Section 2

Data Summaries for Selected Reportable Diseases/Conditions of Frequent Occurrence

Disease Facts

Cause: HIV

Type of illness: Decreased immune system function allows opportunistic infections and tumors to develop that do not usually affect people who have healthy immune systems

Transmission: Anal or vaginal sex; blood exposure (e.g., sharing drug needles, receiving infected blood transfusion [rare due to donor screening]); or from mother to child during pregnancy, delivery or breast-feeding

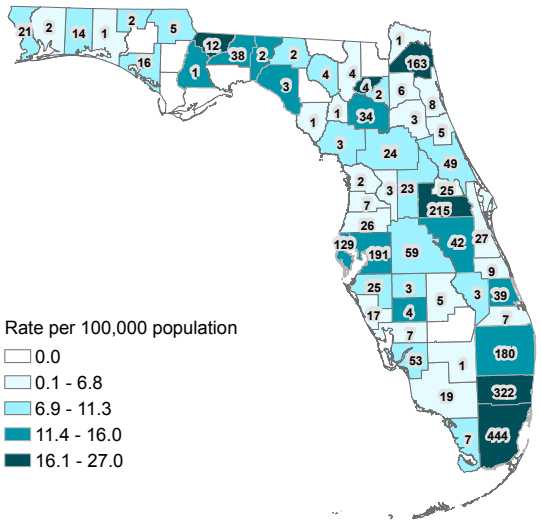
Reason for surveillance: Enhance efforts to prevent HIV transmission, improve allocation of resources for treatment services, and assist in evaluating the impact of public health interventions

Comments: The expansion of electronic laboratory reporting in 2007 and 2012 led to artificial peaks in newly reported cases in 2008 and 2013. AIDS cases in 2014 dropped by 20% from the previous year. Expanded efforts to link and retain people in care may have contributed to the decrease.

Summary of Case Demographics

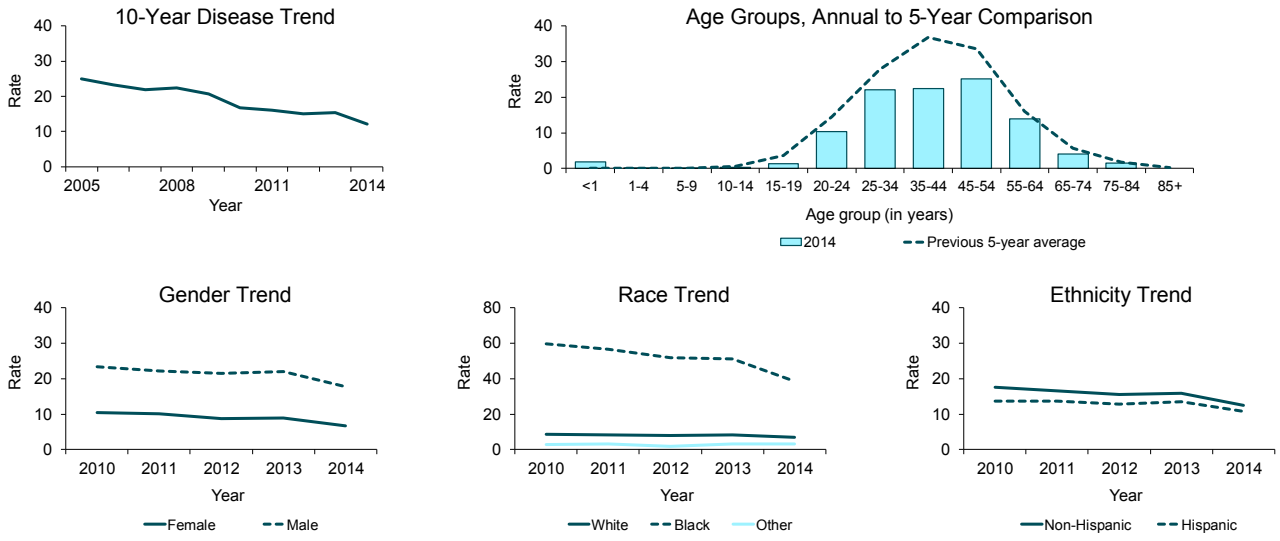
Summary			
Number of cases			2,370
Incidence rate (per 100,000 population)			12.1
Change from 5-year average incidence			-27.6%
Age (in years)			
Mean			43
Median			43
Min-max			0 - 86
Gender	**Number**	**(Percent)**	**Rate**
Female	675	(28.5)	6.8
Male	1,695	(71.5)	17.7
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	1,061	(45.1)	6.9
Black	1,260	(53.6)	38.6
Other	31	(1.3)	3.1
Unknown race	18		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	1,857	(78.7)	12.5
Hispanic	502	(21.3)	10.7
Unknown ethnicity	11		

Reported AIDS Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=2,370)



County totals exclude Department of Corrections cases (n=45).
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported AIDS Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Additional Information

For AIDS cases, men are disproportionately impacted compared to women. In 2014 cases reported in adult men, male-to-male sexual contact was the most common risk factor (64.6%), followed by heterosexual contact (25.1%).

In 2014, blacks were over-represented among AIDS cases, accounting for 44.2% of adult cases among men and 67.8% of the adult cases among women.

For information on HIV, please see the HIV chapter within this section (page 43).

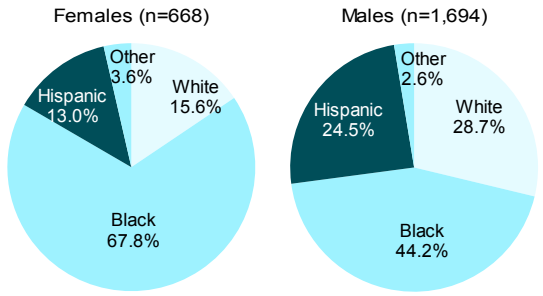
Please visit the AIDS Surveillance website to access additional information at www.FloridaHealth.gov/diseases-and-conditions/aids/surveillance/index.html.

To locate services across the state please visit www.FloridaHealth.gov/diseases-and-conditions/aids/index.html.

Reported Adult (13 Years and Older) AIDS Cases by Gender and Mode of Exposure, Florida, 2014

Mode of exposure	Females cases (n=668)		Males cases (n=1,694)	
	Number	(percent)	Number	(percent)
Men who have sex with men (MSM)	NA		1,095	(64.6)
Heterosexual	576	(86.2)	425	(25.1)
Injection drug user (IDU)	82	(12.3)	111	(6.6)
MSM and IDU	NA		58	(3.4)
Other	10	(1.5)	5	(0.3)
Total	668		1,694	

Reported Adult (13 Years and Older) AIDS Cases by Gender and Race/Ethnicity, Florida, 2014



Campylobacteriosis

Disease Facts

Cause: *Campylobacter* bacteria

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; including person-to-person, animal-to-person, foodborne, and waterborne

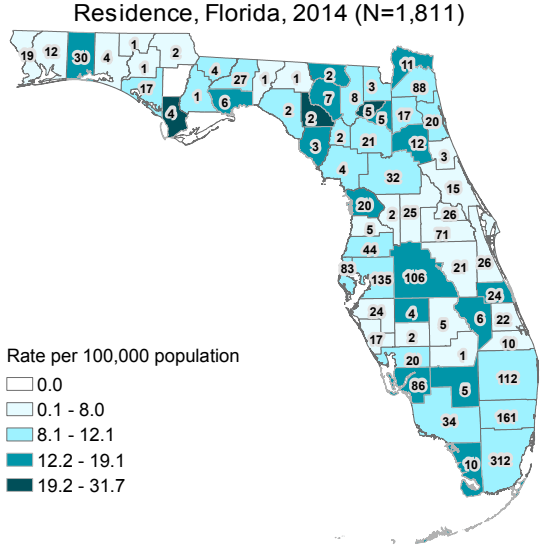
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product, ill food handler), monitor incidence over time, estimate burden of illness

Comments: The use of culture-independent diagnostic testing for *Campylobacter* has increased sharply in recent years. Florida changed the campylobacteriosis surveillance case definition in January and July 2011 to adapt to this change, increasing the number of reported cases. Due to the change in the surveillance case definition, there were approximately seven months in 2011 when positive enzyme immunoassay (EIA) tests were included as part of the probable case definition.

Summary of Case Demographics

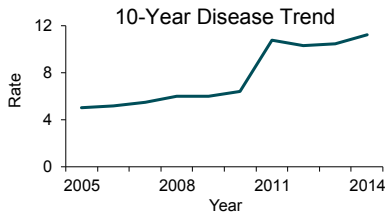
Summary			
Number of cases			2,195
Incidence rate (per 100,000 population)			11.2
Change from 5-year average incidence			+27.6%
Age (in years)			
Mean			37
Median			37
Min-max			0 - 96
Gender	**Number**	**(Percent)**	**Rate**
Female	999	(45.5)	10.0
Male	1,196	(54.5)	12.5
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	1,779	(84.8)	11.6
Black	159	(7.6)	4.9
Other	160	(7.6)	16.0
Unknown race	97		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	1,453	(69.4)	9.8
Hispanic	642	(30.6)	13.7
Unknown ethnicity	100		

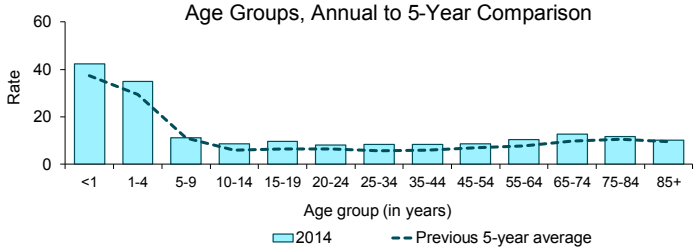
Reported Campylobacteriosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=1,811)

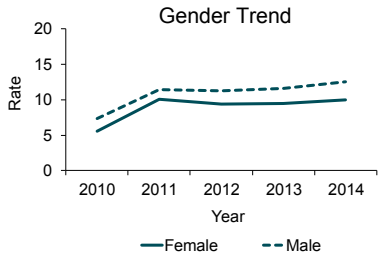


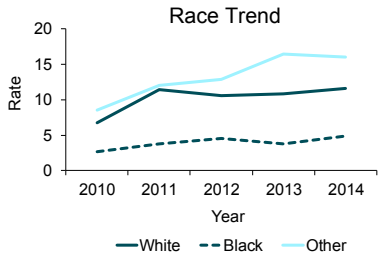
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

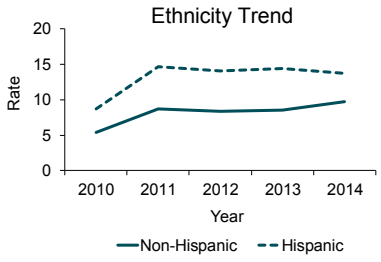
Reported Campylobacteriosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









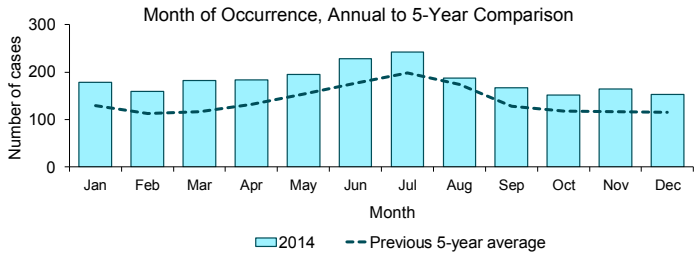


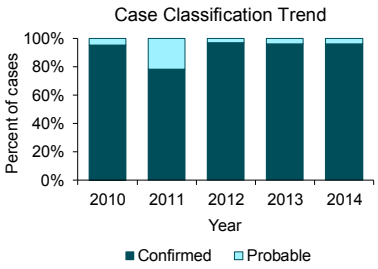
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Campylobacteriosis cases were missing 6.2% of ethnicity data in 2011, 5.1% of race data in 2011, 6.1% of ethnicity data in 2012, 6.2% of race data in 2012, 5.2% of ethnicity data in 2013, and 5.1% of race data in 2013.

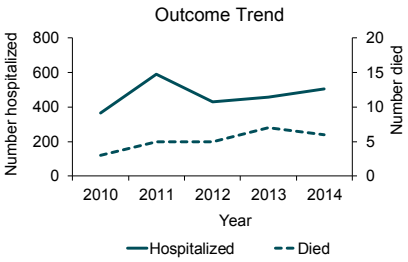
Summary of Case Factors

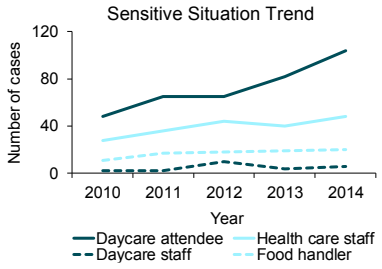
Summary	Number	
Number of cases	2,195	
Case classification	**Number**	**(Percent)**
Confirmed	2,114	(96.3)
Probable	81	(3.7)
Outcome	**Number**	**(Percent)**
Hospitalized	504	(23.0)
Died	6	(0.3)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	104	(4.7)
Daycare staff	6	(0.3)
Health care staff	48	(2.2)
Food handler	20	(0.9)
Imported status	**Number**	**(Percent)**
Acquired in Florida	1,811	(82.5)
Acquired in the U.S., not Florida	55	(2.5)
Acquired outside the U.S.	233	(10.6)
Acquired location unknown	96	(4.4)
Outbreak status	**Number**	**(Percent)**
Sporadic	1,976	(90.0)
Outbreak-associated	176	(8.0)
Outbreak status unknown	43	(2.0)

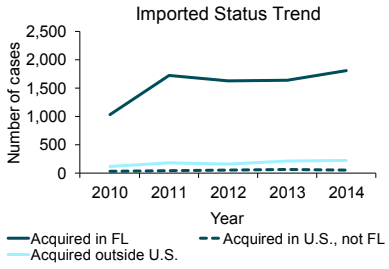
Reported Campylobacteriosis Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

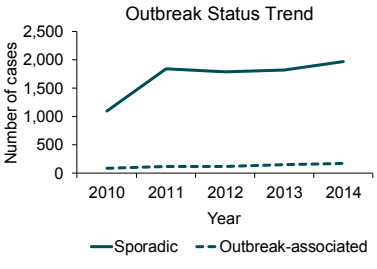












Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

There has been an increase in the number of campylobacteriosis cases reported in daycare attendees starting in 2013. There have been no reported campylobacteriosis outbreaks in daycares in 2013 or 2014; outbreak-associated cases were reflective of household clusters. In addition, the distribution of cases in both 2013 and 2014 by age, gender, and county are all consistent with historical trends. This increase in reported cases, while currently unexplained, is being monitored.

Carbon Monoxide Poisoning

Disease Facts

Cause: Carbon monoxide (CO) gas

Type of illness: Common symptoms include headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion; high levels of CO inhalation can cause loss of consciousness and death

Exposure: Inhaling CO gas from combustion fumes (produced by cars and trucks, generators, stoves, lanterns, burning charcoal and wood, and gas ranges and heating systems)

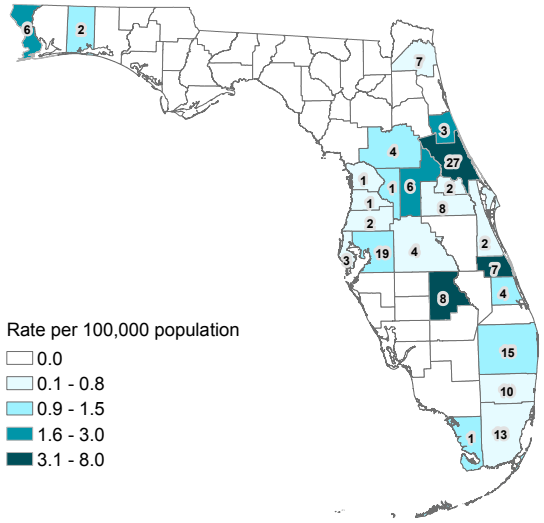
Reason for surveillance: Identify and mitigate persistent sources of exposure, identify populations at risk, evaluate trends in environmental conditions, measure impact of public health interventions

Comments: CO poisoning became a reportable condition in Florida in late 2008, so only cases from 2009 to 2014 are presented in this report. CO poisonings are more common in people ≥35 years old with no distinct seasonal pattern in Florida. Cases in 2014 peaked in winter months, which is consistent with U.S. trends.

Summary of Case Demographics

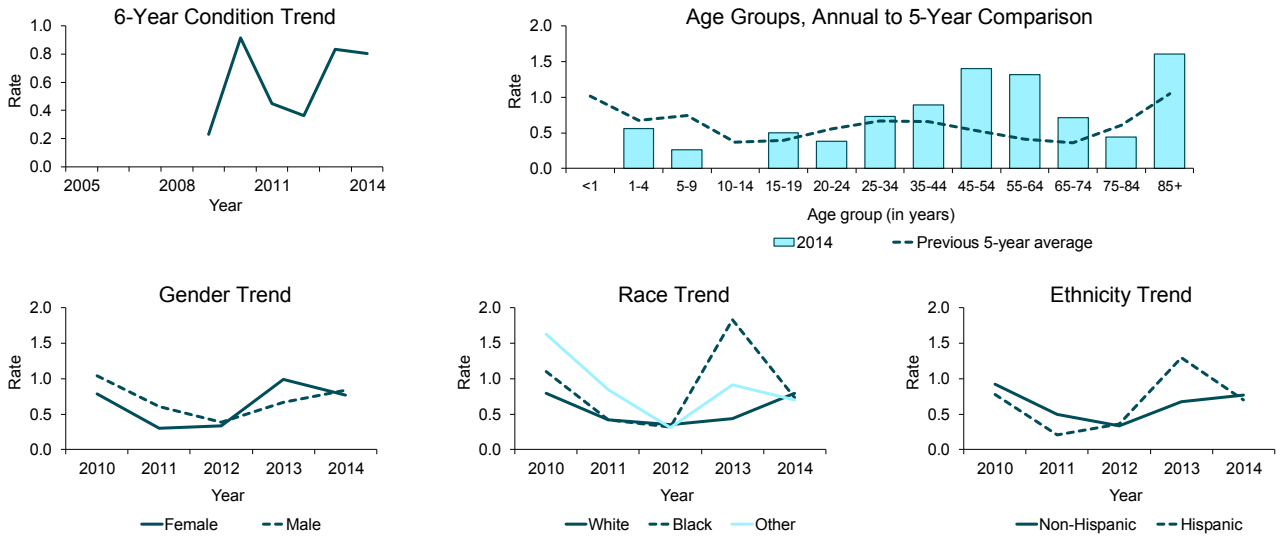
Summary			
Number of cases			157
Incidence rate (per 100,000 population)			0.8
Change from 5-year average incidence			+44.0%
Age (in years)			
Mean			48
Median			51
Min-max			1 - 95
Gender	**Number**	**(Percent)**	**Rate**
Female	77	(49.0)	0.8
Male	80	(51.0)	0.8
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	122	(79.7)	0.8
Black	24	(15.7)	0.7
Other	7	(4.6)	NA
Unknown race	4		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	114	(77.6)	0.8
Hispanic	33	(22.4)	0.7
Unknown ethnicity	10		

Reported Carbon Monoxide Poisoning Cases and Incidence Rates Per 100,000 Population (Restricted to Exposures Occurring in Florida) by County of Residence, Florida, 2014 (N=156)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

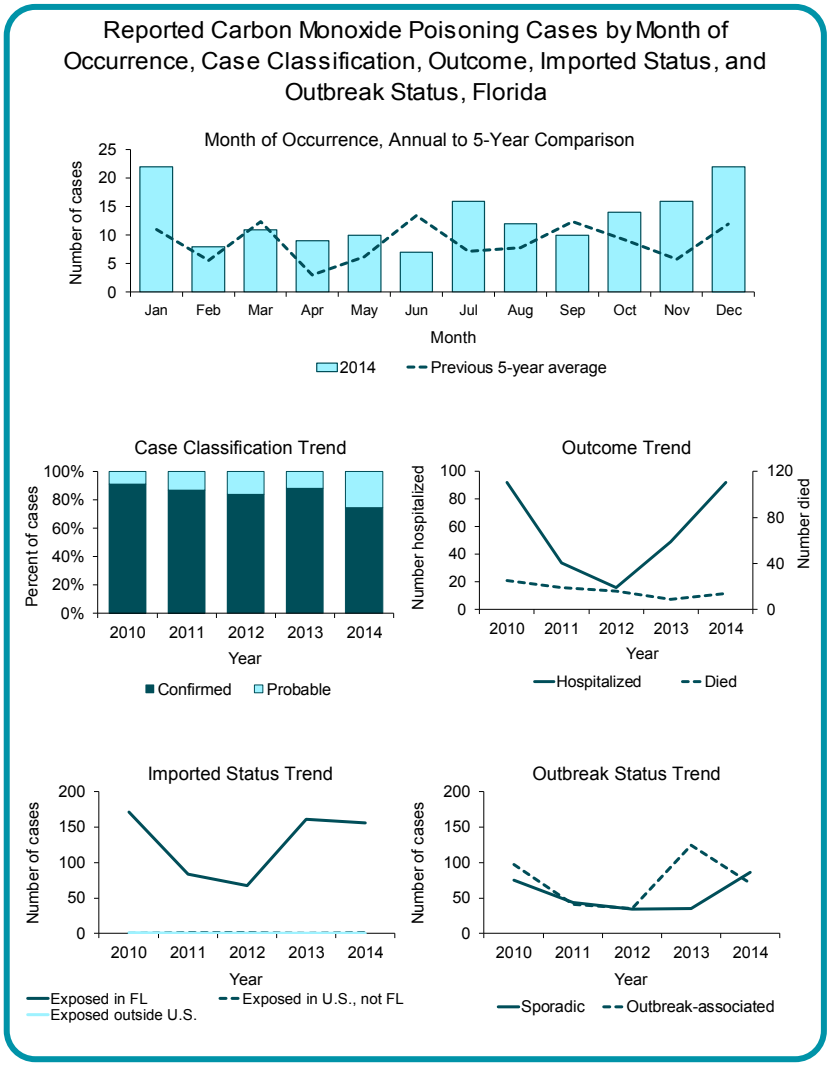
Reported Carbon Monoxide Poisoning Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Carbon monoxide poisoning cases were missing 5.8% of ethnicity data in 2012, 16.8% of race data in 2013, and 6.4% of ethnicity data in 2014.

Summary of Case Factors

Summary	Number	
Number of cases	157	
Case classification	**Number**	**(Percent)**
Confirmed	117	(74.5)
Probable	40	(25.5)
Outcome	**Number**	**(Percent)**
Hospitalized	92	(58.6)
Died	14	(8.9)
Imported status	**Number**	**(Percent)**
Exposed in Florida	156	(99.4)
Exposed in the U.S., not Florida	1	(0.6)
Exposed outside the U.S.	0	(0.0)
Exposed location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	86	(54.8)
Outbreak-associated	71	(45.2)
Outbreak status unknown	0	(0.0)



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the exposure most likely occurred. Outbreak-associated indicates that two or more cases are epidemiologically linked.

Chikungunya Fever

Disease Facts

Cause: Chikungunya virus

Type of illness: Acute febrile illness with joint and muscle pain, headache, joint swelling, and rash; some symptoms can persist for months to years and relapse can occur

Transmission: Bite of infective mosquito, rarely by blood transfusion or organ transplant

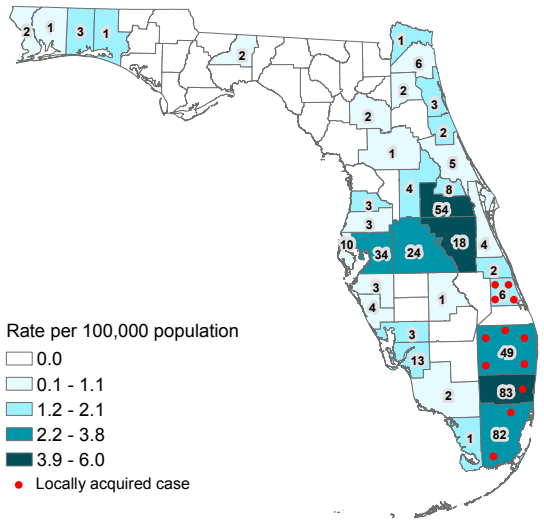
Reason for surveillance: Identify individual cases and implement control measures to prevent endemicity, monitor incidence over time, estimate burden of illness

Comments: The first autochthonous transmission of chikungunya virus in the Americas was reported on the island of St. Martin in December 2013. Since then, local transmission has been identified in countries throughout the Caribbean and the Americas. Prior to 2014, Florida had five imported cases of chikungunya, all of whom had traveled to Asia. Chikungunya fever became reportable in Florida in June 2014.

Summary of Case Demographics

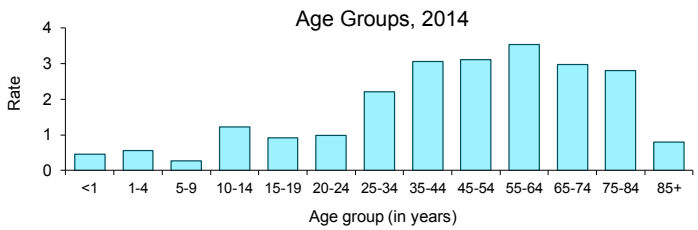
Summary			
Number of cases			442
Age (in years)			
Mean			49
Median			50
Min-max			0 - 98
Gender	**Number**	**(Percent)**	**Rate**
Female	267	(60.4)	2.7
Male	175	(39.6)	1.8
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	200	(45.8)	1.3
Black	153	(35.0)	4.7
Other	84	(19.2)	8.4
Unknown race	5		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	223	(51.6)	1.5
Hispanic	209	(48.4)	4.5
Unknown ethnicity	10		

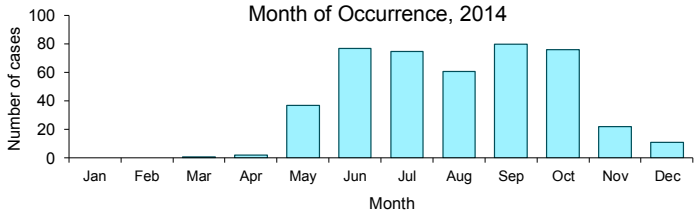
Reported Chikungunya Fever Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=442)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Chikungunya Fever Incidence Rates Per 100,000 Population by Year and Cases by Month of Occurrence, Florida



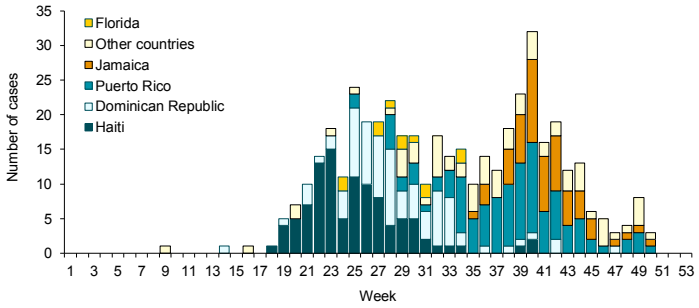


Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the local health office was notified of the case.

Additional Information

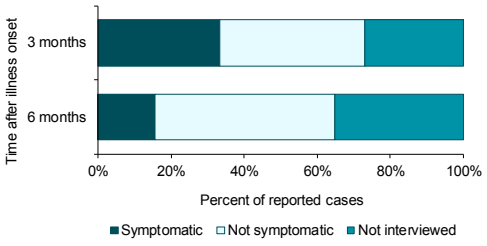
Summary	Number	
Number of cases	442	
Case classification	**Number**	**(Percent)**
Confirmed	205	(46.4)
Probable	237	(53.6)
Outcome	**Number**	**(Percent)**
Hospitalized	144	(32.6)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	12	(2.7)
Acquired in the U.S., not Florida	116	(26.2)
Acquired outside the U.S.	312	(70.6)
Acquired location unknown	2	(0.5)
Region where infection acquired	**Number**	**(Percent)**
Central America/Caribbean	288	(67.3)
Puerto Rico (U.S.)	110	(25.7)
South America	19	(4.4)
Virgin Islands (U.S.)	6	(1.4)
Asia	5	(1.2)
Reason for travel	**Number**	**(Percent)**
Visiting friends/relatives	325	(75.6)
Tourism	28	(6.5)
Missionary	21	(4.9)
Previous resident	10	(2.3)
Business	7	(1.6)
Other	7	(1.6)
Unknown	32	(7.4)

Reported Chikungunya Fever Cases by Location Infection Acquired and Week of Onset*, Florida, 2014



* Note that one case reported in 2014 had an onset in 2013 and is excluded from graph.

Reported Chikungunya Fever Cases Symptomatic Status at Three and Six Months After Onset, Florida, 2014



Interpretation:
For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired.

Additional Information

In total, 2,811 chikungunya virus disease cases in the U.S. were reported to the Centers for Disease Control and Prevention in 2014. Florida was the only state to report locally acquired cases. In 2014, 12 cases of locally acquired chikungunya fever were reported in residents of Palm Beach (five cases in July and August), St. Lucie (four cases in July and August), Miami-Dade (two cases in June), and Broward (one case in July) counties. Thirty-three non-Florida residents were also identified with chikungunya fever (note that this report only includes Florida residents in case counts). Both infected residents and non-residents pose a potential chikungunya virus introduction risk. The majority of Florida's imported chikungunya fever cases were acquired in four countries or territories: Puerto Rico (24.8%), Haiti (22.8%), Dominican Republic (19.9%), and Jamaica (13.6%). Initially, imported cases came mainly from Haiti and Dominican Republic then transitioned to predominantly Puerto Rico and Jamaica by the end of August. This pattern corresponds to the virus's spread throughout the Caribbean.

For infections acquired outside Florida, 74% of people indicated their reason for travel was to visit friends and family; this is important information to help direct targeted prevention messaging for dengue, chikungunya, and other emerging diseases in the Caribbean Basin.

Compared to other arboviral diseases like dengue fever, a higher percentage of chikungunya fever cases were in women and non-Hispanic people.

In Africa and Asia, chikungunya virus infections have been reported to cause persistent symptoms including arthralgia and myalgia that last months after infection in some patients. To better understand the long-term impact of chikungunya virus in Florida, cases with onsets in 2014 were interviewed three months after illness onset, and if still symptomatic, again six months after onset. At three months, 147 people (45.5% of the 323 people interviewed) were still symptomatic. Of the 147 people who were symptomatic at three months, 110 (74.8%) were interviewed again at six months, at which time 69 were still symptomatic. Overall, 69 people (24.1% of all those interviewed) were symptomatic at six months after initial illness onset, which supports findings in Africa and Asia.

Chlamydia

Disease Facts

Cause: *Chlamydia trachomatis* bacteria

Type of illness: Frequently asymptomatic; sometimes abnormal discharge from vagina or penis or burning sensation when urinating

Transmission: Sexually transmitted disease (STD) spread by anal, vaginal, or oral sex and sometimes from mother to child during pregnancy or delivery

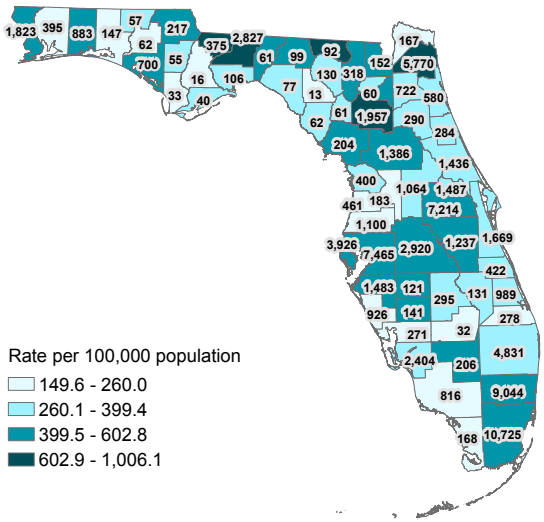
Reason for surveillance: Implement effective interventions immediately for every case, monitor incidence over time, estimate burden of illness, evaluate treatment and prevention programs

Comments: Chlamydia is the most commonly reported STD in Florida and the U.S. Incidence is highest among 15- to 24-year-old women (partly due to emphasis on screening/treating women) and black people. Severe complications can occur in women, including pelvic inflammatory disease, infertility, and ectopic pregnancies.

Summary of Case Demographics

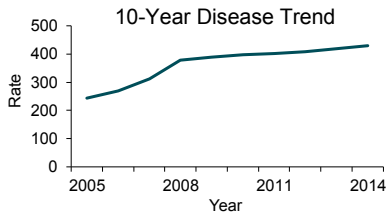
Summary			
Number of cases			84,196
Incidence rate (per 100,000 population)			430.7
Change from 5-year average incidence			+6.8%
Age (in years)			
Mean			24
Median			22
Min-max			0 - 90
Gender	**Number**	**(Percent)**	**Rate**
Female	58,805	(70.0)	588.5
Male	25,252	(30.0)	264.3
Unknown gender	139		
Race	**Number**	**(Percent)**	**Rate**
White	29,718	(46.8)	194.4
Black	33,135	(52.2)	1,015.2
Other	650	(1.0)	65.2
Unknown race	20,693		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	49,528	(80.9)	333.3
Hispanic	11,669	(19.1)	249.0
Unknown ethnicity	22,999		

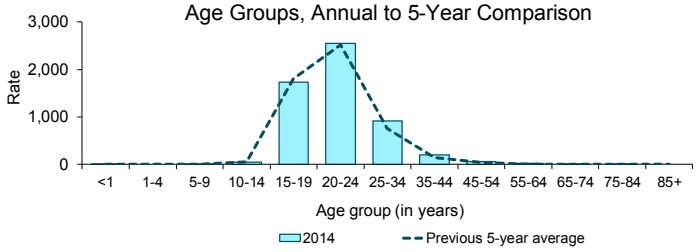
Reported Chlamydia Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=84,196)

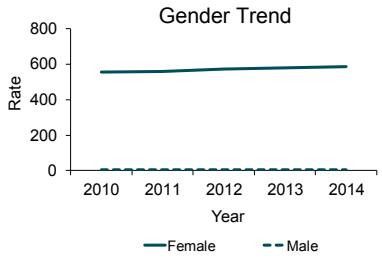


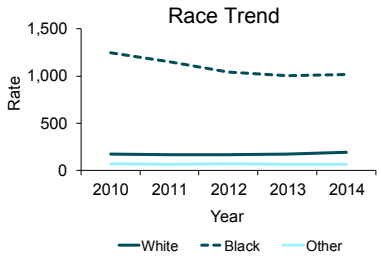
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

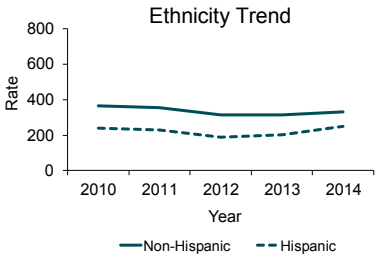
Reported Chlamydia Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Chlamydia cases were missing 15.4% of ethnicity data in 2010, 13.6% of race data in 2010, 18.9% of ethnicity data in 2011, 18.4% of race data in 2011, 30.0% of ethnicity data in 2012, 25.2% of race data in 2012, 31.3% of ethnicity data in 2013, 26.9% of race data in 2013, 27.3% of ethnicity data in 2014, and 24.6% of race data in 2014.

Ciguatera Fish Poisoning

Disease Facts

Cause: Ciguatoxins produced by marine dinoflagellates associated with tropical/subtropical reef fish

Type of illness: Nausea, vomiting, and neurologic symptoms (e.g., tingling fingers or toes, temperature reversal); anecdotal evidence of long-term periodic recurring symptoms

Exposure: Foodborne; consuming fish contaminated with ciguatoxins

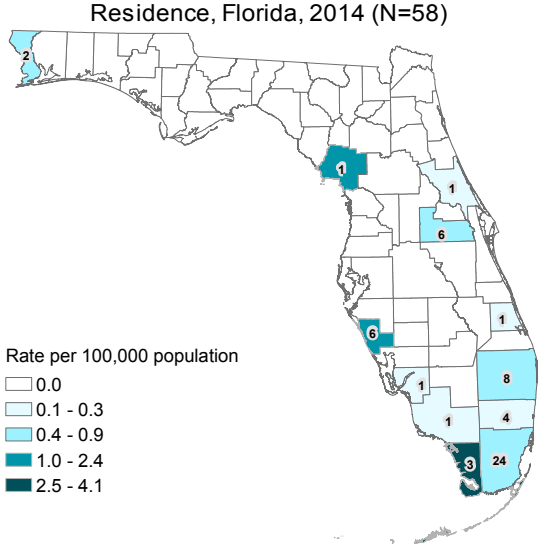
Reason for surveillance: Identify and control outbreaks, identify high-risk products (e.g., barracuda, grouper)

Comments: Outbreaks are usually associated with multiple people sharing an implicated fish. While case finding in Florida is thought to be more complete than in other states, under-reporting is still likely due to lack of recognition and reporting by medical practitioners. Marine dinoflagellates are typically found in tropical and subtropical waters and are eaten by herbivorous fish that are in turn eaten by larger carnivorous fish, causing the toxins to bioaccumulate in larger fish, such as barracuda or grouper.

Summary of Case Demographics

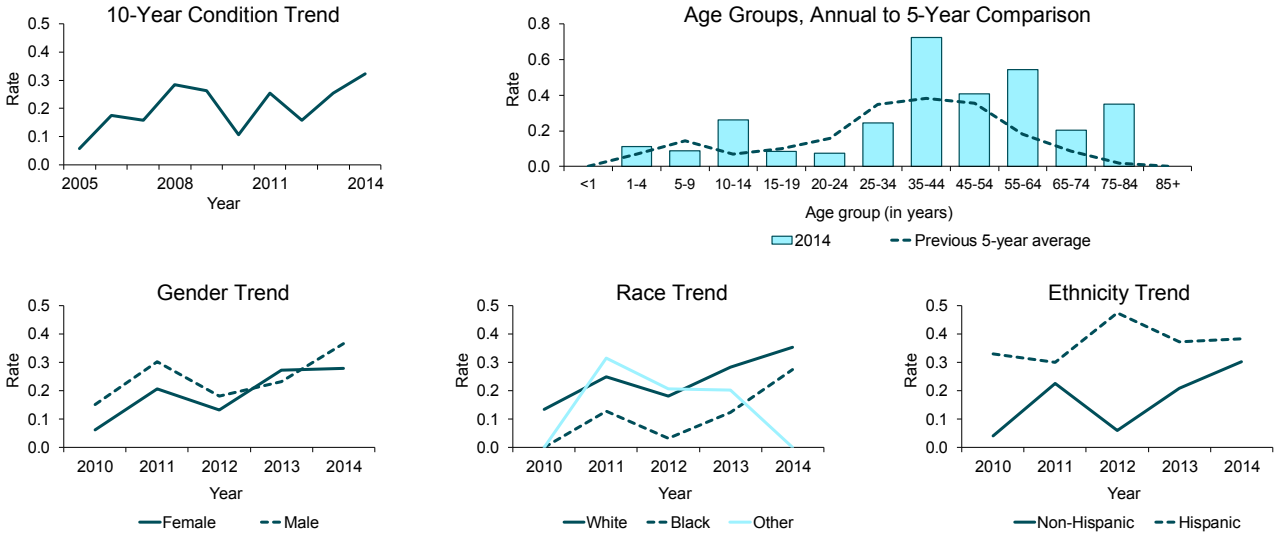
Summary			
Number of cases			63
Incidence rate (per 100,000 population)			0.3
Change from 5-year average incidence			+56.0%
Age (in years)			
Mean			45
Median			45
Min-max			2 - 78
Gender	**Number**	**(Percent)**	**Rate**
Female	28	(44.4)	0.3
Male	35	(55.6)	0.4
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	54	(85.7)	0.4
Black	9	(14.3)	NA
Other	0	(0.0)	NA
Unknown race	0		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	45	(71.4)	0.3
Hispanic	18	(28.6)	NA
Unknown ethnicity	0		

Reported Ciguatera Fish Poisoning Cases and Incidence Rates Per 100,000 Population (Restricted to Exposures Occurring in Florida) by County of Residence, Florida, 2014 (N=58)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Ciguatera Fish Poisoning Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Ciguatera fish poisoning cases were missing 8.3% of race data in 2011.

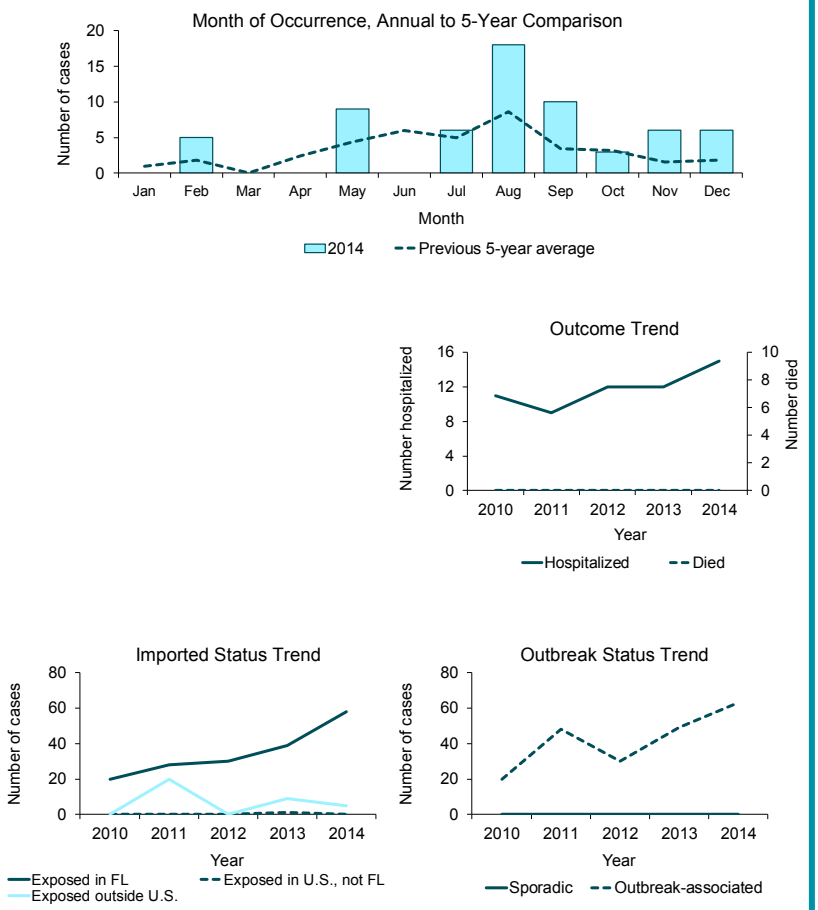
Ciguatera Fish Poisoning

Summary of Case Factors

Summary	Number	
Number of cases	63	
Outcome	**Number**	**(Percent)**
Hospitalized	15	(23.8)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Exposed in Florida	58	(92.1)
Exposed in the U.S., not Florida	0	(0.0)
Exposed outside the U.S.	5	(7.9)
Exposed location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	0	(0.0)
Outbreak-associated	63	(100.0)
Outbreak status unknown	0	(0.0)

A single case of ciguatera fish poisoning is considered an outbreak in Florida because a single case warrants the same investigation as a cluster of cases. See Additional Information for more explanation of outbreaks involving more than one person.

Reported Ciguatera Fish Poisoning Cases by Month of Occurrence, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the exposure most likely occurred. A single case of ciguatera fish poisoning is considered an outbreak.

Additional Information

Among the 63 cases, there were 29 outbreaks, ranging from one case per outbreak to five, with an average of 2.2 cases per outbreak. The 29 outbreaks were associated with eating amberjack (9), grouper (8), barracuda (6), snapper (2), hogfish (1), yellow jack (1), and wahoo (1). One outbreak was associated with an unknown fish species. Outbreaks were more commonly associated with recreationally caught fish.

Cryptosporidiosis

Disease Facts

Cause: *Cryptosporidium* parasites

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; including person-to-person, animal-to-person, waterborne, and foodborne

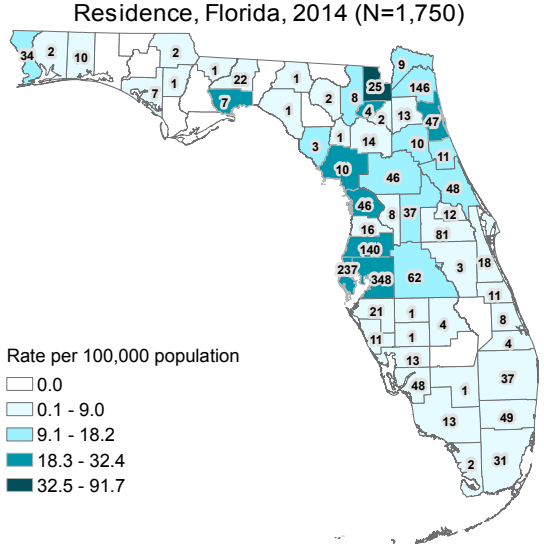
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food/water source, ill food handler), monitor incidence over time, estimate burden of illness

Comments: Diagnostic capabilities have improved over the years, making it easier to identify illnesses caused by this parasite. Cryptosporidiosis in Florida and the U.S. has a seasonal and cyclic trend. Cases increased starting in 2006 and declined in 2008. Cases increased sharply in 2014 in all genders, races, and ethnicities. The largest concentration of cases was in Hillsborough, Pinellas, and Pasco counties.

Summary of Case Demographics

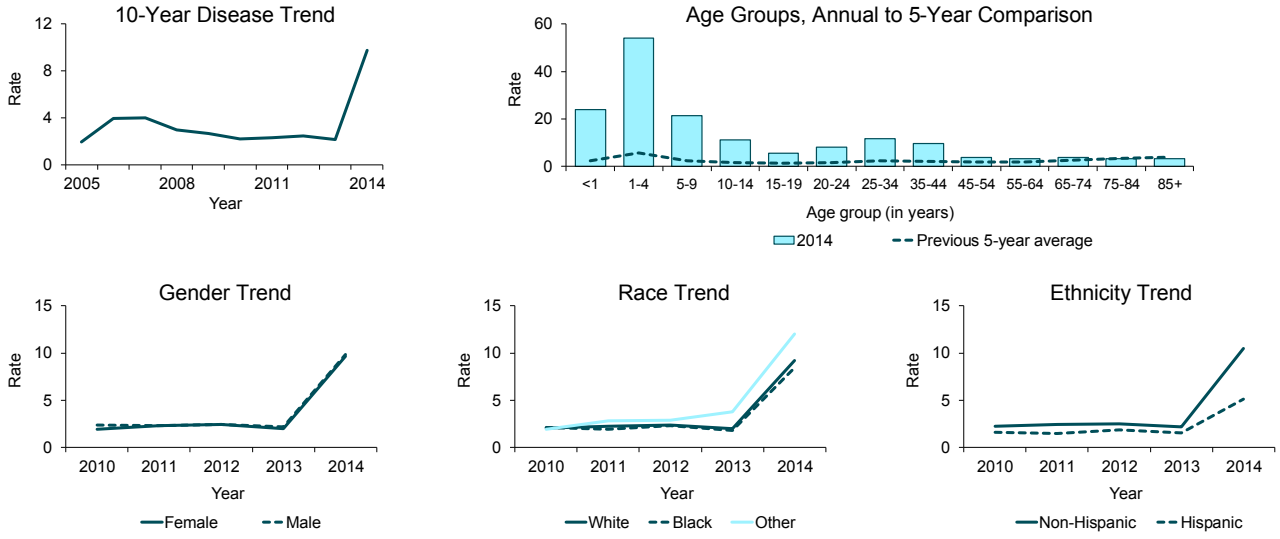
Summary			
Number of cases			1,905
Incidence rate (per 100,000 population)			9.7
Change from 5-year average incidence			+315.9%
Age (in years)			
Mean			23
Median			18
Min-max			0 - 93
Gender	**Number**	**(Percent)**	**Rate**
Female	965	(50.7)	9.7
Male	940	(49.3)	9.8
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	1,410	(78.1)	9.2
Black	276	(15.3)	8.5
Other	120	(6.6)	12.0
Unknown race	99		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	1,555	(86.6)	10.5
Hispanic	240	(13.4)	5.1
Unknown ethnicity	110		

Reported Cryptosporidiosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=1,750)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Cryptosporidiosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



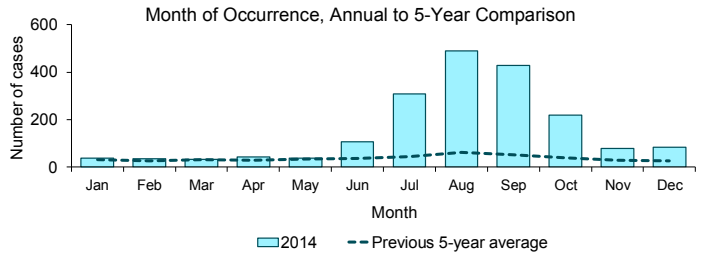
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Cryptosporidiosis cases were missing 5.9% of ethnicity data in 2014 and 5.2% of race data in 2014.

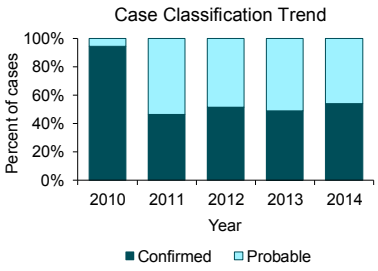
Cryptosporidiosis

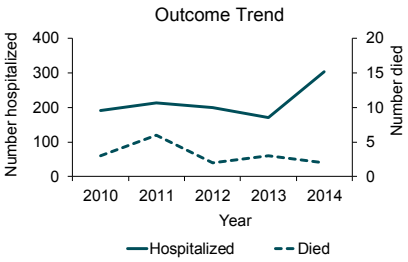
Summary of Case Factors

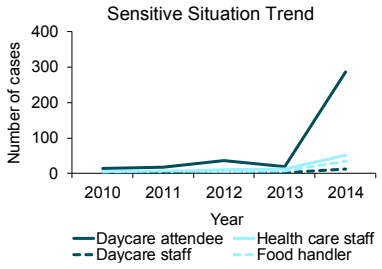
Summary	Number	
Number of cases	1,905	
Case classification	**Number**	**(Percent)**
Confirmed	1,031	(54.1)
Probable	874	(45.9)
Outcome	**Number**	**(Percent)**
Hospitalized	303	(15.9)
Died	2	(0.1)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	287	(15.1)
Daycare staff	12	(0.6)
Health care staff	51	(2.7)
Food handler	35	(1.8)
Imported status	**Number**	**(Percent)**
Acquired in Florida	1,750	(91.9)
Acquired in the U.S., not Florida	32	(1.7)
Acquired outside the U.S.	39	(2.0)
Acquired location unknown	84	(4.4)
Outbreak status	**Number**	**(Percent)**
Sporadic	1,144	(60.1)
Outbreak-associated	713	(37.4)
Outbreak status unknown	48	(2.5)

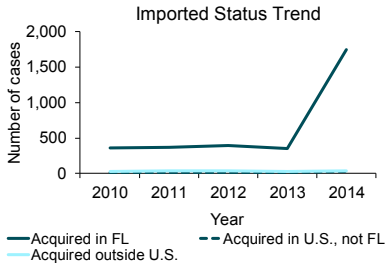
Reported Cryptosporidiosis Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

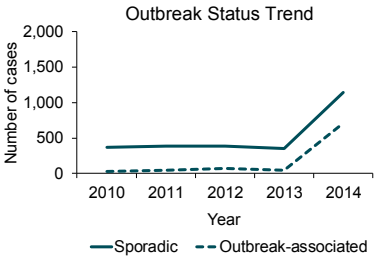












Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In 2014, the Florida Department of Health investigated six waterborne *Cryptosporidium* outbreaks. These outbreaks included 134 cases associated with swimming pools, a recreational water park, and kiddie pools. Identified contributing factors for these outbreaks included patrons still swimming when ill or within two weeks of being ill, diaper/toddler-aged children using these venues, lack of supplemental disinfection, and malfunctioning or inadequate filtration for recreational water systems. Additional community-wide outbreaks were associated with person-to-person transmission and daycares.

Cyclosporiasis

Disease Facts

Cause: *Cyclospora* parasites

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; foodborne and less commonly waterborne

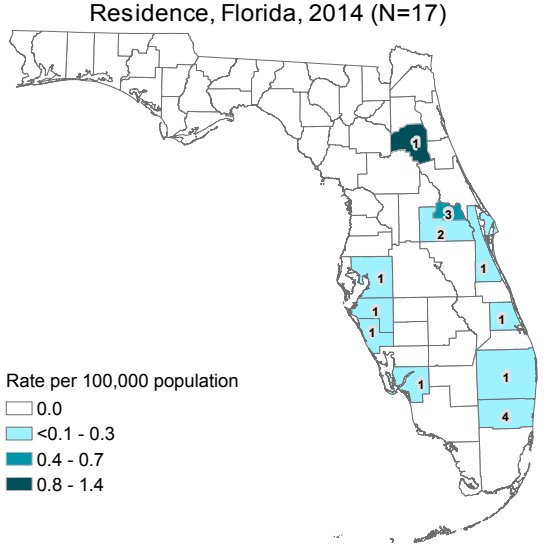
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product), monitor incidence over time, estimate burden of illness

Comments: Incidence is strongly seasonal, peaking in June and July. Large statewide or multistate outbreaks occur occasionally. A large multistate outbreak occurred in 2005 (see the Summary of Notable Outbreaks and Case Investigations section of the *Florida Morbidity Statistics Report, 1997-2006* for additional information). In 2014, another large multistate increase of cyclosporiasis cases involving Florida residents was investigated.

Summary of Case Demographics

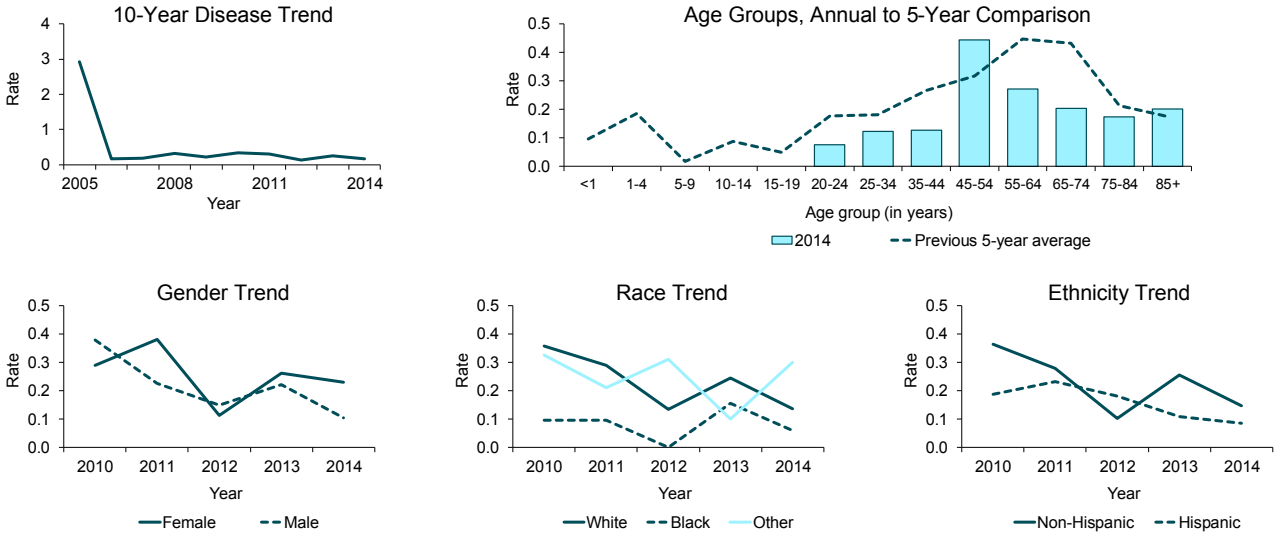
Summary			
Number of cases			33
Incidence rate (per 100,000 population)			0.2
Change from 5-year average incidence			-31.3%
Age (in years)			
Mean			53
Median			52
Min-max			20 - 85
Gender	**Number**	**(Percent)**	**Rate**
Female	23	(69.7)	0.2
Male	10	(30.3)	NA
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	21	(80.8)	0.1
Black	2	(7.7)	NA
Other	3	(11.5)	NA
Unknown race	7		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	22	(84.6)	0.1
Hispanic	4	(15.4)	NA
Unknown ethnicity	7		

Reported Cyclosporiasis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=17)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Cyclosporiasis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

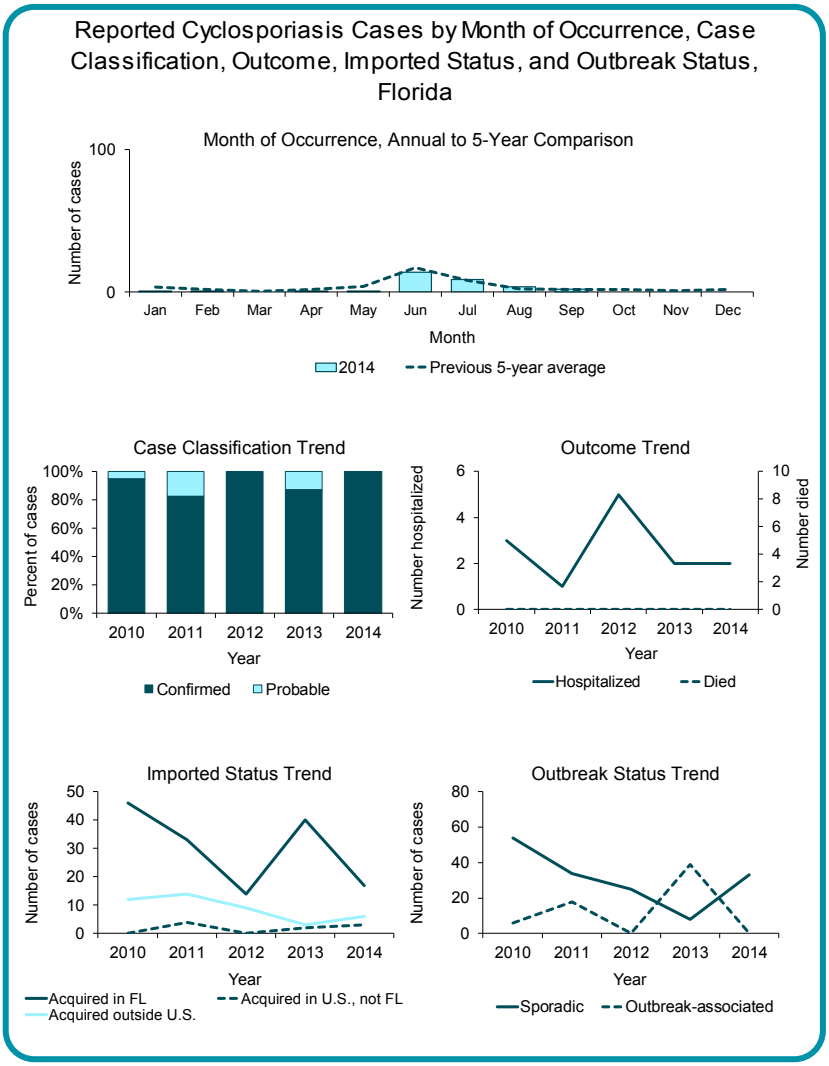


Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Cyclosporiasis cases were missing 6.3% of race data in 2010, 12.1% of ethnicity data in 2011, 17.2% of race data in 2011, 8.0% of ethnicity data in 2012, 8.0% of race data in 2012, 8.5% of ethnicity data in 2013, 8.5% of race data in 2013, 21.2% of ethnicity data in 2014, and 21.2% of race data in 2014.

Cyclosporiasis

Summary of Case Factors

Summary	Number	
Number of cases	33	
Case classification	**Number**	**(Percent)**
Confirmed	33	(100.0)
Probable	0	(0.0)
Outcome	**Number**	**(Percent)**
Hospitalized	2	(6.1)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	17	(51.5)
Acquired in the U.S., not Florida	3	(9.1)
Acquired outside the U.S.	6	(18.2)
Acquired location unknown	7	(21.2)
Outbreak status	**Number**	**(Percent)**
Sporadic	33	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In 2014, the Centers for Disease Control and Prevention (CDC) was notified of 304 people with confirmed *Cyclospora* infections as of August 26, 2014. Of these, 207 (68.1%) had no history of international travel in the two weeks prior to illness. Cases were identified in Arkansas, California, Connecticut, Florida, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Pennsylvania, New Jersey, New York, Texas, Virginia, Wisconsin, and Washington. Of the 207 cases in people not reporting international travel, 133 (64.3%) were in Texas residents. Epidemiologic and traceback investigations conducted by state and local public health and regulatory officials in Texas and the U.S. Food and Drug Administration indicate that some illnesses among Texas residents were linked to fresh cilantro from Puebla, Mexico. No common vehicle was identified for the remaining cases, including the cases in Florida residents. Note that the Florida cases were not reported as outbreak-associated.

Dengue Fever

Disease Facts

Cause: Dengue viruses (DENV-1, DENV-2, DENV-3, DENV-4)

Type of illness: Acute febrile illness with headache, joint and muscle pain, rash, and eye pain; dengue hemorrhagic fever or dengue shock syndrome symptoms include severe abdominal pain, vomiting, and mucosal bleeding

Transmission: Bite of infective mosquito, rarely by blood transfusion or organ transplant

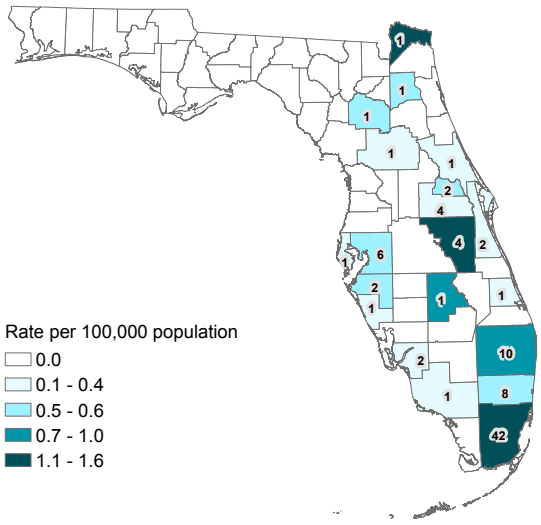
Reason for surveillance: Identify individual cases and implement control measures to prevent endemicity, monitor incidence over time, estimate burden of illness

Comments: An outbreak of locally acquired dengue fever occurred in Monroe County in 2009 and 2010 and in Martin County in 2013. In 2014, there were five unrelated local introductions in Miami-Dade County, resulting in seven locally acquired cases.

Summary of Case Demographics

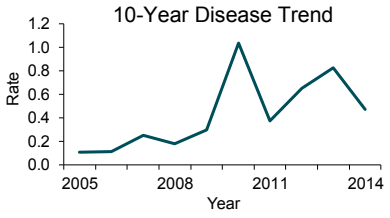
Summary			
Number of cases			92
Incidence rate (per 100,000 population)			0.5
Change from 5-year average incidence			-26.1%
Age (in years)			
Mean			48
Median			50
Min-max			9 - 79
Gender	**Number**	**(Percent)**	**Rate**
Female	41	(44.6)	0.4
Male	51	(55.4)	0.5
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	70	(76.9)	0.5
Black	7	(7.7)	NA
Other	14	(15.4)	NA
Unknown race	1		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	22	(25.0)	0.1
Hispanic	66	(75.0)	1.4
Unknown ethnicity	4		

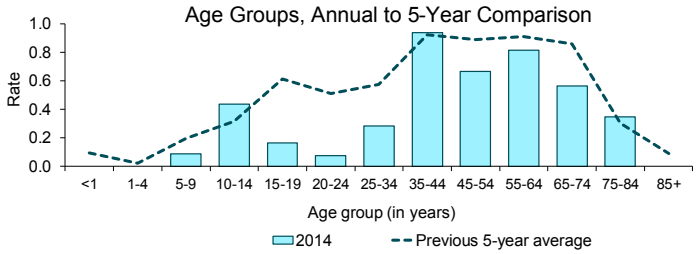
Reported Dengue Fever Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=92)

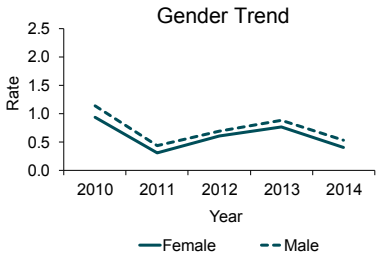


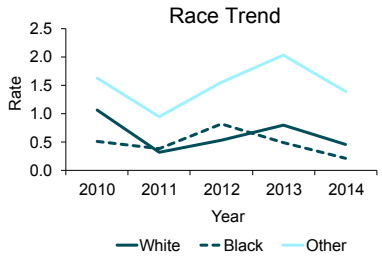
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

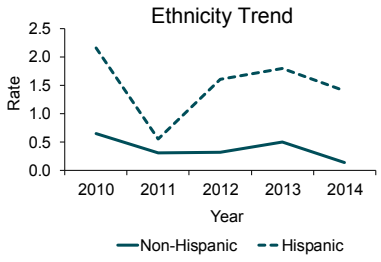
Reported Dengue Fever Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











Note that the majority of dengue fever cases are acquired outside of Florida.

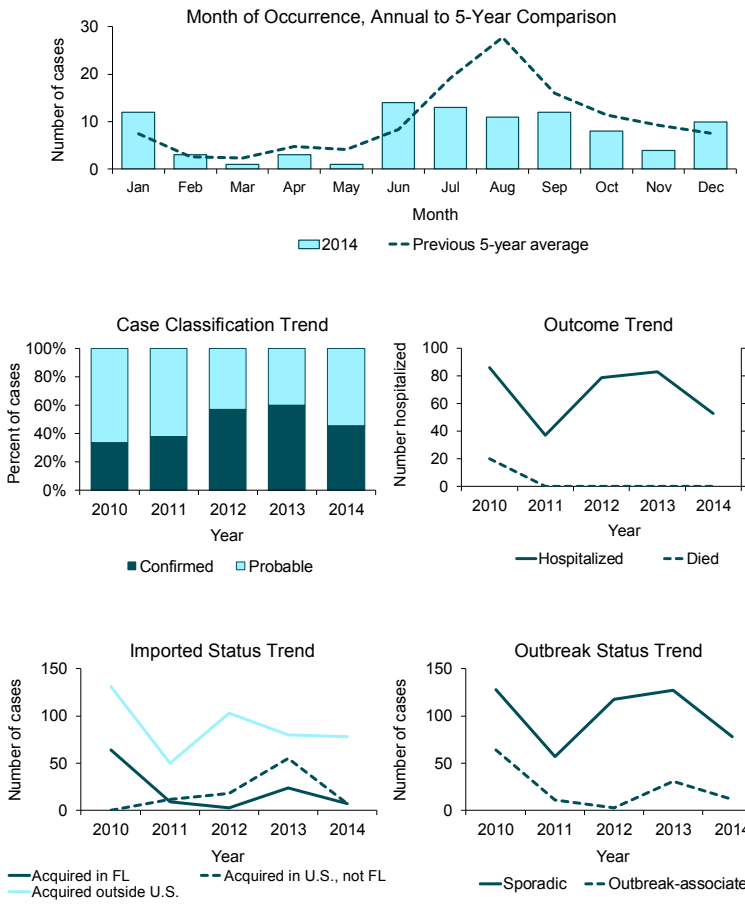
Dengue Fever

Summary of Case Factors

Summary	Number	
Number of cases	92	
Case classification	**Number**	**(Percent)**
Confirmed	42	(45.7)
Probable	50	(54.3)
Outcome	**Number**	**(Percent)**
Hospitalized	53	(57.6)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	7	(7.6)
Acquired in the U.S., not Florida	7	(7.6)
Acquired outside the U.S.	78	(84.8)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	78	(84.8)
Outbreak-associated	12	(13.0)
Outbreak status unknown	2	(2.2)
Region where infection acquired	**Number**	**(Percent)**
Central America/Caribbean	67	(78.8)
South America	9	(10.6)
Puerto Rico (U.S.)	6	(7.1)
Asia	2	(2.4)
Virgin Islands (U.S.)	1	(1.2)

Case counts and rates from this report may differ from those found in other vector-borne disease reports as different criteria are used to assemble the data. Other reports may use illness onset date instead of report date, or county of exposure instead of county of residence.

Reported Dengue Fever Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Five sporadic local introductions of dengue fever in Miami-Dade County involved DENV-2 (2), DENV-3 (2), and one unknown type of dengue virus. One of the local introductions resulted in a cluster of three cases in the same household. Nine non-Florida residents were also identified with dengue fever (note that this report only includes Florida residents in case counts). Both infected residents and non-residents pose a potential dengue virus introduction risk. Several people with dengue fever were also co-infected with chikungunya, although most did not report two distinct symptom onset dates.

Ehrlichiosis

Disease Facts

Cause: *Ehrlichia chaffeensis*, *Ehrlichia ewingii*, *Ehrlichia muris*-like bacteria

Type of illness: Common symptoms include fever, headache, fatigue, and muscle aches

Transmission: Tick-borne; bite of infective tick

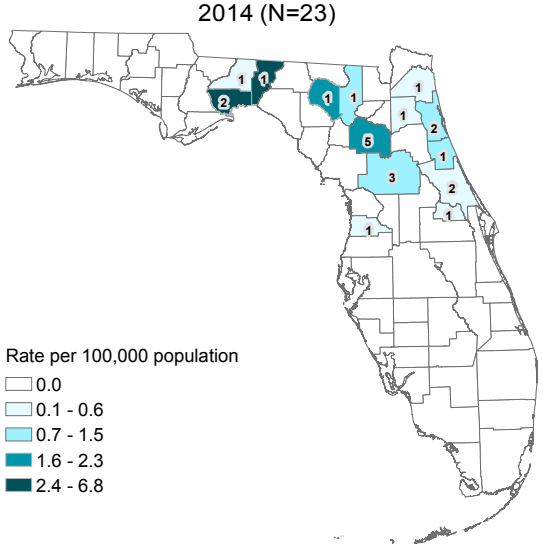
Reason for surveillance: Monitor incidence over time, estimate burden of illness, understand epidemiology of each species, target areas of high incidence for prevention education

Comments: Case numbers were notably elevated suggesting increased activity in 2014. Factors that could contribute to an increase in cases include environmental factors conducive to tick vectors or reservoir hosts. Most infections reported were acquired in Florida, particularly in the north central and east part of the state. All 2014 cases were infections of *E. chaffeensis*. In this year's report, ehrlichiosis and anaplasmosis are now summarized separately as the diseases involve different vectors, ecology, and geographic distribution.

Summary of Case Demographics

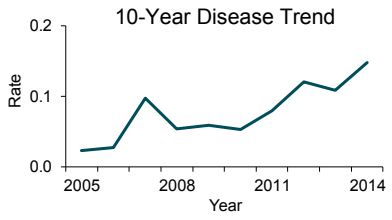
Summary			
Number of cases			29
Incidence rate (per 100,000 population)			0.1
Change from 5-year average incidence			+76.3%
Age (in years)			
Mean			62
Median			65
Min-max			6 - 95
Gender	**Number**	**(Percent)**	**Rate**
Female	16	(55.2)	NA
Male	13	(44.8)	NA
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	26	(96.3)	0.2
Black	1	(3.7)	NA
Other	0	(0.0)	NA
Unknown race	2		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	27	(100.0)	0.2
Hispanic	0	(0.0)	NA
Unknown ethnicity	2		

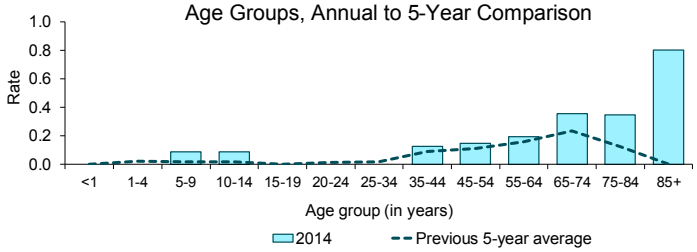
Reported Ehrlichiosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=23)

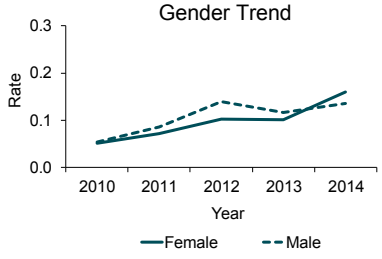


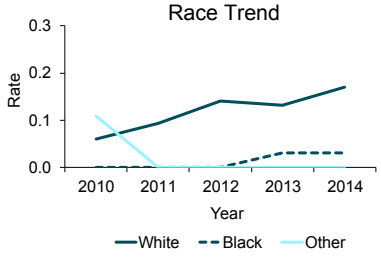
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

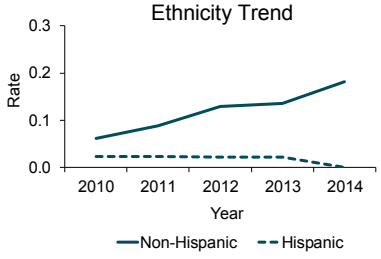
Reported Ehrlichiosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Ehrlichiosis cases were missing 6.7% of ethnicity data in 2011, 6.7% of race data in 2011, 13.0% of ethnicity data in 2012, 8.7% of race data in 2012, 6.9% of ethnicity data in 2014, and 6.9% of race data in 2014.

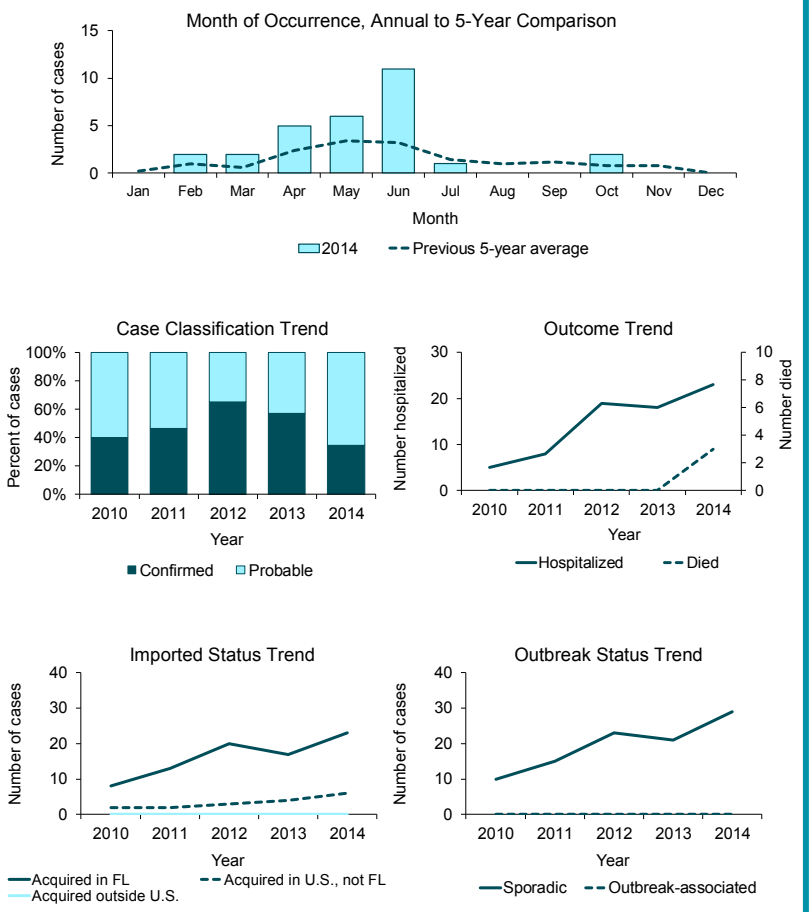
Ehrlichiosis

Summary of Case Factors

Summary	Number	
Number of cases	29	
Case classification	**Number**	**(Percent)**
Confirmed	10	(34.5)
Probable	19	(65.5)
Outcome	**Number**	**(Percent)**
Hospitalized	23	(79.3)
Died	3	(10.3)
Imported status	**Number**	**(Percent)**
Acquired in Florida	23	(79.3)
Acquired in the U.S., not Florida	6	(20.7)
Acquired outside the U.S.	0	(0.0)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	29	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)

Case counts and rates from this report may differ from those found in other vector-borne disease reports as different criteria are used to assemble the data. Other reports may use illness onset date instead of report date, or county of exposure instead of county of residence.

Reported Ehrlichiosis Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Ehrlichiosis is a broad term used to describe a group of bacterial pathogens. At least three different *Ehrlichia* species are known to cause human illness in the U.S. Both *E. chaffeensis*, also known as human monocytic ehrlichiosis (HME) and *E. ewingii* are transmitted by the lone star tick (*Amblyomma americanum*), one of the most commonly encountered ticks in the southeastern U.S. A third *Ehrlichia* species, provisionally called *E. muris*-like (EML), has been reported in a small number of cases in Minnesota and Wisconsin, but no tick vector has been identified. Ehrlichiosis cases present with similar symptoms no matter which species is involved, and are indistinguishable by serologic testing. *E. ewingii* and EML are most frequently identified in immunocompromised patients.

Severe illness is most frequent in adults >50 years old. Delays in treatment can also result in severe outcome. Three fatal infections reported in 2014 involved persons >70 years old. A mortality rate over 10% is well above the national mortality rate of 1-2%. Most reported cases (79.3%) were hospitalized. These data suggest that more mild cases may be unrecognized or under-reported.

Giardiasis, Acute

Disease Facts

Cause: *Giardia* parasites

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; including person-to-person, animal-to-person, waterborne, and foodborne

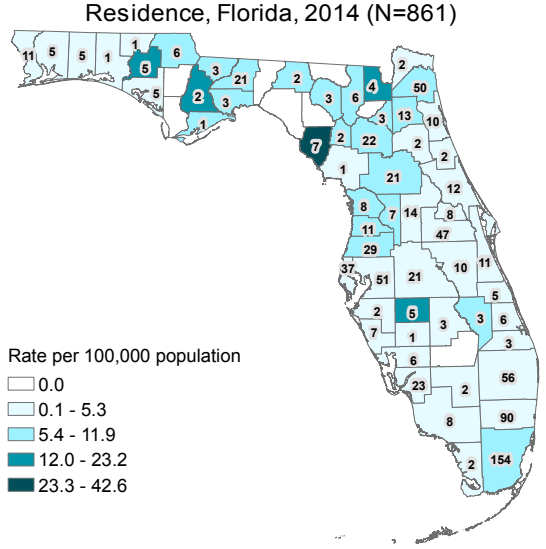
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food/water source, ill food handler), monitor incidence over time, estimate burden of illness

Comments: From August 2008 to January 2011, laboratory-confirmed cases no longer had to be symptomatic to meet the confirmed case definition, resulting in an increase in reported cases in 2009 and 2010. The percentage of cases reported in people in sensitive situations (i.e., food handlers, daycares, and health care settings), typically ~10%, decreased in 2013 (7.9%) and returned to a more characteristic level in 2014 (9.6%).

Summary of Case Demographics

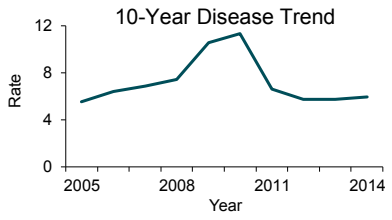
Summary			
Number of cases			1,165
Incidence rate (per 100,000 population)			6.0
Change from 5-year average incidence			-25.7%
Age (in years)			
Mean			31
Median			30
Min-max			0 - 93
Gender	**Number**	**(Percent)**	**Rate**
Female	440	(37.8)	4.4
Male	725	(62.2)	7.6
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	876	(82.7)	5.7
Black	92	(8.7)	2.8
Other	91	(8.6)	9.1
Unknown race	106		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	717	(67.6)	4.8
Hispanic	343	(32.4)	7.3
Unknown ethnicity	105		

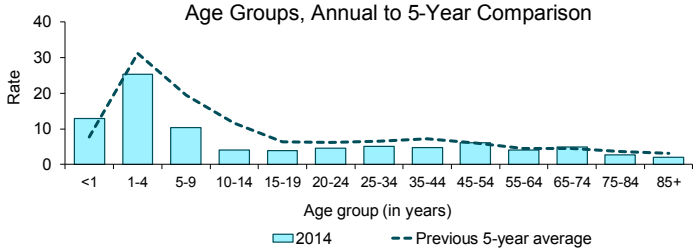
Reported Acute Giardiasis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=861)

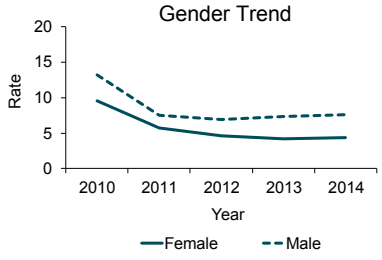


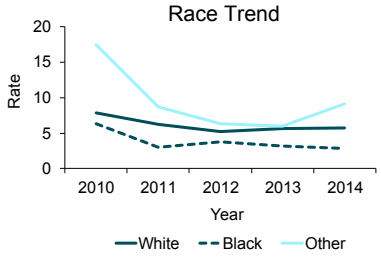
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

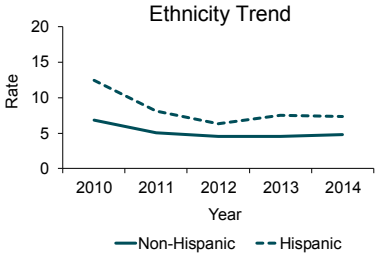
Reported Acute Giardiasis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









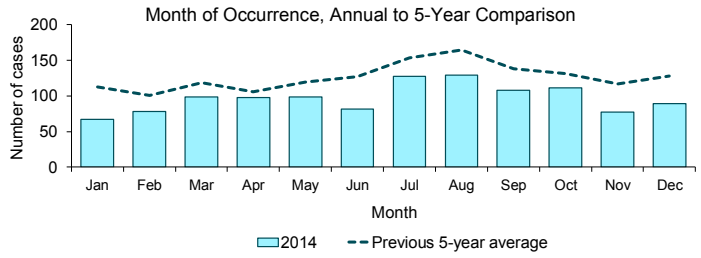


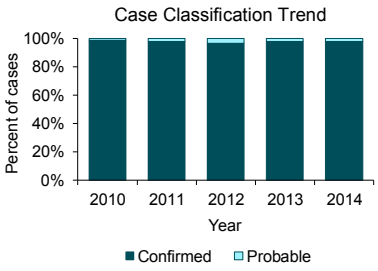
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Acute giardiasis cases were missing 28.7% of ethnicity data in 2010, 28.6% of race data in 2010, 13.1% of ethnicity data in 2011, 12.4% of race data in 2011, 13.2% of ethnicity data in 2012, 12.4% of race data in 2012, 8.9% of ethnicity data in 2013, 9.3% of race data in 2013, 9.0% of ethnicity data in 2014, and 9.1% of race data in 2014.

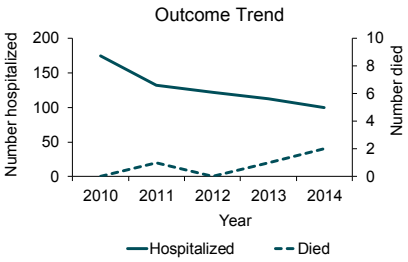
Summary of Case Factors

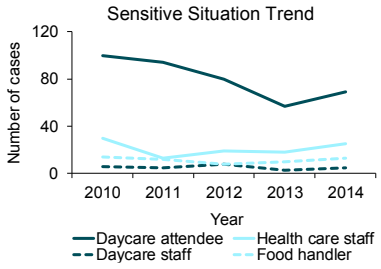
Summary	Number	
Number of cases	1,165	
Case classification	**Number**	**(Percent)**
Confirmed	1,142	(98.0)
Probable	23	(2.0)
Outcome	**Number**	**(Percent)**
Hospitalized	100	(8.6)
Died	2	(0.2)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	69	(5.9)
Daycare staff	5	(0.4)
Health care staff	25	(2.1)
Food handler	13	(1.1)
Imported status	**Number**	**(Percent)**
Acquired in Florida	861	(73.9)
Acquired in the U.S., not Florida	30	(2.6)
Acquired outside the U.S.	178	(15.3)
Acquired location unknown	96	(8.2)
Outbreak status	**Number**	**(Percent)**
Sporadic	1,030	(88.4)
Outbreak-associated	107	(9.2)
Outbreak status unknown	28	(2.4)

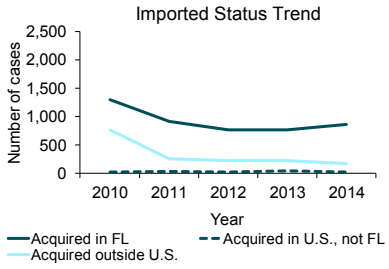
Reported Acute Giardiasis Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

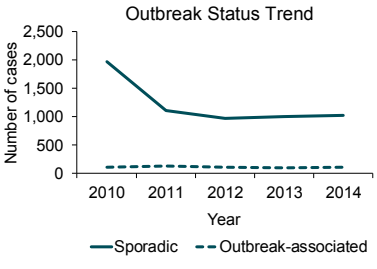












Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Gonorrhea

Disease Facts

Cause: *Neisseria gonorrhoeae* bacteria

Type of illness: Frequently asymptomatic; sometimes abnormal discharge from vagina or penis or burning sensation when urinating

Transmission: Sexually transmitted disease (STD) spread by anal, vaginal, or oral sex and sometimes from mother to child during pregnancy or delivery

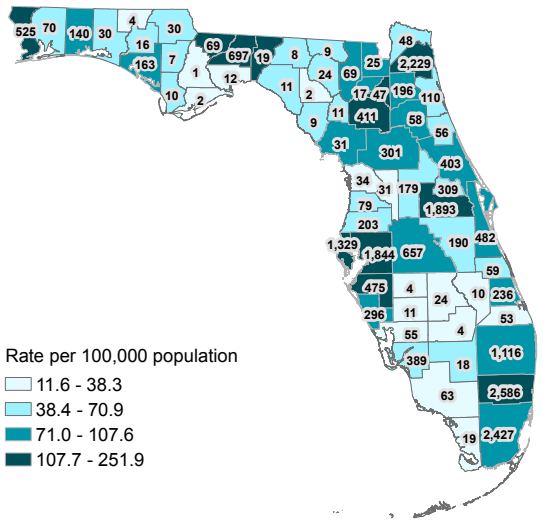
Reason for surveillance: Implement effective interventions immediately for every case, monitor incidence over time, estimate burden of illness, evaluate treatment and prevention programs

Comments: Incidence is highest among 20- to 24-year-olds, followed by 15- to 19-year-olds. Although incidence increased nationally from 2013 to 2014, Florida cases decreased slightly. A shift in treatment guidelines and recommendations for screening women <25 years old likely contributed to the long term decrease in cases.

Summary of Case Demographics

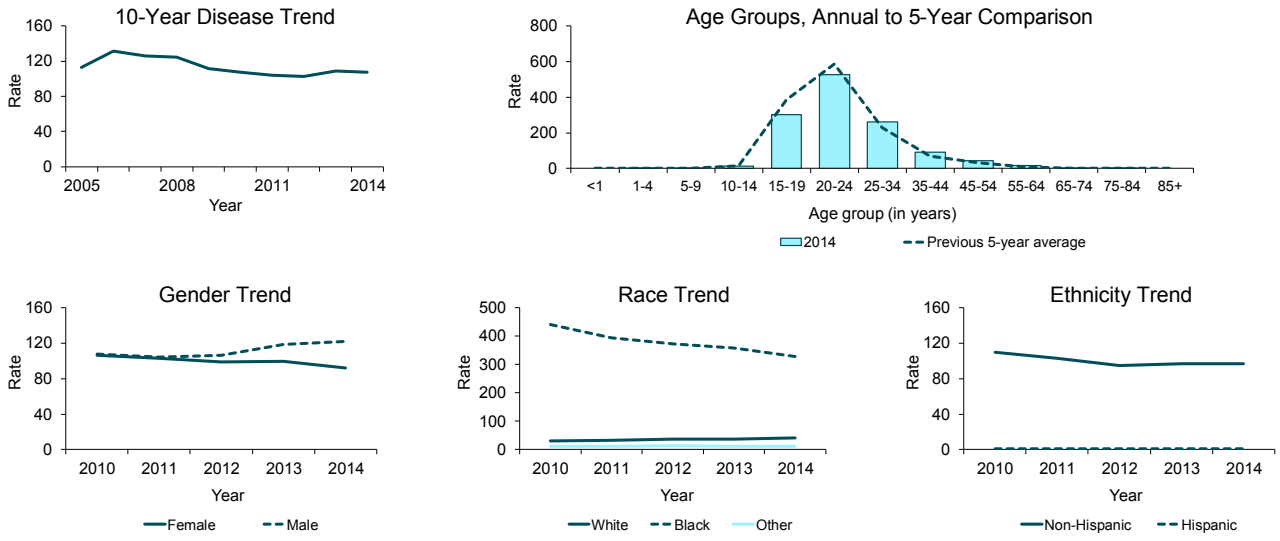
Summary			
Number of cases			20,945
Incidence rate (per 100,000 population)			107.1
Change from 5-year average incidence			+0.2%
Age (in years)			
Mean			27
Median			24
Min-max			2 - 88
Gender	**Number**	**(Percent)**	**Rate**
Female	9,227	(44.1)	92.3
Male	11,692	(55.9)	122.4
Unknown gender	26		
Race	**Number**	**(Percent)**	**Rate**
White	6,266	(36.6)	41.0
Black	10,745	(62.7)	329.2
Other	122	(0.7)	12.2
Unknown race	3,812		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	14,372	(86.9)	96.7
Hispanic	2,169	(13.1)	46.3
Unknown ethnicity	4,404		

Reported Gonorrhea Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=20,945)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Gonorrhea Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Gonorrhea cases were missing 12.4% of ethnicity data in 2010, 9.1% of race data in 2010, 15.0% of ethnicity data in 2011, 12.3% of race data in 2011, 19.8% of ethnicity data in 2012, 10.8% of race data in 2012, 24.1% of ethnicity data in 2013, 18.9% of race data in 2013, 21.0% of ethnicity data in 2014, and 18.2% of race data in 2014.

Haemophilus influenzae Invasive Disease in Children <5 Years Old

Disease Facts

Cause: *Haemophilus influenzae* bacteria

Type of illness: Can present as pneumonia, bacteremia, septicemia, meningitis, epiglottitis, septic arthritis, cellulitis, or purulent pericarditis; less frequently endocarditis and osteomyelitis

Transmission: Person-to-person; inhalation of infective respiratory tract droplets or direct contact with infective respiratory tract secretions

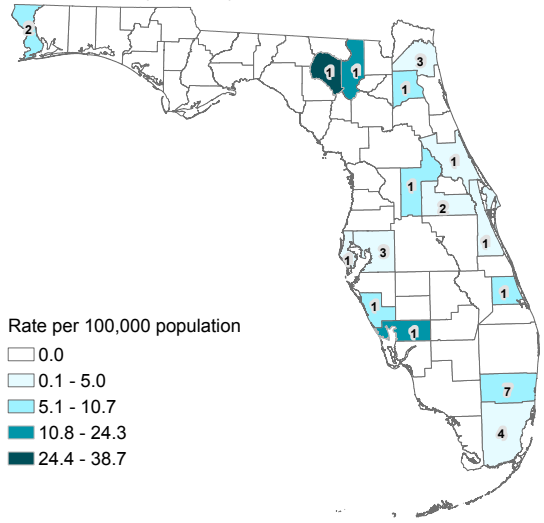
Reason for surveillance: Identify and control outbreaks, monitor incidence over time, monitor effectiveness of immunization programs and vaccines

Comments: *H. influenzae* serotype b (Hib) is a vaccine-preventable disease. Meningitis and septicemia due to Hib in children <5 years old have almost been eliminated since the introduction of effective Hib conjugate vaccines. Four Hib cases in children <5 were reported in 2014, compared to one in 2013, and three in 2012.

Summary of Case Demographics

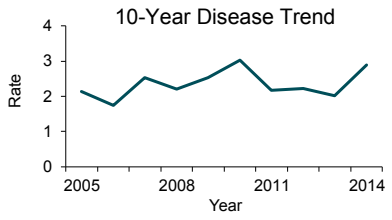
Summary			
Number of cases			32
Incidence rate (per 100,000 population)			2.9
Change from 5-year average incidence			+21.1%
Age (in years)			
Mean			1
Median			1
Min-max			0 - 4
Gender	**Number**	**(Percent)**	**Rate**
Female	17	(53.1)	NA
Male	15	(46.9)	NA
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	11	(35.5)	NA
Black	16	(51.6)	NA
Other	4	(12.9)	NA
Unknown race	1		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	24	(77.4)	3.1
Hispanic	7	(22.6)	NA
Unknown ethnicity	1		

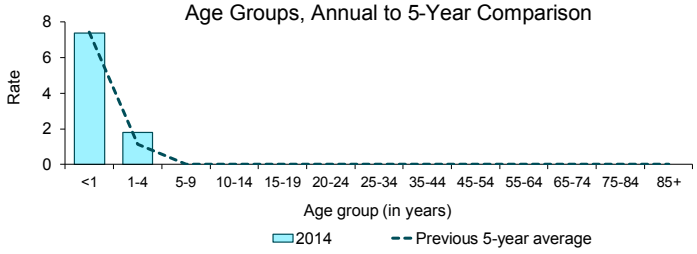
Reported *H. influenzae* Invasive Disease in Children <5 Years Old Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=31)

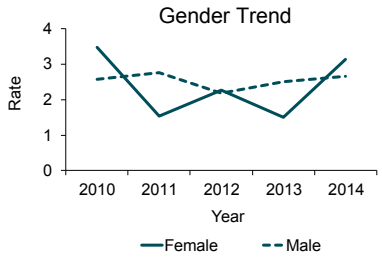


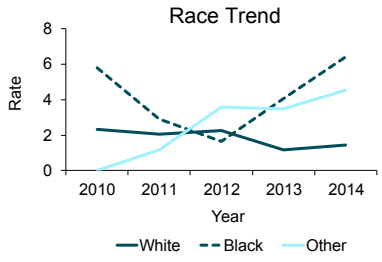
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

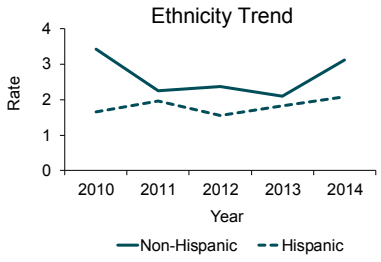
Reported *H. influenzae* Invasive Disease in Children <5 Years Old Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









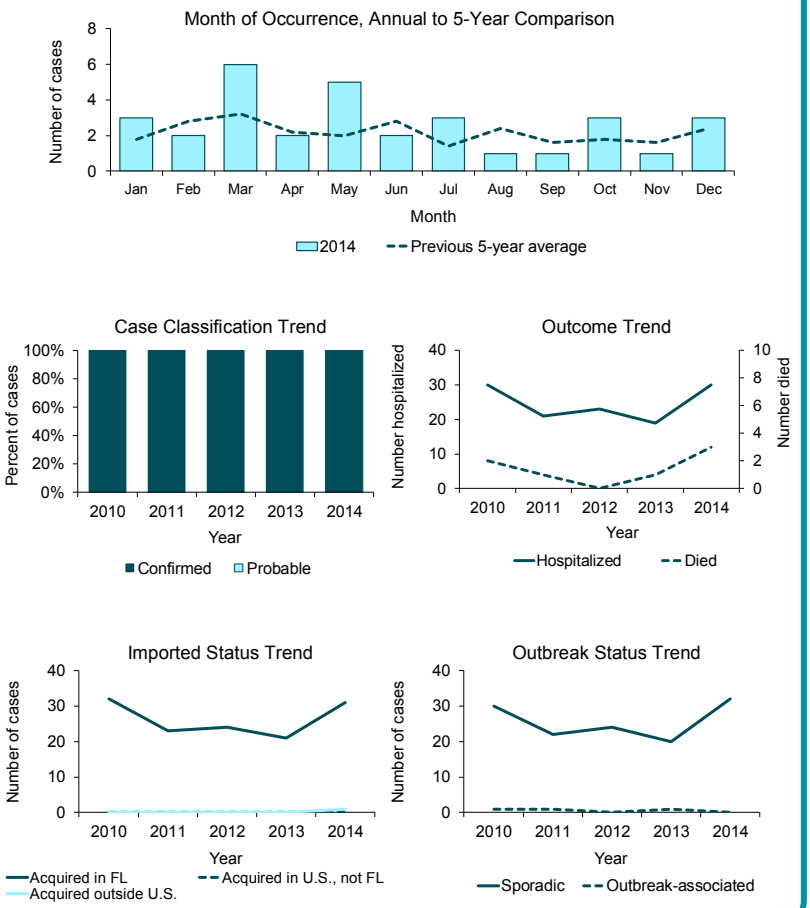


Haemophilus influenzae Invasive Disease in Children <5 Years Old

Summary of Case Factors

Summary	Number	
Number of cases	32	
Case classification	**Number**	**(Percent)**
Confirmed	32	(100.0)
Probable	0	(0.0)
Outcome	**Number**	**(Percent)**
Hospitalized	30	(93.8)
Died	3	(9.4)
Imported status	**Number**	**(Percent)**
Acquired in Florida	31	(96.9)
Acquired in the U.S., not Florida	0	(0.0)
Acquired outside the U.S.	1	(3.1)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	32	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)

Reported *H. influenzae* Invasive Disease in Children <5 Years Old Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Hepatitis A

Disease Facts

Cause: Hepatitis A virus (HAV)

Type of illness: Inflammation of the liver; sometimes asymptomatic; symptoms can include fever, malaise, loss of appetite, nausea, vomiting, abdominal discomfort, and jaundice

Transmission: Fecal-oral; including person-to-person, foodborne, and waterborne

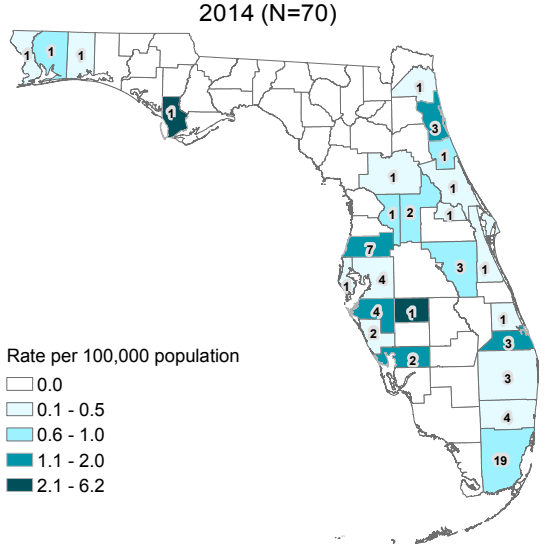
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product, ill food handler), monitor effectiveness of immunization programs

Comments: Hepatitis A is a vaccine-preventable disease. Incidence has continued to decline in Florida as well as nationally, likely due to increased use of the hepatitis A vaccine and recommendations to vaccinate as part of the routine childhood immunization schedule. A large portion of infections are acquired while traveling in other countries where routine immunizations are not required (31.8% in 2014).

Summary of Case Demographics

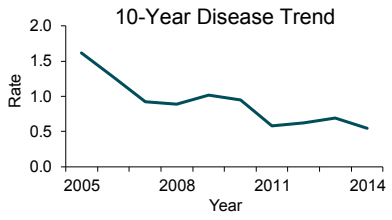
Summary			
Number of cases			107
Incidence rate (per 100,000 population)			0.5
Change from 5-year average incidence			-29.0%
Age (in years)			
Mean			47
Median			50
Min-max			4 - 92
Gender	**Number**	**(Percent)**	**Rate**
Female	59	(55.1)	0.6
Male	48	(44.9)	0.5
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	83	(81.4)	0.5
Black	9	(8.8)	NA
Other	10	(9.8)	NA
Unknown race	5		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	68	(66.7)	0.5
Hispanic	34	(33.3)	0.7
Unknown ethnicity	5		

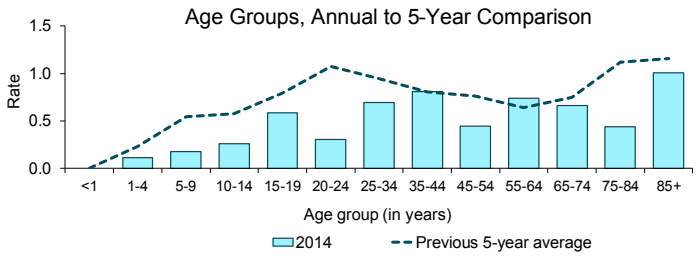
Reported Hepatitis A Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=70)

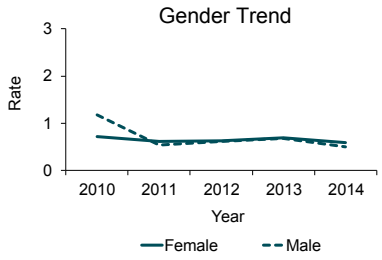


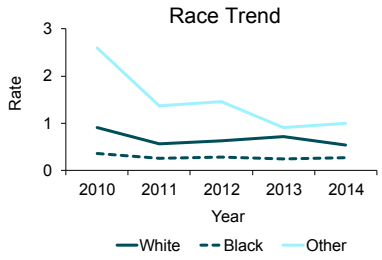
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

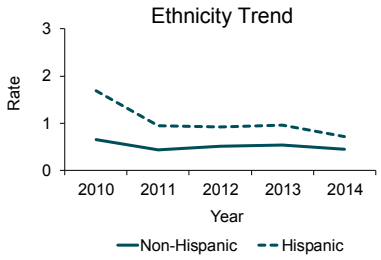
Reported Hepatitis A Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









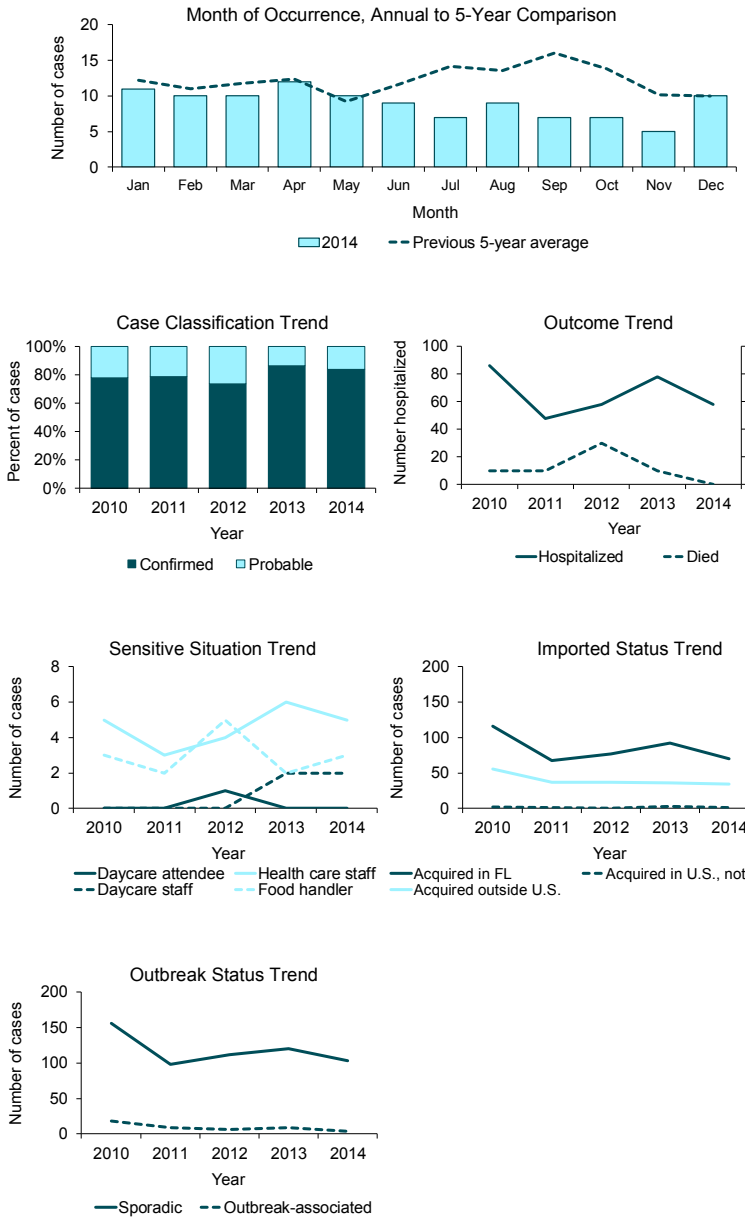


Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Hepatitis A cases were missing 5.6% of ethnicity data in 2010, 6.8% of ethnicity data in 2013, and 5.3% of race data in 2013.

Summary of Case Factors

Summary	Number	
Number of cases	107	
Case classification	**Number**	**(Percent)**
Confirmed	90	(84.1)
Probable	17	(15.9)
Outcome	**Number**	**(Percent)**
Hospitalized	58	(54.2)
Died	0	(0.0)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	0	(0.0)
Daycare staff	2	(1.9)
Health care staff	5	(4.7)
Food handler	3	(2.8)
Imported status	**Number**	**(Percent)**
Acquired in Florida	70	(65.4)
Acquired in the U.S., not Florida	1	(0.9)
Acquired outside the U.S.	34	(31.8)
Acquired location unknown	2	(1.9)
Outbreak status	**Number**	**(Percent)**
Sporadic	103	(96.3)
Outbreak-associated	4	(3.7)
Outbreak status unknown	0	(0.0)
Region where infection acquired	**Number**	**(Percent)**
Central America/Caribbean	19	(54.3)
South America	8	(22.9)
Asia	7	(20.0)
Other U.S. state	1	(2.9)

Reported Hepatitis A Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak-associated indicates that two or more cases are epidemiologically linked.

Additional Information

In 2014, there were no reported multistate outbreaks of hepatitis A. Four cases of hepatitis A were associated with two outbreaks. In one outbreak, sexual contact resulted in transmission from one person to another. In the second outbreak, close personal contact resulted in transmission from one person to another.

Hepatitis B, Acute

Disease Facts

Cause: Hepatitis B virus (HBV)

Type of illness: Inflammation of the liver; sometimes asymptomatic; symptoms can include malaise, loss of appetite, nausea, vomiting, abdominal discomfort, and jaundice; ~5% of infections become chronic

Transmission: Blood exposure (e.g., sharing drug needles), anal or vaginal sex, percutaneous exposure (e.g., tattooing, needle sticks), or from mother to child during pregnancy or delivery

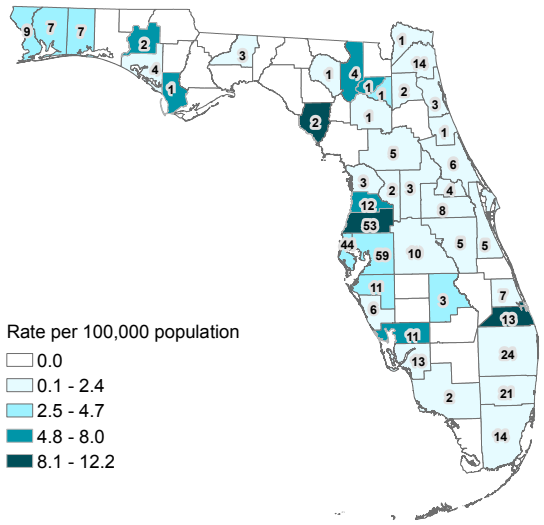
Reason for surveillance: Enhance efforts to prevent HBV transmission, identify and prevent outbreaks, improve allocation of resources for treatment services, assist in evaluating the impact of public health interventions, monitor effectiveness of immunization programs

Comments: Hepatitis B is a vaccine-preventable disease. Incidence declined over the last decade due to increased vaccination. An enhanced surveillance project in 2012 has led to an increase in cases identified.

Summary of Case Demographics

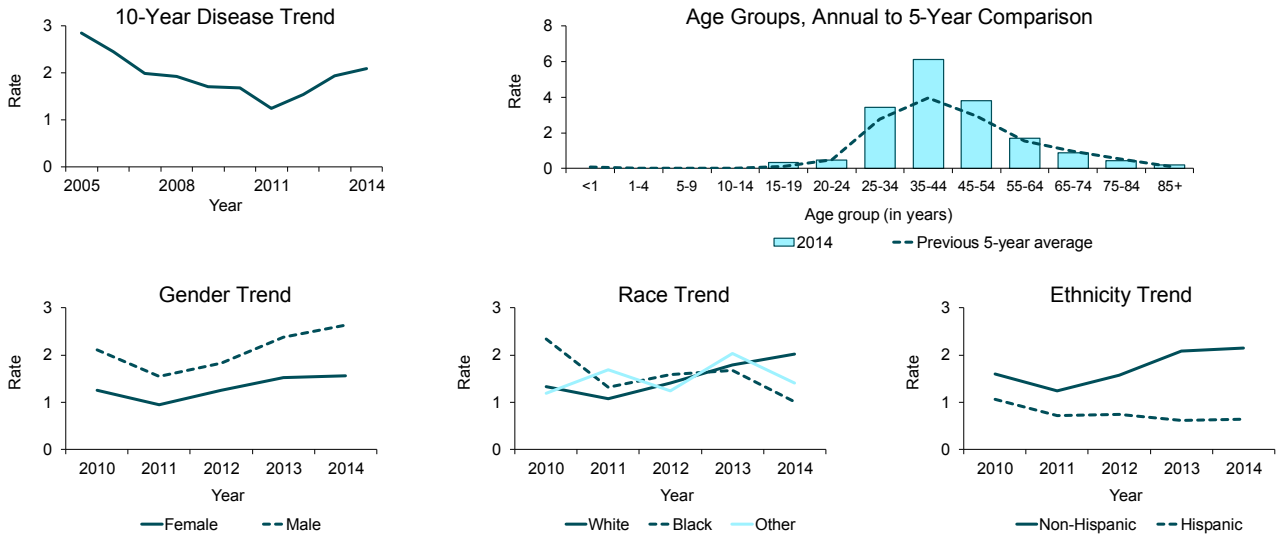
Summary			
Number of cases			408
Incidence rate (per 100,000 population)			2.1
Change from 5-year average incidence			+29.0%
Age (in years)			
Mean			44
Median			42
Min-max			19 - 90
Gender	**Number**	**(Percent)**	**Rate**
Female	156	(38.2)	1.6
Male	252	(61.8)	2.6
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	309	(86.8)	2.0
Black	33	(9.3)	1.0
Other	14	(3.9)	NA
Unknown race	52		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	319	(91.4)	2.1
Hispanic	30	(8.6)	0.6
Unknown ethnicity	59		

Reported Acute Hepatitis B Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=408)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Acute Hepatitis B Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Acute hepatitis B cases were missing 11.7% of ethnicity data in 2010, 10.8% of race data in 2010, 9.4% of ethnicity data in 2011, 7.2% of race data in 2011, 9.9% of ethnicity data in 2012, 6.5% of race data in 2012, 10.1% of ethnicity data in 2013, 7.7% of race data in 2013, 14.5% of ethnicity data in 2014, and 12.7% of race data in 2014.

Summary of Case Factors

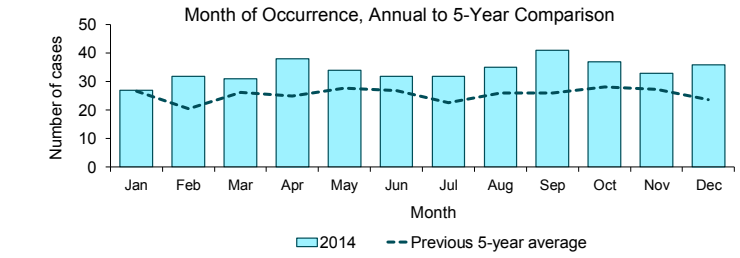
Summary	Number	
Number of cases	408	
Case classification	**Number**	**(Percent)**
Confirmed	313	(76.7)
Probable	95	(23.3)
Outcome	**Number**	**(Percent)**
Hospitalized	290	(71.1)
Died	3	(0.7)
Imported status	**Number**	**(Percent)**
Acquired in Florida	354	(86.8)
Acquired in the U.S., not Florida	4	(1.0)
Acquired outside the U.S.	4	(1.0)
Acquired location unknown	46	(11.3)
Outbreak status	**Number**	**(Percent)**
Sporadic	360	(88.2)
Outbreak-associated	22	(5.4)
Outbreak status unknown	26	(6.4)

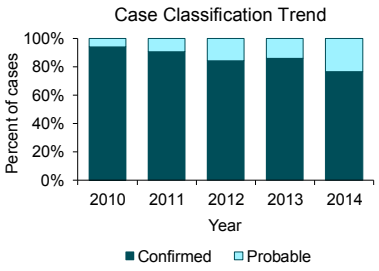
The number of reported acute hepatitis B cases continued to slowly increase in 2014, partially due to an enhanced surveillance project focusing on chronic hepatitis in young adults implemented in 2012. Additionally, laboratory reporting requirements were updated in July 2014 for laboratories participating in electronic laboratory reporting to include all negative hepatitis results, allowing counties to correctly identify more acute cases. The increase was seen in non-Hispanic white men and women.

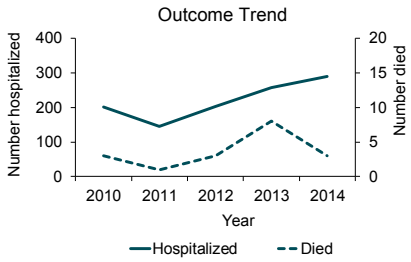
Of the 22 outbreak-associated cases, 12 cases were epidemiologically linked to another case by sexual contact (7), personal contact (3), household contact (1), and unknown contact (1). The remaining six cases classified as outbreak-associated were later determined to be sporadic.

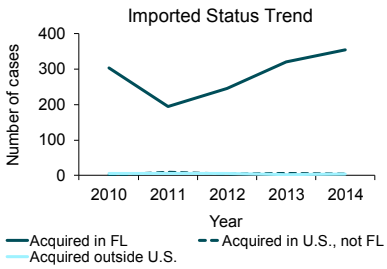
In 2014, 397 cases (97.3%) were investigated and 281 cases (68.9%) were interviewed to determine possible risk factors. Risk factors reported are shown to the right. Note that a person can report multiple risk factors. New infections are most frequently associated with drug use, likely leading to sharing of injection equipment or risky sexual behaviors.

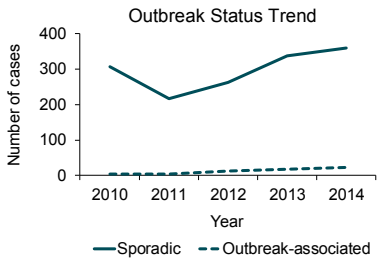
Reported Acute Hepatitis B Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



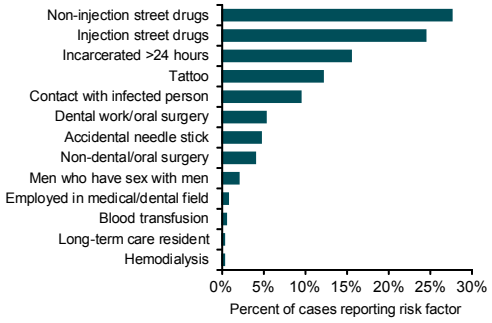








Risk Factors for Reported Acute Hepatitis B Cases, Florida, 2014



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak-associated indicates that two or more cases are epidemiologically linked.

Hepatitis B, Surface Antigen in Pregnant Women

Disease Facts

Cause: Hepatitis B virus (HBV)

Type of illness: Acute or chronic illness; infection is identified when a woman tests positive for hepatitis B surface antigen (HBsAg) during pregnancy, regardless of symptoms; up to 90% of perinatal infections become chronic

Transmission: Anal or vaginal sex, blood exposure (e.g., sharing drug needles), percutaneous exposure (e.g., tattooing, needle sticks), or from mother to child during pregnancy or delivery

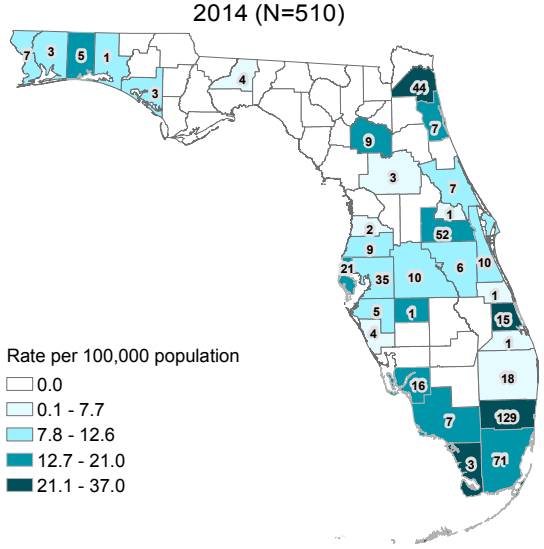
Reason for surveillance: Identify individual cases and implement control measures to prevent HBV transmission from mother to baby; evaluate effectiveness of screening programs

Comments: Hepatitis B is a vaccine-preventable disease. Identification of HBsAg in pregnant women allows for appropriate treatment of their infants, significantly reducing the infants' risk of contracting HBV. In the U.S., Asians have a high HBsAg carrier rate (7-16%) and account for most infections in the "other" race category.

Summary of Case Demographics

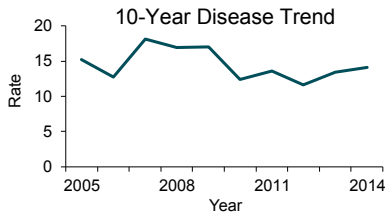
Summary			
Number of cases			510
Incidence rate (per 100,000 population)			14.1
Change from 5-year average incidence			+3.6%
Age (in years)			
Mean			30
Median			30
Min-max			15 - 45
Gender	**Number**	**(Percent)**	**Rate**
Female	510	(100.0)	14.1
Male	NA	NA	NA
Unknown gender	NA		
Race	**Number**	**(Percent)**	**Rate**
White	104	(22.2)	3.9
Black	188	(40.1)	25.7
Other	177	(37.7)	78.8
Unknown race	41		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	411	(89.9)	15.8
Hispanic	46	(10.1)	4.5
Unknown ethnicity	53		

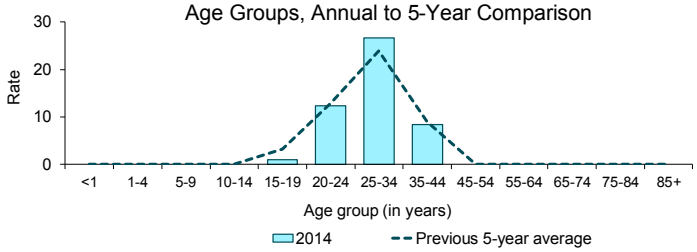
Reported Hepatitis B Surface Antigen in Pregnant Women Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=510)

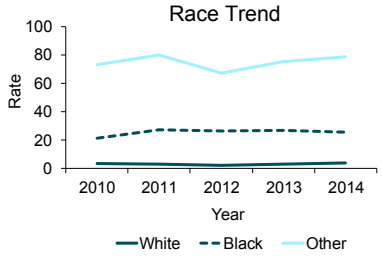


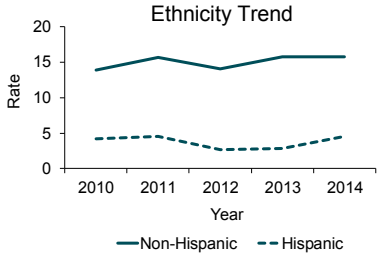
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Hepatitis B Surface Antigen in Pregnant Women Incidence Rates Per 100,000 Population by Year, Age, Race, and Ethnicity, Florida









Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Hepatitis B surface antigen in pregnant women cases were missing 8.2% of ethnicity data in 2010, 6.6% of race data in 2010, 6.4% of ethnicity data in 2011, 5.6% of ethnicity data in 2012, 8.7% of ethnicity data in 2013, 6.8% of race data in 2013, 10.4% of ethnicity data in 2014, and 8.0% of race data in 2014.

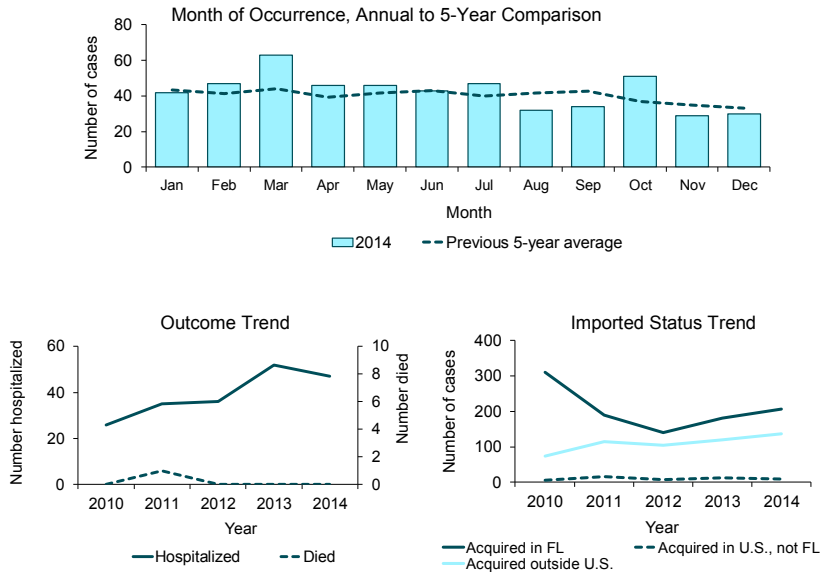
Hepatitis B, Surface Antigen in Pregnant Women

Summary of Case Factors

Summary	Number	
Number of cases	510	
Outcome	**Number**	**(Percent)**
Hospitalized	47	(9.2)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	206	(40.4)
Acquired in the U.S., not Florida	9	(1.8)
Acquired outside the U.S.	137	(26.9)
Acquired location unknown	158	(31.0)

According to the 2013 National Immunization Survey, the estimated HBV vaccination coverage for birth dose administered from birth through 3 days of age was 74.2% ± 1.4 in the U.S. and 58.0% ± 8.3 in Florida.

Reported Hepatitis B Surface Antigen in Pregnant Women Cases by Month of Occurrence, Outcome, and Imported Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired.

Hepatitis C, Acute

Disease Facts

Cause: Hepatitis C virus (HCV)

Type of illness: Inflammation of the liver; sometimes asymptomatic; symptoms can include fever, malaise, loss of appetite, nausea, vomiting, abdominal discomfort, and jaundice

Transmission: Blood exposure, with most infections occurring due to sharing injection drug equipment; rarely by anal or vaginal sex or from mother to child during pregnancy or delivery

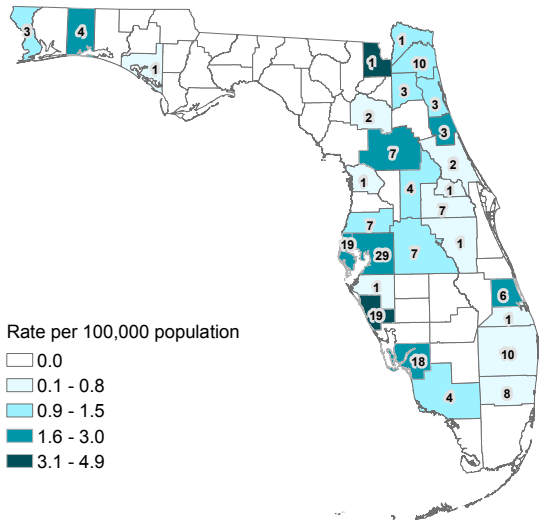
Reason for surveillance: Enhance efforts to prevent HCV transmission, identify and prevent outbreaks, improve allocation of resources for treatment services, assist in evaluating the impact of public health interventions and screening programs

Comments: The increase in cases is due to a change in case definition (2008), an enhanced surveillance project focusing on chronic infections in young adults (2012), and changes in risk behaviors in young adults.

Summary of Case Demographics

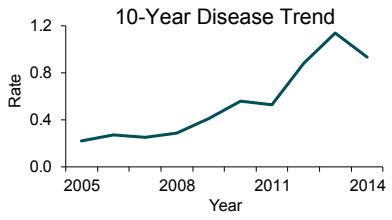
Summary			
Number of cases			183
Incidence rate (per 100,000 population)			0.9
Change from 5-year average incidence			+33.0%
Age (in years)			
Mean			34
Median			31
Min-max			17 - 66
Gender	**Number**	**(Percent)**	**Rate**
Female	93	(50.8)	0.9
Male	90	(49.2)	0.9
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	160	(92.0)	1.0
Black	6	(3.4)	NA
Other	8	(4.6)	NA
Unknown race	9		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	161	(94.7)	1.1
Hispanic	9	(5.3)	NA
Unknown ethnicity	13		

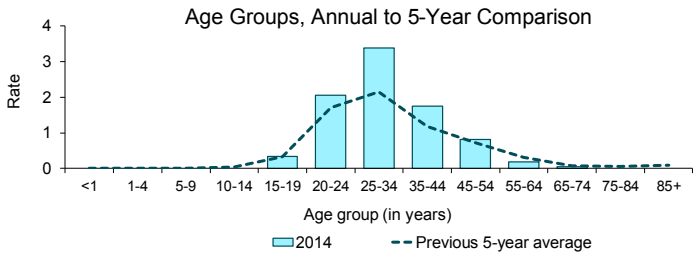
Reported Acute Hepatitis C Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=183)

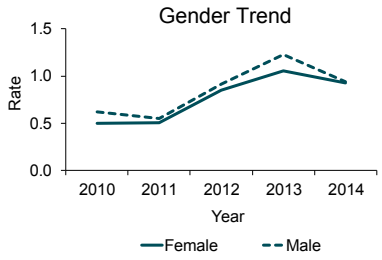


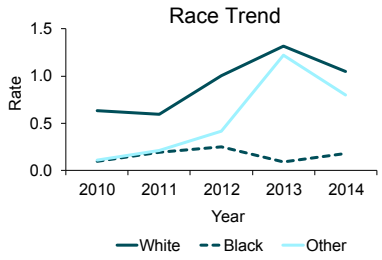
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

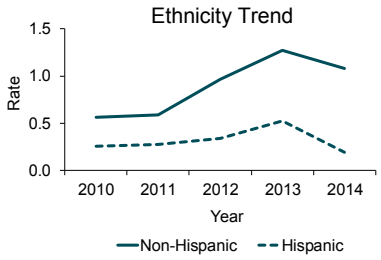
Reported Acute Hepatitis C Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









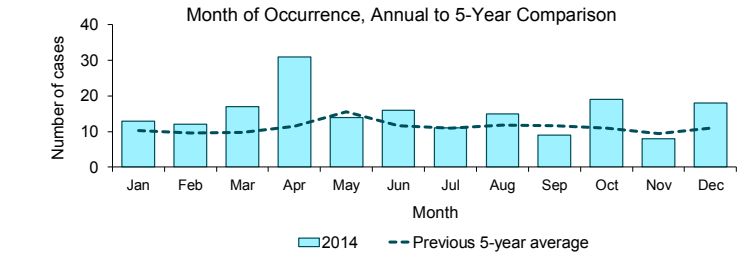


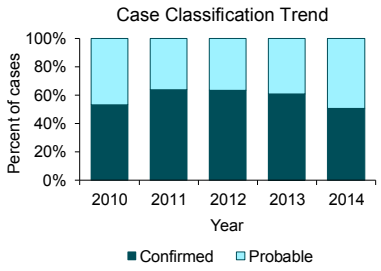
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Acute hepatitis C cases were missing 12.4% of ethnicity data in 2010, 7.6% of race data in 2010, 7.1% of ethnicity data in 2012, and 7.1% of ethnicity data in 2014.

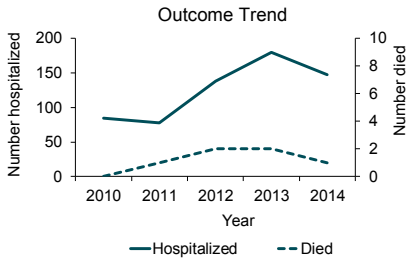
Summary of Case Factors

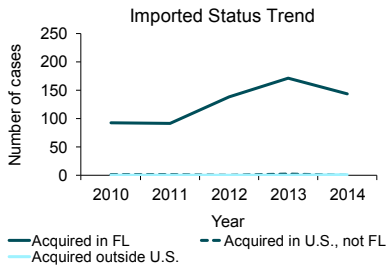
Summary	Number	
Number of cases	183	
Case classification	**Number**	**(Percent)**
Confirmed	93	(50.8)
Probable	90	(49.2)
Outcome	**Number**	**(Percent)**
Hospitalized	148	(80.9)
Died	1	(0.5)
Imported status	**Number**	**(Percent)**
Acquired in Florida	144	(78.7)
Acquired in the U.S., not Florida	0	(0.0)
Acquired outside the U.S.	1	(0.5)
Acquired location unknown	38	(20.8)
Outbreak status	**Number**	**(Percent)**
Sporadic	169	(92.3)
Outbreak-associated	4	(2.2)
Outbreak status unknown	10	(5.5)

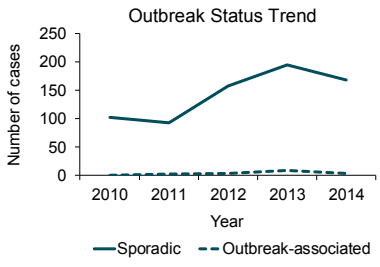
Reported Acute Hepatitis C Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida

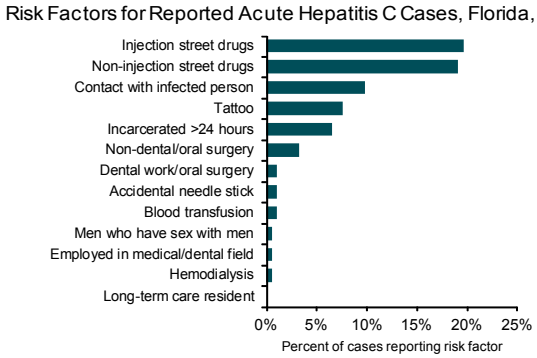












Variation in identified disease incidence at the local level likely reflects differences in the true incidence of disease and differences in the vigor with which surveillance is performed. Conducting surveillance for acute hepatitis C is difficult because acute infection is differentiated from chronic infection only by the presence of acute clinical symptoms. Most acute cases are identified only when symptoms warrant hospitalization. The majority of >22,000 hepatitis C reports received by the Florida Department of Health (DOH) each year are from laboratories and do not include symptom information. Additional follow-up is required to determine if they represent acute or chronic infection or repeated testing of a person previously reported. Not all local health offices have the resources to conduct these investigations due to the large volume of laboratory results received. As a result, there is variation in the number of acute hepatitis C cases identified by county.

In 2012, DOH implemented an enhanced surveillance project focusing on chronic hepatitis in young adults. In July 2014, reporting requirements were updated for laboratories participating in electronic laboratory reporting to include all negative hepatitis results, allowing counties to correctly identify more acute cases. In 2014, 182 cases (99.5%) were investigated and 98 cases (53.8%) were interviewed to determine possible risk factors. Risk factors reported are shown above. Note that a person can report multiple risk factors. Injection drug use and non-injection drug use were the most commonly reported risk factors. New infections of viral hepatitis are frequently associated with drug use, likely due to sharing of injection equipment or risky sexual behaviors.

Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak-associated indicates that two or more cases are epidemiologically linked.

Disease Facts

Cause: HIV

Type of illness: Flu-like illness at primary infection, causes severe damage to immune system leading to AIDS

Transmission: Anal or vaginal sex; blood exposure (e.g., sharing drug needles, receiving infected blood transfusion [rare due to donor screening]); or from mother to child during pregnancy, delivery, or breast-feeding

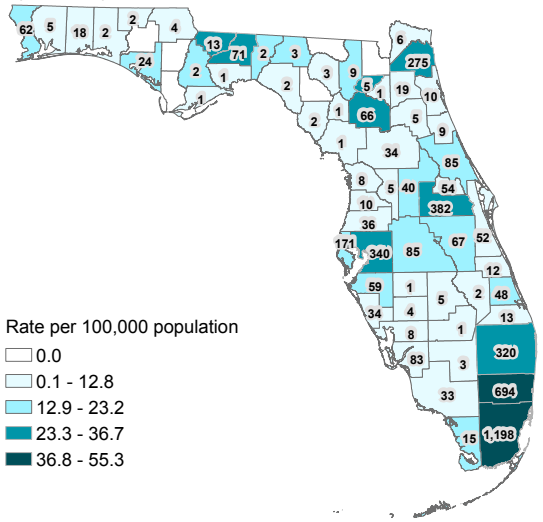
Reason for surveillance: Enhance efforts to prevent HIV transmission, improve allocation of resources for treatment services, and assist in evaluating the impact of public health interventions

Comments: The expansion of electronic laboratory reporting in 2007 and 2012 led to artificial peaks in newly reported cases in 2008 and 2013. HIV infection cases in 2014 increased 4% from the previous year. Statewide increases in infected white and Hispanic men who have sex with men contributed to the increase in 2014.

Summary of Case Demographics

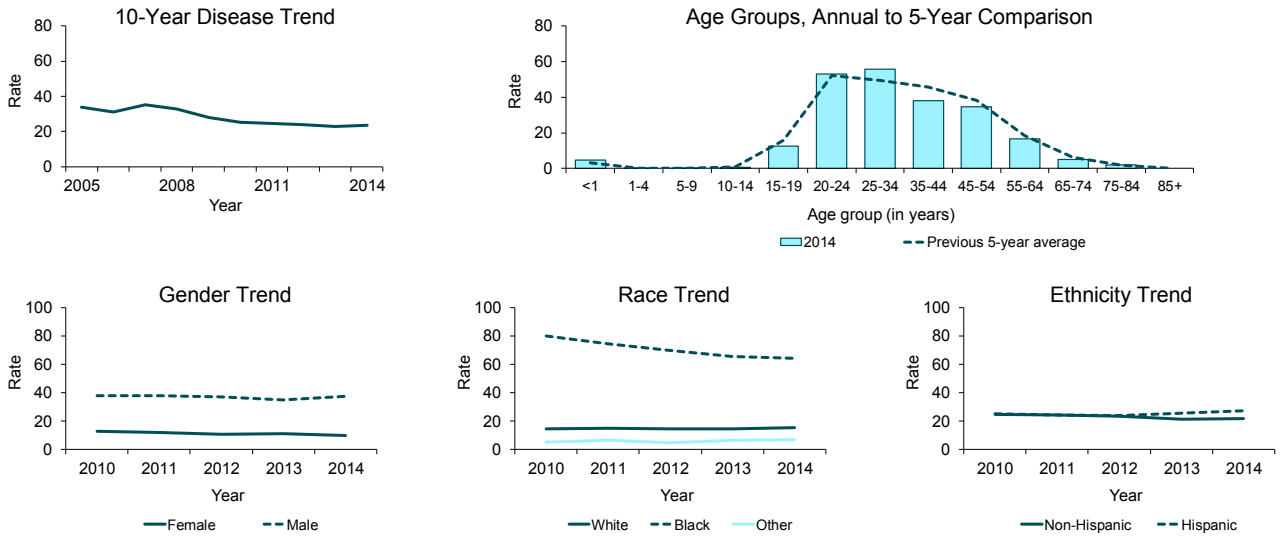
Summary			
Number of cases			4,613
Incidence rate (per 100,000 population)			23.6
Change from 5-year average incidence			-5.1%
Age (in years)			
Mean			38
Median			35
Min-max			0 - 88
Gender	**Number**	**(Percent)**	**Rate**
Female	1,007	(21.8)	10.1
Male	3,606	(78.2)	37.7
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	2,389	(52.3)	15.6
Black	2,107	(46.1)	64.6
Other	70	(1.5)	7.0
Unknown race	47		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	3,268	(71.8)	22.0
Hispanic	1,281	(28.2)	27.3
Unknown ethnicity	64		

Reported HIV Infection Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=4,613)



County totals exclude Department of Corrections cases (n=87).
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported HIV Infection Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Additional Information

HIV infection cases tend to represent a more current picture of the AIDS epidemic as they are indicative of recent exposure. For HIV infection cases in men reported in 2014, male-to-male sexual contact was the most common risk factor (76.7%), followed by heterosexual contact (18.0%).

In 2014, HIV infection cases by race and ethnicity were more evenly distributed among adult men compared to adult women; 65.8% of infected adult women were black.

From 1979 to 2014, 1,220 perinatally infected newborns were born in Florida. The number of HIV-infected babies rose from 1979 through 1993. In April 1994, the U.S. Public Health Service released guidelines for use of zidovudine (ZDV), also known as azidothymidine (AZT), to reduce perinatal HIV transmission. Beginning in October 1996, Florida law required the offering of HIV testing to pregnant women, resulting in more HIV-positive women being offered ZDV during their pregnancies. Enhanced perinatal surveillance systems have documented increased use of ZDV among exposed infants and HIV-infected mothers at the prenatal, intrapartum, delivery and neonatal stages.

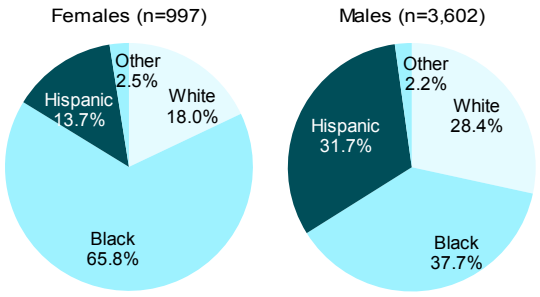
In the past few years, the use of other medical therapies, including protease inhibitors, has supplemented the use of ZDV for both infected mothers and their babies. The use of these medical therapies has resulted in a dramatic decline in perinatally acquired HIV/AIDS since 1994. Other initiatives in Florida have also contributed to the reduction in perinatal cases, including Targeted Outreach to Pregnant Women Act programs, the assignment of perinatal nurses to the most heavily impacted counties, social marketing and provider education. Combined, these successful initiatives have resulted in a 94.5% decline in perinatally infected newborns in Florida from 109 cases in 1993 to six cases in 2014.

For information on AIDS, please see the AIDS chapter within this section (page 11).

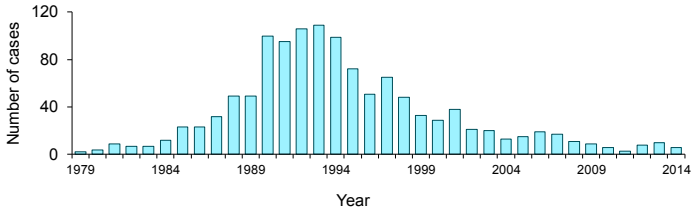
Reported Adult (13 Years and Older) HIV Infection Cases by Gender and Mode of Exposure, Florida, 2014

Mode of exposure	Females cases (n=0,997)		Males cases (n=3,602)	
	Number	(percent)	Number	(percent)
Men who have sex with men (MSM)	NA		2,761	(76.7)
Heterosexual	894	(89.7)	649	(18.0)
Injection drug user (IDU)	98	(9.8)	101	(2.8)
MSM and IDU	NA		88	(2.4)
Other	5	(0.5)	3	(0.1)
Total	997		3,602	

Reported Adult (13 Years and Older) HIV Infection Cases by Gender and Race/Ethnicity, Florida, 2014



Reported Perinatal HIV Infection Cases by Year of Birth, Florida, 1979-2014



Please visit the AIDS Surveillance website to access additional information at www.FloridaHealth.gov/diseases-and-conditions/aids/surveillance/index.html.

To locate services across the state please visit www.FloridaHealth.gov/diseases-and-conditions/aids/index.html.

Lead Poisoning

Disease Facts

Cause: Lead

Type of illness: Wide range of adverse health effects, from difficulty learning, sluggishness, and fatigue to seizures, coma, and death

Exposure: Most commonly ingestion of paint dust in houses built prior to elimination of lead in paints in 1978 for children; occupational exposure for adults

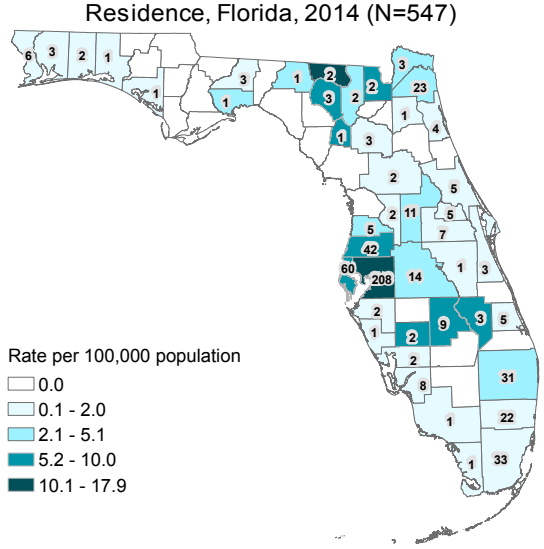
Reason for surveillance: Estimate burden among children, ensure follow-up care for identified cases, prevent new cases and exacerbation of illness, help target future public health interventions

Comments: Prior to 2010, lead poisoning case data were primarily stored outside the state's reportable disease surveillance system, therefore only cases from 2010 to 2014 are presented in this report. Lead poisoning is most often identified in children as part of routine screening.

Summary of Case Demographics

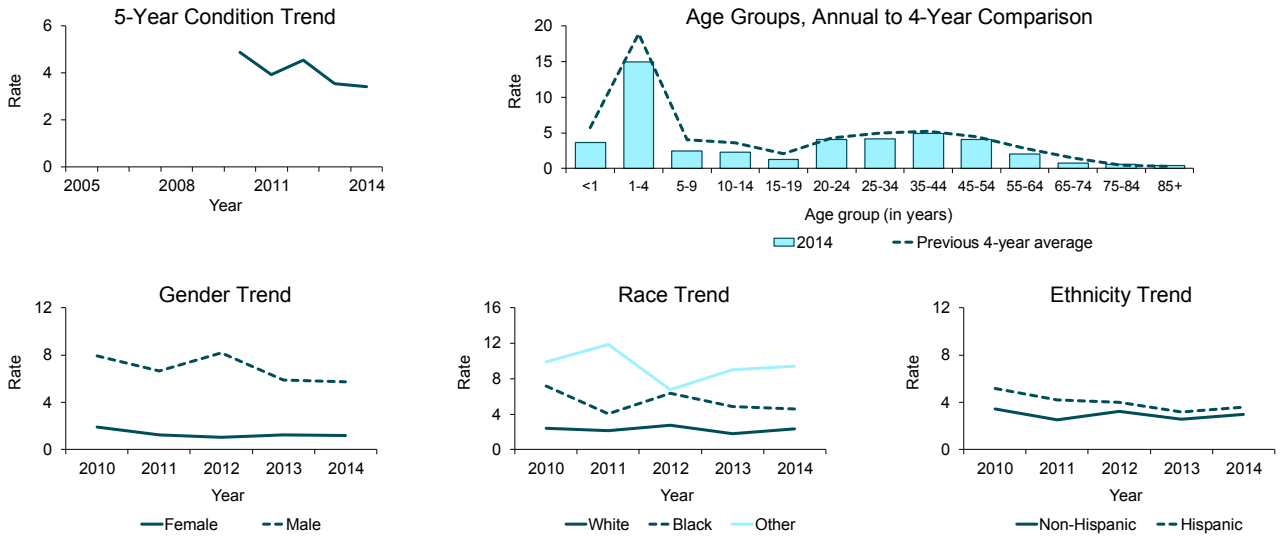
Summary			
Number of cases			669
Incidence rate (per 100,000 population)			3.4
Change from 4-year average incidence			-18.8%
Age (in years)			
Mean			30
Median			31
Min-max			0 - 89
Gender	**Number**	**(Percent)**	**Rate**
Female	120	(17.9)	1.2
Male	549	(82.1)	5.7
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	358	(59.5)	2.3
Black	150	(24.9)	4.6
Other	94	(15.6)	9.4
Unknown race	67		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	444	(72.4)	3.0
Hispanic	169	(27.6)	3.6
Unknown ethnicity	56		

Reported Lead Poisoning Cases and Incidence Rates Per 100,000 Population (Restricted to Exposures Occurring in Florida) by County of Residence, Florida, 2014 (N=547)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Lead Poisoning Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

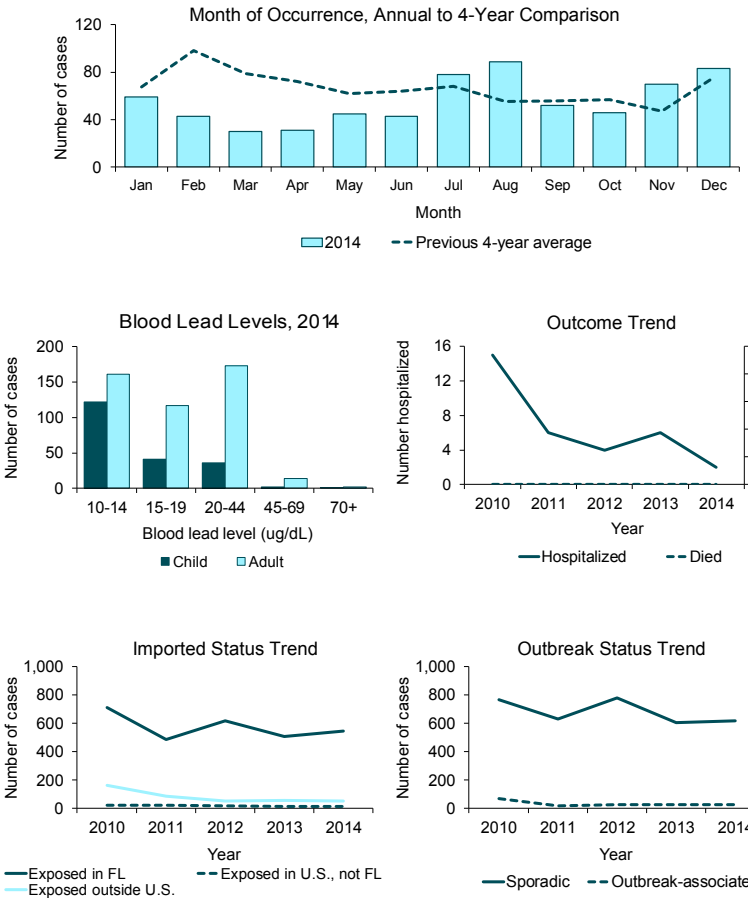


Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Lead poisoning cases were missing 21.4% of ethnicity data in 2010, 27.3% of race data in 2010, 25.6% of ethnicity data in 2011, 24.9% of race data in 2011, 25.0% of ethnicity data in 2012, 21.6% of race data in 2012, 23.6% of ethnicity data in 2013, 23.6% of race data in 2013, 8.4% of ethnicity data in 2014, and 10.0% of race data in 2014.

Summary of Case Factors

Summary	Number	
Number of cases	669	
Outcome	**Number**	**(Percent)**
Hospitalized	2	(0.3)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Exposed in Florida	547	(81.8)
Exposed in the U.S., not Florida	14	(2.1)
Exposed outside the U.S.	52	(7.8)
Exposed location unknown	56	(8.4)
Outbreak status	**Number**	**(Percent)**
Sporadic	618	(92.4)
Outbreak-associated	28	(4.2)
Outbreak status unknown	23	(3.4)
Age group	**Number**	**(Percent)**
<6 (young child)	153	(22.9)
6-15 (child)	49	(7.3)
16+ (adult)	467	(69.8)

Reported Lead Poisoning Cases by Month of Occurrence, Blood Lead Level, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the exposure most likely occurred. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In Florida, a blood lead level (BLL) ≥10 µg/dL meets the surveillance case definition for lead poisoning. Lead poisoning is most common in children <6 years old, partially due to recommended testing in this age group for children who are Medicaid-enrolled or eligible, foreign-born or otherwise identified as high-risk. Children in this age group are more likely to put lead-contaminated hands, toys, or paint chips in their mouths making them more vulnerable to lead poisoning than older children. Most children with lead poisoning have BLLs in the 10-14 µg/dL range.

Occupations such as battery manufacturing and recycling, scrap metal recycling, and automotive and radiator repair are the main causes of lead poisoning in adults. Common non-occupational exposures are shooting firearms; remodeling, renovating, or painting; retaining bullets from gunshot wounds; and lead casting. Lead poisoning is much more common in men than women as they are more likely to have these occupations and hobbies. Compared to children, adults have much higher BLLs, peaking in the 24-44 µg/dL range. Hillsborough, Pinellas, and Pasco counties have a high rate of lead poisoning cases due to the number of battery recycling plants and metal recycling plants located in those counties.

Legionellosis

Disease Facts

Cause: *Legionella* bacteria

Type of illness: Common symptoms include fever, muscle pain, cough, and pneumonia

Transmission: Airborne; inhalation of aerosolized water containing the bacteria

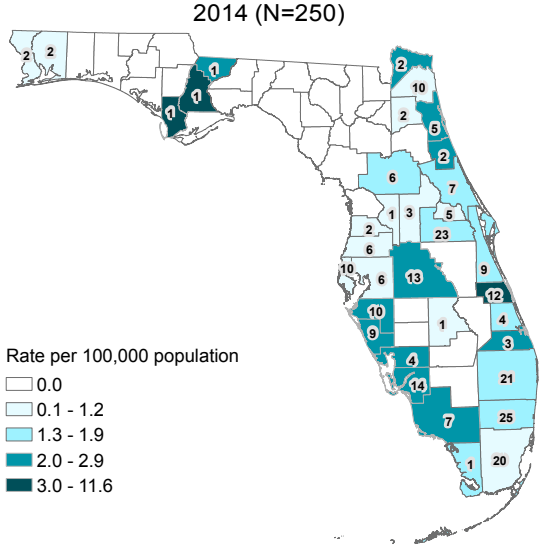
Reason for surveillance: Identify and control outbreaks, identify and mitigate common reservoirs, monitor incidence over time, estimate burden of illness

Comments: The elderly and those with weakened immune systems are at highest risk for developing disease. Environmental assessments are conducted for outbreaks to determine the source; recently identified sources in Florida and the U.S. include decorative fountains, hot tubs, cooling towers (air-conditioning units for large buildings), and potable water systems. Increasing incidence in Florida is consistent with the increase observed nationally over the past decade.

Summary of Case Demographics

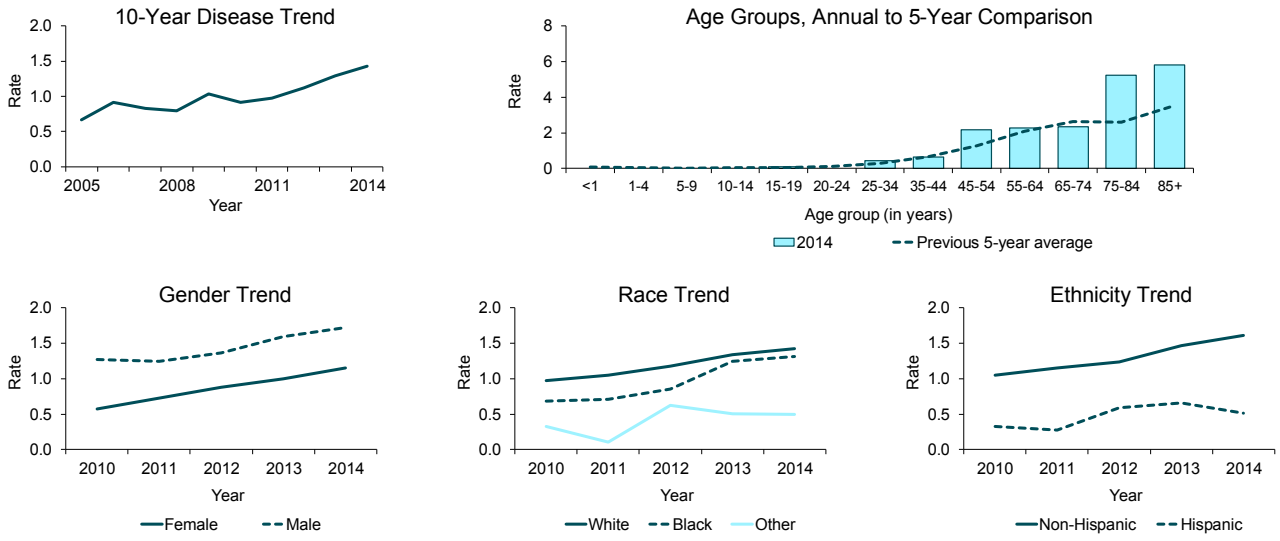
Summary			
Number of cases			280
Incidence rate (per 100,000 population)			1.4
Change from 5-year average incidence			+34.2%
Age (in years)			
Mean			64
Median			63
Min-max			19 - 96
Gender	**Number**	**(Percent)**	**Rate**
Female	115	(41.1)	1.2
Male	165	(58.9)	1.7
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	218	(82.0)	1.4
Black	43	(16.2)	1.3
Other	5	(1.9)	NA
Unknown race	14		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	240	(90.9)	1.6
Hispanic	24	(9.1)	0.5
Unknown ethnicity	16		

Reported Legionellosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=250)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Legionellosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

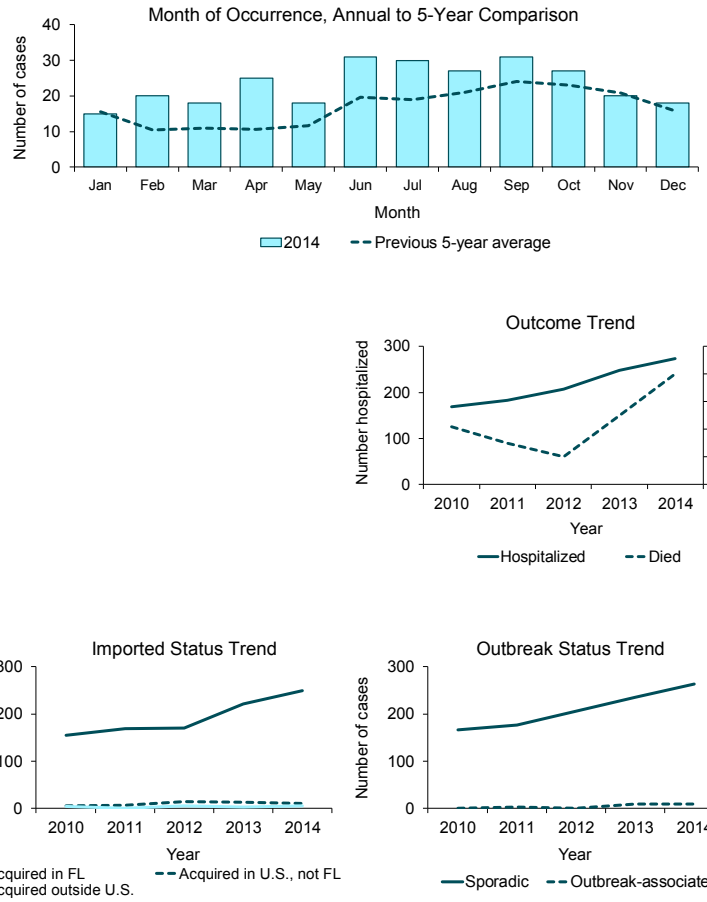


Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Legionellosis cases were missing 5.7% of ethnicity data in 2014.

Summary of Case Factors

Summary	Number	
Number of cases	280	
Outcome	**Number**	**(Percent)**
Hospitalized	274	(97.9)
Died	40	(14.3)
Imported status	**Number**	**(Percent)**
Acquired in Florida	250	(89.3)
Acquired in the U.S., not Florida	11	(3.9)
Acquired outside the U.S.	6	(2.1)
Acquired location unknown	13	(4.6)
Outbreak status	**Number**	**(Percent)**
Sporadic	263	(93.9)
Outbreak-associated	10	(3.6)
Outbreak status unknown	7	(2.5)

Reported Legionellosis Cases by Month of Occurrence, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In Florida, sporadic cases of both Legionnaires' disease and Pontiac fever (two distinct presentations of legionellosis) are monitored. Four outbreaks were identified in 2014. These outbreaks involved a hotel, correctional institution, a hospital, and an assisted living facility. Building water systems were identified as the source of all the outbreaks.

Listeriosis

Disease Facts

Cause: *Listeria monocytogenes* bacteria

Type of illness: Most people infected with *Listeria* have "invasive" infection, in which the bacteria has spread beyond the gastrointestinal tract; initial illness is often characterized by fever and diarrhea

Transmission: Foodborne; can be transmitted to fetus during pregnancy

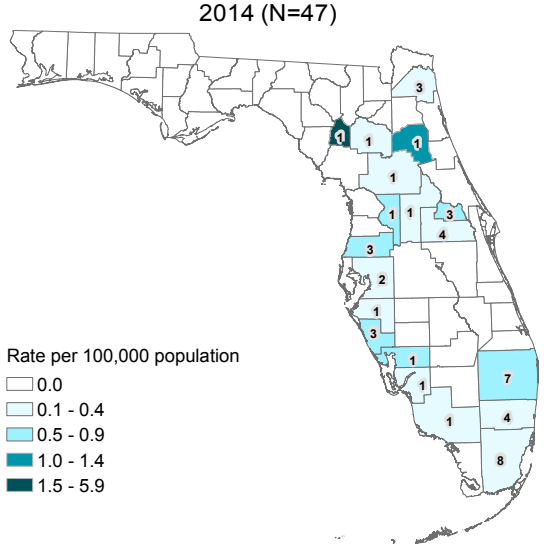
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product), monitor incidence over time, estimate burden of illness, reduce stillbirths

Comments: Listeriosis primarily affects pregnant women, newborns, and older adults or people with weakened immune systems. Infection during pregnancy can cause fetal loss, preterm labor, stillbirths, and illness or death in newborn infants. Incidence is usually slightly higher in women than in men, but was substantially higher in women in 2014.

Summary of Case Demographics

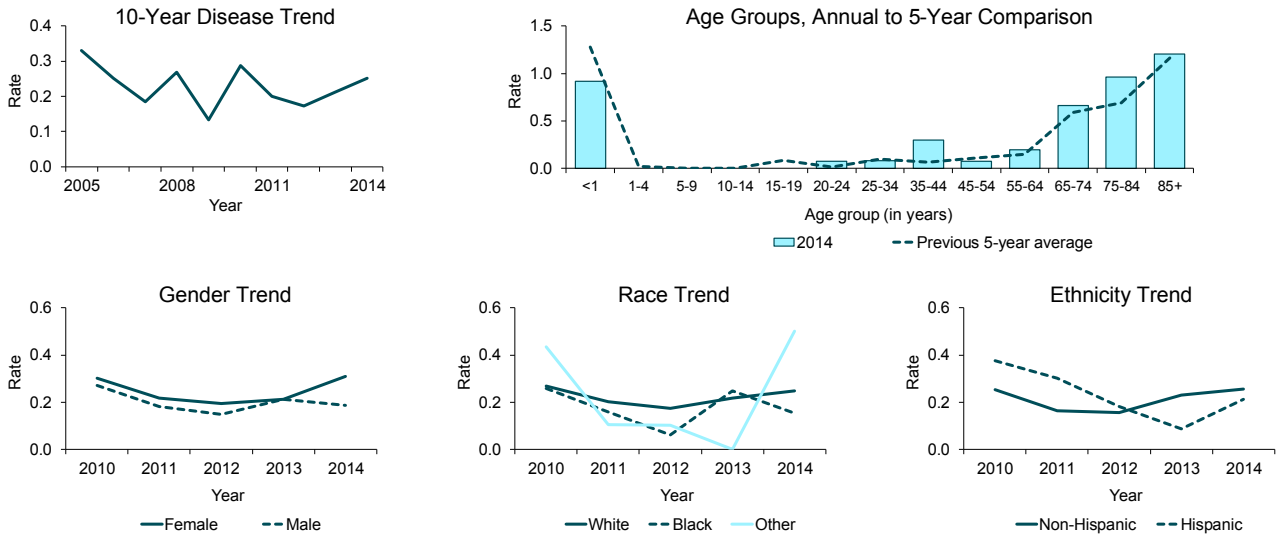
Summary			
Number of cases			49
Incidence rate (per 100,000 population)			0.3
Change from 5-year average incidence			+24.5%
Age (in years)			
Mean			63
Median			71
Min-max			0 - 96
Gender	**Number**	**(Percent)**	**Rate**
Female	31	(63.3)	0.3
Male	18	(36.7)	NA
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	38	(79.2)	0.2
Black	5	(10.4)	NA
Other	5	(10.4)	NA
Unknown race	1		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	38	(79.2)	0.3
Hispanic	10	(20.8)	NA
Unknown ethnicity	1		

Reported Listeriosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=47)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Listeriosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

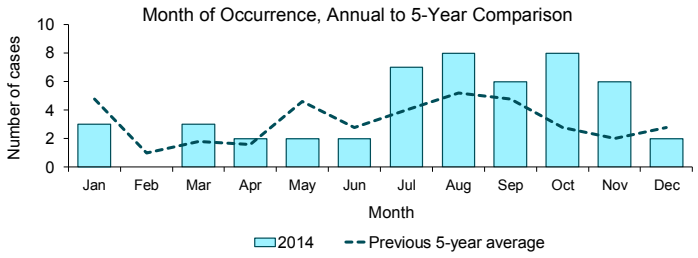


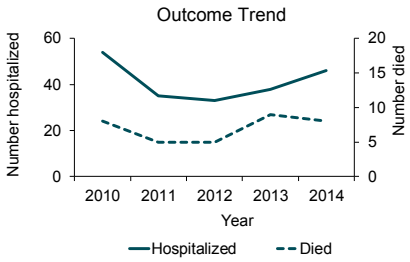
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Listeriosis cases were missing 5.3% of race data in 2011, 6.1% of ethnicity data in 2012, 12.1% of race data in 2012, and 7.3% of ethnicity data in 2013.

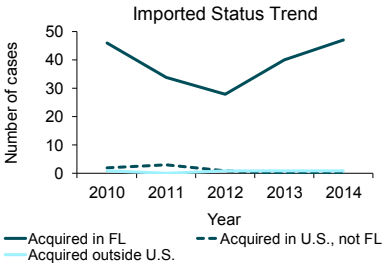
Summary of Case Factors

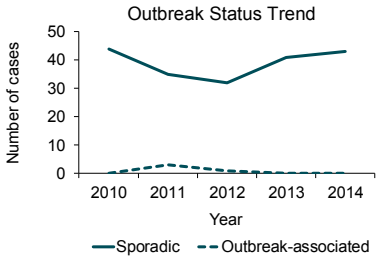
Summary	Number	
Number of cases	49	
Outcome	**Number**	**(Percent)**
Hospitalized	46	(93.9)
Died	8	(16.3)
Imported status	**Number**	**(Percent)**
Acquired in Florida	47	(95.9)
Acquired in the U.S., not Florida	0	(0.0)
Acquired outside the U.S.	1	(2.0)
Acquired location unknown	1	(2.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	43	(87.8)
Outbreak-associated	0	(0.0)
Outbreak status unknown	6	(12.2)

Reported Listeriosis Cases by Month of Occurrence, Outcome, Imported Status, and Outbreak Status, Florida









Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Three cases in Florida residents were linked to two different multistate outbreaks after being reported. One of these multistate outbreaks was linked to recalled cheeses. No vehicle was identified in the other outbreak. Unfortunately, information about these cases was not updated after being reported to reflect the outbreak association.

Lyme Disease

Disease Facts

Cause: *Borrelia burgdorferi* bacteria

Type of illness: Acute illness or late manifestation; common acute symptoms include fever, headache, fatigue, and erythema migrans (characteristic bull's-eye rash); late manifestation symptoms can include Bell's palsy, severe joint pain and swelling, and shooting pain

Transmission: Tick-borne; bite of infective tick

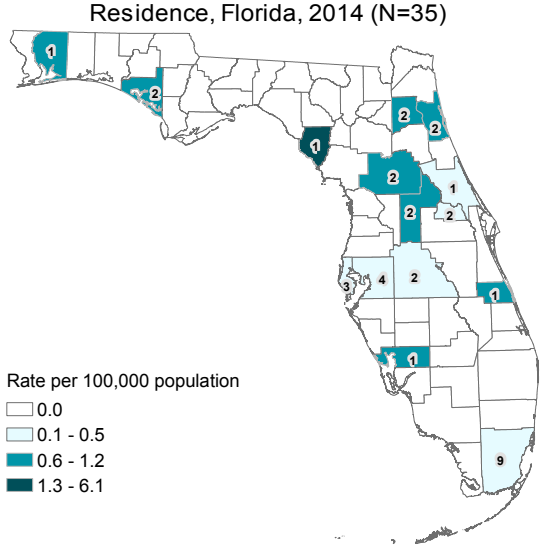
Reason for surveillance: Monitor incidence over time, estimate burden of illness and degree of endemicity, target areas of high incidence for prevention education

Comments: Lyme disease is the most common tick-borne disease in the U.S. A case definition change in 2008 expanding the acceptable laboratory criteria contributes significantly to the increase in cases starting in 2008. Other contributing factors include increased incidence, recognition, and geographic distribution.

Summary of Case Demographics

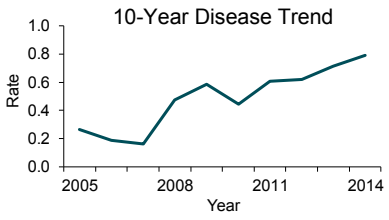
Summary			
Number of cases			155
Incidence rate (per 100,000 population)			0.8
Change from 5-year average incidence			+33.2%
Age (in years)			
Mean			45
Median			51
Min-max			1 - 83
Gender	**Number**	**(Percent)**	**Rate**
Female	71	(45.8)	0.7
Male	84	(54.2)	0.9
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	123	(96.1)	0.8
Black	1	(0.8)	NA
Other	4	(3.1)	NA
Unknown race	27		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	118	(91.5)	0.8
Hispanic	11	(8.5)	NA
Unknown ethnicity	26		

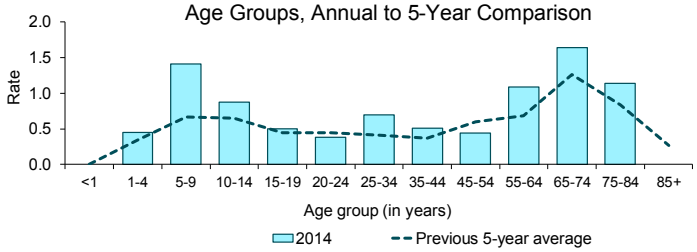
Reported Lyme Disease Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=35)

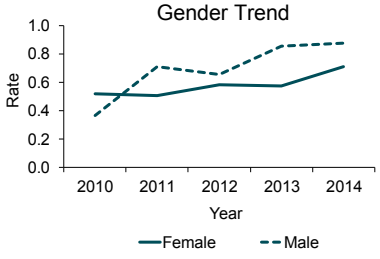


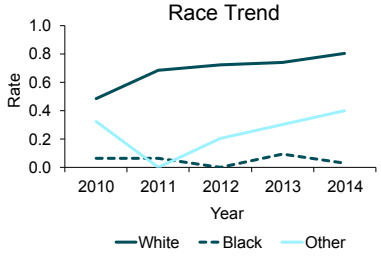
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

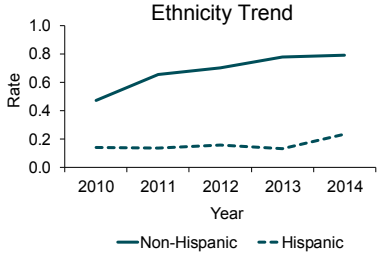
Reported Lyme Disease Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Lyme disease cases were missing 10.7% of ethnicity data in 2010, 8.3% of race data in 2010, 11.3% of ethnicity data in 2011, 9.6% of race data in 2011, 6.8% of ethnicity data in 2012, 6.8% of race data in 2012, 12.3% of ethnicity data in 2013, 14.5% of race data in 2013, 16.8% of ethnicity data in 2014, and 17.4% of race data in 2014.

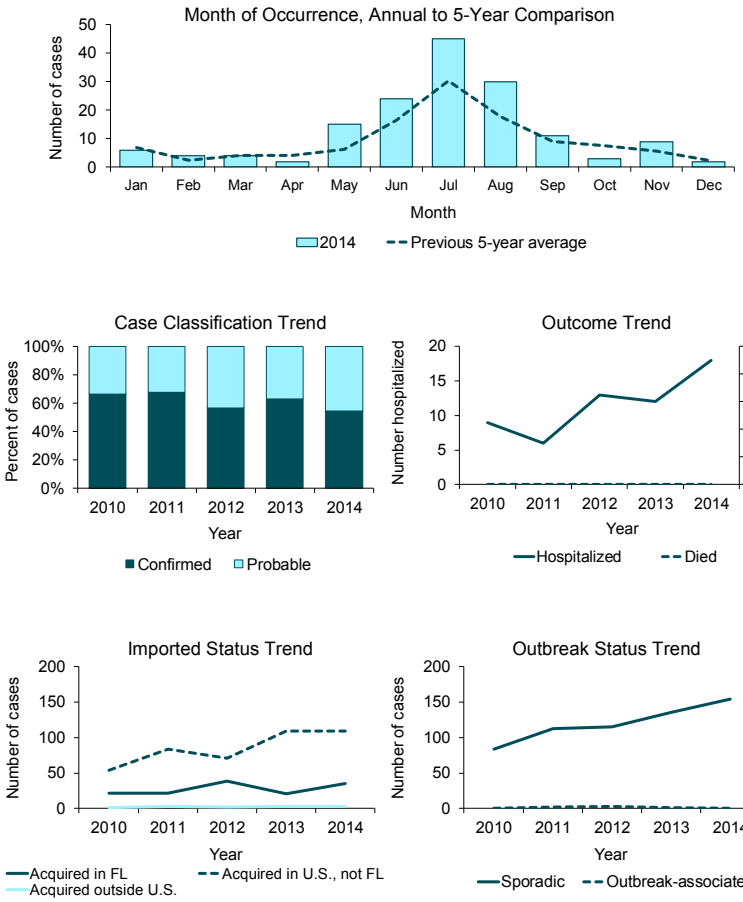
Note that the majority of Lyme disease cases are acquired outside of Florida.

Summary of Case Factors

Summary	Number	
Number of cases	155	
Case classification	**Number**	**(Percent)**
Confirmed	85	(54.8)
Probable	70	(45.2)
Outcome	**Number**	**(Percent)**
Hospitalized	18	(11.6)
Died	0	(0.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	35	(22.6)
Acquired in the U.S., not Florida	109	(70.3)
Acquired outside the U.S.	3	(1.9)
Acquired location unknown	8	(5.2)
Outbreak status	**Number**	**(Percent)**
Sporadic	154	(99.4)
Outbreak-associated	0	(0.0)
Outbreak status unknown	1	(0.6)

Case counts and rates from this report may differ from those found in other vector-borne disease reports as different criteria are used to assemble the data. Other reports may use illness onset date instead of report date, or county of exposure instead of county of residence.

Reported Lyme Disease Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Erythema migrans rash associated with acute Lyme disease may also be seen with southern tick-associated rash illness (STARI), although chronic symptoms are not reported with STARI. There is also increased recognition of post-treatment Lyme disease syndrome which is managed symptomatically and with lifestyle modifications. In 2014, incidence increased in both the young and elderly, particularly those in the 5-9-year-old and 65-74-year-old age groups, and more hospitalizations were reported. Similar to past years, most cases (70.3%) were imported from other states, primarily the Northeast and upper Midwest U.S.

Malaria

Disease Facts

Cause: *Plasmodium vivax, P. falciparum, P. malariae, P. ovale* parasites

Type of illness: Uncomplicated or severe illness; common symptoms include high fever with chills, rigor, sweats, headache, nausea, and vomiting

Transmission: Bite of infective mosquito; rarely by blood transfusion or organ transplant

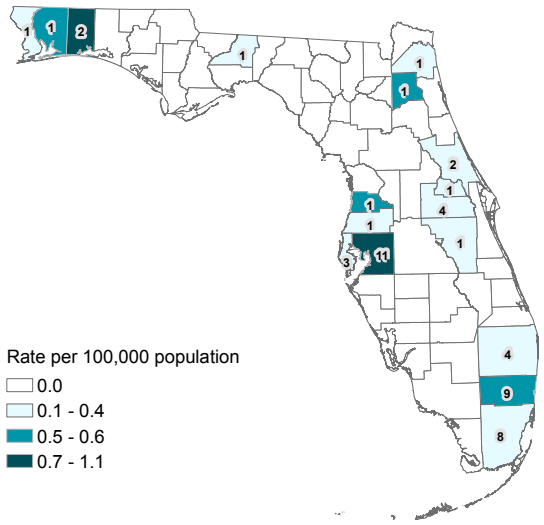
Reason for surveillance: Identify individual cases and implement control measures to prevent endemicity, monitor incidence over time, estimate burden of illness

Comments: There were no Florida-acquired malaria infections reported in 2014. All infections were associated with travel abroad to countries with endemic transmission (primarily African countries). Imported malaria cases peaked in 2010 after the January 2010 earthquake in Haiti resulted in an influx of Haitians in Florida, but decreased from 2011 to 2014. The last malaria case possibly acquired in Florida was reported in 2010.

Summary of Case Demographics

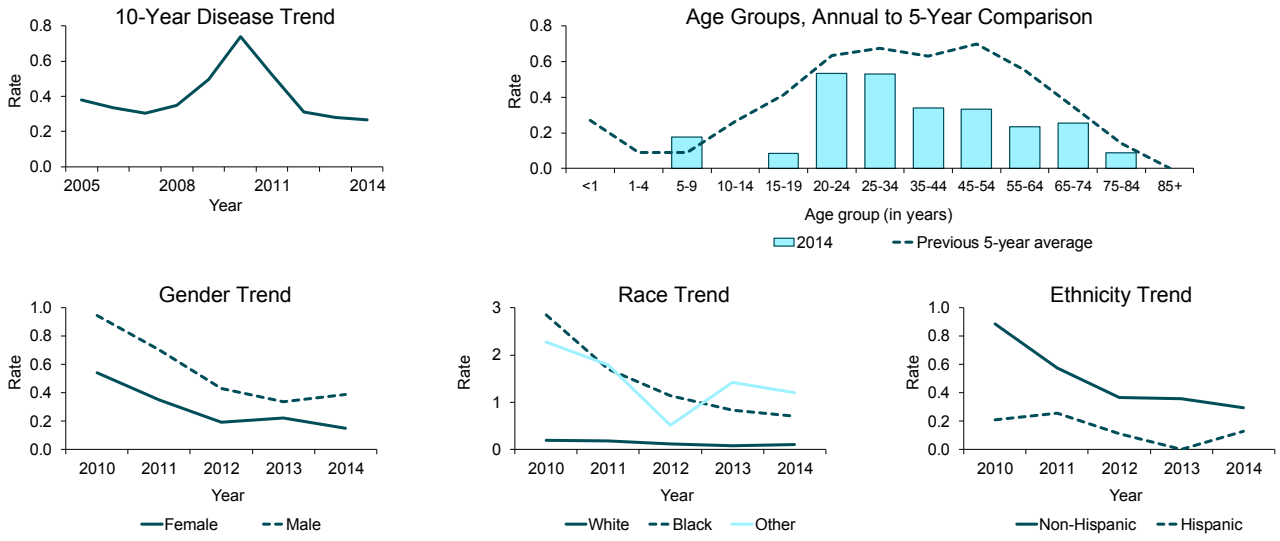
Summary			
Number of cases			52
Incidence rate (per 100,000 population)			0.3
Change from 5-year average incidence			-43.3%
Age (in years)			
Mean			41
Median			36
Min-max			5 - 82
Gender	**Number**	**(Percent)**	**Rate**
Female	15	(28.8)	NA
Male	37	(71.2)	0.4
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	17	(32.7)	NA
Black	23	(44.2)	0.7
Other	12	(23.1)	NA
Unknown race	0		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	44	(88.0)	0.3
Hispanic	6	(12.0)	NA
Unknown ethnicity	2		

Reported Malaria Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=52)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Malaria Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



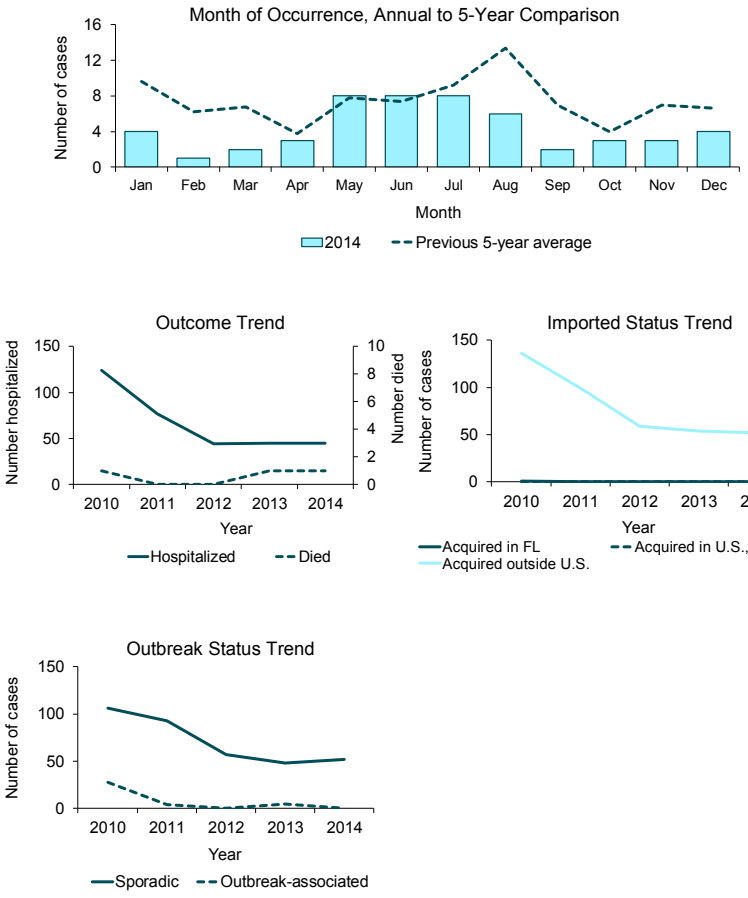
Note that the majority of malaria cases are acquired outside of Florida.

Summary of Case Factors

Summary	Number	
Number of cases	52	
Outcome	**Number**	**(Percent)**
Hospitalized	45	(86.5)
Died	1	(1.9)
Imported status	**Number**	**(Percent)**
Acquired in Florida	0	(0.0)
Acquired in the U.S., not Florida	0	(0.0)
Acquired outside the U.S.	52	(100.0)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	52	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)
Region where infection acquired	**Number**	**(Percent)**
Africa	36	(69.2)
Asia	8	(15.4)
Central America/Caribbean	4	(7.7)
South America	4	(7.7)

Case counts and rates from this report may differ from those found in other vector-borne disease reports as different criteria are used to assemble the data. Other reports may use illness onset date instead of report date, or county of exposure instead of county of residence.

Reported Malaria Cases by Month of Occurrence, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In 2014, there was one death associated with *Plasmodium falciparum* infection that involved a person who traveled to West Africa and did not take anti-malarial prophylaxis. Although not a factor in this malaria death, due to the West African Ebola virus disease (EVD) outbreak and similarities in symptoms in early EVD and malaria illness, there were concerns nationwide about delays in diagnosis and treatment of malaria patients. In 2014, 15 non-Florida residents were diagnosed with malaria in Florida (note that this report only includes Florida residents in case counts). Both infected residents and non-residents pose a potential malaria introduction risk.

Meningococcal Disease

Disease Facts

Cause: *Neisseria meningitidis* bacteria

Type of illness: Neurological (meningitis) or bloodstream infections (septicemia) most common

Transmission: Person-to-person; direct contact or inhalation of respiratory droplets from nose or throat of colonized or infected person

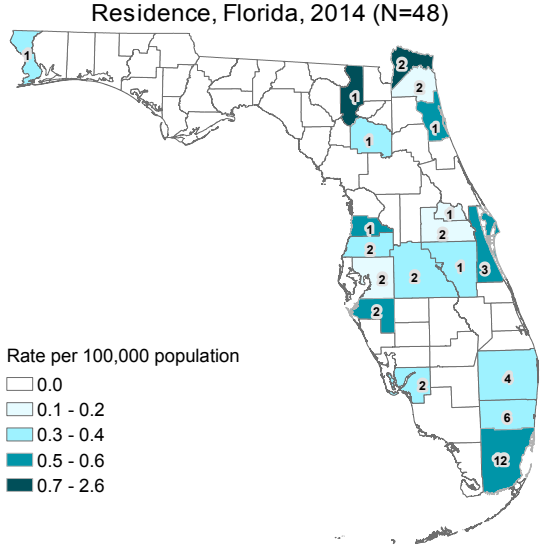
Reason for surveillance: Immediate public health actions are taken in response to every suspected meningococcal disease case to prevent secondary transmission; monitor effectiveness of immunization programs and vaccines

Comments: Five *N. meningitidis* serogroups cause almost all invasive disease (A, B, C, Y and W). Vaccines provide protection against serogroups A, B, C, Y, and W. In 2014, the proportion of infections caused by serogroup W decreased, but the serogroup continued to cause a greater proportion of cases nationwide.

Summary of Case Demographics

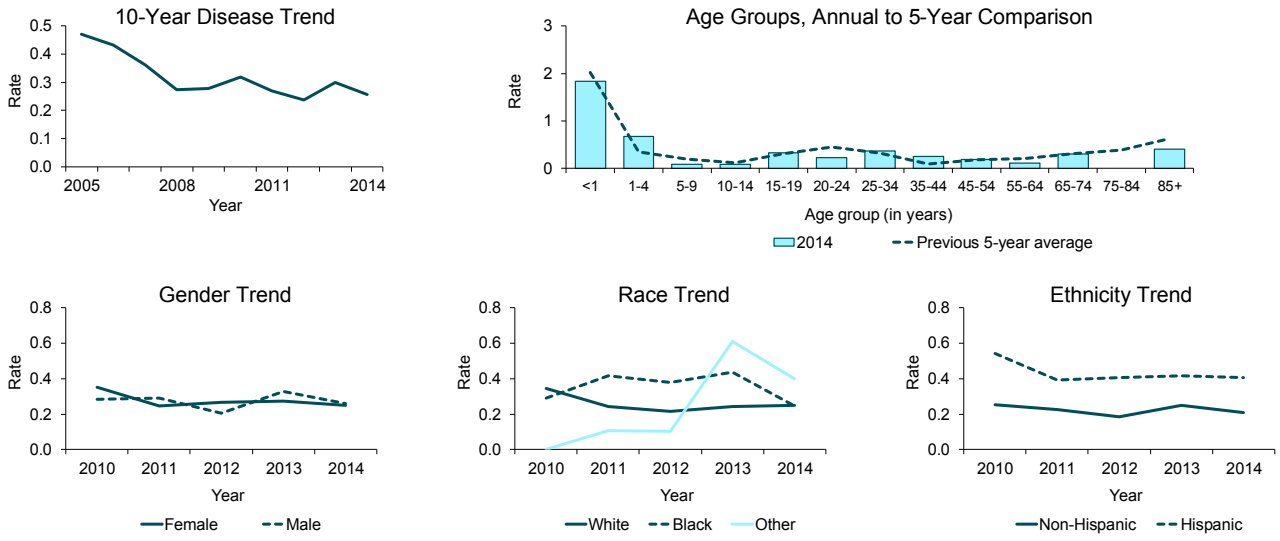
Summary			
Number of cases			50
Incidence rate (per 100,000 population)			0.3
Change from 5-year average incidence			-8.8%
Age (in years)			
Mean			33
Median			29
Min-max			0 - 88
Gender	**Number**	**(Percent)**	**Rate**
Female	25	(50.0)	0.3
Male	25	(50.0)	0.3
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	38	(76.0)	0.2
Black	8	(16.0)	NA
Other	4	(8.0)	NA
Unknown race	0		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	31	(62.0)	0.2
Hispanic	19	(38.0)	NA
Unknown ethnicity	0		

Reported Meningococcal Disease Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=48)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

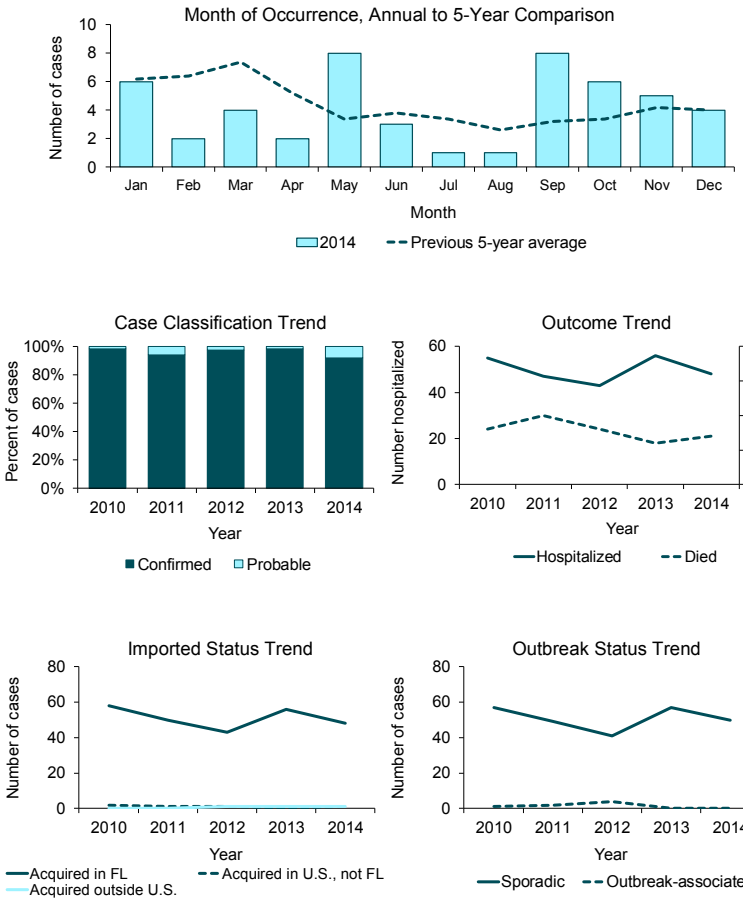
Reported Meningococcal Disease Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Summary of Case Factors

Summary	Number	
Number of cases	50	
Case classification	**Number**	**(Percent)**
Confirmed	46	(92.0)
Probable	4	(8.0)
Outcome	**Number**	**(Percent)**
Hospitalized	48	(96.0)
Died	7	(14.0)
Imported status	**Number**	**(Percent)**
Acquired in Florida	48	(96.0)
Acquired in the U.S., not Florida	1	(2.0)
Acquired outside the U.S.	1	(2.0)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	50	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)
Serogroup	**Number**	**(Percent)**
Group B	14	(28.0)
Group W	14	(28.0)
Group C	8	(16.0)
Group Y	6	(12.0)
Non-groupable	1	(2.0)
Unknown	7	(14.0)

Reported Meningococcal Disease Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Beginning in late 2008, a dominant clone of *N. meningitidis* serogroup W emerged in south Florida. This *N. meningitidis* clone has caused the majority of invasive meningococcal disease cases in south Florida over the past eight years and has also caused an increase in invasive meningococcal disease in the region. In 2014, the clone caused sporadic infections in central Florida counties, possibly indicating an expanding geographic distribution. For additional information on the initial cluster, please see the article below.

Doyle TJ, Mejia-Echeverry A, Fiorella P, Leguen F, Livengood J, Kay R, et al. 2010. Cluster of Serogroup W135 Meningococci, Southeastern Florida, 2008–2009. *Emerging Infectious Diseases*, 16(1):113-115. Available at wwwnc.cdc.gov/eid/article/16/1/09-1026_article.

Pertussis

Disease Facts

Cause: *Bordetella pertussis* bacteria

Type of illness: Respiratory infection; early symptoms last 1-2 weeks and include runny nose, low-grade fever, mild cough, and apnea; progresses to paroxysmal cough or “whoop” with posttussive vomiting and exhaustion

Transmission: Person-to-person; inhalation of infective, aerosolized respiratory tract droplets

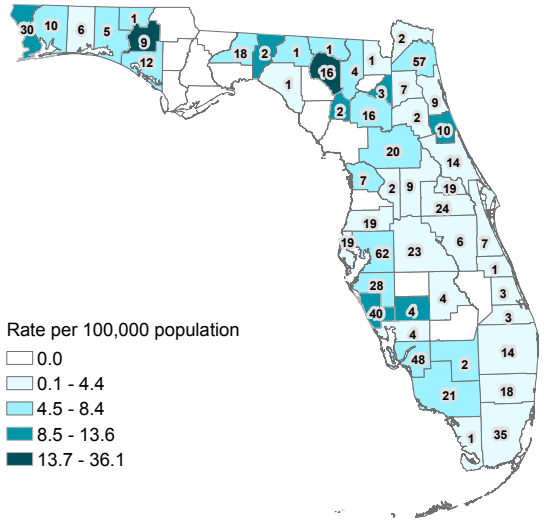
Reason for surveillance: Identify cases for treatment to prevent death, identify and prevent outbreaks, limit transmission in settings with infants or others who may transmit to infants, monitor effectiveness of immunization programs and vaccines

Comments: Pertussis incidence has increased nationwide since the 1980s. There was sharp increase in incidence in Florida in 2012 and 2013, however cases decreased slightly in 2014. Incidence remained highest in infants <1 year old and 42.7% of all cases reported in 2014 were outbreak-associated.

Summary of Case Demographics

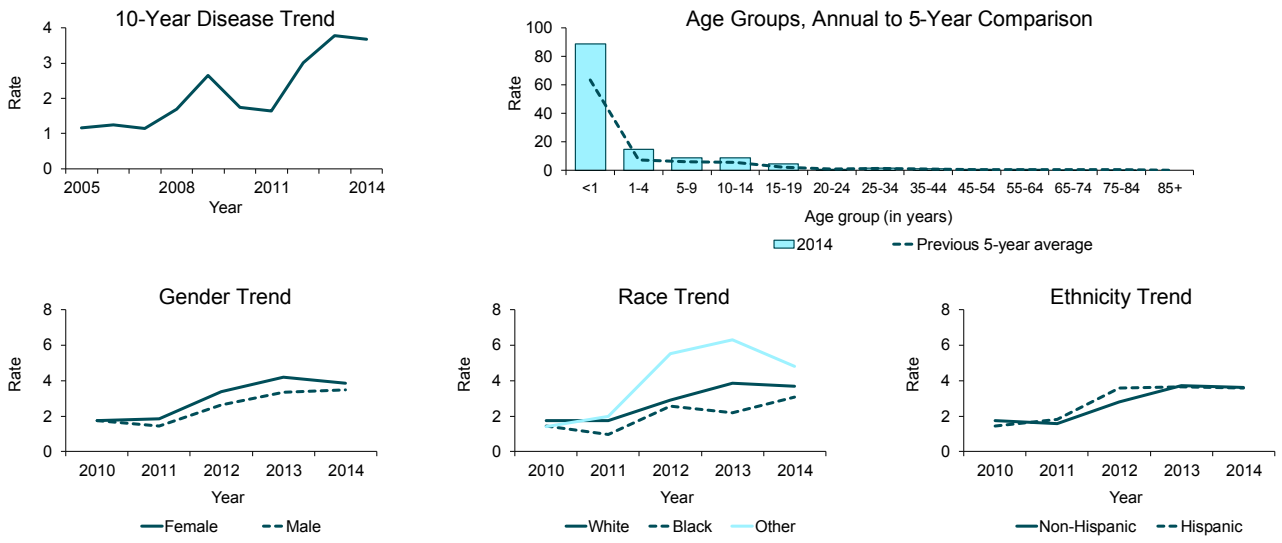
Summary			
Number of cases			719
Incidence rate (per 100,000 population)			3.7
Change from 5-year average incidence			+43.1%
Age (in years)			
Mean			13
Median			6
Min-max			0 - 82
Gender	**Number**	**(Percent)**	**Rate**
Female	386	(53.7)	3.9
Male	333	(46.3)	3.5
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	563	(79.2)	3.7
Black	100	(14.1)	3.1
Other	48	(6.8)	4.8
Unknown race	8		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	539	(76.2)	3.6
Hispanic	168	(23.8)	3.6
Unknown ethnicity	12		

Reported Pertussis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=682)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

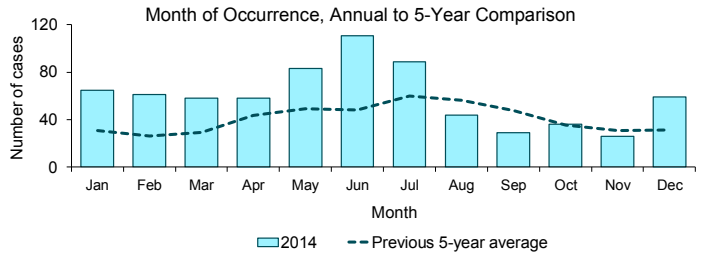
Reported Pertussis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

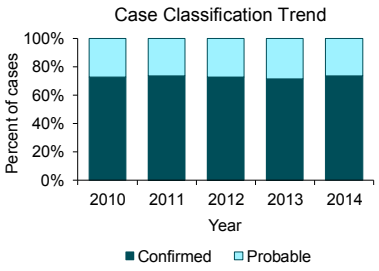


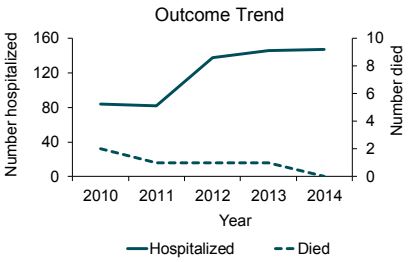
Summary of Case Factors

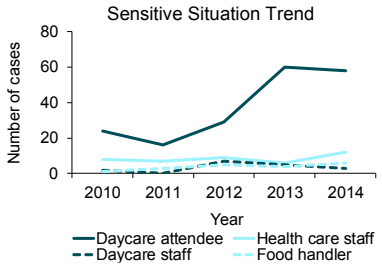
Summary	Number	
Number of cases	719	
Case classification	**Number**	**(Percent)**
Confirmed	531	(73.9)
Probable	188	(26.1)
Outcome	**Number**	**(Percent)**
Hospitalized	147	(20.4)
Died	0	(0.0)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	58	(8.1)
Daycare staff	3	(0.4)
Health care staff	12	(1.7)
Food handler	6	(0.8)
Imported status	**Number**	**(Percent)**
Acquired in Florida	682	(94.9)
Acquired in the U.S., not Florida	25	(3.5)
Acquired outside the U.S.	4	(0.6)
Acquired location unknown	8	(1.1)
Outbreak status	**Number**	**(Percent)**
Sporadic	408	(56.7)
Outbreak-associated	307	(42.7)
Outbreak status unknown	4	(0.6)

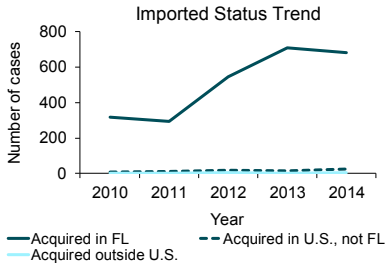
Reported Pertussis Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

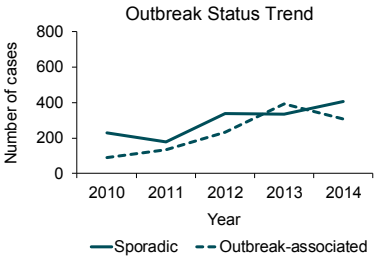












Interpretation:
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Additional Information

Older adults often have milder infections and serve as the reservoirs and sources of infection for infants and young children. The highest rate of pertussis is in infants <1 year old who are too young to be vaccinated, underscoring the importance of pregnant women and family members of infants getting vaccinated to protect infants from exposure. One dose of Tdap (tetanus, diphtheria, pertussis) vaccine became a requirement for children entering, attending, or transferring to the seventh grade during the 2009-2010 school year.

The number of pertussis cases that were outbreak-associated decreased from 392 (53.6%) in 2013 to 307 (42.7%) in 2014. The majority of outbreak-associated cases in 2014 remained among household members or close contacts, with the exception of an outbreak in a Leon County child care center involving 18 cases.

Pesticide-Related Illness and Injury, Acute

Disease Facts

Cause: Pesticides

Type of illness: Respiratory, gastrointestinal, neurological, dermal, etc., depending on the agent

Exposure: Depends on agent; dermal, inhalation, and ingestion are most common

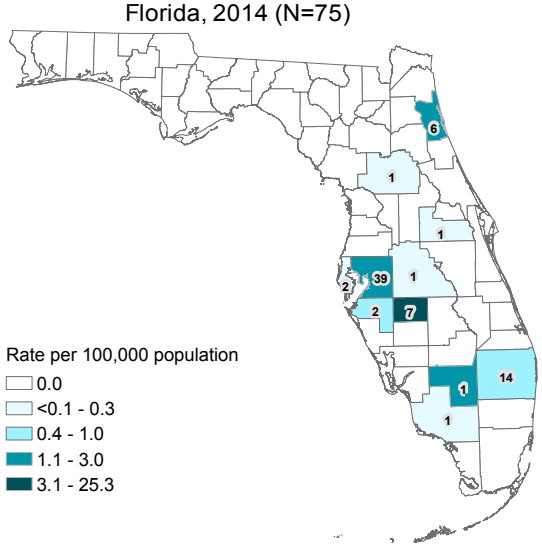
Reason for surveillance: Identify and mitigate persistent sources of exposure, identify populations at risk, evaluate trends in environmental conditions and occupational exposure, improve administration and proper use of pesticides to reduce exposure

Comments: Starting in January 2012, suspect sporadic cases (i.e., not part of a cluster) and suspect cases associated with non-occupational exposures (typically limited household exposures) were no longer reportable, resulting in a substantially decreased number of cases reported in 2012. Note that suspect cases are included in acute pesticide-related illness and injury case counts and rates in this report.

Summary of Case Demographics

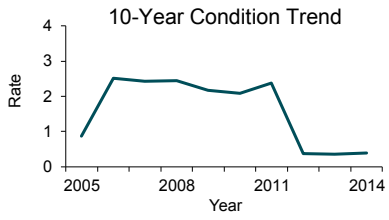
Summary			
Number of cases			75
Incidence rate (per 100,000 population)			0.4
Change from 5-year average incidence			-73.9%
Age (in years)			
Mean			44
Median			45
Min-max			10 - 72
Gender	**Number**	**(Percent)**	**Rate**
Female	39	(52.0)	0.4
Male	36	(48.0)	0.4
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	61	(83.6)	0.4
Black	1	(1.4)	NA
Other	11	(15.1)	NA
Unknown race	2		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	46	(63.9)	0.3
Hispanic	26	(36.1)	0.6
Unknown ethnicity	3		

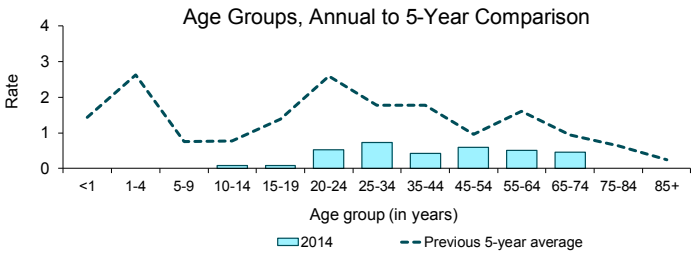
Reported Acute Pesticide-Related Illness and Injury Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=75)

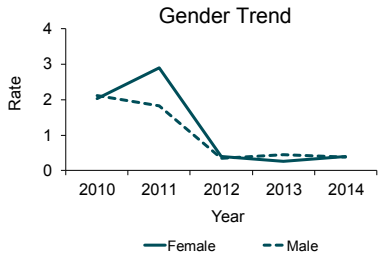


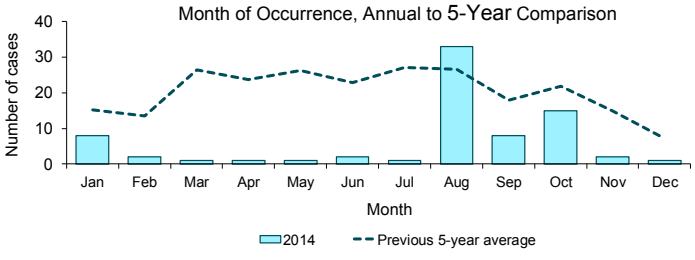
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Acute Pesticide-Related Illness and Injury Incidence Rates Per 100,000 Population by Year, Age, Gender, and Month of Occurrence, Florida









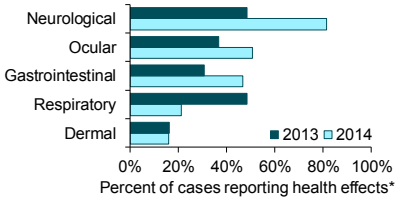
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the local health office was notified of the case.

Additional Information

Reported Acute Pesticide-Related Illness and Injury Cases by Severity of Illness and Health Effects*, Florida

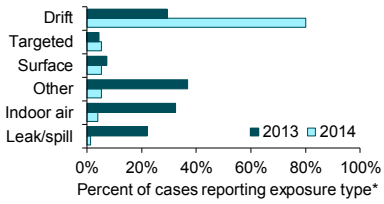
5-Year Trend for Severity of Illness

Health Effects*, 2013-2014

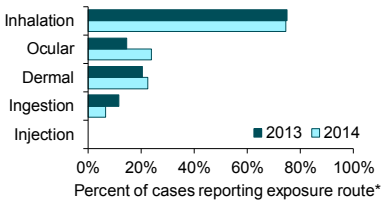


Reported Acute Pesticide-Related Illness and Injury Cases by Exposure Type*, Exposure Route*, Occupational Exposure, and Type of Activity at Time of Exposure, Florida

Exposure Type*, 2013-2014

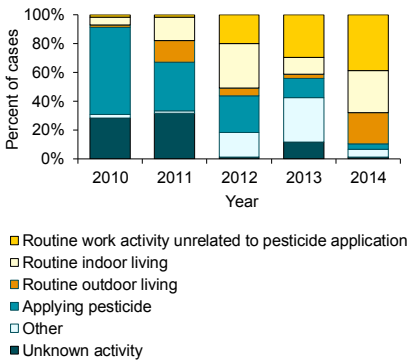


Exposure Route1, 2013-2014



5-Year Occupational Exposure Trend

5-Year Trend for Activity at Time of Exposure



* Note that there may be multiple exposure types and routes for one case, and multiple categories of health effects may be reported for one case.

Definitions of exposure types:

- Drift: Person was exposed via the movement of pesticides away from the treatment site.
- Targeted: Person was exposed to an application of a pesticide material released at the target site, and not carried from the target site by air.
- Indoor air: Person was exposed via indoor air contamination (this includes residential, commercial and greenhouse indoor air).
- Surface: Person was exposed via contact with pesticide residues on a treated surface (e.g., plant material, carpets, a treated animal) or entry into an outdoor treated area.
- Leak/spill: Person was exposed to a leak or spill of pesticide material (e.g., from a leaking container or equipment, flood waters, emergency response).

Additional Information

In 2014, most cases experienced neurological symptoms (e.g. headache, weakness, dizziness) and had low severity of illness following pesticide exposure. One death was reported related to pesticide exposure. Most cases were exposed by inhaling pesticide (74.7%) and many were exposed while doing routine indoor or outdoor activities (38.7%). The majority (65.3%) of cases were related to two drift incidents in Hillsborough and Palm Beach counties. In September 2014, 36 suspect cases of pesticide-related illness and injury were reported in Hillsborough County residents related to Paladin odor, a soil fumigant with dimethyl disulfide (DMDS) as the active ingredient. In October 2014, 13 farmworkers in Palm Beach County were exposed to Baythroid® XL after a drift occurred from a fumigation airplane while working in a celery field. All 13 were classified as confirmed cases of pesticide-related illness and injury.

Rabies, Animal and Possible Human Exposure

Disease Facts

Cause: Rabies virus

Type of illness in humans: Fever, headache, insomnia, confusion, hallucinations, increase in saliva, difficulty swallowing, and fear of water; death usually occurs within days of symptom onset

Transmission: Infectious saliva or nervous tissue in contact with open wound or mucous membrane via bite

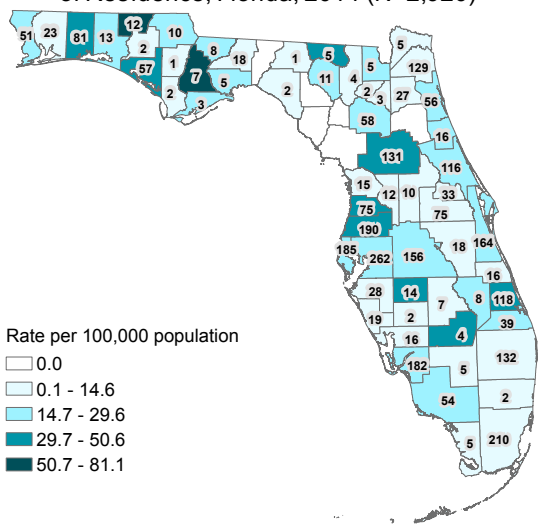
Reason for surveillance: Identify and mediate sources of exposure, evaluate adherence to guidance on rabies post-exposure prophylaxis (PEP)

Comments: Incidence of human exposures to suspected rabid animals for which PEP is recommended has increased since case reporting was initiated primarily due to PEP recommendations related to dog bites. Reasons for the increase could include more animal bites, lack of rabies PEP training, and decreased local resources to find and confine or test biting animals.

Summary of Case Demographics

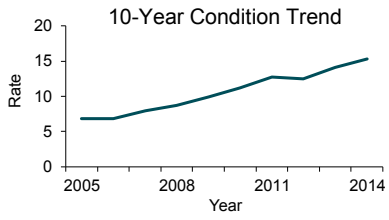
Possible human exposure to rabies			
Number of cases with PEP recommended			2,995
Incidence rate (per 100,000 population)			15.3
Change from 5-year average incidence			+26.8%
Age (in years)			
Mean			37
Median			36
Min-max			0 - 93
Gender	**Number**	**(Percent)**	**Rate**
Female	1,530	(51.1)	15.3
Male	1,465	(48.9)	15.3
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	2,138	(84.7)	14.0
Black	278	(11.0)	8.5
Other	108	(4.3)	10.8
Unknown race	471		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	2,208	(85.3)	14.9
Hispanic	382	(14.7)	8.2
Unknown ethnicity	405		

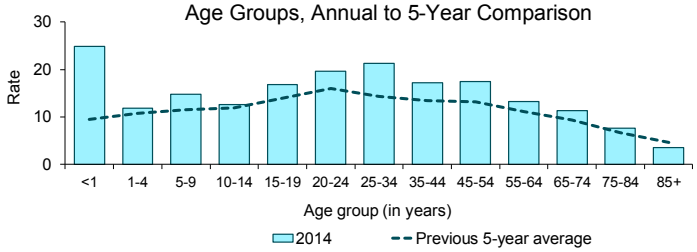
Reported Possible Human Exposure to Rabies and Incidence Rates Per 100,000 Population (Restricted to Exposures Occurring in Florida) by County of Residence, Florida, 2014 (N=2,920)

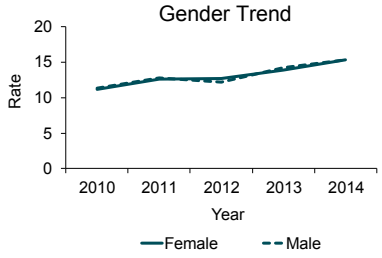


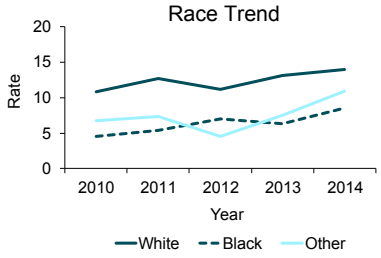
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

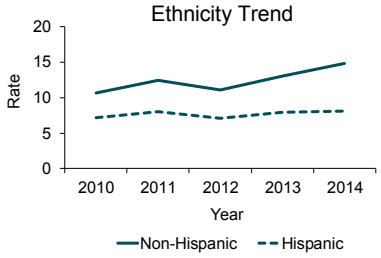
Reported Possible Human Exposure to Rabies Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Possible human exposure to rabies cases were missing 12.1% of ethnicity data in 2010, 14.7% of race data in 2010, 9.8% of ethnicity data in 2011, 12.0% of race data in 2011, 18.3% of ethnicity data in 2012, 18.3% of race data in 2012, 15.8% of ethnicity data in 2013, 16.8% of race data in 2013, 13.5% of ethnicity data in 2014, and 15.7% of race data in 2014.

Additional Information

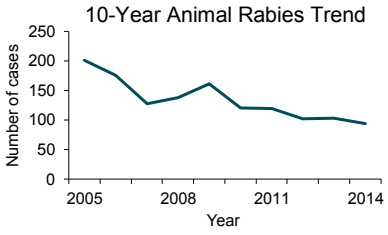
The last case of human rabies acquired in Florida was in 1948. The animals most frequently diagnosed with rabies in Florida are raccoons, bats, unvaccinated cats, and foxes. Rabies is endemic in the raccoon and bat populations of Florida. Rabies frequently spreads from raccoons, and occasionally bats, to other animal species such as foxes and cats.

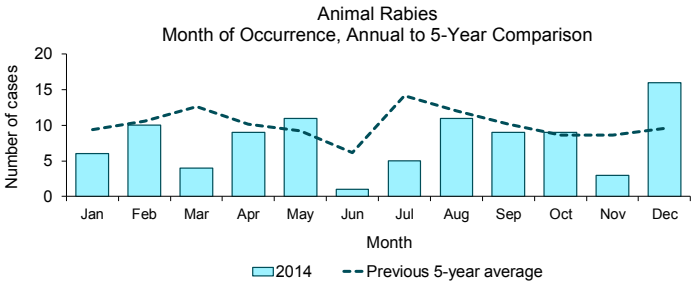
Laboratory testing for animal rabies is only done when animals potentially expose (e.g., bite) humans or domestic animals, thus these data do not necessarily correlate with the true prevalence of rabies by animal species in Florida. A total of 94 laboratory-confirmed rabid animals were reported in 2014, which was a 22.6% decrease from the previous 5-year average.

Case counts in this report may differ from those found in other rabies reports as different criteria are used to assemble the data. Other reports use the calendar year, while this report uses report year. For additional information on calendar year versus report year, please see the paragraph on Determining How Cases are Counted: Reporting Period and Reporting Dates within Interpreting the Data in the Introduction (page vii). Note that one cat and one raccoon tested positive during the overlap of calendar year 2013 and report year 2014 and therefore are included in this *2014 Florida Morbidity Statistics Report*.

Although the total number of rabid animals decreased in 2014, the total number of rabid domestic animals increased from 2013 including rabid cats (16), dogs (2), and a horse (1). There is generally a much greater risk for rabies exposure to people when domestic animals are infected versus wildlife. Properly administered rabies vaccines are highly effective in protecting domestic animals like cats and dogs against rabies infection, and rabies vaccination is required by state law for these animals.

Reported Animal Rabies
by Year, Month of Occurrence, Animal, and County, Florida

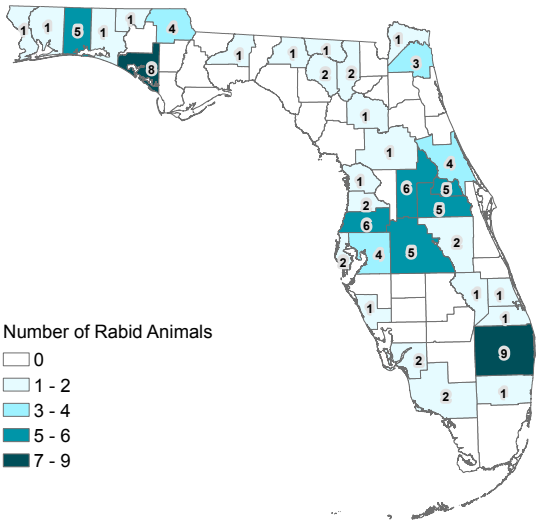




Laboratory-Confirmed Rabid Animals by Type of Animal, Florida, 2013 and 2014

Type of animal	2013		2014	
	Number	(Percent)	Number	(Percent)
Raccoon	70	(68.0)	51	(54.3)
Bat	19	(18.4)	19	(20.2)
Cat	8	(7.8)	16	(17.0)
Fox	2	(1.9)	5	(5.3)
Dog	0	(0.0)	2	(2.1)
Horse	0	(0.0)	1	(1.1)
Bobcat	2	(1.9)	0	(0.0)
Skunk	2	(1.9)	0	(0.0)
Total	103		94	

Laboratory-Confirmed Rabid Animals by County, Florida, 2014 (N=94)



Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis

Disease Facts

Cause: Certain *Rickettsia* bacteria, most commonly *R. rickettsia*, *R. parkeri*, *R. africae*, *R. conorii*

Type of illness: Fever, headache, abdominal pain, vomiting, and muscle pain; rash develops in 80% of cases

Transmission: Tick-borne; bite of infective tick

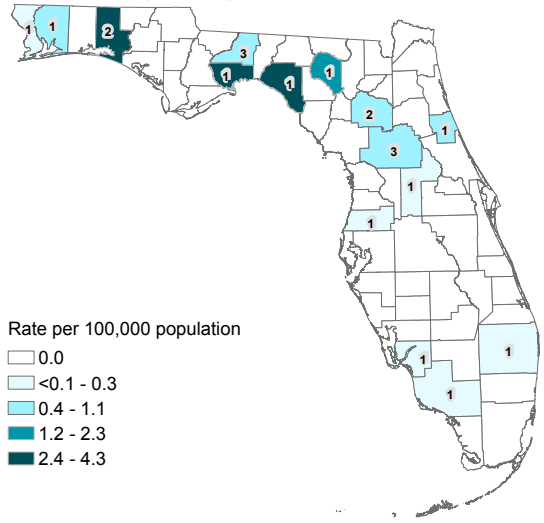
Reason for surveillance: Monitor incidence over time, estimate burden of illness, monitor geographical and temporal occurrence, target areas of high incidence for prevention education

Comments: Most infections are acquired within Florida, primarily in the northern and central regions of the state. Cases are reported year-round without distinct seasonality, though peak transmission typically occurs during the summer months. The principal tick vectors in Florida are the American dog tick (*Dermacentor variabilis*) and the Gulf Coast tick (*Amblyomma maculatum*).

Summary of Case Demographics

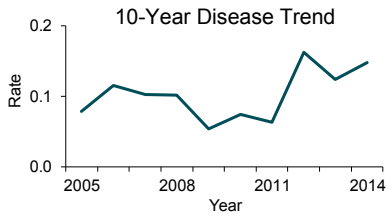
Summary			
Number of cases			29
Incidence rate (per 100,000 population)			0.1
Change from 5-year average incidence			+55.1%
Age (in years)			
Mean			51
Median			56
Min-max			4 - 79
Gender	**Number**	**(Percent)**	**Rate**
Female	7	(24.1)	NA
Male	22	(75.9)	0.2
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	25	(100.0)	0.2
Black	0	(0.0)	NA
Other	0	(0.0)	NA
Unknown race	4		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	23	(92.0)	0.2
Hispanic	2	(8.0)	NA
Unknown ethnicity	4		

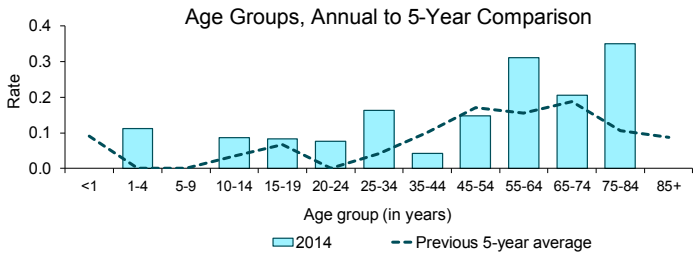
Reported Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=21)

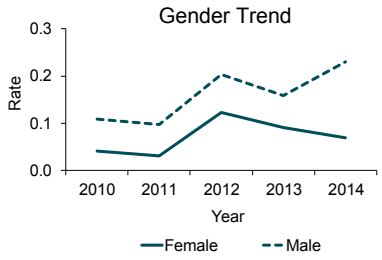


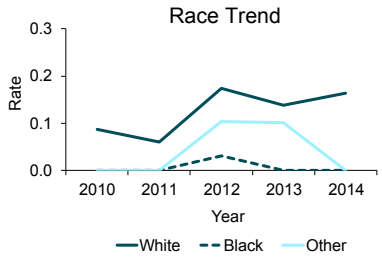
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

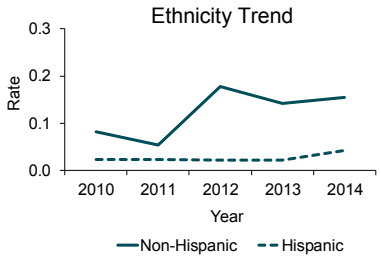
Reported Rocky Mountain Spotted Fever Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida











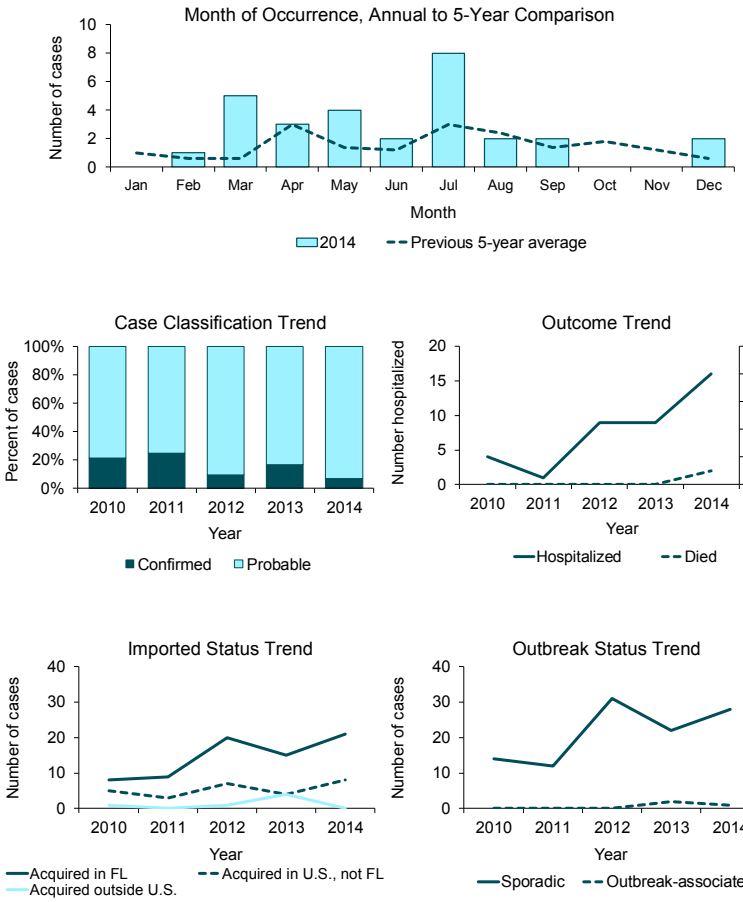
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Rocky Mountain spotted fever and spotted fever rickettsiosis cases were missing 7.1% of ethnicity data in 2010, 7.1% of race data in 2010, 25.0% of ethnicity data in 2011, 25.0% of race data in 2011, 12.9% of ethnicity data in 2012, 9.7% of race data in 2012, 8.3% of ethnicity data in 2013, 8.3% of race data in 2013, 13.8% of ethnicity data in 2014, and 13.8% of race data in 2014.

Summary of Case Factors

Summary	Number	
Number of cases	29	
Case classification	**Number**	**(Percent)**
Confirmed	2	(6.9)
Probable	27	(93.1)
Outcome	**Number**	**(Percent)**
Hospitalized	16	(55.2)
Died	1	(3.4)
Imported status	**Number**	**(Percent)**
Acquired in Florida	21	(72.4)
Acquired in the U.S., not Florida	8	(27.6)
Acquired outside the U.S.	0	(0.0)
Acquired location unknown	0	(0.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	28	(96.6)
Outbreak-associated	1	(3.4)
Outbreak status unknown	0	(0.0)

Case counts and rates from this report may differ from those found in other vector-borne disease reports as different criteria are used to assemble the data. Other reports may use illness onset date instead of report date, or county of exposure instead of county of residence.

Reported Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis Cases by Month of Occurrence, Case Classification, Outcome, Imported Status, and Outbreak Status, Florida



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

In addition to Rocky Mountain spotted fever (RMSF), several other tick-borne species of *Rickettsia* are known to cause human infections. These species are grouped under spotted fever rickettsiosis (SFR). In 2010, the national reporting criteria were expanded to include both RMSF and other SFR. Florida adopted this change in June 2014. Human antibodies to spotted fever rickettsial species such as *R. parkeri*, *R. amblyommii*, *R. africae*, and *R. conorii* cross-react with serologic tests for the RMSF organism *R. rickettsii*. In addition, commercial antibody testing to differentiate other SFRs from RMSF is currently limited. The probable case definition lacks specificity and most cases are never confirmed. Only 2 cases were confirmed in 2014; it is difficult to draw meaningful conclusions about case patterns given the low specificity of the probable case definition.

One death attributed to an aortic aneurysm 11 days after onset was reported in a 77-year-old man. It is unknown if RMSF/SFR infection directly contributed to the death. One case classified as outbreak-associated was later determined to be sporadic.

Salmonellosis

Disease Facts

Cause: *Salmonella* bacteria (excluding *Salmonella* serotype Typhi, which causes typhoid fever and is described in Section 3: Narratives for Selected Reportable Diseases/Conditions of Infrequent Occurrence)

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; including person-to-person, animal-to-person, foodborne, and waterborne

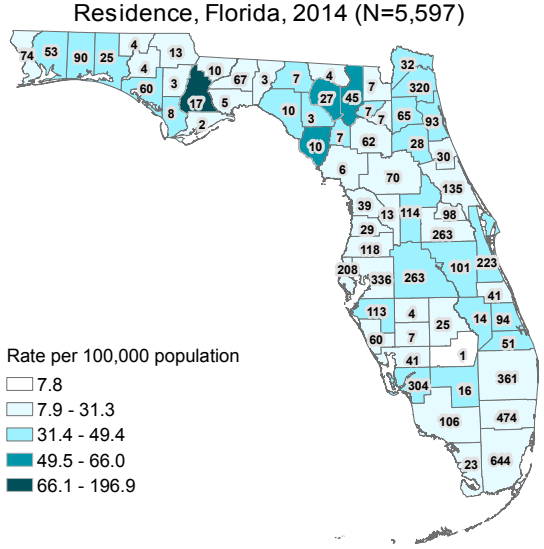
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product, ill food handler), monitor incidence over time, estimate burden of illness

Comments: In recent years, Florida has had the highest number and one of the highest rates of salmonellosis cases of any state in the U.S. Salmonellosis rates are very high in <1-year-olds and decrease dramatically with age. The seasonal pattern is very strong, peaking in late summer.

Summary of Case Demographics

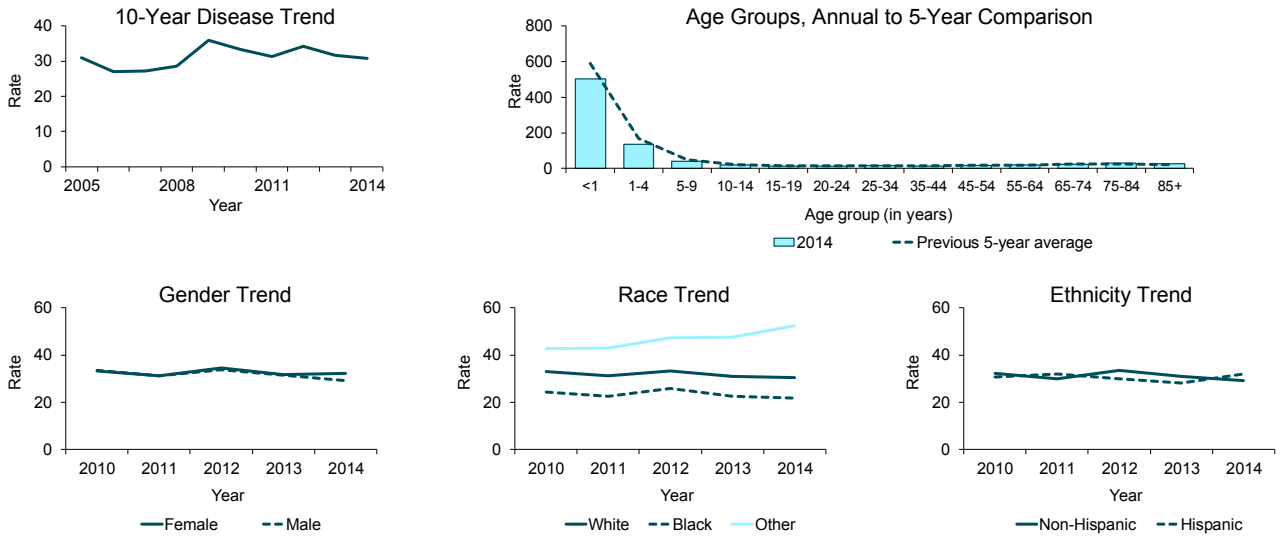
Summary			
Number of cases			6,019
Incidence rate (per 100,000 population)			30.8
Change from 5-year average incidence			-7.6%
Age (in years)			
Mean			28
Median			15
Min-max			0 - 97
Gender	**Number**	**(Percent)**	**Rate**
Female	3,219	(53.5)	32.2
Male	2,800	(46.5)	29.3
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	4,643	(79.0)	30.4
Black	709	(12.1)	21.7
Other	524	(8.9)	52.5
Unknown race	143		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	4,334	(74.3)	29.2
Hispanic	1,499	(25.7)	32.0
Unknown ethnicity	186		

Reported Salmonellosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=5,597)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

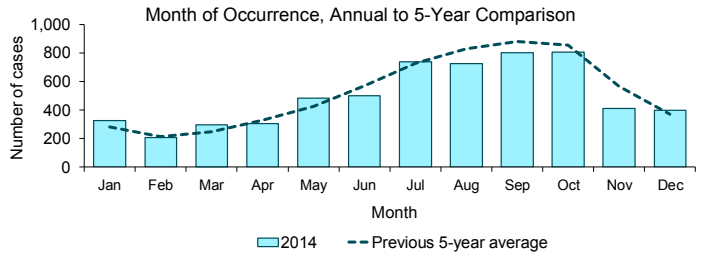
Reported Salmonellosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

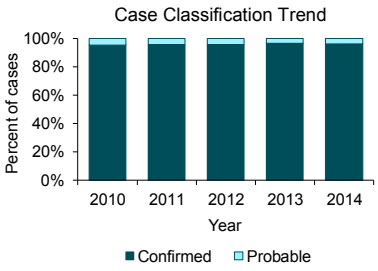


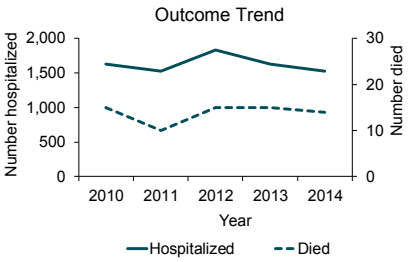
Summary of Case Factors

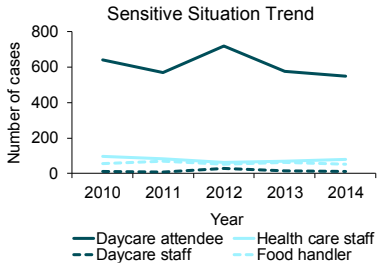
Summary	Number	
Number of cases	6,019	
Case classification	**Number**	**(Percent)**
Confirmed	5,794	(96.3)
Probable	225	(3.7)
Outcome	**Number**	**(Percent)**
Hospitalized	1,526	(25.4)
Died	14	(0.2)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	548	(9.1)
Daycare staff	11	(0.2)
Health care staff	79	(1.3)
Food handler	52	(0.9)
Imported status	**Number**	**(Percent)**
Acquired in Florida	5,597	(93.0)
Acquired in the U.S., not Florida	101	(1.7)
Acquired outside the U.S.	138	(2.3)
Acquired location unknown	183	(3.0)
Outbreak status	**Number**	**(Percent)**
Sporadic	5,397	(89.7)
Outbreak-associated	536	(8.9)
Outbreak status unknown	86	(1.4)

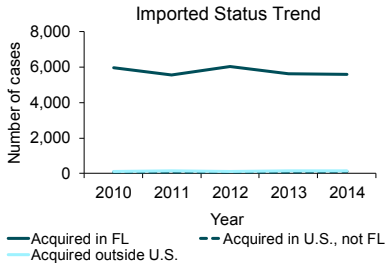
Reported Salmonellosis Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

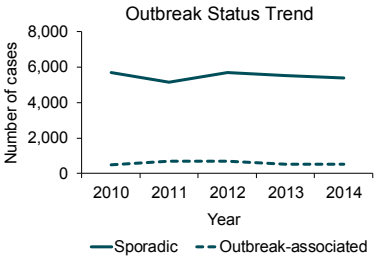












Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Most outbreak-associated cases are due to household clusters; however, some outbreak-associated cases are part of national or multistate outbreaks linked to particular food items. In 2014, Florida had 65 outbreak-associated cases that were part of 37 different multistate outbreaks.

Shiga Toxin-Producing *Escherichia coli* (STEC) Infection

Disease Facts

Cause: Shiga toxin-producing *Escherichia coli* (STEC) bacteria

Type of illness: Gastroenteritis (diarrhea, vomiting); less frequently hemolytic uremic syndrome (HUS)

Transmission: Fecal-oral; including person-to-person, animal-to-person, waterborne and foodborne

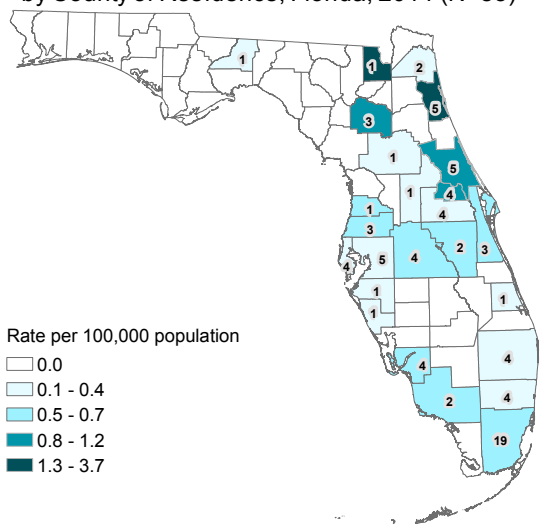
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., contaminated food product, ill food handler), monitor incidence over time, estimate burden of illness

Comments: Incidence varied considerably over the past 10 years. STEC infection typically peaks in late spring and early summer. Incidence is highest in children <5 years old, a group shown to be particularly vulnerable to STEC infection. STEC incidence in women increased steadily from 2010 to 2013; but decreased in 2014 to a rate similar to men.

Summary of Case Demographics

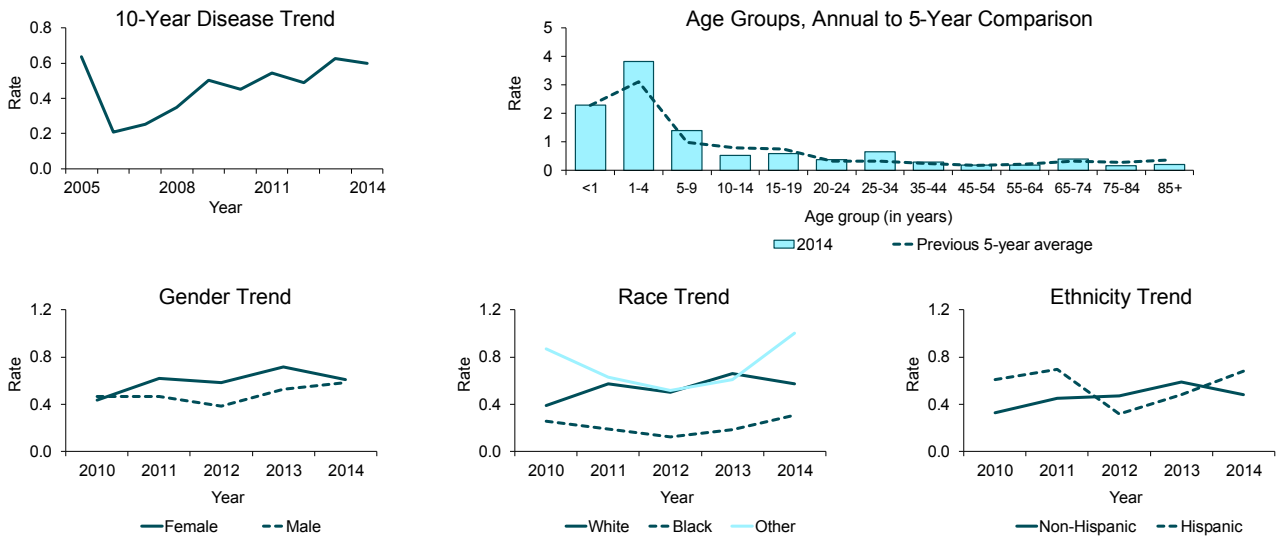
Summary			
Number of cases			117
Incidence rate (per 100,000 population)			0.6
Change from 5-year average incidence			+14.5%
Age (in years)			
Mean			22
Median			14
Min-max			0 - 91
Gender	**Number**	**(Percent)**	**Rate**
Female	61	(52.1)	0.6
Male	56	(47.9)	0.6
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	88	(81.5)	0.6
Black	10	(9.3)	NA
Other	10	(9.3)	NA
Unknown race	9		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	72	(69.2)	0.5
Hispanic	32	(30.8)	0.7
Unknown ethnicity	13		

Reported Shiga Toxin-Producing *E. coli* Infection Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=85)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Shiga Toxin-Producing *E. coli* Infection Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida

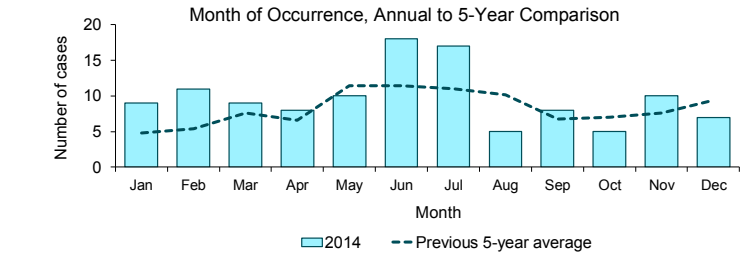


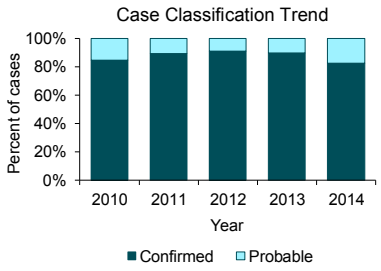
Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Shiga toxin- producing *E. coli* infection cases were missing 12.9% of ethnicity data in 2010, 12.9% of race data in 2010, 6.8% of ethnicity data in 2011, 5.8% of race data in 2011, 10.8% of ethnicity data in 2012, 9.7% of race data in 2012, 9.9% of ethnicity data in 2013, 7.4% of race data in 2013, 11.1% of ethnicity data in 2014, and 7.7% of race data in 2014.

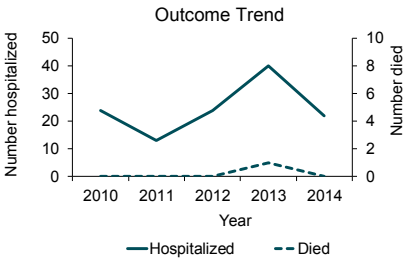
Summary of Case Factors

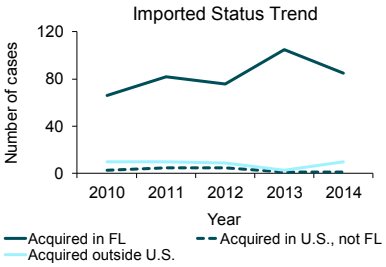
Summary	Number	
Number of cases	117	
Case classification	**Number**	**(Percent)**
Confirmed	97	(82.9)
Probable	20	(17.1)
Outcome	**Number**	**(Percent)**
Hospitalized	22	(18.8)
Died	0	(0.0)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	10	(8.5)
Daycare staff	0	(0.0)
Health care staff	2	(1.7)
Food handler	2	(1.7)
Imported status	**Number**	**(Percent)**
Acquired in Florida	85	(72.6)
Acquired in the U.S., not Florida	1	(0.9)
Acquired outside the U.S.	10	(8.5)
Acquired location unknown	21	(17.9)
Outbreak status	**Number**	**(Percent)**
Sporadic	74	(63.2)
Outbreak-associated	39	(33.3)
Outbreak status unknown	4	(3.4)
Serogroup	**Number**	**(Percent)**
O157	34	(35.1)
O111	15	(15.5)
O26	12	(12.4)
O103	10	(10.3)
O145	4	(4.1)
O45	1	(1.0)
Other	9	(9.3)
Not typeable	12	(12.4)

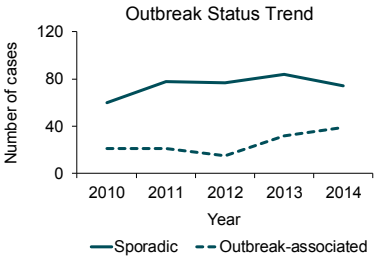
Reported Shiga Toxin-Producing *E. coli* Infection Cases by Month of Occurrence, Case Classification, Outcome, Sensitive Situation, Imported Status, and Outbreak Status, Florida

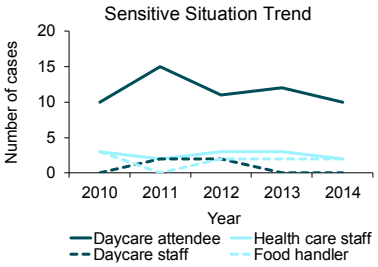












While O157 remains the most common serogroup identified in STEC infections, the top six non-O157 serogroups (O26, O45, O103, O111, O121, O145) are being increasingly identified due to advances in laboratory testing technology.

Most outbreak-associated cases are due to household clusters; however, some cases are part of national or multistate outbreaks linked to particular food items. In 2014, Florida did not have any cases that were part of Florida or multistate outbreaks. Outbreak-associated cases were reflective of household clusters.

Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Shigellosis

Disease Facts

Cause: *Shigella* bacteria

Type of illness: Gastroenteritis (diarrhea, vomiting)

Transmission: Fecal-oral; including person-to-person, foodborne, and waterborne

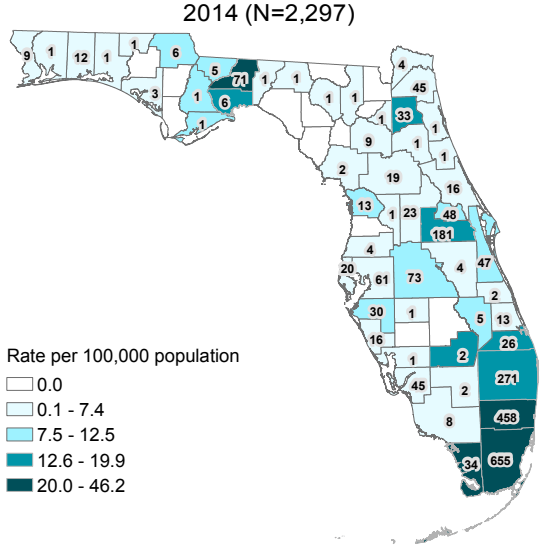
Reason for surveillance: Identify and control outbreaks, identify and mitigate common sources (e.g., ill daycare attendee), monitor incidence over time, estimate burden of illness

Comments: Shigellosis has a cyclic temporal pattern with large, community-wide outbreaks, frequently involving daycare centers, occurring every 3-5 years. Shigellosis incidence is highest in children aged 1 to 9 years and black people. A large portion of cases are outbreak-associated, primarily due to outbreaks in daycare centers. Consistent with Florida's cyclical pattern, shigellosis incidence increased substantially in 2014, with a rate similar to the last large peak in 2011.

Summary of Case Demographics

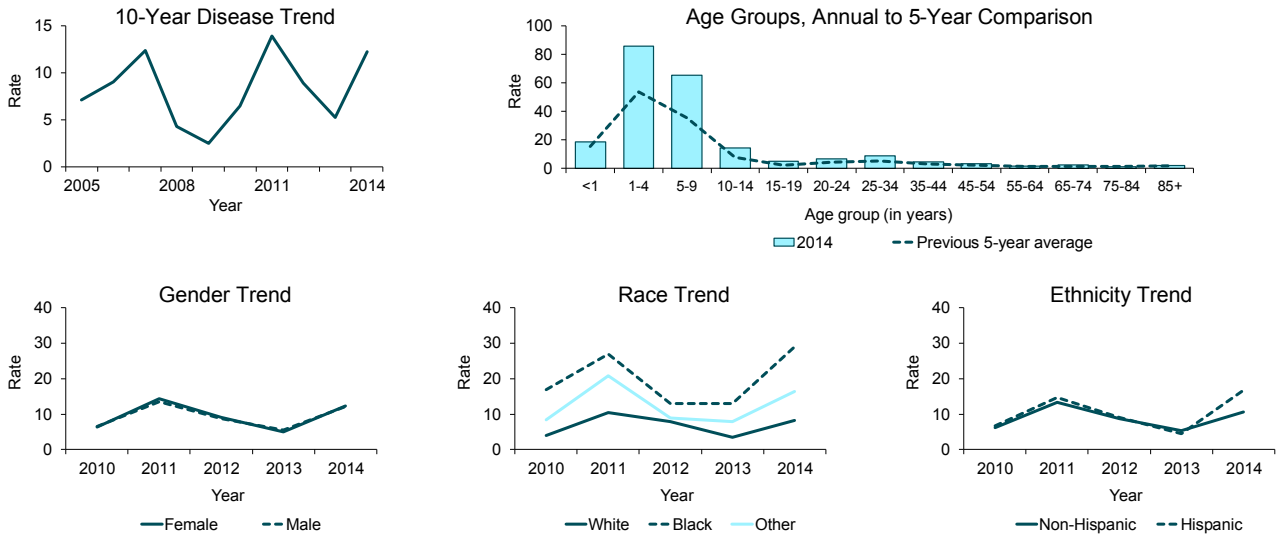
Summary			
Number of cases			2,396
Incidence rate (per 100,000 population)			12.3
Change from 5-year average incidence			+65.5%
Age (in years)			
Mean			14
Median			6
Min-max			0 - 100
Gender	**Number**	**(Percent)**	**Rate**
Female	1,229	(51.3)	12.3
Male	1,167	(48.7)	12.2
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	1,267	(53.3)	8.3
Black	948	(39.8)	29.0
Other	164	(6.9)	16.4
Unknown race	17		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	1,589	(67.0)	10.7
Hispanic	784	(33.0)	16.7
Unknown ethnicity	23		

Reported Shigellosis Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=2,297)



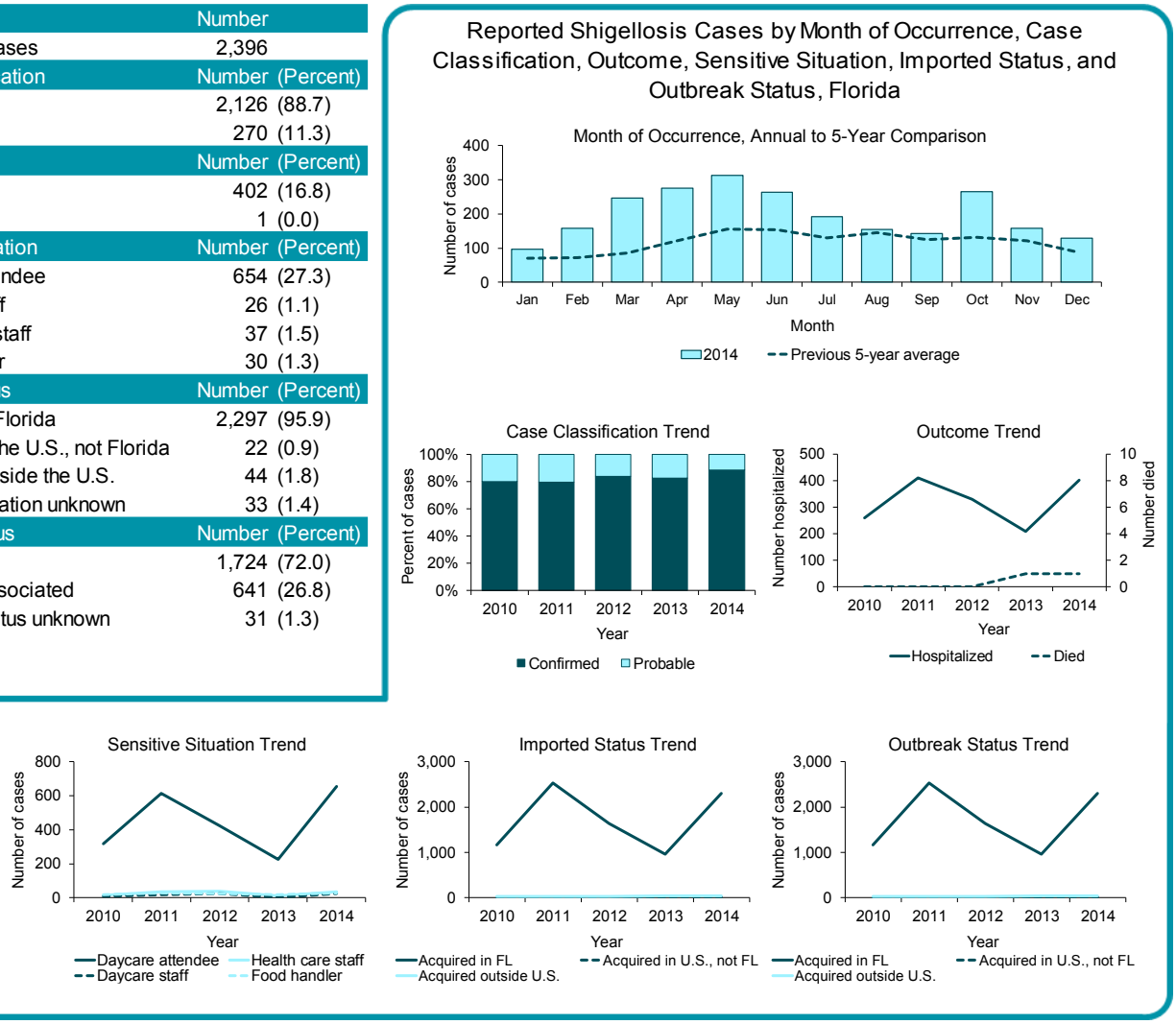
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Shigellosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Summary of Case Factors

Summary	Number	
Number of cases	2,396	
Case classification	**Number**	**(Percent)**
Confirmed	2,126	(88.7)
Probable	270	(11.3)
Outcome	**Number**	**(Percent)**
Hospitalized	402	(16.8)
Died	1	(0.0)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	654	(27.3)
Daycare staff	26	(1.1)
Health care staff	37	(1.5)
Food handler	30	(1.3)
Imported status	**Number**	**(Percent)**
Acquired in Florida	2,297	(95.9)
Acquired in the U.S., not Florida	22	(0.9)
Acquired outside the U.S.	44	(1.8)
Acquired location unknown	33	(1.4)
Outbreak status	**Number**	**(Percent)**
Sporadic	1,724	(72.0)
Outbreak-associated	641	(26.8)
Outbreak status unknown	31	(1.3)



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Antibiotic or antimicrobial resistance is the ability of microbes to resist the effects of drugs, decreasing the likelihood that those drugs will kill the microbe. Most *Shigella* infections are self-limited and do not require antibiotic treatment. *Shigella* resistance to antibiotics is a growing concern worldwide due to how easily *Shigella* is spread between people. In the U.S., most *Shigella* is already resistant to ampicillin and trimethoprim/ sulfamethoxazole, making ciprofloxacin the first drug of choice to treat *Shigella* infections. Globally, *Shigella* resistance is increasing and is believed to have been introduced to the U.S. by international travelers. Large clusters of ciprofloxacin-resistant *Shigella* infections have been identified recently in Massachusetts, California, and Pennsylvania. No multidrug-resistant *Shigella* isolates have been documented in Florida to date. More information on multidrug-resistant *Shigella* and antimicrobial resistance in general is available at www.cdc.gov/ drugresistance/about.html.

Syphilis

Disease Facts

Cause: *Treponema pallidum* bacteria

Type of illness: Sores on genitals, anus or mouth, or a rash on the body

Transmission: Sexually transmitted disease (STD) spread by anal, vaginal, or oral sex and sometimes from mother to infant during pregnancy or delivery

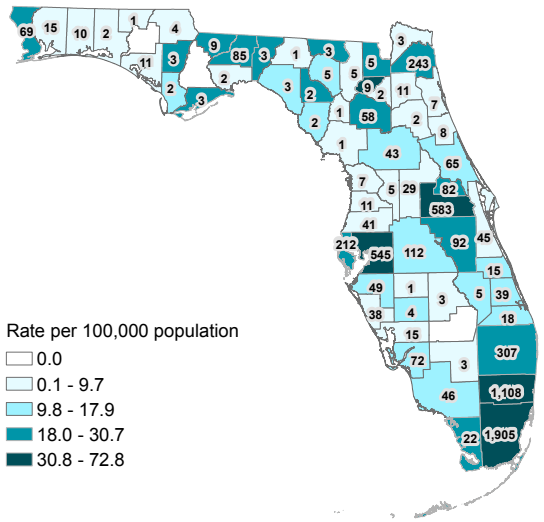
Reason for surveillance: Implement effective interventions immediately for every case, monitor incidence over time, estimate burden of illness, evaluate treatment and prevention programs

Comments: Syphilis is separated into early syphilis (i.e., syphilis <1 year duration; the infectious stage) and late or latent syphilis (i.e., syphilis diagnosed >1 year after infection). Rates are higher in men than in women. Men who have sex with men have a higher incidence of early syphilis than non-MSM men and are also more likely to be co-infected with HIV.

Summary of Case Demographics

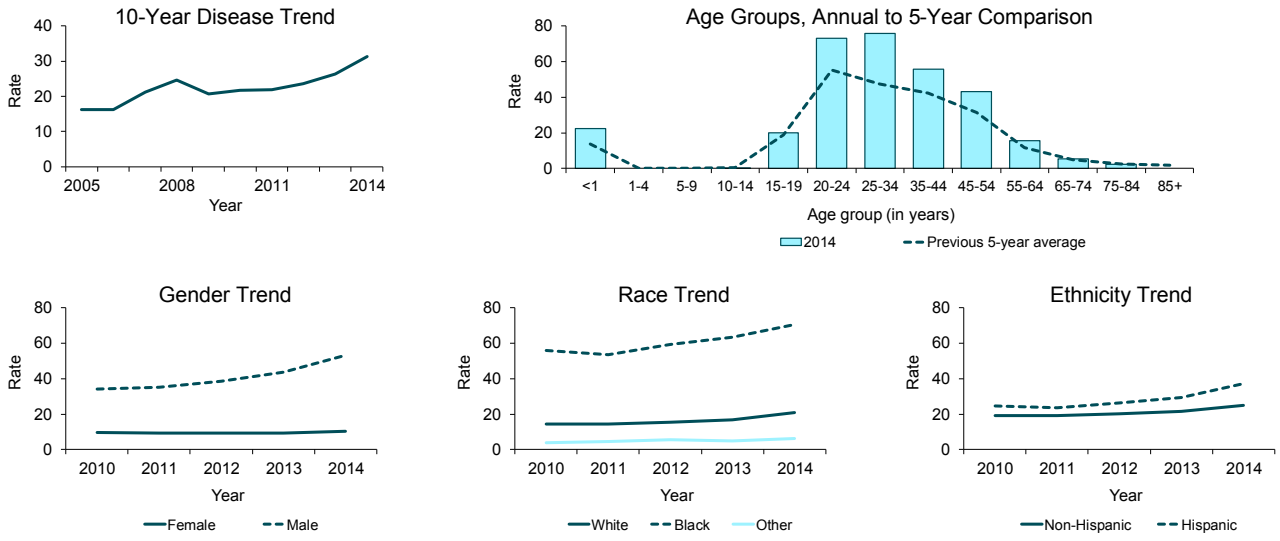
Summary			
Number of cases			6,112
Incidence rate (per 100,000 population)			31.3
Change from 5-year average incidence			+37.0%
Age (in years)			
Mean			36
Median			34
Min-max			0 - 88
Gender	**Number**	**(Percent)**	**Rate**
Female	1,028	(16.8)	10.3
Male	5,083	(83.2)	53.2
Unknown gender	1		
Race	**Number**	**(Percent)**	**Rate**
White	3,203	(57.5)	21.0
Black	2,300	(41.3)	70.5
Other	64	(1.1)	6.4
Unknown race	545		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	3,690	(67.9)	24.8
Hispanic	1,744	(32.1)	37.2
Unknown ethnicity	678		

Reported Syphilis Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=6,112)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Syphilis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Syphilis cases were missing 5.3% of ethnicity data in 2010, 5.0% of race data in 2010, 7.7% of ethnicity data in 2011, 6.4% of race data in 2011, 8.2% of ethnicity data in 2012, 6.5% of race data in 2012, 10.9% of ethnicity data in 2013, 8.5% of race data in 2013, 11.1% of ethnicity data in 2014, and 8.9% of race data in 2014.

Disease Facts

Cause: *Mycobacterium tuberculosis* bacteria

Type of illness: Usually respiratory (severe cough, pain in chest), but can affect all parts of the body including kidneys, spine, or brain

Transmission: Person-to-person; inhalation of aerosolized droplets from people with active tuberculosis (TB)

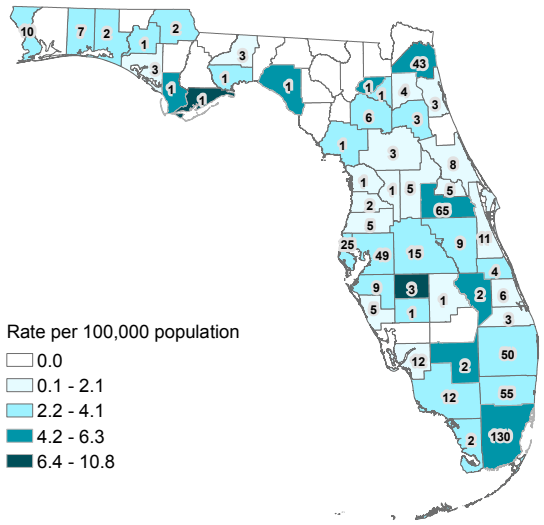
Reason for surveillance: Implement effective interventions immediately for every case to prevent further transmission, monitor directly observed therapy prevention programs, evaluate trends

Comments: TB continues to be a public health threat in Florida; however incidence has been declining over the past decade, and continued to decline in 2014. Medically underserved and low-income populations, including racial and ethnic minorities, have high rates of TB exposure and infection. In most countries, TB incidence is twice as high in men as in women. Incidence of TB in Florida is also much higher in men than women.

Summary of Case Demographics

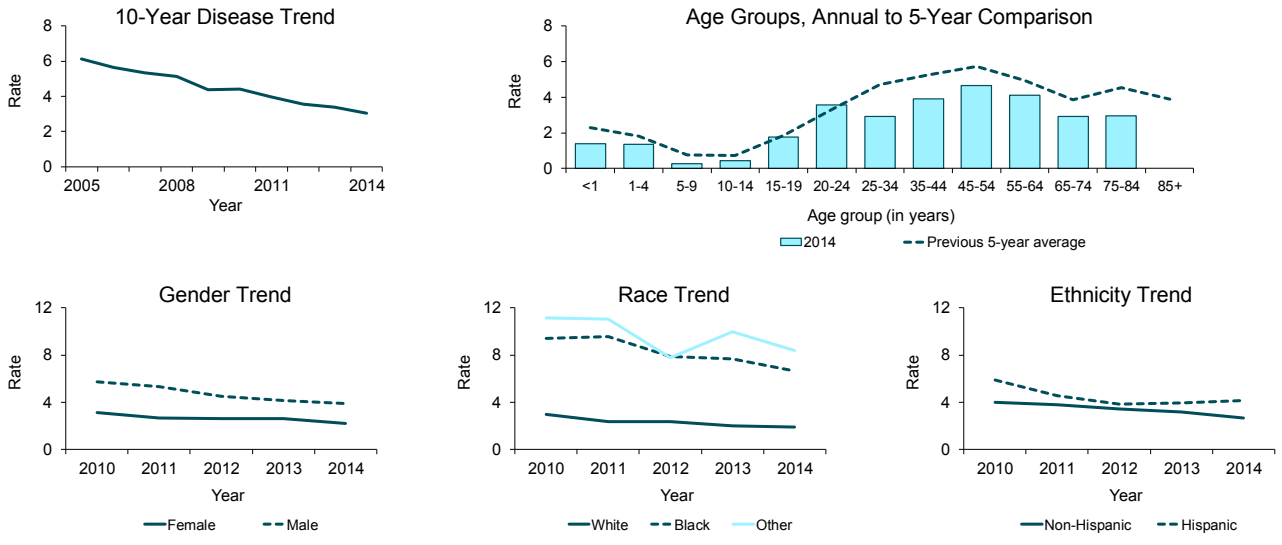
Summary			
Number of cases			595
Incidence rate (per 100,000 population)			3.0
Change from 5-year average incidence			-22.9%
Age (in years)			
Mean			47
Median			48
Min-max			0 - 95
Gender	**Number**	**(Percent)**	**Rate**
Female	220	(37.0)	2.2
Male	375	(63.0)	3.9
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	293	(49.2)	1.9
Black	218	(36.6)	6.7
Other	84	(14.1)	8.4
Unknown race	0		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	400	(67.2)	2.7
Hispanic	195	(32.8)	4.2
Unknown ethnicity	0		

Reported Tuberculosis Cases and Incidence Rates Per 100,000 Population by County of Residence, Florida, 2014 (N=595)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

Reported Tuberculosis Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



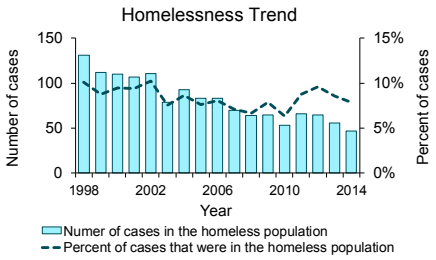
Additional Information

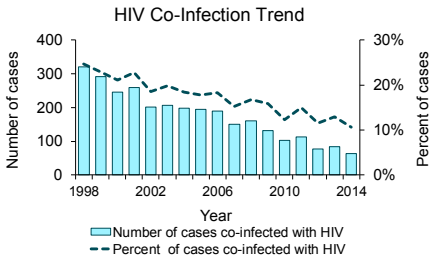
People experiencing homelessness are at increased risk for disease and are a focus for TB prevention and control efforts in Florida. Since 1998, the total number of TB cases among the homeless population in Florida has decreased by over 50%; however, in the same time period the percent of people with TB who are homeless has remained relatively stable. In 2014, 7.9% of TB cases were in the homeless population.

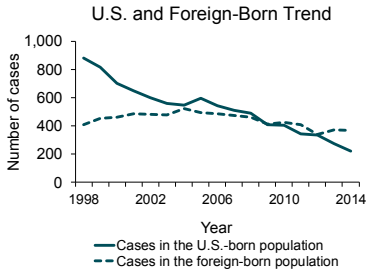
TB and HIV co-infection has been declining modestly but steadily over time in Florida. In 2014, 10.6% of TB cases were co-infected with HIV. Untreated HIV infection remains the biggest risk factor for developing active TB disease following infection with TB and is a focus for TB prevention and control efforts in Florida.

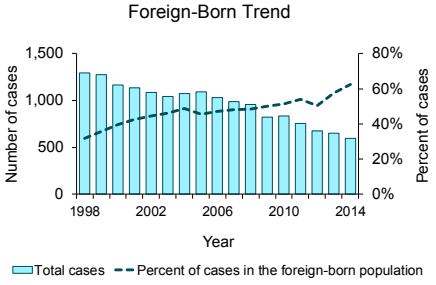
The rate of TB in the U.S.-born population in Florida has been decreasing faster than the rate among the foreign-born population. Being born in a country where TB is prevalent is one of the most significant risk factors for developing TB and is a focus for TB prevention and control efforts in Florida. In 2014, 62.4% of the total cases counted in Florida were in the foreign-born population. The most common countries of origin in 2014 included Haiti, Mexico, Cuba, and the Philippines, accounting for 175 (47.2%) of 371 cases identified in foreign-born people.

Reported Tuberculosis by Homeless Status, HIV Co-Infection, and Foreign-Born Status, Florida









Varicella (Chickenpox)

Disease Facts

Cause: Varicella-zoster virus (VZV)

Type of illness: Common symptoms include vesicular rash, itching, tiredness, and fever

Transmission: Person-to-person; contact with or inhalation of aerosolized, infective respiratory tract droplets or secretions, or direct contact with vesicular lesions of people infected with VZV

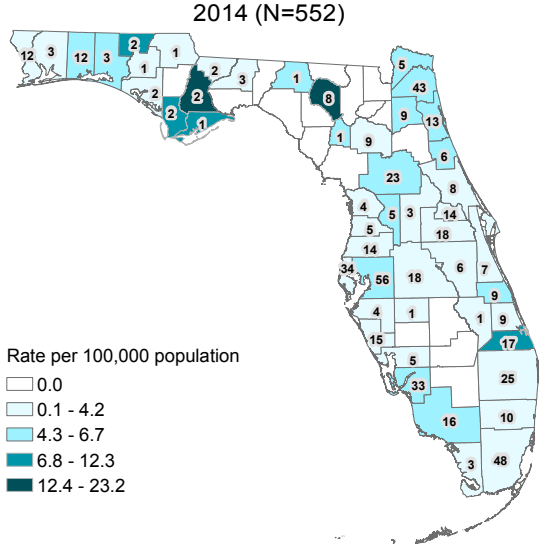
Reason for surveillance: Identify and control outbreaks, monitor effectiveness of immunization programs and vaccines, monitor trends and severe outcomes

Comments: Varicella (chicken pox) is a classic childhood disease that is now vaccine-preventable. It became reportable in Florida in late 2006 and has shown a steady decrease in incidence since 2008, due to effective vaccination programs. Beginning with the 2008-2009 school year, children entering kindergarten were required to receive two doses of varicella vaccine.

Summary of Case Demographics

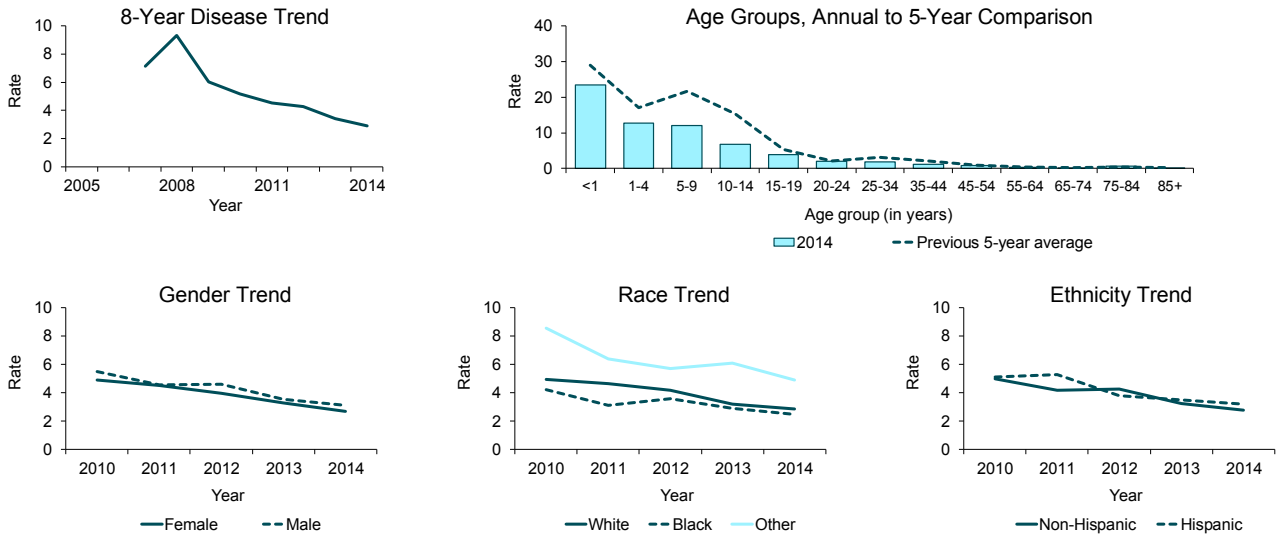
Summary			
Number of cases			570
Incidence rate (per 100,000 population)			2.9
Change from 5-year average incidence			-37.8%
Age (in years)			
Mean			15
Median			9
Min-max			0 - 90
Gender	**Number**	**(Percent)**	**Rate**
Female	271	(47.5)	2.7
Male	299	(52.5)	3.1
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	437	(77.1)	2.9
Black	81	(14.3)	2.5
Other	49	(8.6)	4.9
Unknown race	3		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	414	(73.4)	2.8
Hispanic	150	(26.6)	3.2
Unknown ethnicity	6		

Reported Varicella Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=552)



Note that rates based on <20 cases are not reliable and should be interpreted with caution.

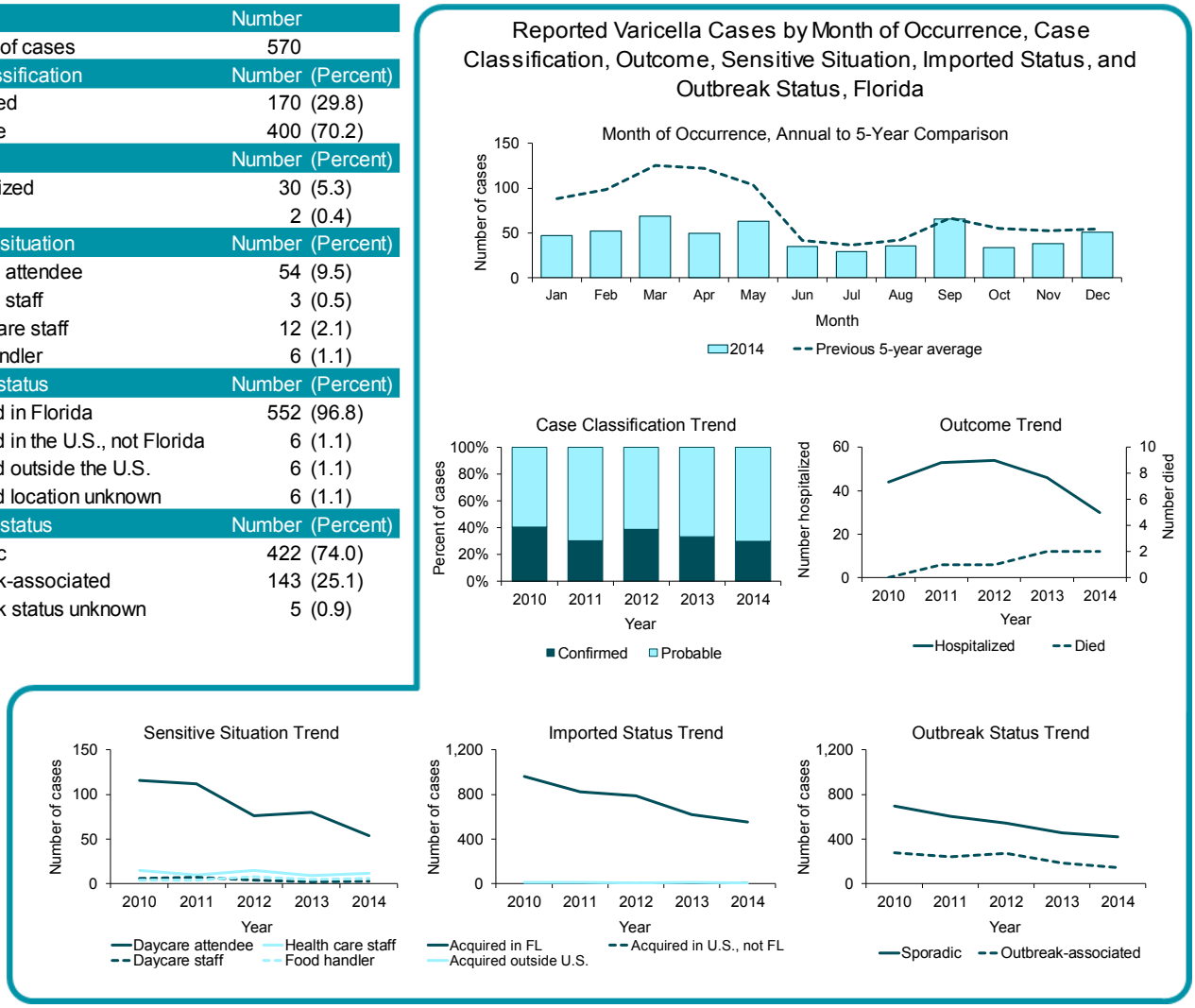
Reported Varicella Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida



Varicella (Chickenpox)

Summary of Case Factors

Summary	Number	
Number of cases	570	
Case classification	**Number**	**(Percent)**
Confirmed	170	(29.8)
Probable	400	(70.2)
Outcome	**Number**	**(Percent)**
Hospitalized	30	(5.3)
Died	2	(0.4)
Sensitive situation	**Number**	**(Percent)**
Daycare attendee	54	(9.5)
Daycare staff	3	(0.5)
Health care staff	12	(2.1)
Food handler	6	(1.1)
Imported status	**Number**	**(Percent)**
Acquired in Florida	552	(96.8)
Acquired in the U.S., not Florida	6	(1.1)
Acquired outside the U.S.	6	(1.1)
Acquired location unknown	6	(1.1)
Outbreak status	**Number**	**(Percent)**
Sporadic	422	(74.0)
Outbreak-associated	143	(25.1)
Outbreak status unknown	5	(0.9)



Interpretation:
Occurrence is determined by the earliest date associated with the case, which is most frequently the date of onset, but can also be the diagnosis date, the laboratory report date, or the date the county health department was notified of the case. For outcome, a case can be included in the hospitalized count as well as the death count. Hospitalized status means that a person was hospitalized at the time of their illness, though the hospitalization may not necessarily have been due to the illness. Deaths include all people with the illness who died, though the death may not necessarily have been due to the illness. Sensitive situation categories are not mutually exclusive, and most cases do not fall into any of these categories. Imported status refers to where the infection was most likely acquired. Outbreak- associated indicates that two or more cases are epidemiologically linked.

Additional Information

Most cases of varicella occur in winter and spring with the highest incidence in school-aged children. Of the 143 outbreak-associated cases identified, most were household clusters, though a few were clusters in schools with <5 cases. One death was reported in an 80-year-old man testing positive for VZV, but the death certificate did not identify varicella as cause or contributing factor to death.

Vibriosis (Excluding Cholera)

Disease Facts

Cause: *Vibrio* species bacteria (see following page for list of species included)

Type of illness: Gastroenteritis (diarrhea, vomiting), bacteremia, septicemia, wound infection, cellulitis; other common symptoms include low-grade fever, headache, and chills

Transmission: Foodborne, waterborne, and wound infections from direct contact with seawater where the bacteria naturally live or direct contact with marine wildlife

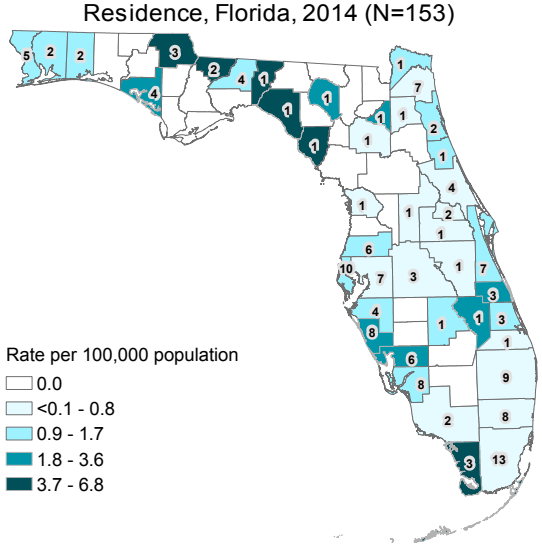
Reason for surveillance: Identify sources of transmission (e.g., shellfish collection area) and mitigate source, monitor incidence over time, estimate burden of illness

Comments: *Vibrio* species are endemic in Florida's seawater. Incidence is typically higher in the summer when exposure to seawater is more common and warmer water is conducive to bacterial growth. Incidence decreased slightly in 2014 compared to 2013. Incidence is consistently much higher in men than women.

Summary of Case Demographics

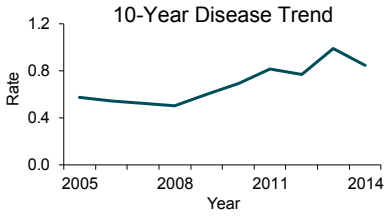
Summary			
Number of cases			166
Incidence rate (per 100,000 population)			0.8
Change from 5-year average incidence			+9.8%
Age (in years)			
Mean			46
Median			51
Min-max			3 - 86
Gender	**Number**	**(Percent)**	**Rate**
Female	47	(28.3)	0.5
Male	119	(71.7)	1.2
Unknown gender	0		
Race	**Number**	**(Percent)**	**Rate**
White	149	(94.9)	1.0
Black	8	(5.1)	NA
Other	0	(0.0)	NA
Unknown race	9		
Ethnicity	**Number**	**(Percent)**	**Rate**
Non-Hispanic	141	(87.6)	0.9
Hispanic	20	(12.4)	0.4
Unknown ethnicity	5		

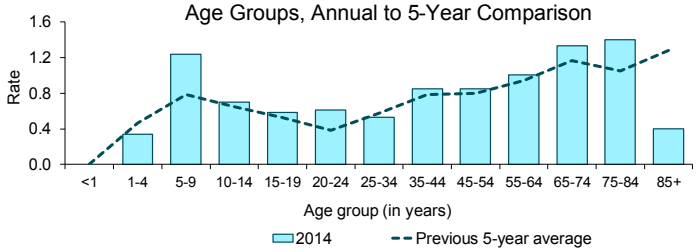
Reported Vibriosis (Excluding Cholera) Cases and Incidence Rates Per 100,000 Population (Restricted to Infections Acquired in Florida) by County of Residence, Florida, 2014 (N=153)

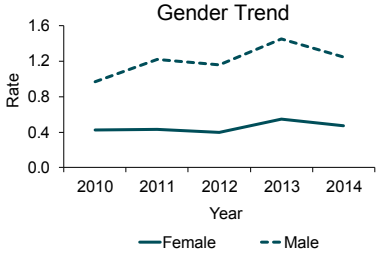


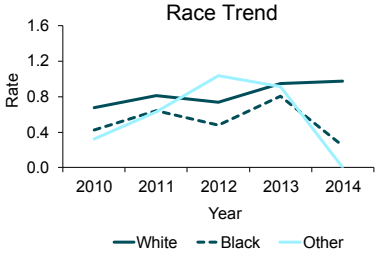
Note that rates based on <20 cases are not reliable and should be interpreted with caution.

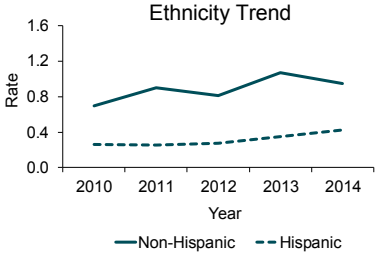
Reported Vibriosis (Excluding Cholera) Incidence Rates Per 100,000 Population by Year, Age, Gender, Race, and Ethnicity, Florida









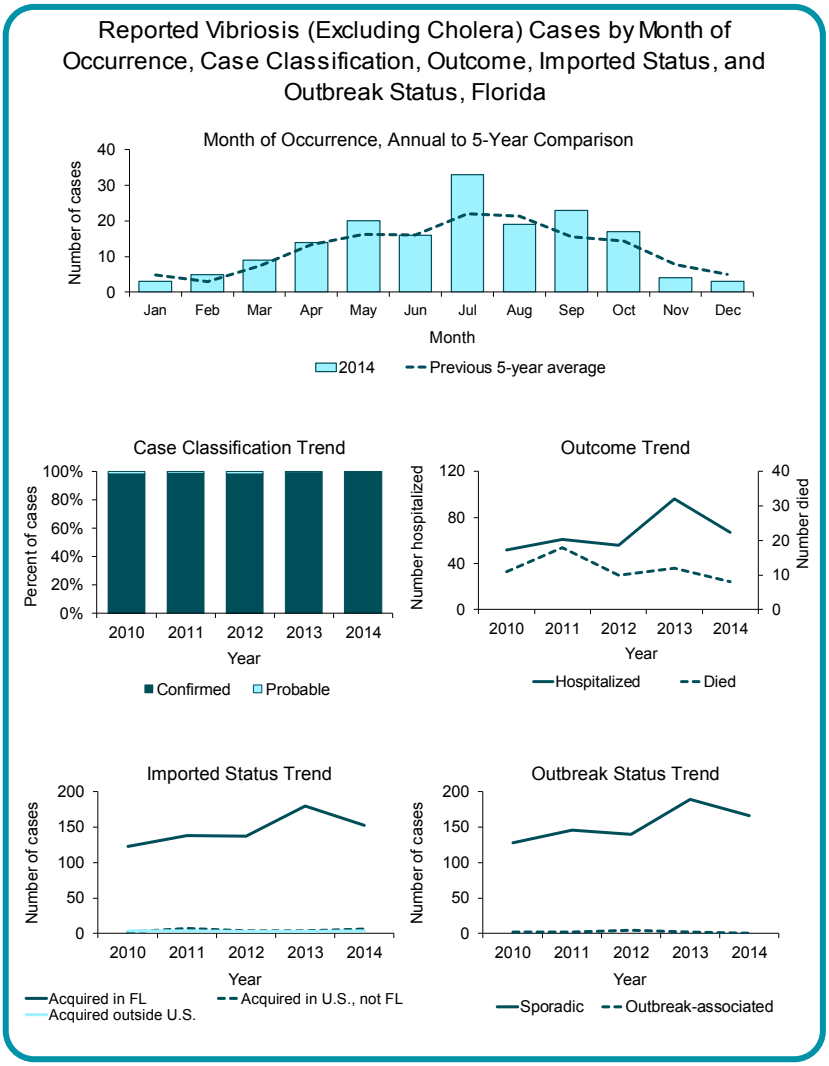


Note that trend graphs should be interpreted with caution when more than 5% of data are missing. Vibriosis (excluding cholera) cases were missing 13.1% of ethnicity data in 2010, 10.8% of race data in 2010, 7.7% of ethnicity data in 2011, 5.2% of race data in 2011, 10.9% of ethnicity data in 2012, 8.2% of race data in 2012, 8.9% of ethnicity data in 2013, 6.3% of race data in 2013, and 5.4% of race data in 2014.

Vibriosis (Excluding Cholera)

Summary of Case Factors

Summary	Number	
Number of cases	166	
Case classification	**Number**	**(Percent)**
Confirmed	166	(100.0)
Probable	0	(0.0)
Outcome	**Number**	**(Percent)**
Hospitalized	67	(40.4)
Died	8	(4.8)
Imported status	**Number**	**(Percent)**
Acquired in Florida	153	(92.2)
Acquired in the U.S., not Florida	6	(3.6)
Acquired outside the U.S.	4	(2.4)
Acquired location unknown	3	(1.8)
Outbreak status	**Number**	**(Percent)**
Sporadic	166	(100.0)
Outbreak-associated	0	(0.0)
Outbreak status unknown	0	(0.0)
Type of infection	**Number**	**(Percent)**
Vibrio alginolyticus	66	(39.8)
Vibrio vulnificus	32	(19.3)
Vibrio parahaemolyticus	30	(18.1)
Vibrio cholerae Type Non-O1	11	(6.6)
Vibrio fluvialis	8	(4.8)
Vibrio mimicus	7	(4.2)
Grimontia hollisae	2	(1.2)
Other *Vibrio* species	10	(6.0)



Interpretation:
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Additional Information

In 2014, the most commonly reported *Vibrio* infection was *V. alginolyticus*, accounting for 39.8% of cases. This was an increase from 2013, in which only 25.7% of cases were associated with that species. The number of infections of *V. vulnificus* and *V. parahaemolyticus* decreased in 2014 compared to 2013. *V. vulnificus* can cause particularly severe disease, with about 50% of bloodstream infections being fatal. Of the 32 cases due to *V. vulnificus* in 2014, 27 (84.4%) were hospitalized and seven (21.9%) died, accounting for seven of the eight deaths. The eighth death was in a person co-infected with *V. vulnificus* and *V. parahaemolyticus*. *V. vulnificus* infections typically occur in people who have chronic liver disease, a history of alcoholism, or are immunocompromised. Of the 32 cases, 28 (87.5%) had underlying medical conditions. Of the eight people who died from vibriosis, two (25%) reported consuming seafood or having exposure to seafood drippings, three (37.5%) had a wound with seawater exposure, and three (37.5%) had other or unknown exposures.