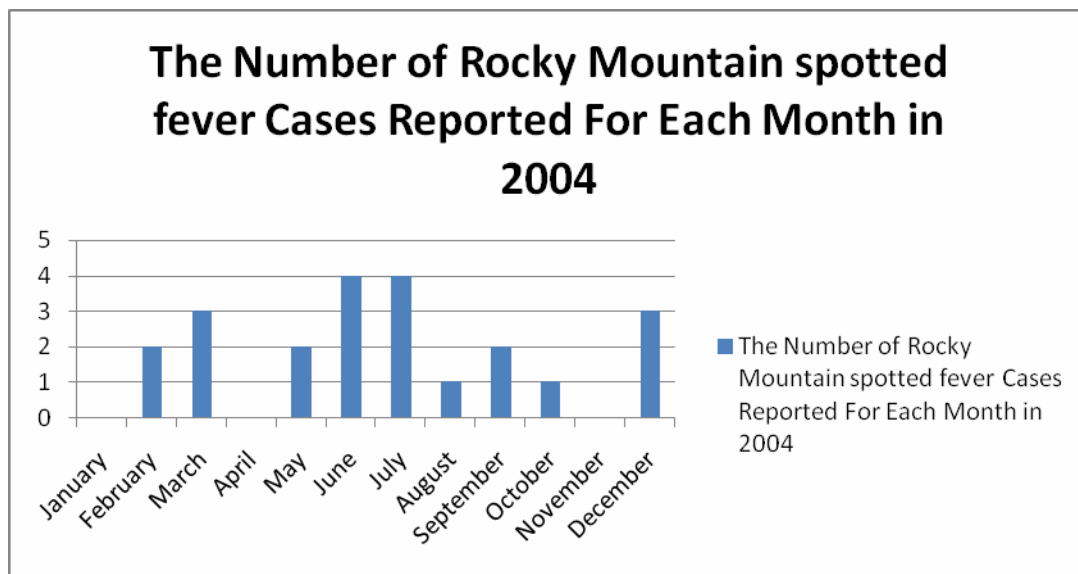
| Symptom  | Present    | Not present | Unknown  | Not specified |
|--|------------|-------------|----------|---------------|
| <b>Erythema Migrans</b>  | 9 (50%)    | 8 (44.4%)   | 0        | 1 (5.6%)      |
| <b>Arthritis</b>   | 10 (55.5%) | 6 (33.3%)   | 1 (5.6%) | 1 (5.6%)      |
| <b>Bell’s Palsy or other cranial neuritis</b>                  | 2 (11.1%)  | 15 (83.3%)  | 0        | 1 (5.6%)      |
| <b>Radiculoneuropathy</b>                                      | 2 (11.1%)  | 16 (88.9%)  | 0        | 0             |
| <b>Lymphocytic meningitis</b>                                  | 0          | 17 (94.4%)  | 0        | 1 (5.6%)      |
| <b>Encephalitis/encephalomyelitis</b>                          | 0          | 17 (94.4%)  | 0        | 1 (5.6%)      |
| <b>2<sup>nd</sup> or 3<sup>rd</sup> atrioventricular block</b> | 1 (5.6%)   | 17 (94.4%)  | 0        | 0             |

### Rocky Mountain spotted fever

In 2004, twenty-six cases of Rocky Mountain spotted fever were reported. Of those cases, 22 (84.6%) were acquired in Florida, 3 (11.5%) were acquired in the United States but not in Florida, and 1 (3.8%) case was acquired outside the United States. Of the twenty-two cases acquired in Florida, 5

(22.7%) were female and 17 (77.3%) were male. The average age was 39 years old (range 6-81 years). Thirteen individuals (59.1%) were white non-Hispanic, 4 (18.2%) were white with an unknown ethnicity, 2 (9.1%) were black non-Hispanic, for 2 (9.1%) both the race and ethnicity were unknown, and for 1 individual (4.5%) the race was other and the ethnicity was Hispanic. Sixteen (72.7%) individuals resided in the northern region\*, 4 (18.2%) individuals resided in the panhandle region, and 2 (9.1%) resided in the central region of Florida. Sixteen (72.7%) case met the case definition for probable Rocky Mountain spotted fever and 6 (27.3%) met the case definition for confirmed Rocky Mountain spotted fever. As Figure 3 shows, 4 cases (18.2%) had an onset of symptoms that occurred each in June and July, 3 (13.6%) occurred each in March and December, 2 (9.1%) occurred in each of the following months: February, May, and September, and 1 (4.5%) occurred each in August and October.

Figure 3



### Human Monocytic Ehrlichiosis

In 2004, four cases of Human Monocytic Ehrlichiosis (HME) were reported in Florida. Of these, 3 (75%) were acquired in Florida and for the remaining case the location where the disease was acquired is unknown. Of the three cases acquired in Florida, 1 (33.3%) was female and 2 (66.7%) were male. The average age of the individuals was 55.7 years old (range 35-76 years). Two individuals were white non-Hispanic and for one both the race and ethnicity was unknown. One case resided in each of the following regions\* of Florida: central, northern, and panhandle. All of the cases met the case definition for probable HME. One case occurred in each of the following months: January, April, and September.

### Anaplasmosis

In 2004, there were three cases of Anaplasmosis (formerly Human Granulocytic Ehrlichiosis) reported in Florida. All of the cases were acquired in the United States but not in Florida.

\*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.