



## Florida Tick-Borne Disease Surveillance April 19 – June 12, 2012

Tick-borne disease surveillance in Florida includes confirmed and probable cases of *Ehrlichia chaffeensis* or human monocytic ehrlichiosis (HME), *Anaplasma phagocytophilum* or human granulocytic anaplasmosis (HGA), Rocky Mountain spotted fever (RMSF) or other spotted fever rickettsiosis (SFR), and Lyme disease that meet case definitions. The following cases have been reported from April 19<sup>th</sup> to June 12<sup>th</sup>, 2012.

**Florida acquired HME:** Five cases, three with exposure in Alachua County, one in Flagler County, and one in Wakulla County were reported. Case county of residence were Alachua (1), Bay (1), Flagler (1), Leon (1) and Wakulla (1).

**Non-Florida or unknown acquired HME:** One case with exposure in North Carolina was reported. Case county of residence was Sumter.

**Florida acquired HGA:** One case with exposure in Columbia County was reported in a local resident.

**Florida acquired RMSF / SFR:** Two cases, one case with exposure and residence in Alachua County. One case with exposure in Marion County was reported. Case county of residence was Brevard.

**Non-Florida or unknown acquired RMSF / SFR:** One case with exposure in Georgia was reported. Case county of residence was Putnam.

**Florida acquired acute Lyme disease:** Three cases, with exposures in Citrus County, Manatee County, and Pinellas County were reported. Exposure was in county of residence for both cases.

## Year to Date Tick-Borne Disease Summary

**Florida acquired HME:** Eight cases with an onset date in 2012 have been reported. Three cases have exposure in Leon County, 3 in Alachua County, 1 in Flagler County, and 1 in Wakulla County. Cases were reported by Leon (3), Alachua (1), Bay (1), Brevard (1), Flagler (1), and Wakulla (1) counties.

**Non-Florida or unknown acquired HME:** One case with an onset date in 2012 has been reported. Case was reported by Sumter County but was exposed in North Carolina.



**Florida acquired HGA:** One case with an onset date in 2012 has been reported. Exposure and county of residence was Columbia County.

**Non-Florida or unknown acquired HGA:** No cases with an onset date in 2012 have been reported.

**Florida acquired RMSF / SFR:** Three cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (1), Lake (1), and Marion (1) counties. Cases were reported by Alachua (1), Brevard (1), and Sumter (1) counties.

**Non-Florida or unknown acquired RMSF/ SFR:** Two cases with an onset date in 2012 have been reported. Exposure was determined to be in Georgia for one case and was unable to be determined for the other case. Cases were reported by Jackson (1) and Putnam (1) counties.

**Florida acquired acute Lyme disease:** Nine cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (1), Citrus (1), Hillsborough (1), Manatee (1), Pinellas (1), Putnam (1), Seminole (1), St. Lucie (1), and Volusia (1) counties. Florida counties reporting these Lyme disease cases include: Citrus (1), Hillsborough (2), Manatee (1), Pinellas (1), Putnam (1), Seminole (1), St. Lucie (1), and Volusia (1).

**Non-Florida or unknown acquired acute Lyme disease:** Three cases with an onset date in 2012 have been reported. Locations of exposure: Oklahoma (1), Pennsylvania (1), and Puerto Rico (1). Florida counties reporting these cases include: Palm Beach (1), Pasco (1), and St. Lucie (1).

**Year to Date Tick-Borne Diseases by Geographic Location**

<b>2012 Cases of Tick-borne Infections Exposure Location</b>			
<b>Location</b>	<b># of cases</b>	<b>Location</b>	<b># of cases</b>
Florida	21	Pennsylvania	1
Undetermined	1	Puerto Rico	1
Oklahoma	1	North Carolina	1
Georgia	1		

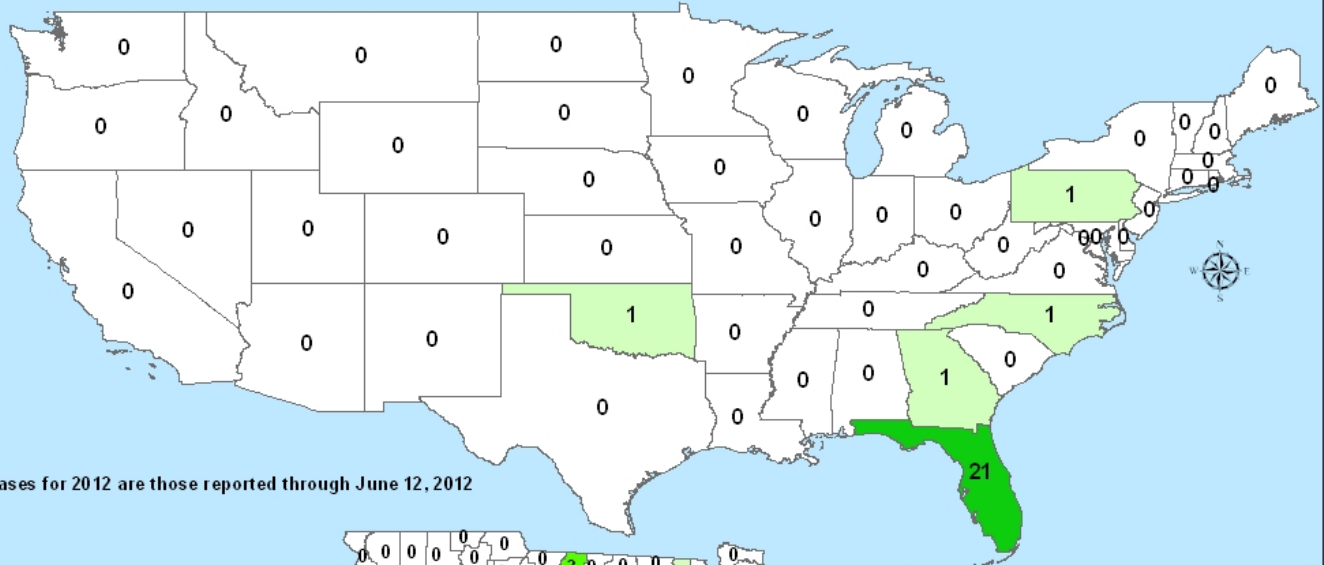


**Year to Date Tick-Borne Disease Cases by County**

<b>Tick-Borne Disease Activity by County of Exposure</b>									
<b>Disease</b>	<b>HME</b>		<b>HGA</b>		<b>RMSF/SFR</b>		<b>Acute LYME</b>		<b>Totals</b>
<b>Origin</b>	FL	Non-FL	FL	Non-FL	FL	Non-FL	FL	Non-FL	All
<b>Alachua</b>	3	0	0	0	1	0	1	0	5
<b>Citrus</b>	0	0	0	0	0	0	1	0	1
<b>Columbia</b>	0	0	1	0	0	0	0	0	1
<b>Flagler</b>	1	0	0	0	0	0	0	0	1
<b>Hillsborough</b>	0	0	0	0	0	0	1	0	1
<b>Jackson</b>	0	0	0	0	0	1 (U)	0	0	1
<b>Lake</b>	0	0	0	0	1	0	0	0	1
<b>Leon</b>	3	0	0	0	0	0	0	0	3
<b>Manatee</b>	0	0	0	0	0	0	1	0	1
<b>Marion</b>	0	0	0	0	1	0	0	0	1
<b>Palm Beach</b>	0	0	0	0	0	0	0	1 (I)	1
<b>Pasco</b>	0	0	0	0	0	0	0	1 (I)	1
<b>Pinellas</b>	0	0	0	0	0	0	1	0	1
<b>Putnam</b>	0	0	0	0	0	1 (I)	1	0	2
<b>Seminole</b>	0	0	0	0	0	0	1	0	1
<b>St. Lucie</b>	0	0	0	0	0	0	1	1 (I)	2
<b>Sumter</b>	0	1 (I)	0	0	0	0	0	0	1
<b>Volusia</b>	0	0	0	0	0	0	1	0	1
<b>Wakulla</b>	1	0	0	0	0	0	0	0	1
<b>Totals</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>27</b>

Legend: FL = Florida acquired, Non-FL=Non-Florida or unknown origin, I=imported, U=Unknown

**Origin of Tick-borne Illness Geographic Exposure for Florida Reported Cases for 2012**

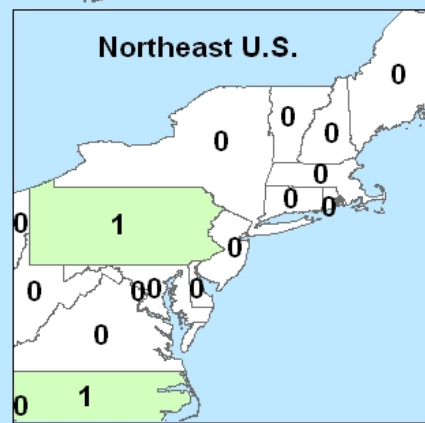
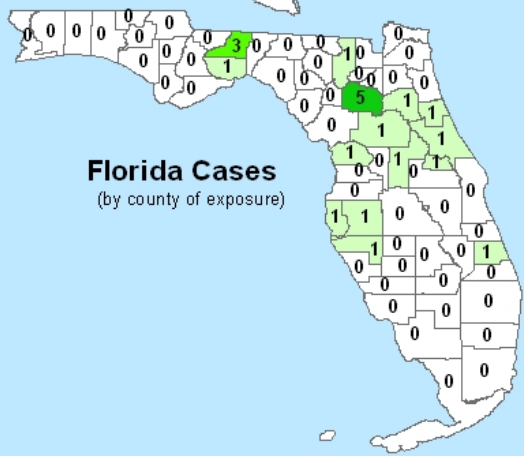


Cases for 2012 are those reported through June 12, 2012

**Legend**

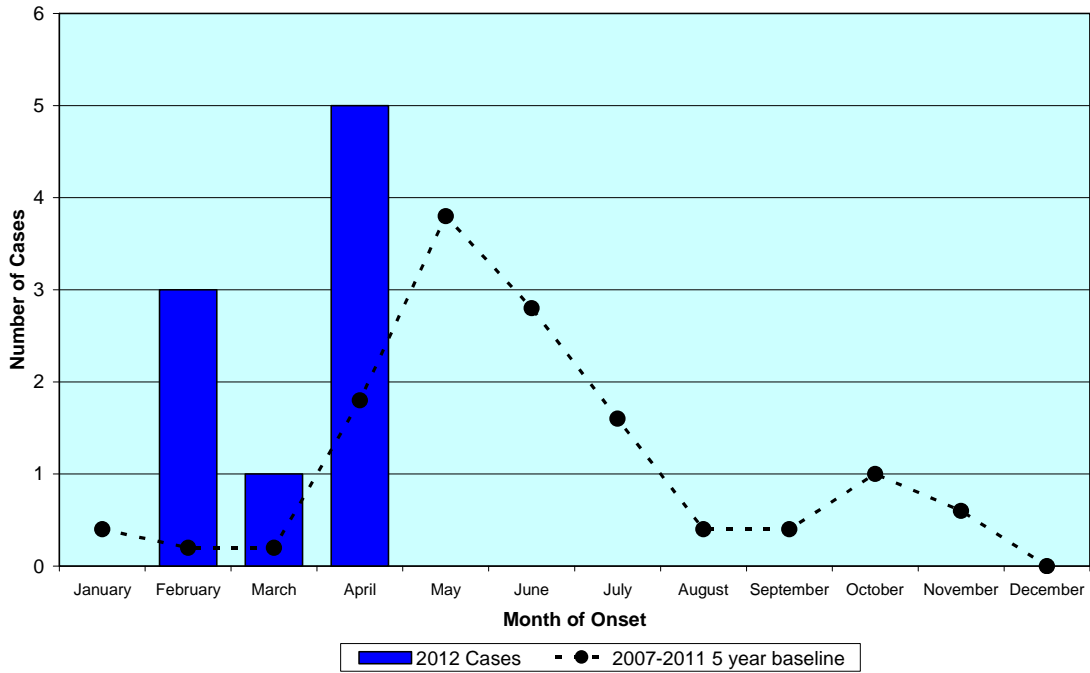
**Number of Cases**

- 0 Cases
- 1 Case
- 2 Cases
- 3 - 4 Cases
- 5 or More Cases

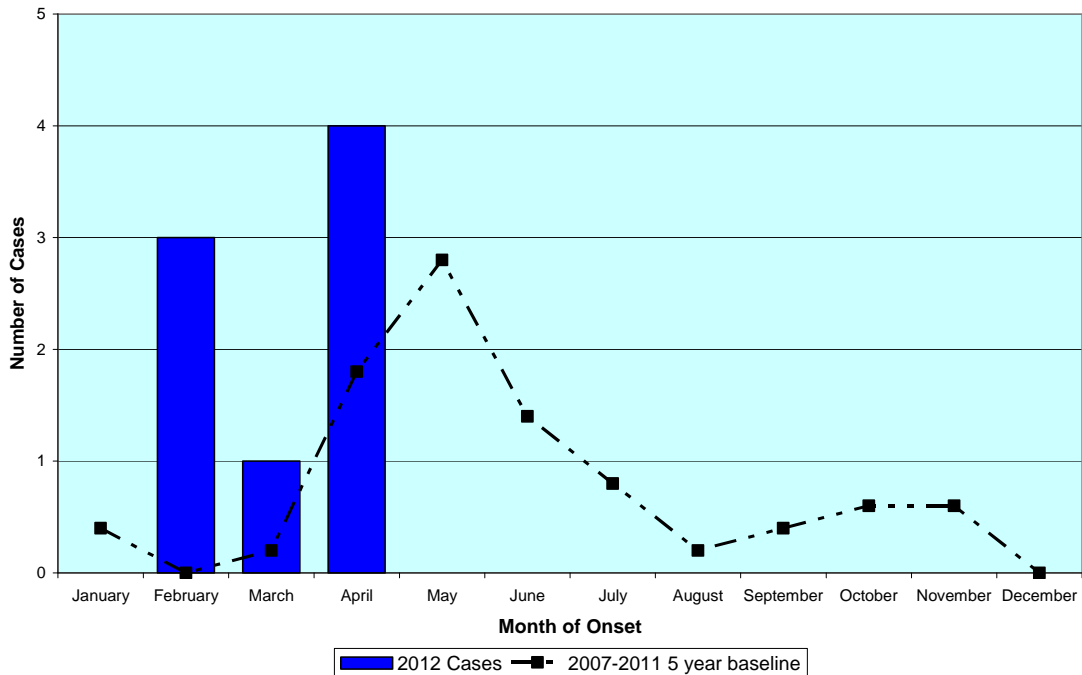


**Monthly Tick-Borne Disease Summary**

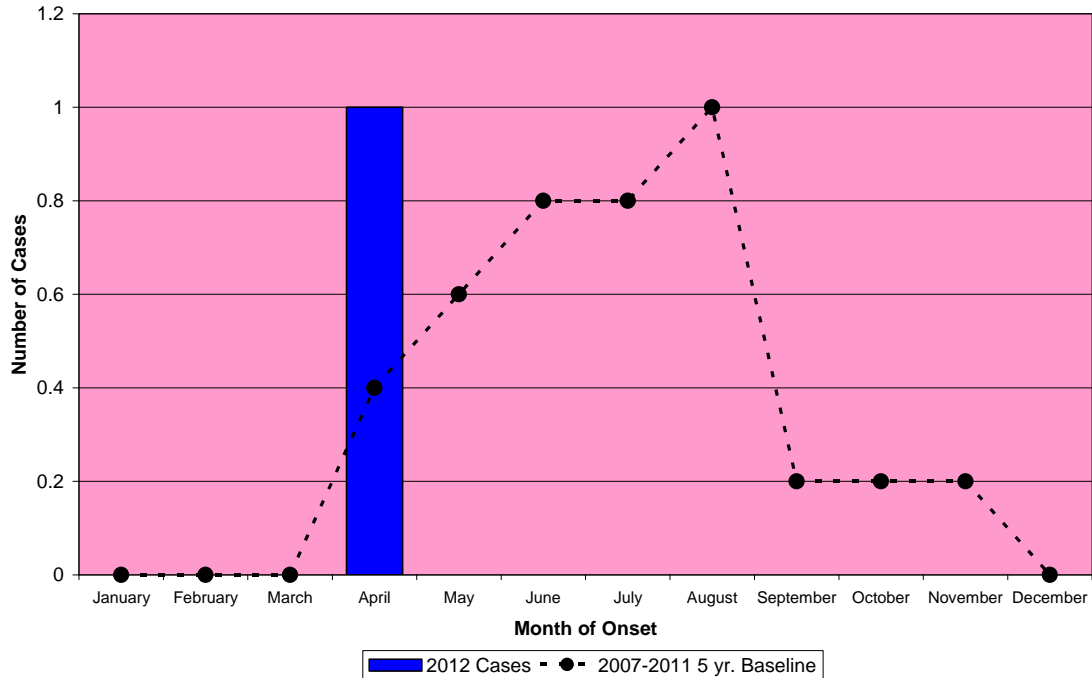
**Total *Ehrlichia chaffeensis* / HME Cases By Month**



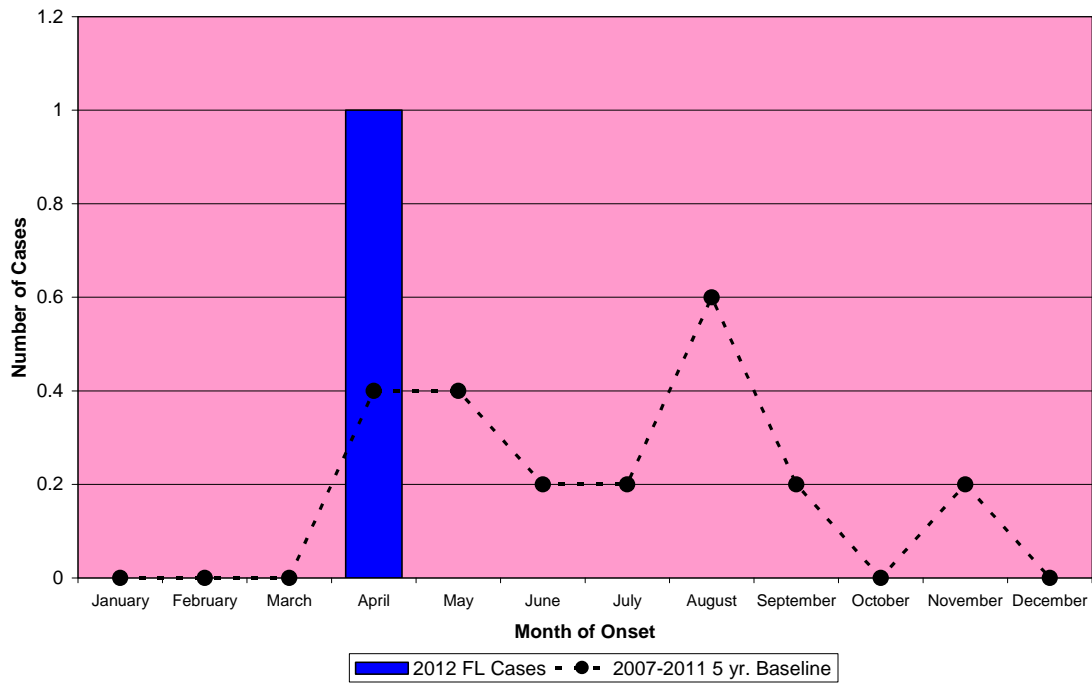
**Florida Acquired Cases of *Ehrlichia chaffeensis* / HME By Month**



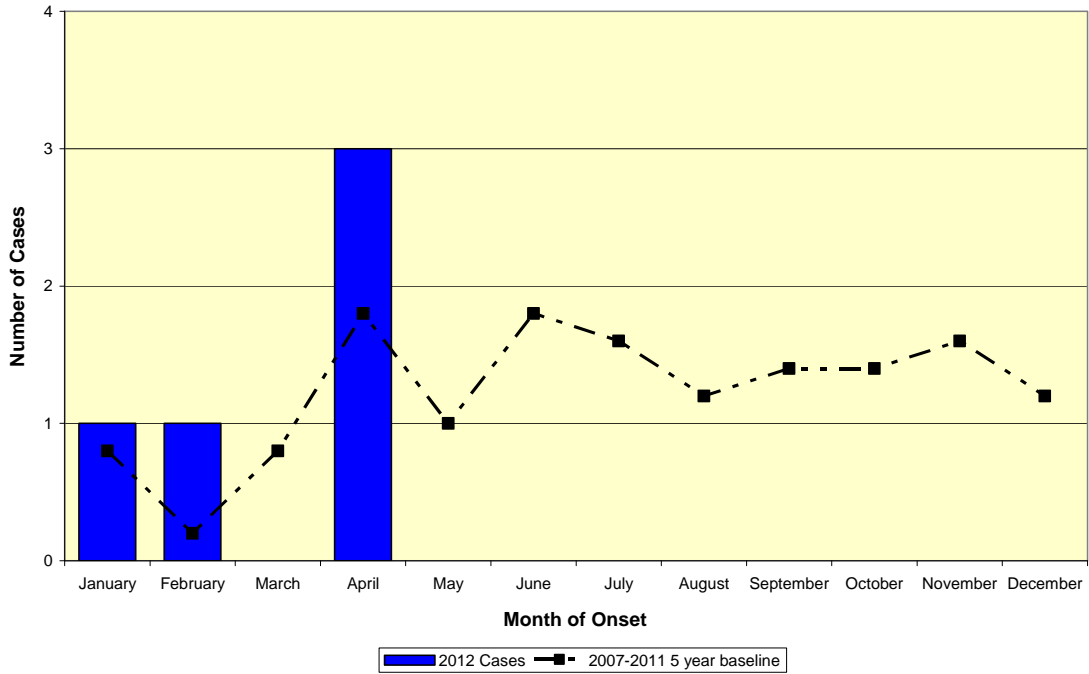
**Total *Anaplasma phagocytophilum* / HGA Cases By Month**



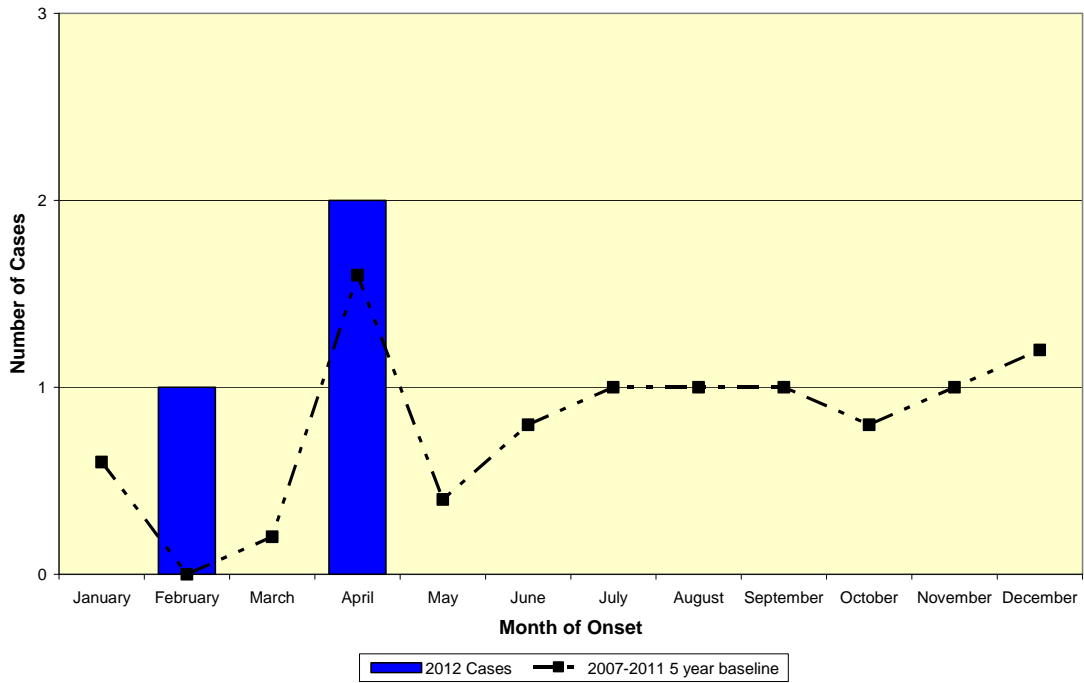
**Florida Acquired *Anaplasma phagocytophilum* / HGA Cases By Month**



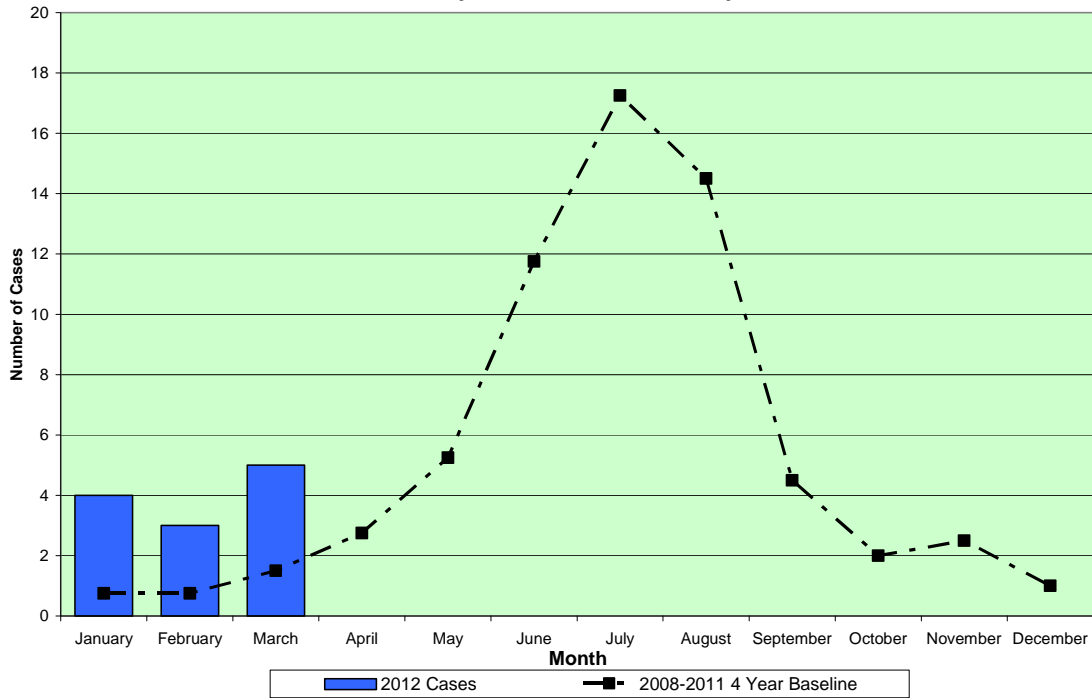
**Total RMSF / SFR Cases By Month**



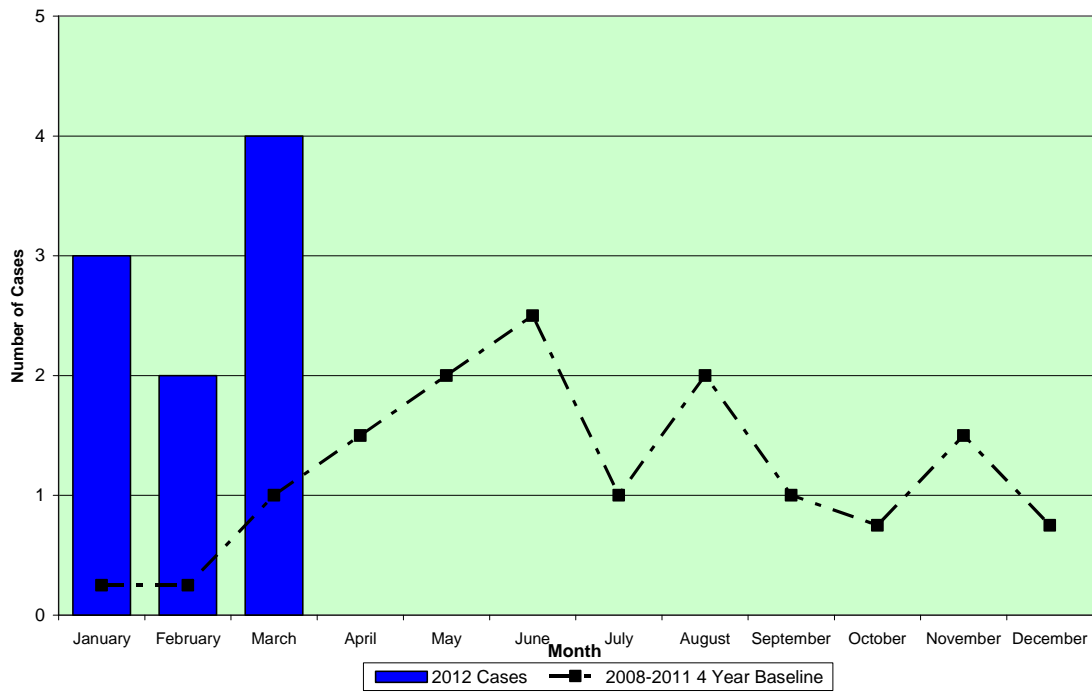
**Florida Acquired Cases of RMSF / SFR By Month**



**Total Acute Lyme Disease Cases By Month**

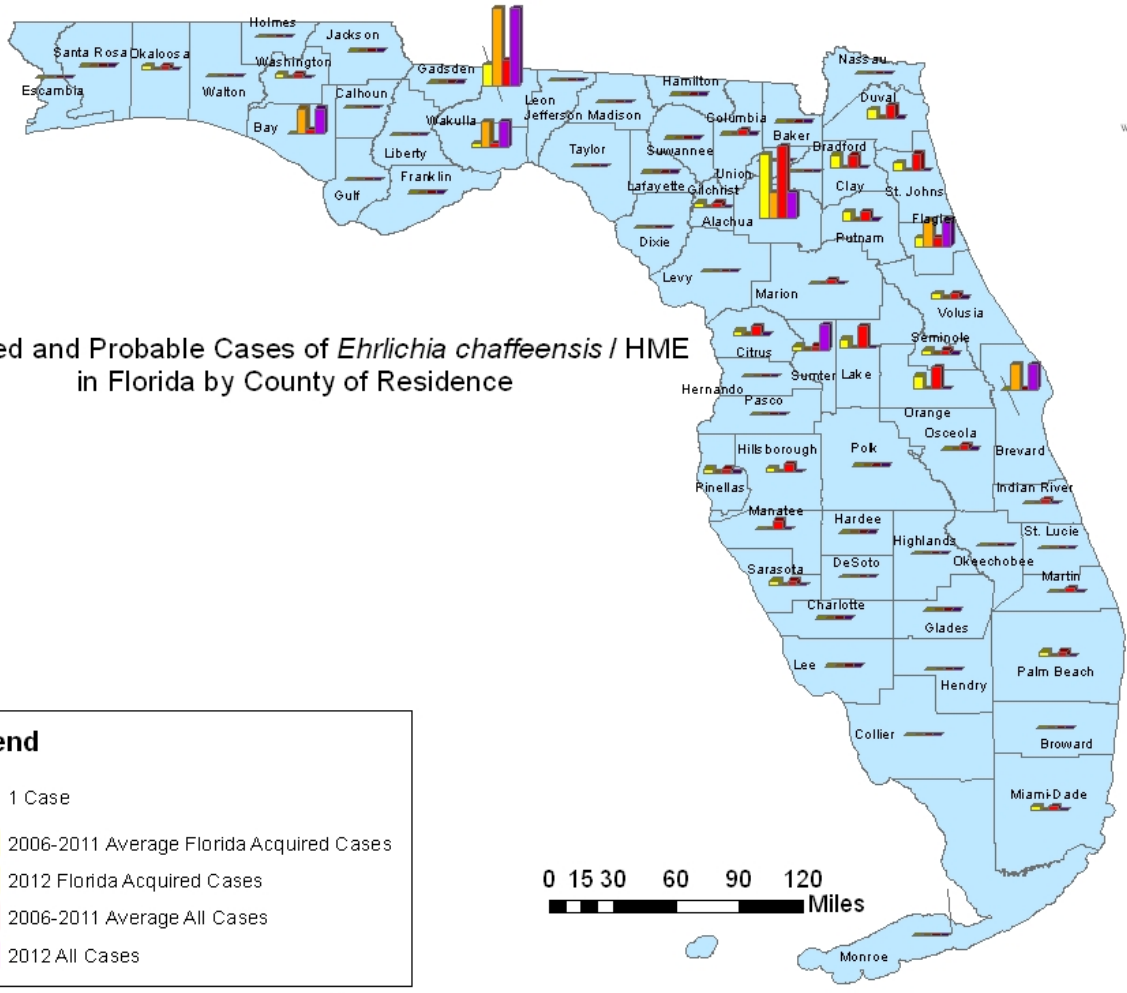


**Florida Acquired Acute Cases of Lyme Disease By Month**





**Maps of Tick-Borne Disease Cases by County**

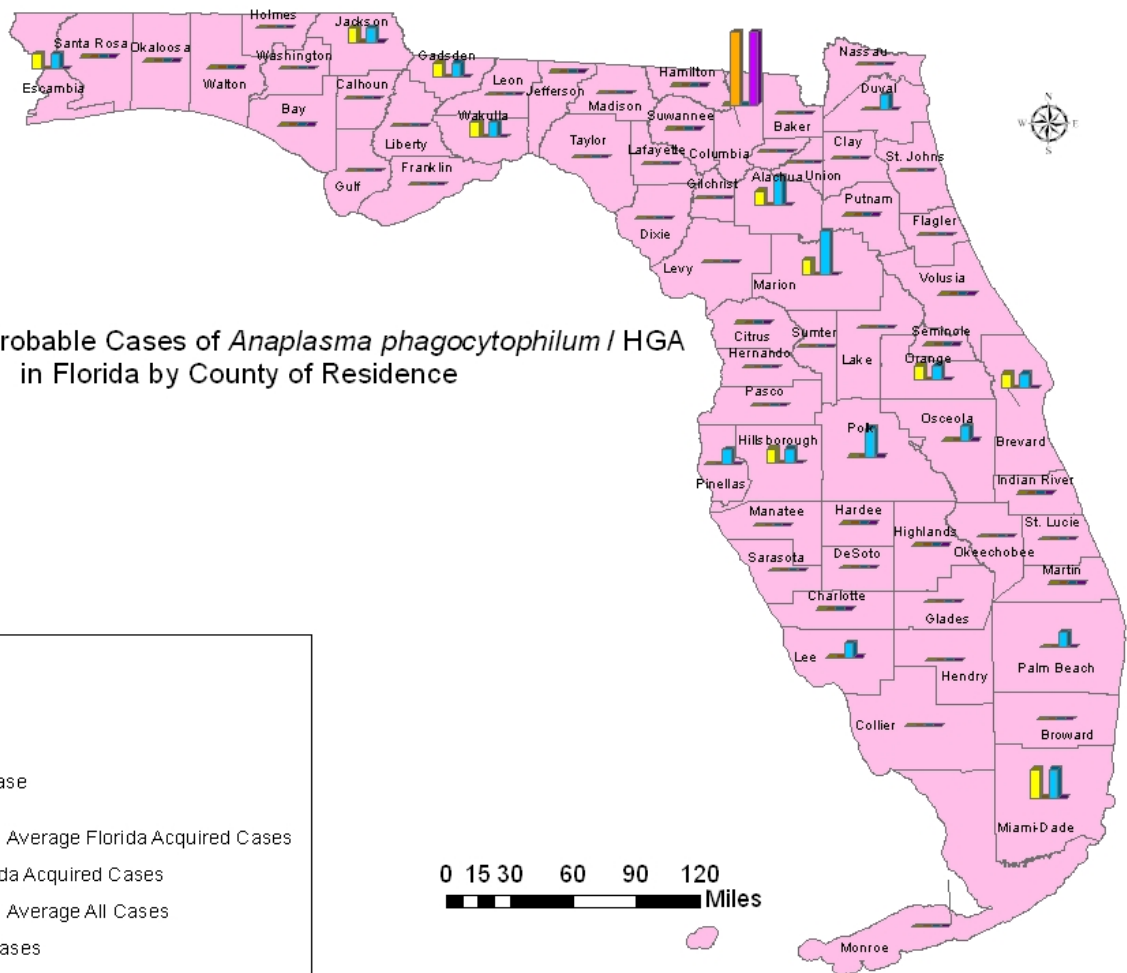


Confirmed and Probable Cases of *Ehrlichia chaffeensis* / HME in Florida by County of Residence

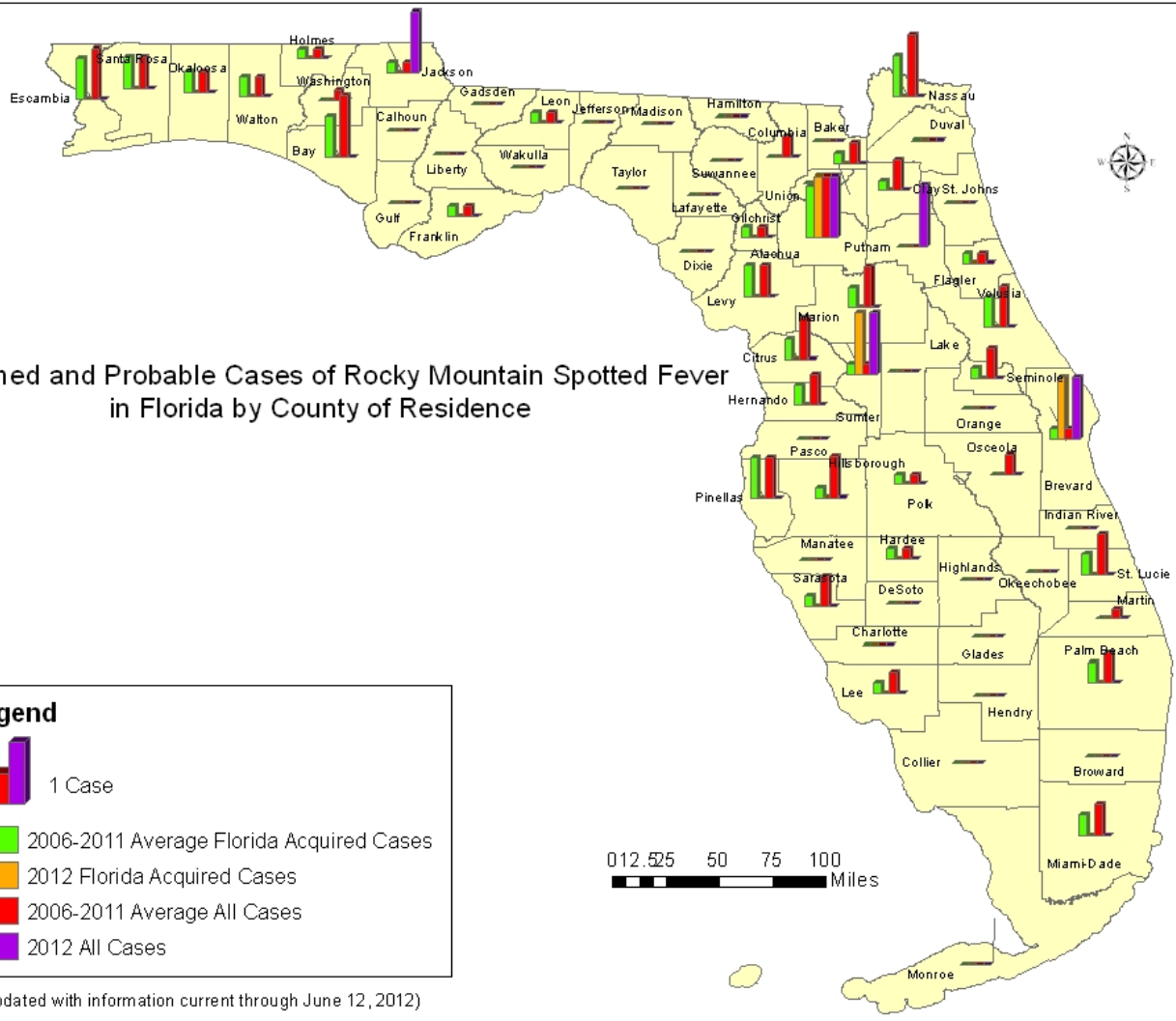
**Legend**

- 1 Case
- 2006-2011 Average Florida Acquired Cases
- 2012 Florida Acquired Cases
- 2006-2011 Average All Cases
- 2012 All Cases

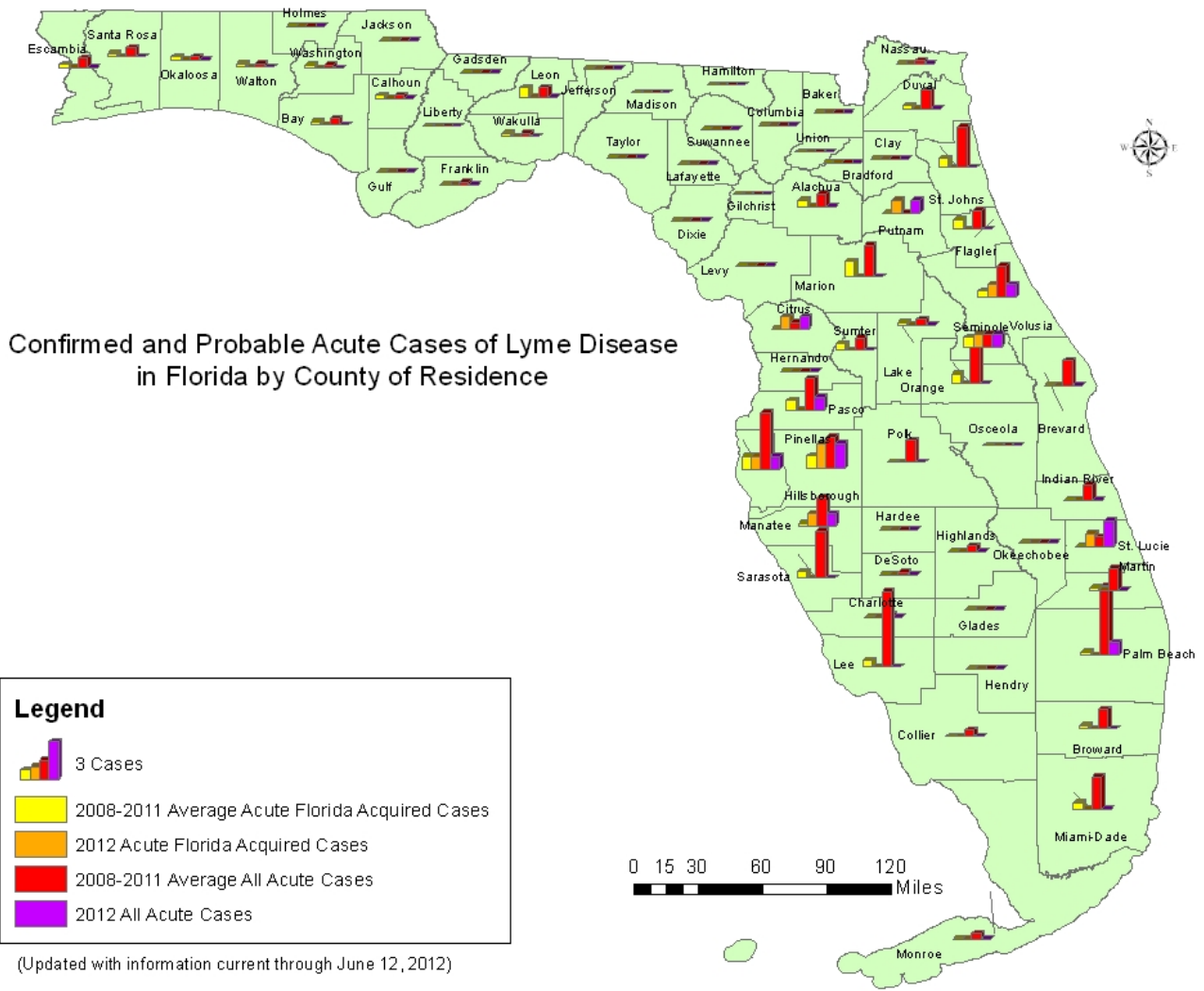
(Updated with information current through June 12, 2012)



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## Acknowledgements and Data Sources

Contributors: James Matthias, MPH, Danielle Stanek, DVM, and Carina Blackmore, DVM, PhD, DOH Bureau of Environmental Public Health Medicine.

**For more surveillance information, please see the DOH website at:**

**[http://www.doh.state.fl.us/Environment/medicine/arboviral/Tick Borne Diseases/Tick Index.htm](http://www.doh.state.fl.us/Environment/medicine/arboviral/Tick_Borne_Diseases/Tick_Index.htm)**

Data is provided by county health departments, Department of Health Bureau of Laboratories-Jacksonville, private health care providers and laboratories. Tallies are organized into those where exposure to the infected tick most likely occurred: in Florida or a total case count which includes cases with exposures in and outside Florida as well as cases that exposure location was not definitively determined. This report is in large part designed to increase awareness of current tick disease transmission so the report focuses on cases acquired in 2011. Acute Lyme cases include patients with symptoms of less than 30 days duration, without late clinical signs such as intermittent arthritis. Reporting is inherently delayed as most testing for tick-borne illness is based on antibody testing which can take 2-4 weeks to form and generally requires an acute and convalescent serum sample to be definitive.