



**Florida Tick-Borne Disease Surveillance  
September 13<sup>th</sup> – October 5<sup>th</sup>, 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 September 13<sup>th</sup> to October 5<sup>th</sup>, 2012.

**Florida acquired HME:** One case with exposure and residence in Levy County was reported.

**Non-Florida or unknown acquired RMSF / SFR:** One case was reported with exposure in North Carolina. Case's county of residence was Clay County.

**Florida acquired acute Lyme disease:** One case with exposure and residence in Leon County was reported.

**Non-Florida or unknown acquired acute Lyme disease:** Six cases, with exposures in Maine (3), Massachusetts (1), New York (1), and Rhode Island (1) were reported. Case's county of residence included Brevard (1), Collier (2), Hillsborough (1), Lee (1), and St. Lucie (1).

**Year to Date Tick-Borne Disease Summary**

**Florida acquired HME:** Thirteen cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (4), Flagler (1), Lafayette (1), Leon (3), Levy (1), St. Johns (2), and Wakulla (1). Cases were reported by Alachua (2), Bay (1), Brevard (1), Flagler (2), Lafayette (1), Leon (3), Levy (1), St. Johns (1), and Wakulla (1) counties.

**Non-Florida or unknown acquired HME:** Three cases with an onset date in 2012 have been reported. Exposures were determined to be Arkansas (1), North Carolina (1), and Tennessee (1). Cases were reported by Lee, Sumter, and Duval counties respectively.

**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:** Two cases with an onset date in 2012 have been reported. Cases were exposed in Minnesota (1) and Virginia (1). Cases were reported by Sarasota (1) and Pasco (1) County respectively.



**Florida acquired RMSF / SFR:** Nine cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (2), Citrus (1), Jackson (1), Lake (1), Leon (1) Marion (1), and Sumter (2) counties. Cases were reported by Alachua (2), Brevard (1), Citrus (1), Jackson (1), Orange (1), and Sumter (3) counties.

**Non-Florida or unknown acquired RMSF/ SFR:** Seven cases with an onset date in 2012 have been reported. Locations of exposure: Arkansas (1), Georgia (1), North Carolina (2), Tennessee (1) and unable to be determined (2). Cases were reported by Clay (1), Hillsborough (1), Jackson (1), Miami-Dade (1) Polk (1), Putnam (1), and Sumter (1) counties.

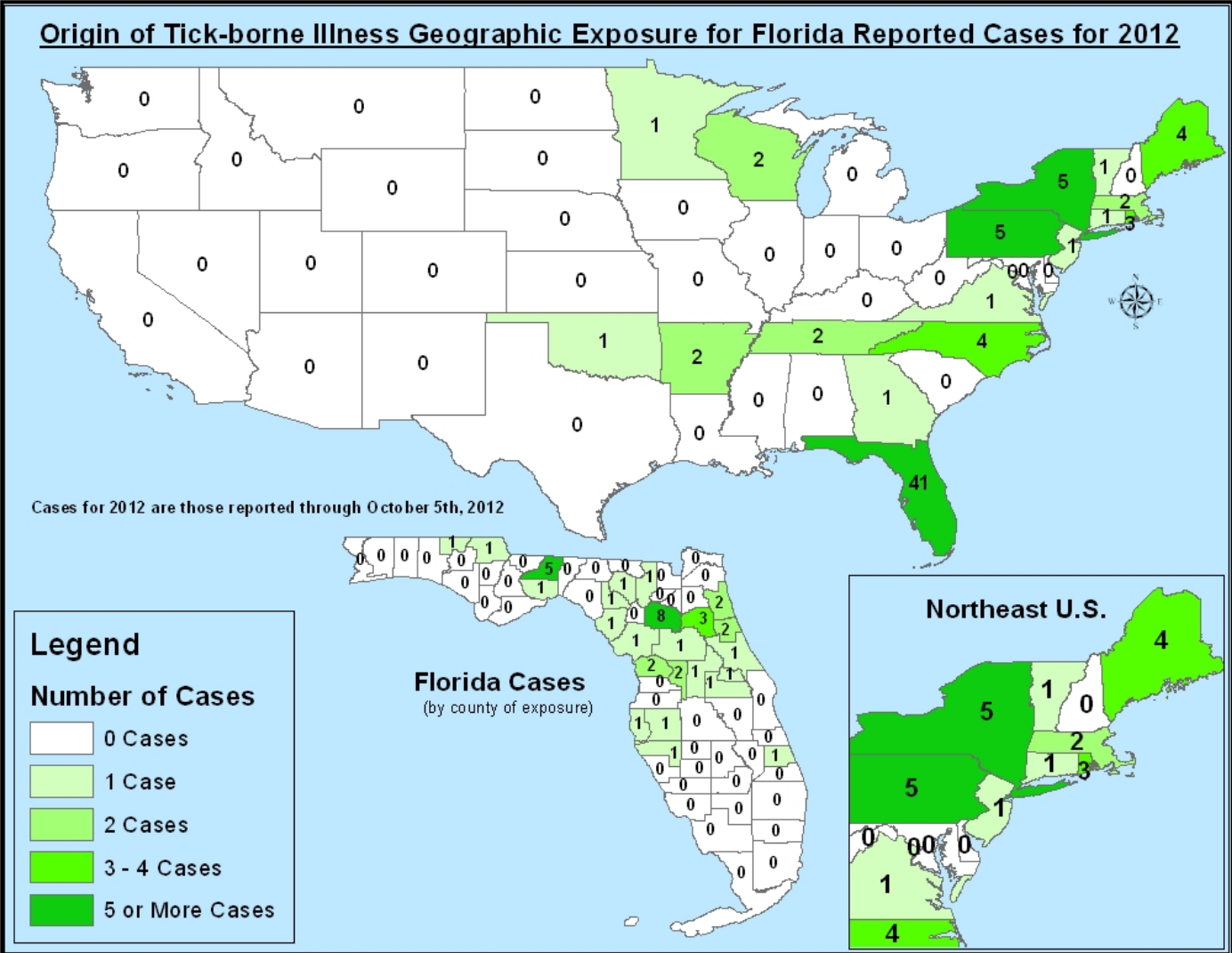
**Florida acquired acute Lyme disease:** Eighteen cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (2), Citrus (1), Dixie (1), Flagler (1), Hillsborough (1), Holmes (1), Leon (1), Manatee (1), Orange (1), Pinellas (1), Putnam (3), Seminole (1), St. Lucie (1), Suwannee (1), and Volusia (1) counties. Cases were reported by Citrus (1), Flagler (1), Hillsborough (2), Holmes (1), Leon (1), Manatee (1), Marion (1), Miami-Dade (1), Pinellas (2), Putnam (3), Seminole (1), St. Lucie (2), and Volusia (1).

**Non-Florida or unknown acquired acute Lyme disease:** Twenty-eight cases with an onset date in 2012 have been reported. Locations of exposure: Connecticut (1), Maine (4), Massachusetts (2), New Jersey (1), New York (5), Northeast US (1), North Carolina (1), Oklahoma (1), Pennsylvania (5), Puerto Rico (1), Rhode Island (3), Vermont (1), and Wisconsin (2). Florida counties reporting these cases include: Alachua (1), Brevard (2), Broward (1), Collier (3), Flagler (1), Hillsborough (4), Lee (2), Martin (1), Palm Beach (2), Pasco (1), Pinellas (1), Polk (2), Sarasota (1), St. Lucie (4), and Volusia (2).



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

2012 Cases of Tick-borne Infections Exposure Location			
Location	# of cases	Location	# of cases
Florida	41	Connecticut	
New York	5	Georgia	1
Pennsylvania	5	Minnesota	1
Maine	4	New Jersey	1
North Carolina	4	Northeast US	1
Rhode Island	3	Oklahoma	1
Arkansas	2	Puerto Rico	1
Massachusetts	2	Vermont	1
Tennessee	2	Virginia	1
Wisconsin	2	Undetermined	2





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

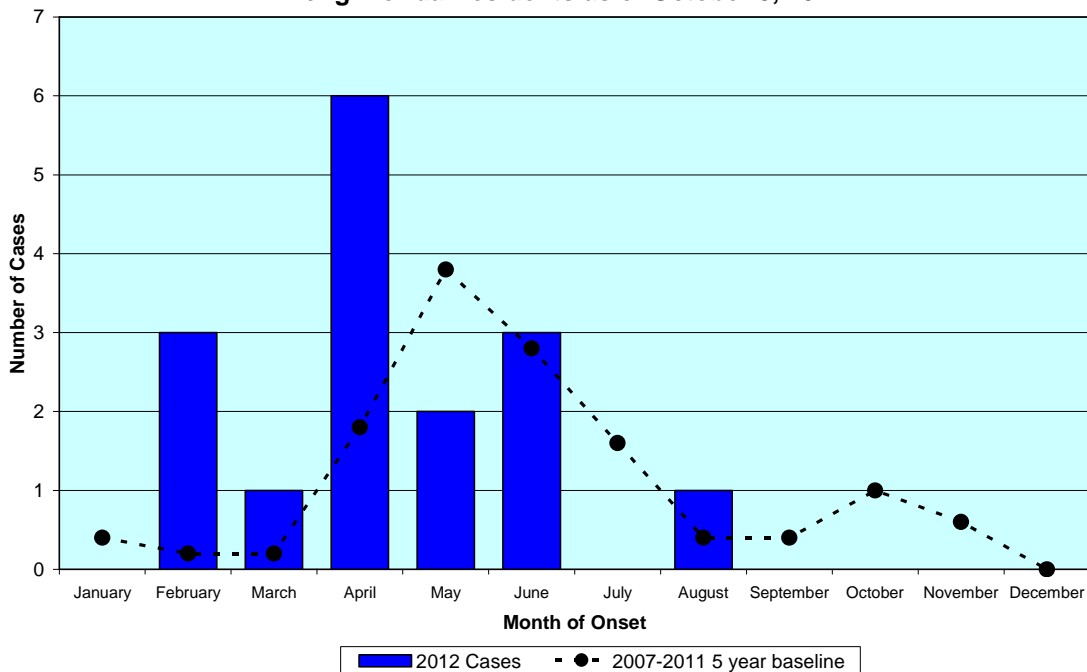
<b>Tick-Borne Disease Activity by County of Exposure</b>									
<b>Disease</b>	<b>HME</b>		<b>HGA</b>		<b>RMSF/SFR</b>		<b>Acute LYME</b>		<b>Totals</b>
	<b>FL</b>	<b>Non-FL</b>	<b>FL</b>	<b>Non-FL</b>	<b>FL</b>	<b>Non-FL</b>	<b>FL</b>	<b>Non-FL</b>	
<b>Origin</b>	FL	Non-FL	FL	Non-FL	FL	Non-FL	FL	Non-FL	All
<b>Alachua</b>	4	0	0	0	2	0	2	1 (I)	9
<b>Brevard</b>	0	0	0	0	0	0	0	2 (I)	2
<b>Broward</b>	0	0	0	0	0	0	0	1 (I)	1
<b>Citrus</b>	0	0	0	0	1	0	1	0	2
<b>Clay</b>	0	0	0	0	0	1 (I)	0	0	1
<b>Collier</b>	0	0	0	0	0	0	0	3 (I)	3
<b>Columbia</b>	0	0	1	0	0	0	0	0	1
<b>Dixie</b>	0	0	0	0	0	0	1	0	1
<b>Duval</b>	0	1 (I)	0	0	0	0	0	0	1
<b>Flagler</b>	1	0	0	0	0	0	1	1 (I)	3
<b>Hillsborough</b>	0	0	0	0	0	1 (I)	1	4 (I)	6
<b>Holmes</b>	0	0	0	0	0	0	1	0	1
<b>Jackson</b>	0	0	0	0	1	1 (U)	0	0	2
<b>Lafayette</b>	1	0	0	0	0	0	0	0	1
<b>Lake</b>	0	0	0	0	1	0	0	0	1
<b>Lee</b>	0	1 (I)	0	0	0	0	0	2 (I)	3
<b>Leon</b>	3	0	0	0	1	0	1	0	5
<b>Levy</b>	1	0	0	0	0	0	0	0	1
<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>Martin</b>	0	0	0	0	0	0	0	1 (I)	1
<b>Miami-Dade</b>	0	0	0	0	0	1 (I)	0	0	1
<b>Orange</b>	0	0	0	0	0	0	1	0	1
<b>Palm Beach</b>	0	0	0	0	0	0	0	2 (I)	2
<b>Pasco</b>	0	0	0	1 (I)	0	0	0	1 (I)	2
<b>Pinellas</b>	0	0	0	0	0	0	1	1 (I)	2
<b>Polk</b>	0	0	0	0	0	1 (I)	0	2 (I)	3
<b>Putnam</b>	0	0	0	0	0	1 (I)	3	0	4
<b>Sarasota</b>	0	0	0	1 (I)	0	0	0	1 (I)	2
<b>Seminole</b>	0	0	0	0	0	0	1	0	1
<b>St. Johns</b>	2	0	0	0	0	0	0	0	2
<b>St. Lucie</b>	0	0	0	0	0	0	1	4 (I)	5
<b>Sumter</b>	0	1 (I)	0	0	2	1 (U)	0	0	4
<b>Suwannee</b>	0	0	0	0	0	0	1	0	1
<b>Volusia</b>	0	0	0	0	0	0	1	2 (I)	3
<b>Wakulla</b>	1	0	0	0	0	0	0	0	1
<b>Totals</b>	<b>13</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>9</b>	<b>7</b>	<b>18</b>	<b>28</b>	<b>80</b>

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

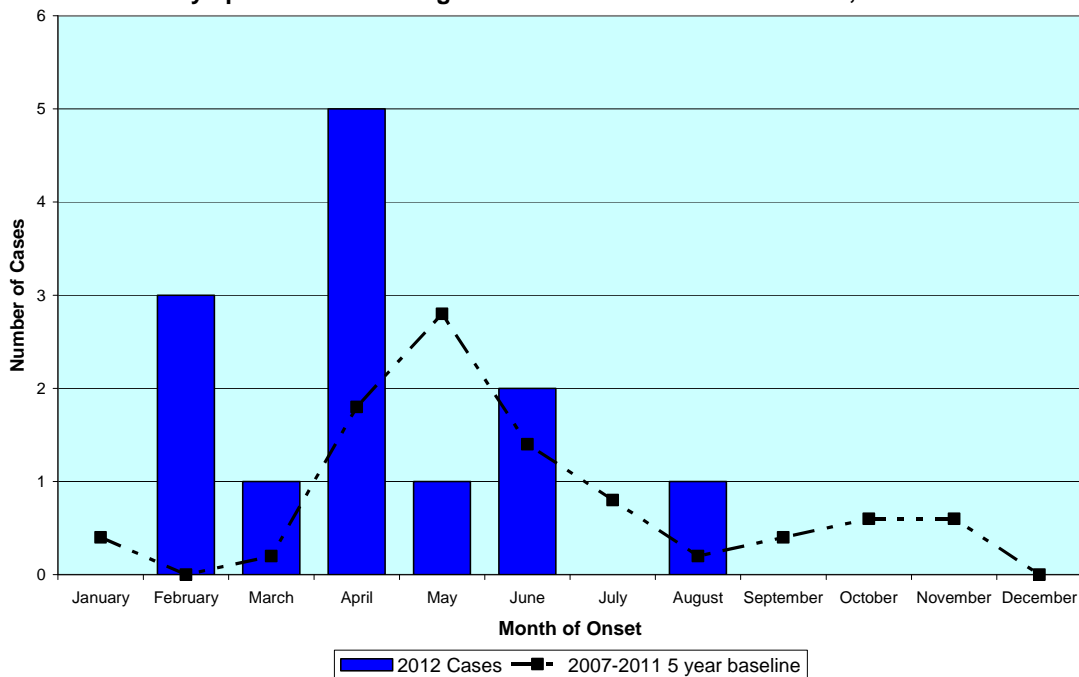


**Monthly Tick-Borne Disease Summary**

**All Human Monocytic Ehrlichiosis Cases By Month of Symptom Onset Among Florida Residents as of October 5, 2012**

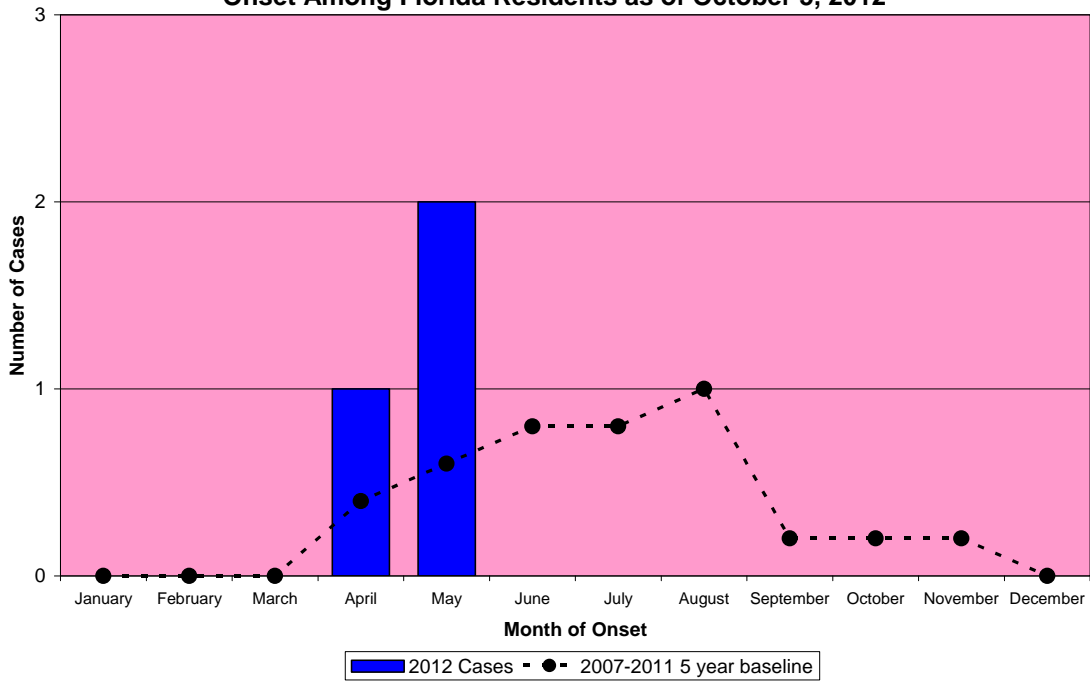


**Florida-Acquired Cases of Human Monocytic Ehrlichiosis By Month of Symptom Onset Among Florida Residents as of October 5, 2012**

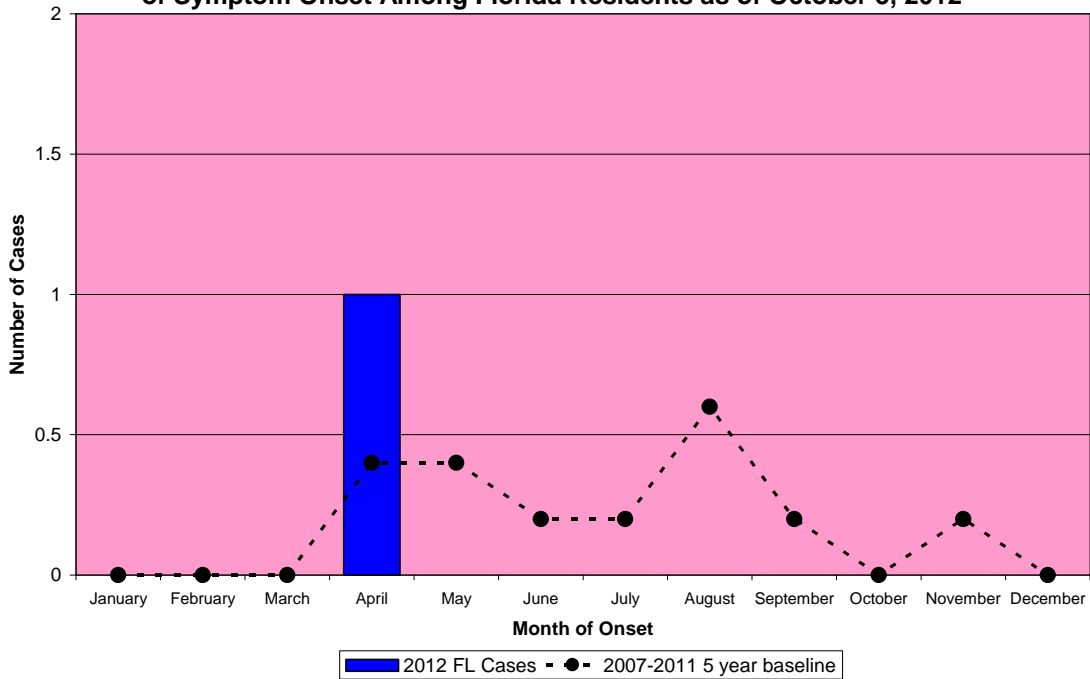




**All Human Granulocytic Anaplasmosis Cases By Month of Symptom Onset Among Florida Residents as of October 5, 2012**

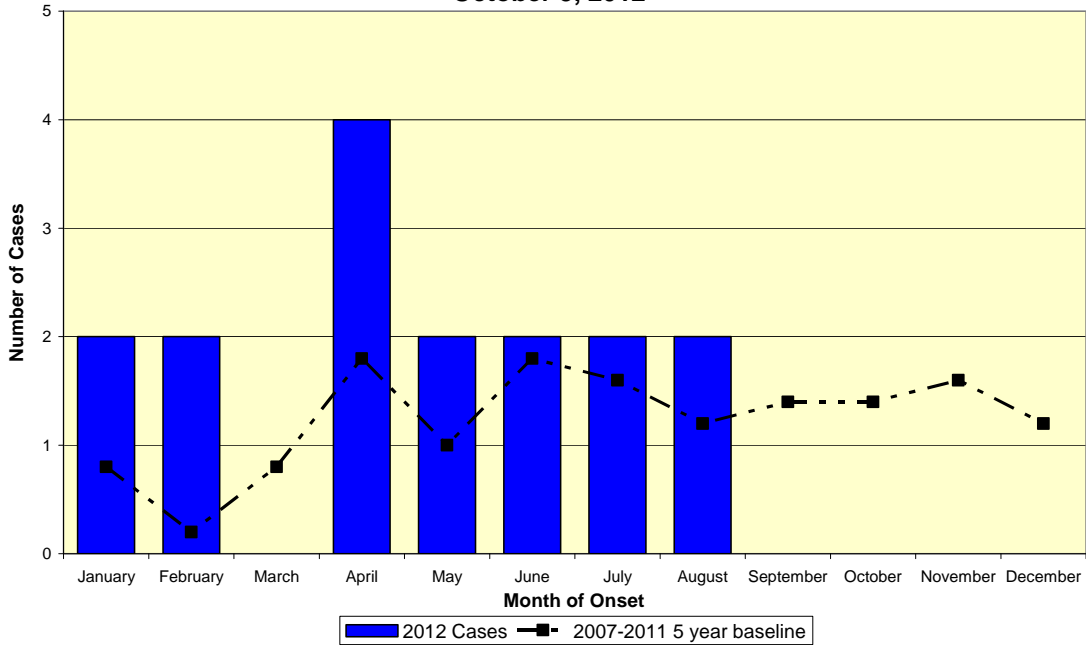


**Florida-Acquired Human Granulocytic Anaplasmosis Cases By Month of Symptom Onset Among Florida Residents as of October 5, 2012**

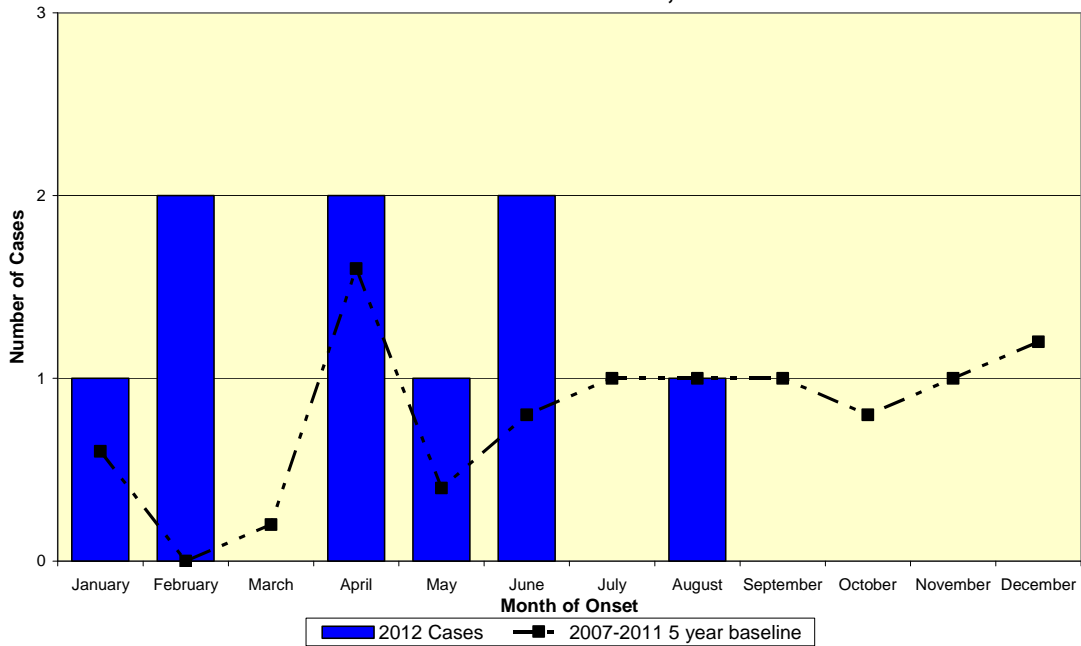




**All Rocky Mountain Spotted Fever / Spotted Fever Rickettsiosis Cases  
By Month of Symptom Onset Among Florida Residents as of  
October 5, 2012**

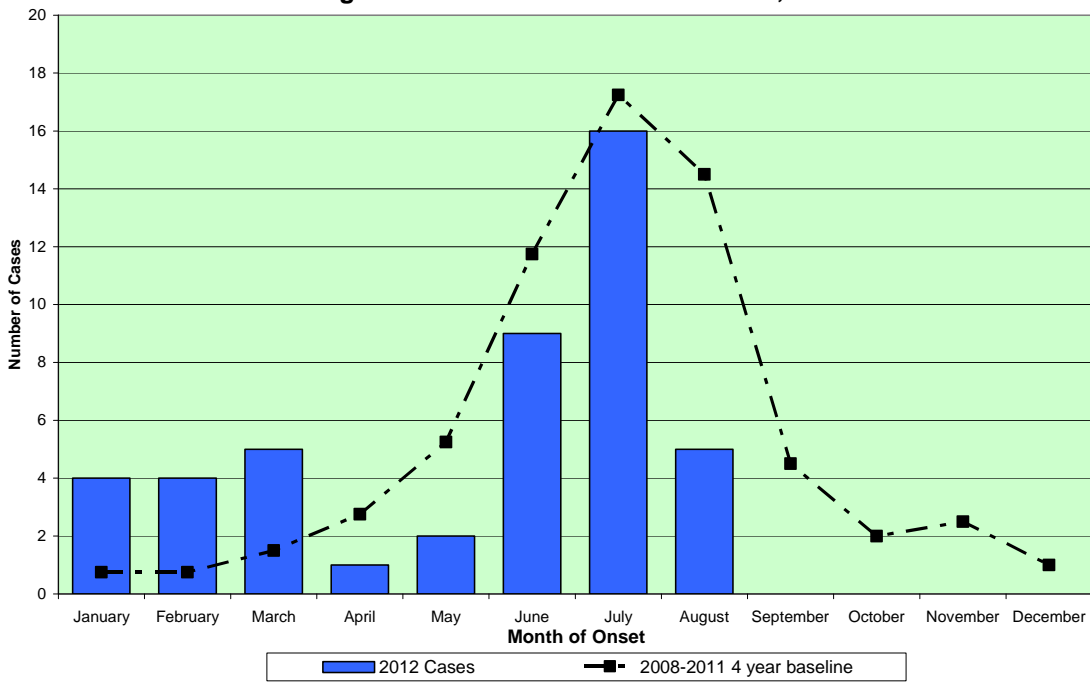


**Florida-Acquired Rocky Mountain Spotted Fever / Spotted Fever  
Rickettsiosis Cases By Month of Symptom Onset Among Florida  
Residents as of October 5, 2012**

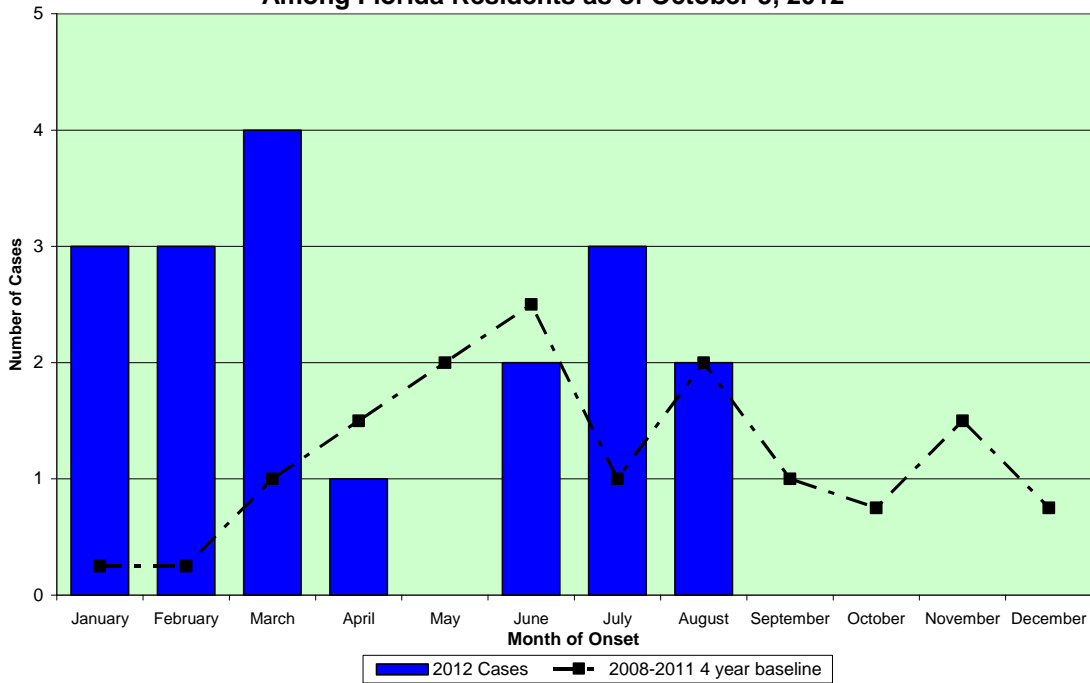




**All Acute Lyme Disease Cases By Month of Symptom Onset  
Among Florida Residents as of October 5, 2012**

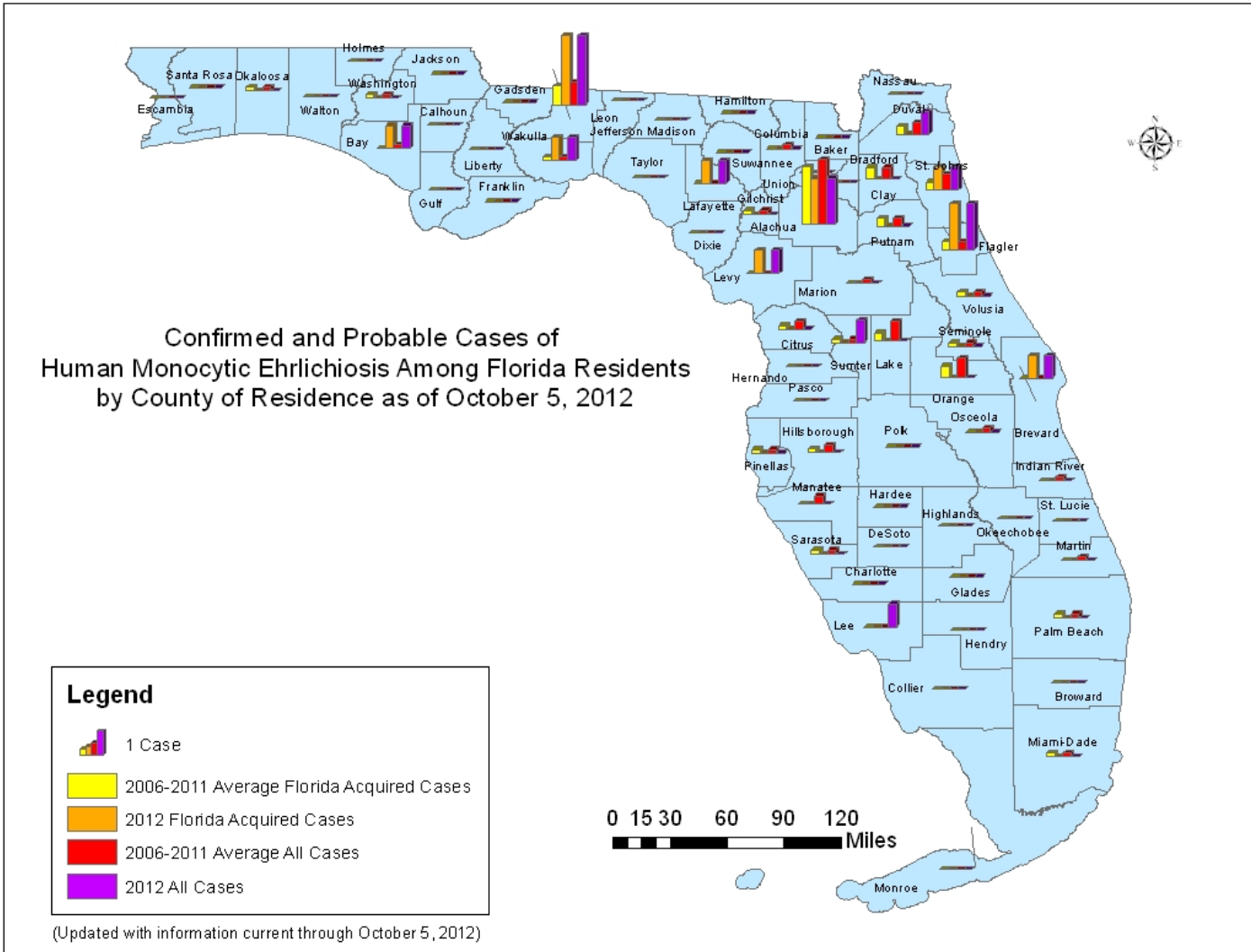


**Florida-Acquired Lyme Disease Cases By Month of Symptom Onset  
Among Florida Residents as of October 5, 2012**



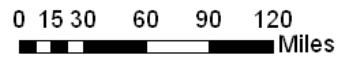
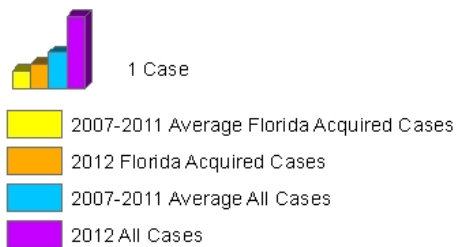


**Maps of Tick-Borne Disease Cases by County**

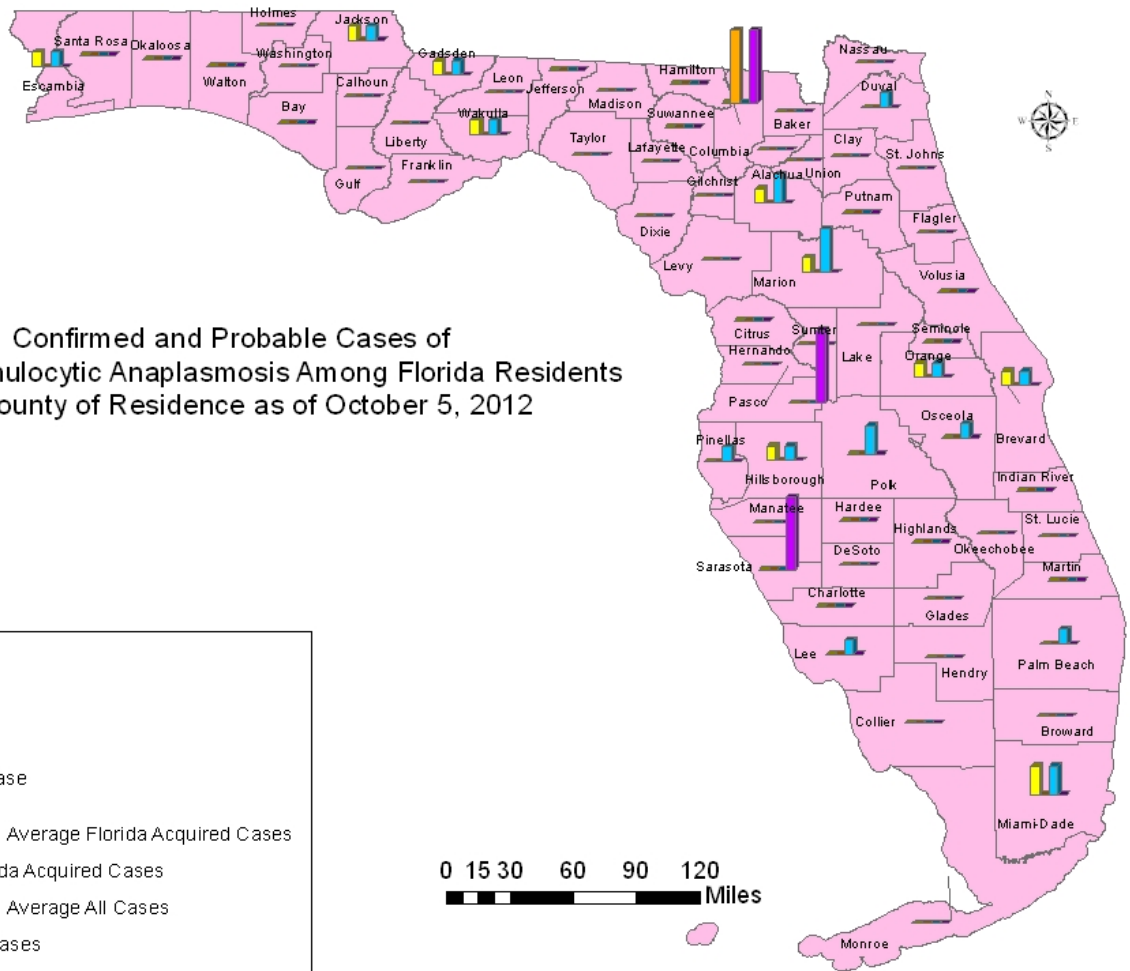


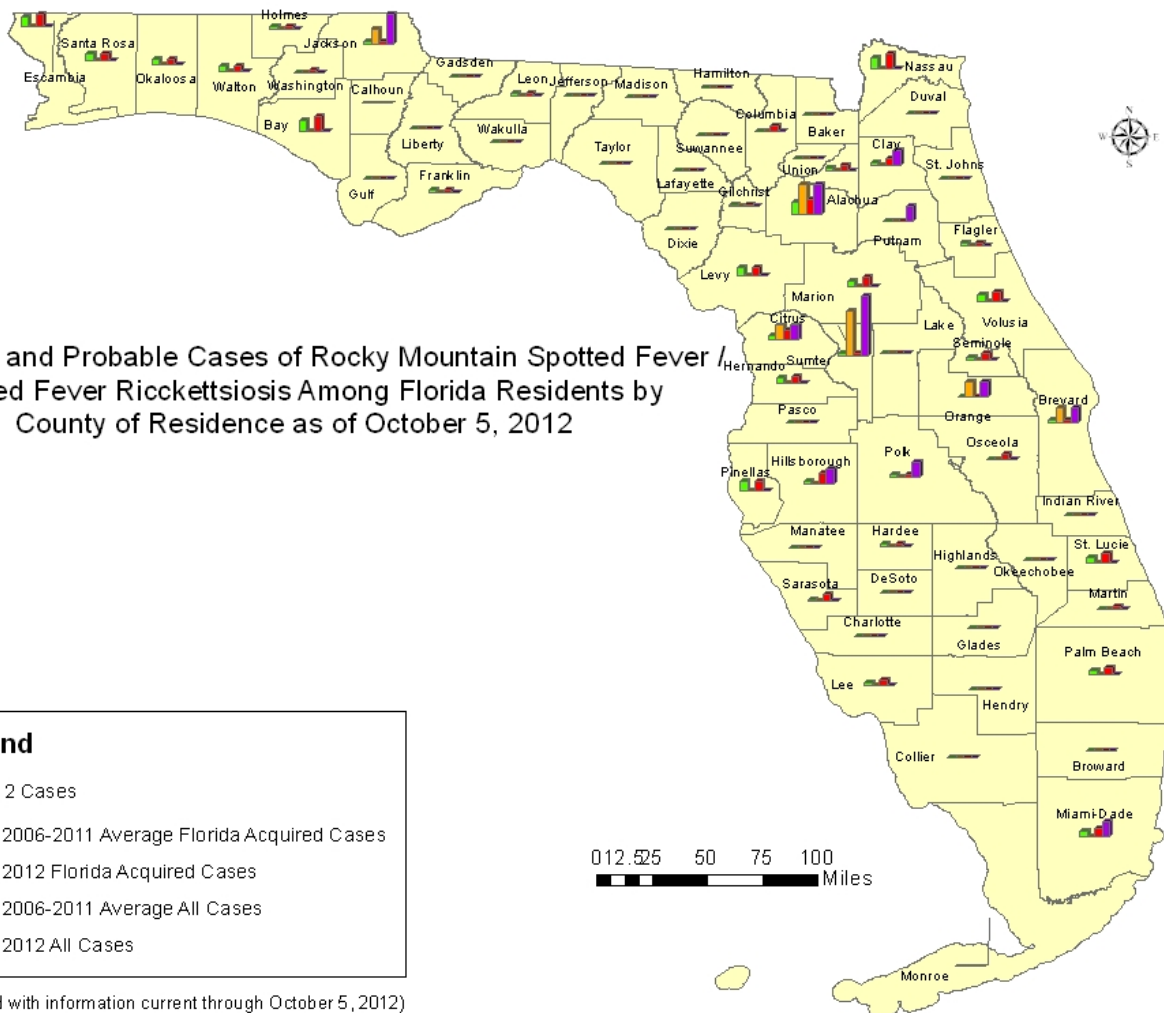
Confirmed and Probable Cases of  
Human Granulocytic Anaplasmosis Among Florida Residents  
by County of Residence as of October 5, 2012

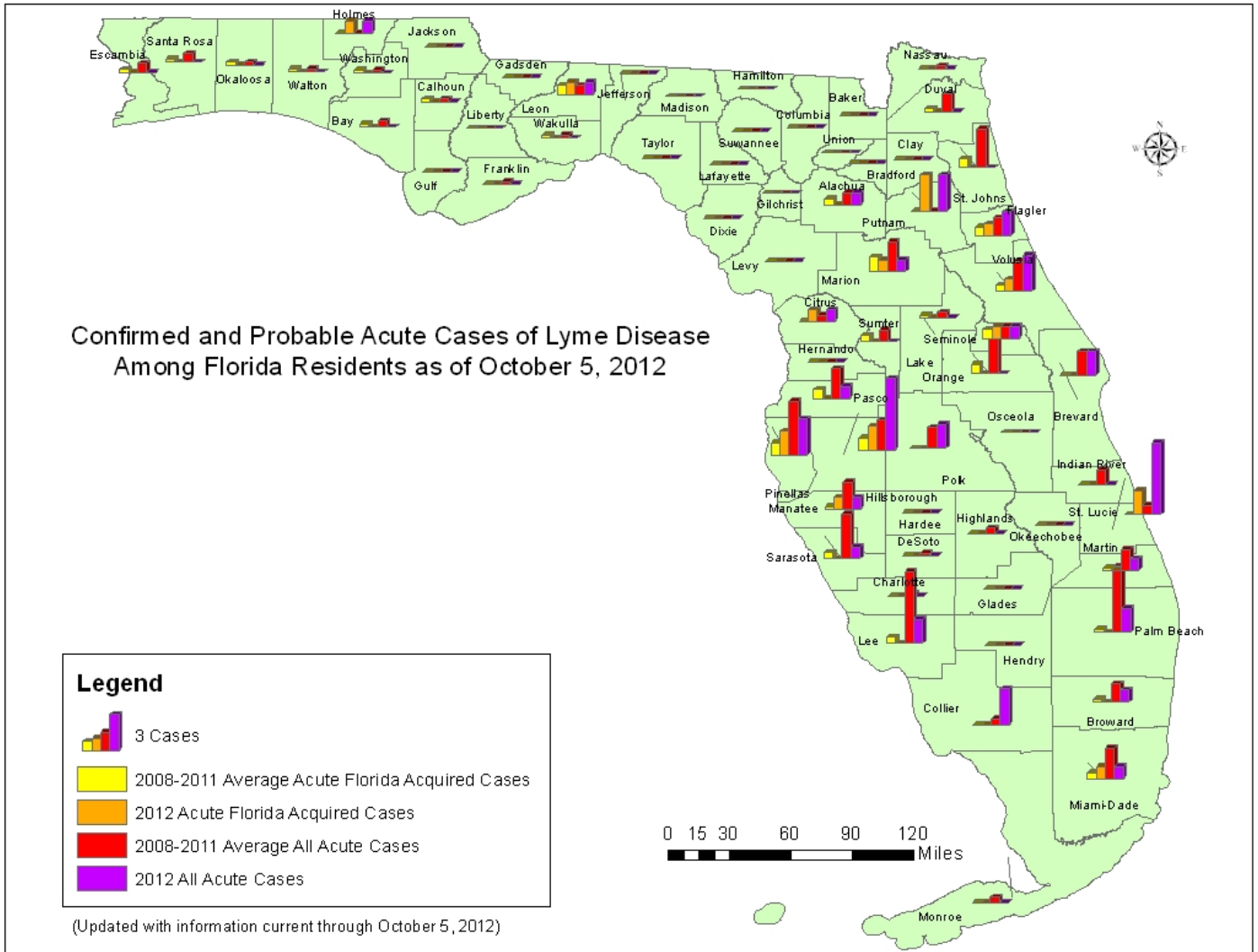
**Legend**



(Updated with information current through October 5, 2012)









## Acknowledgements and Data Sources

Contributors: James Matthias, MPH, Danielle Stanek, DVM, and Carina Blackmore, DVM, PhD, Florida Department of Health.

**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 are provided by county health departments, Florida Department of Health, Bureau of Public Health 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 for cases where 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 disease cases include patients with symptoms of less than 30 days duration at the time of diagnosis, without late clinical signs such as intermittent arthritis. Reporting is inherently delayed as most testing for tick-borne illness is based on antibodies which can take 2-4 weeks to form and generally requires an acute and convalescent serum sample to be definitive.