



**Florida Tick-Borne Disease Surveillance
October 6th – November 30th, 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 October 6th to November 30th, 2012.

Florida acquired HME: Two cases, with exposures in Taylor and Seminole counties. Counties of residence were Taylor and Seminole counties.

Non-Florida or unknown acquired HGA: Two cases, with exposures in Maine and Wisconsin. Counties of residence were Sarasota and Pinellas.

Florida acquired RMSF / SFR: Three cases, with exposures in Duval, Escambia, and Wakulla counties. Counties of residence were Duval, Escambia, and Wakulla counties.

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

Non-Florida or unknown acquired acute Lyme disease: Five cases, with exposures in Maine (3), Connecticut (1), and New York (1) were reported. Case's county of residence included Citrus (1), Palm Beach (1), Sarasota (1), Seminole (1), and Volusia (1).

Year to Date Tick-Borne Disease Summary

Florida acquired HME: Fifteen cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (4), Flagler (1), Lafayette (1), Leon (3), Levy (1), Seminole (1), St. Johns (2), Taylor (1), and Wakulla (1). Cases were reported by Alachua (2), Bay (1), Brevard (1), Flagler (2), Lafayette (1), Leon (3), Levy (1), Seminole (1), St. Johns (1), Taylor (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: Four cases with an onset date in 2012 have been reported. Cases were exposed in Maine (1), Minnesota (1), Virginia (1), and Wisconsin (1). Cases were reported by Sarasota (2), Pasco (1), and Pinellas (1) counties.

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

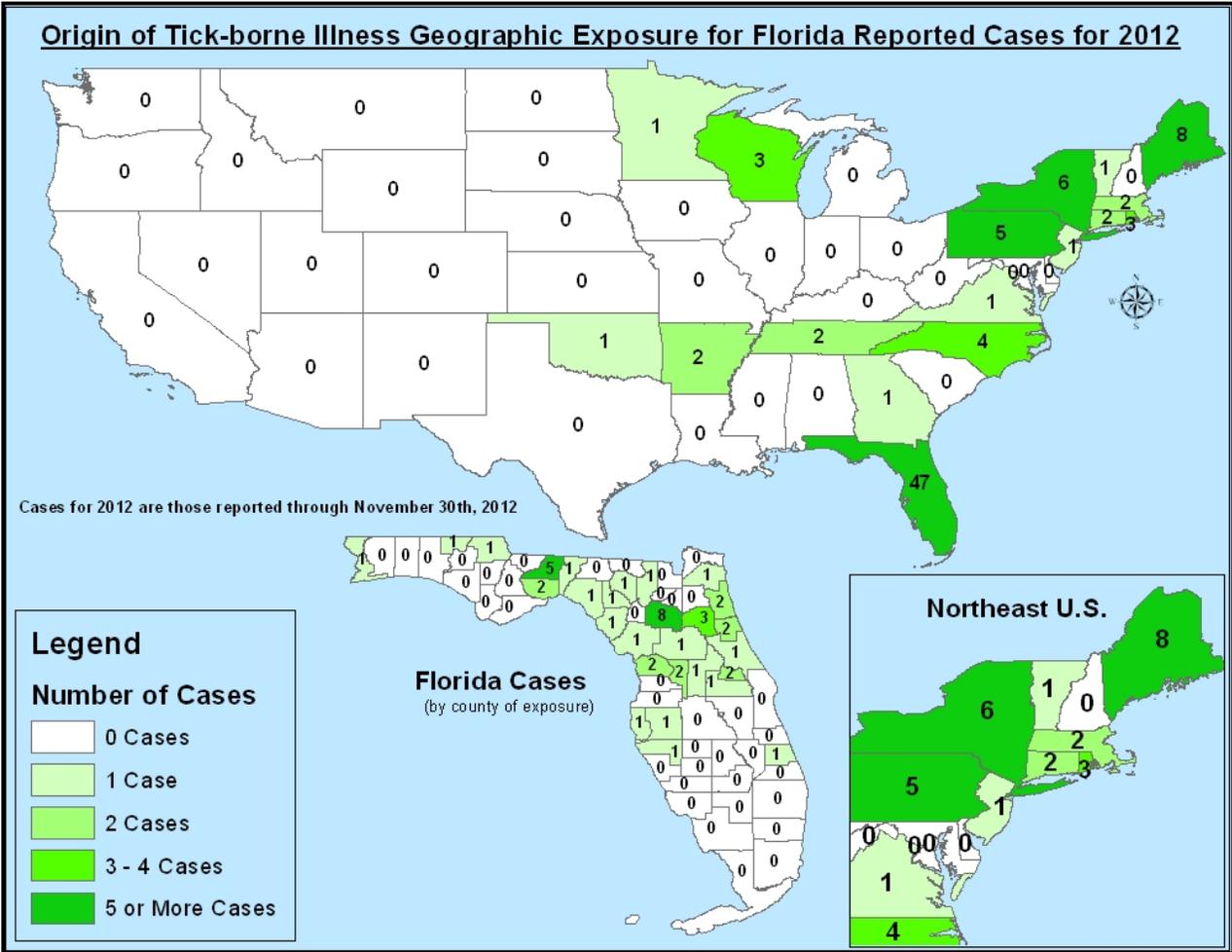
Florida acquired acute Lyme disease: Nineteen cases with an onset date in 2012 have been reported. Cases were exposed in Alachua (2), Citrus (1), Dixie (1), Flagler (1), Hillsborough (1), Holmes (1), Jefferson (1), Leon (1), Manatee (1), Orange (1), Pinellas (1), Putnam (3), Seminole (1), St. Lucie (1), Suwannee (1), and Volusia (1) counties. Cases were reported by Citrus (1), Flagler (1), Hillsborough (2), Holmes (1), Jefferson (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: Thirty-three cases with an onset date in 2012 have been reported. Locations of exposure: Connecticut (2), Maine (7), Massachusetts (2), New Jersey (1), New York (6), Northeast US (1), North Carolina (1), Oklahoma (1), Pennsylvania (5), , Rhode Island (3), Vermont (1), Wisconsin (2), and unable to be determined (1). 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	47	Tennessee	2
Maine	8	Georgia	1
New York	6	Minnesota	1
Pennsylvania	5	New Jersey	1
North Carolina	4	Northeast US	1
Rhode Island	3	Oklahoma	1
Wisconsin	3	Vermont	1
Arkansas	2	Virginia	1
Connecticut	2	Undetermined	3
Massachusetts	2		





Year to Date Tick-Borne Disease Cases by County

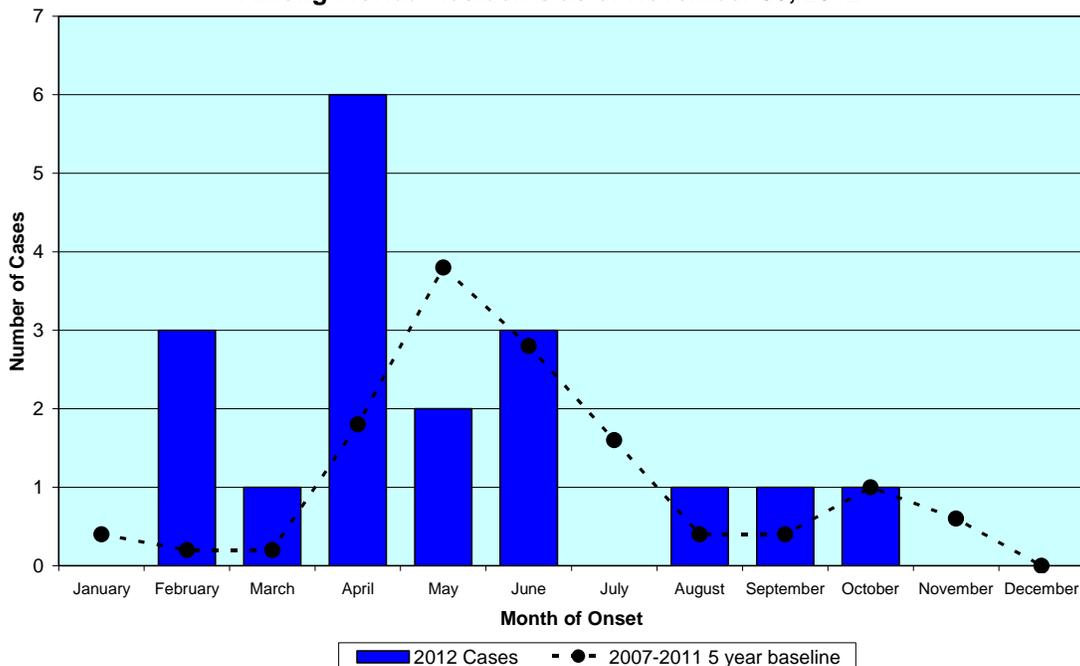
Tick-Borne Disease Activity by County of Exposure									
Disease	HME		HGA		RMSF/SFR		Acute LYME		Totals
	FL	Non-FL	FL	Non-FL	FL	Non-FL	FL	Non-FL	
Origin	FL	Non-FL	FL	Non-FL	FL	Non-FL	FL	Non-FL	All
Alachua	4	0	0	0	2	0	2	1 (I)	9
Brevard	0	0	0	0	0	0	0	2 (I)	2
Broward	0	0	0	0	0	0	0	1 (I)	1
Citrus	0	0	0	0	1	0	1	1 (I)	3
Clay	0	0	0	0	0	1 (I)	0	0	1
Collier	0	0	0	0	0	0	0	3 (I)	3
Columbia	0	0	1	0	0	0	0	0	1
Dixie	0	0	0	0	0	0	1	0	1
Duval	0	1 (I)	0	0	1	0	0	0	2
Escambia	0	0	0	0	1	0	0	0	1
Flagler	1	0	0	0	0	0	1	1 (I)	3
Hillsborough	0	0	0	0	0	1 (I)	1	4 (I)	6
Holmes	0	0	0	0	0	0	1	0	1
Jackson	0	0	0	0	1	1 (U)	0	0	2
Jefferson	0	0	0	0	0	0	1	0	1
Lafayette	1	0	0	0	0	0	0	0	1
Lake	0	0	0	0	1	0	0	0	1
Lee	0	1 (I)	0	0	0	0	0	2 (I)	3
Leon	3	0	0	0	1	0	1	0	5
Levy	1	0	0	0	0	0	0	0	1
Manatee	0	0	0	0	0	0	1	0	1
Marion	0	0	0	0	1	0	0	0	1
Martin	0	0	0	0	0	0	0	1 (I)	1
Miami-Dade	0	0	0	0	0	1 (I)	0	0	1
Orange	0	0	0	0	0	0	1	0	1
Palm Beach	0	0	0	0	0	0	0	3 (I)	3
Pasco	0	0	0	1 (I)	0	0	0	1 (I)	2
Pinellas	0	0	0	1 (I)	0	0	1	1 (I)	3
Polk	0	0	0	0	0	1 (I)	0	2 (I)	3
Putnam	0	0	0	0	0	1 (I)	3	0	4
Sarasota	0	0	0	2 (I)	0	0	0	2 (I)	4
Seminole	1	0	0	0	0	0	1	1 (I)	3
St. Johns	2	0	0	0	0	0	0	0	2
St. Lucie	0	0	0	0	0	0	1	4 (I)	5
Sumter	0	1 (I)	0	0	2	1 (U)	0	0	4
Suwannee	0	0	0	0	0	0	1	0	1
Taylor	1	0	0	0	0	0	0	0	1
Volusia	0	0	0	0	0	0	1	3 (I)	4
Wakulla	1	0	0	0	1	0	0	0	2
Totals	15	3	1	4	12	7	19	33	94

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

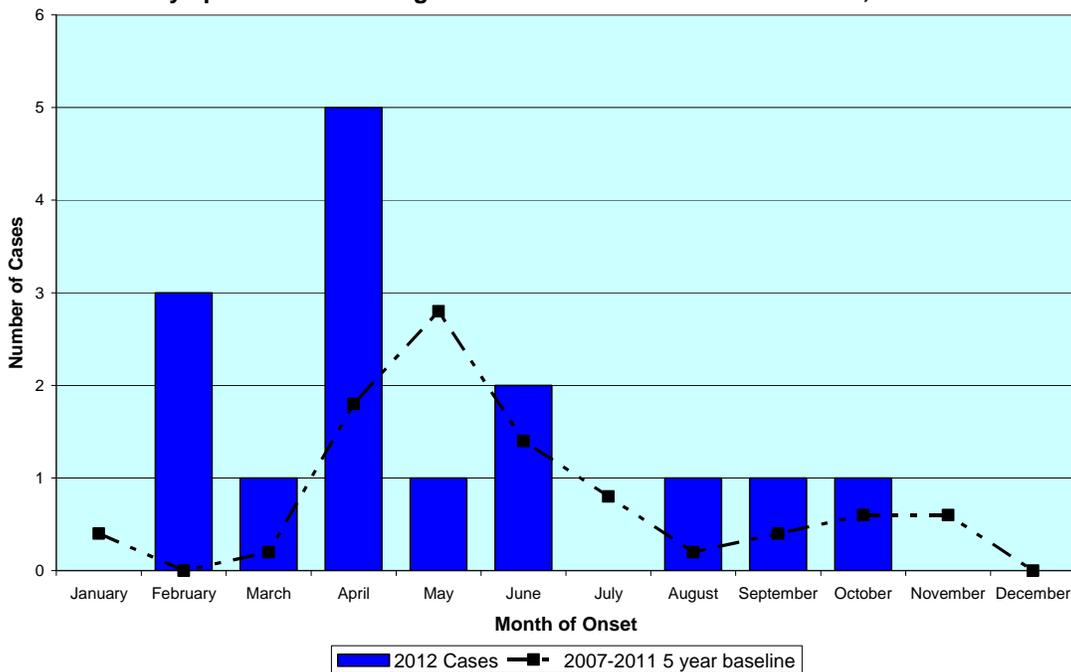


Monthly Tick-Borne Disease Summary

All Human Monocytic Ehrlichiosis Cases By Month of Symptom Onset Among Florida Residents as of November 30, 2012

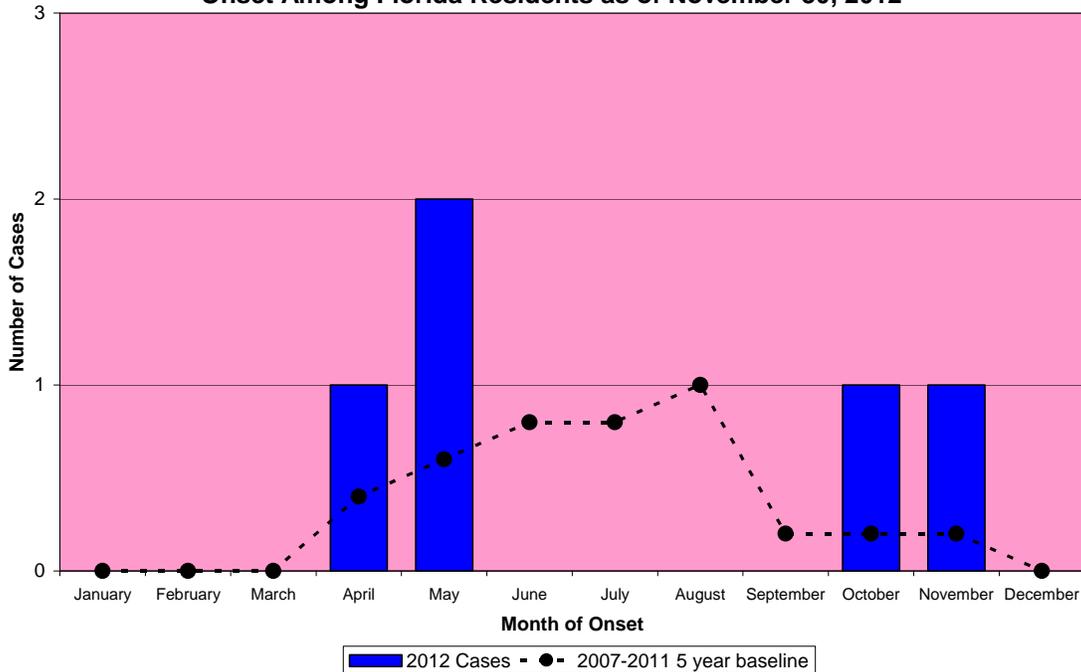


Florida-Acquired Cases of Human Monocytic Ehrlichiosis By Month of Symptom Onset Among Florida Residents as of November 30, 2012

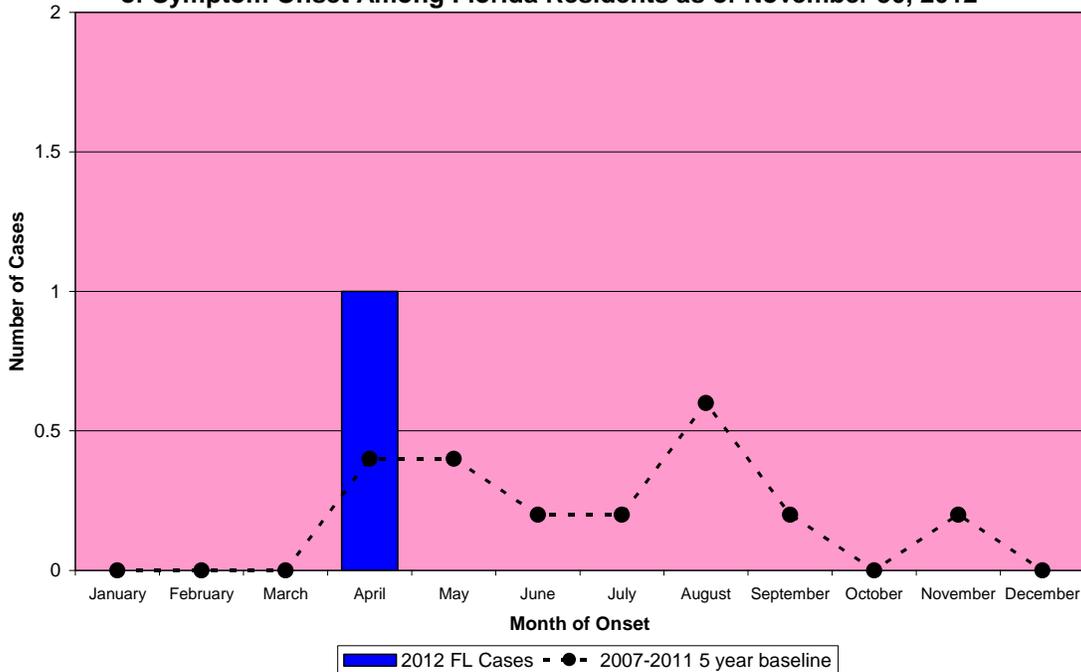




All Human Granulocytic Anaplasmosis Cases By Month of Symptom Onset Among Florida Residents as of November 30, 2012

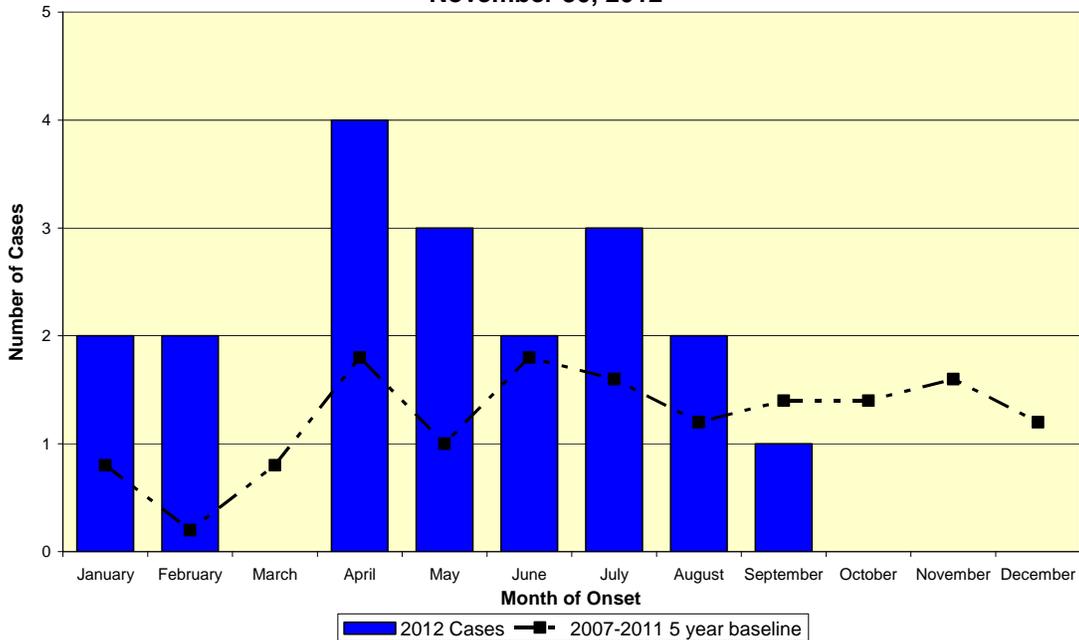


Florida-Acquired Human Granulocytic Anaplasmosis Cases By Month of Symptom Onset Among Florida Residents as of November 30, 2012

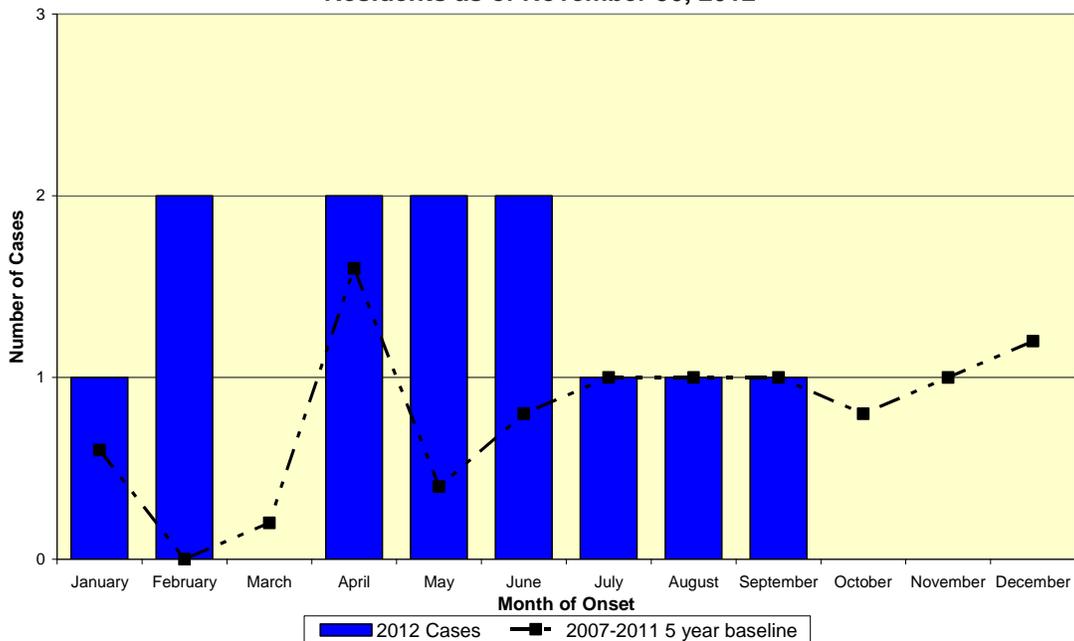




**All Rocky Mountain Spotted Fever / Spotted Fever Rickettsiosis Cases
By Month of Symptom Onset Among Florida Residents as of
November 30, 2012**

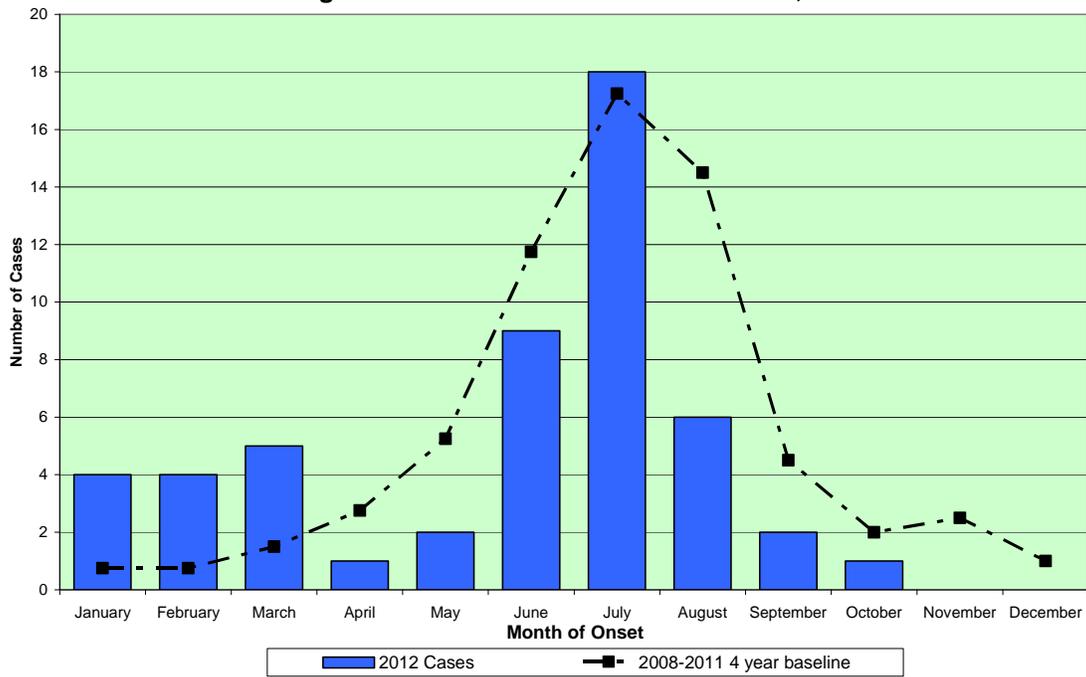


**Florida-Acquired Rocky Mountain Spotted Fever / Spotted Fever
Rickettsiosis Cases By Month of Symptom Onset Among Florida
Residents as of November 30, 2012**

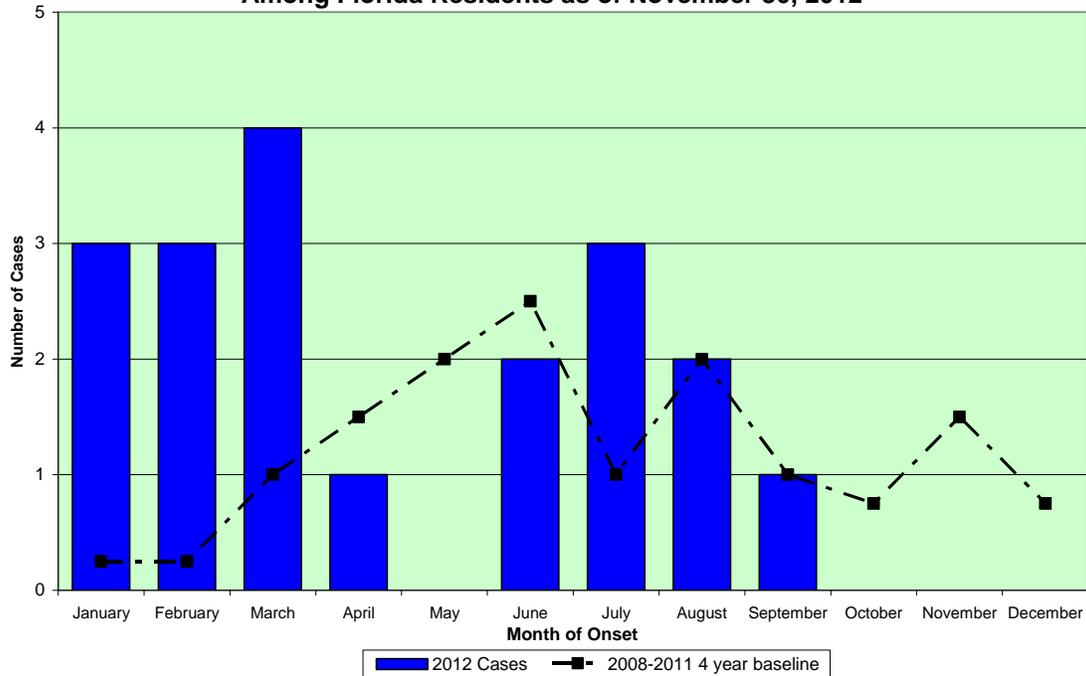




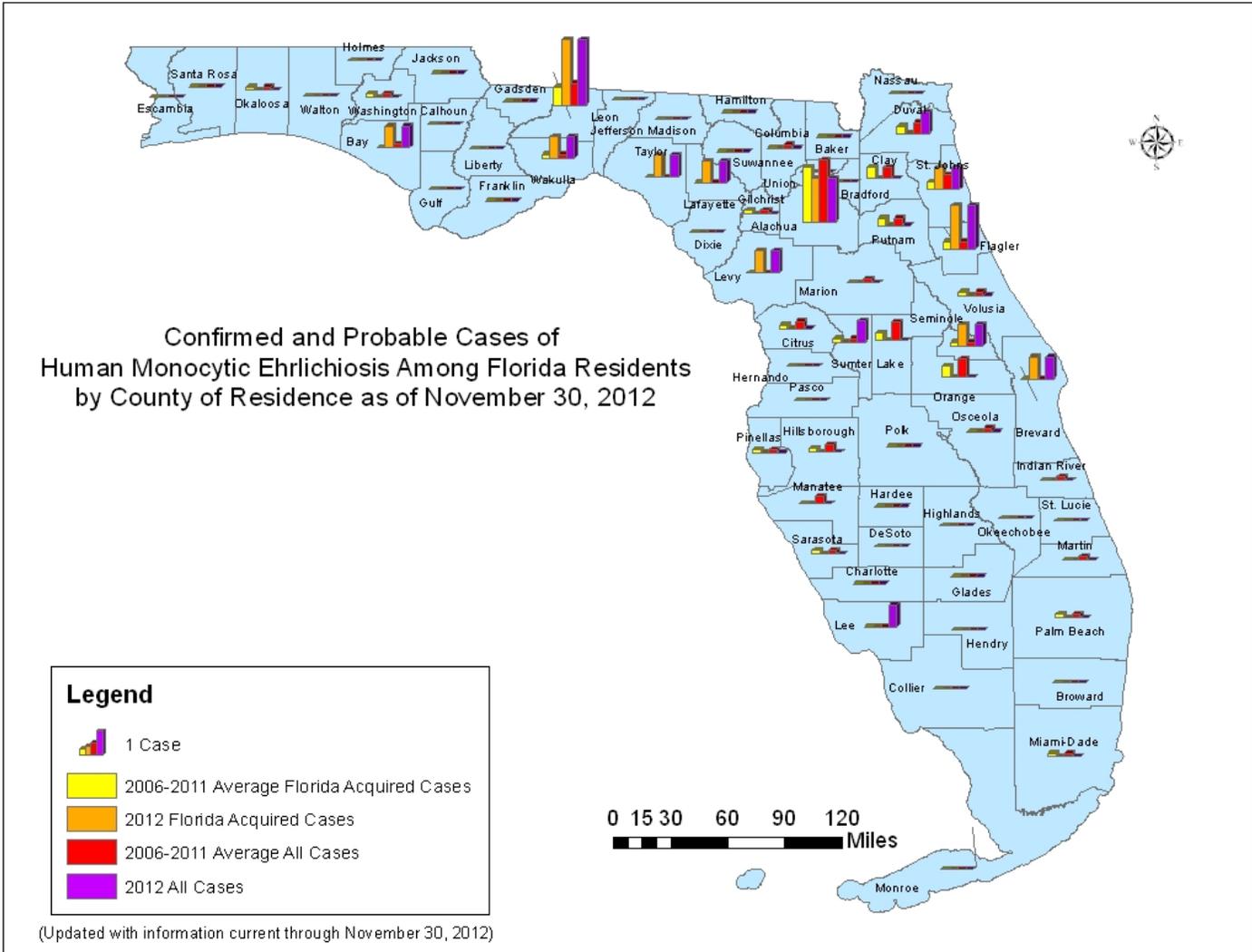
**All Acute Lyme Disease Cases By Month of Symptom Onset
Among Florida Residents as of November 30, 2012**

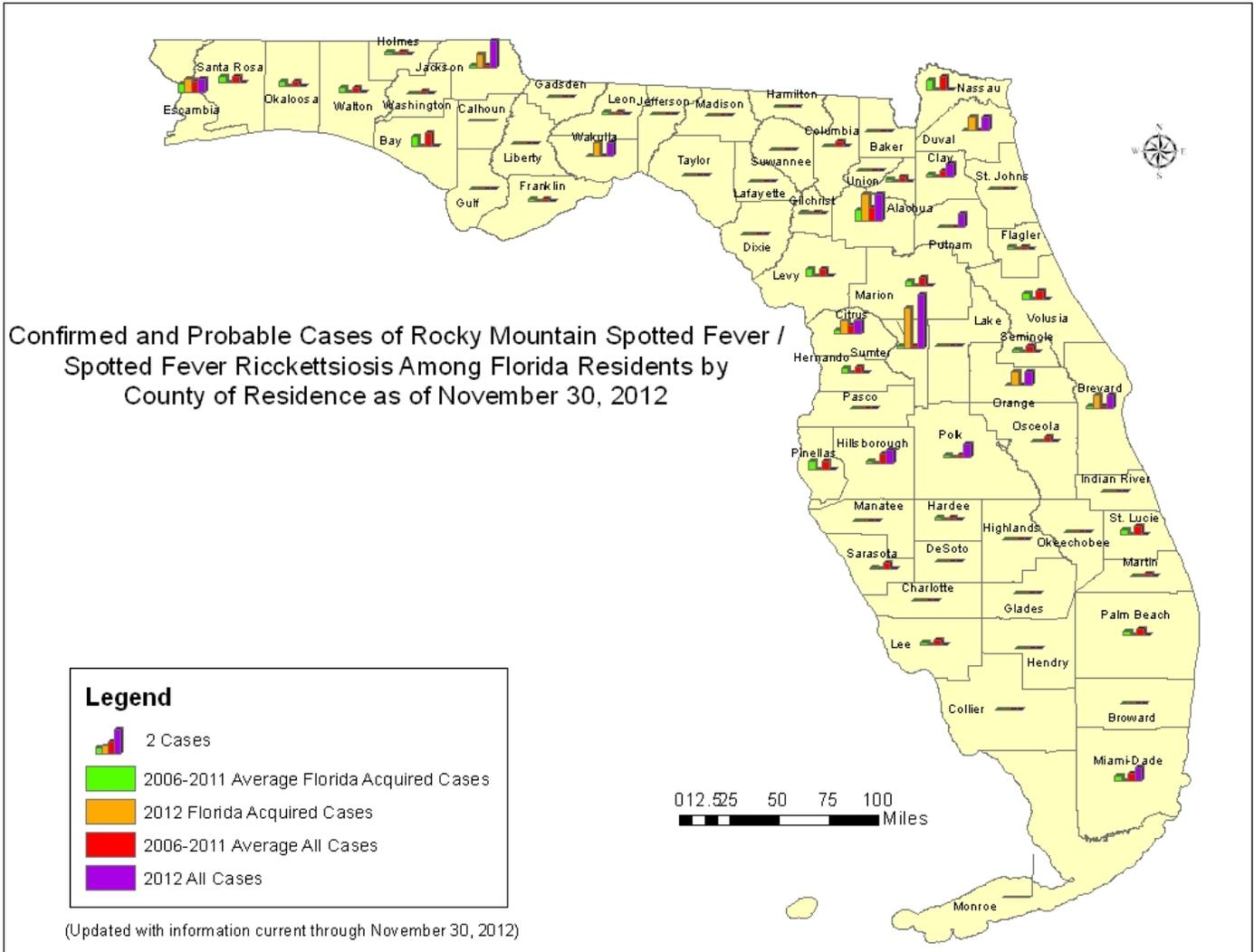


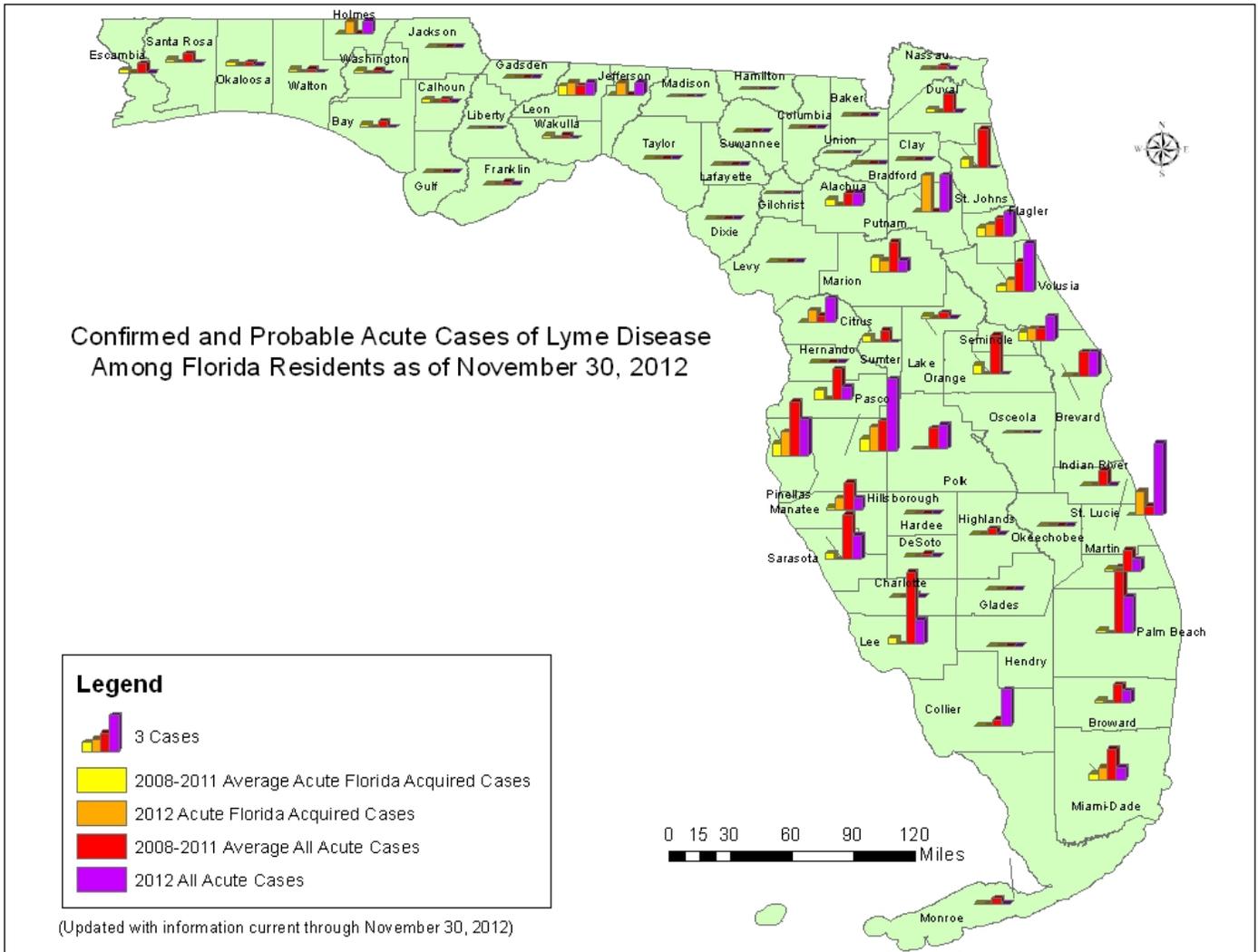
**Florida-Acquired Lyme Disease Cases By Month of Symptom Onset
Among Florida Residents as of November 30, 2012**



Maps of Tick-Borne Disease Cases by County









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.