

EPI-GAZETTE



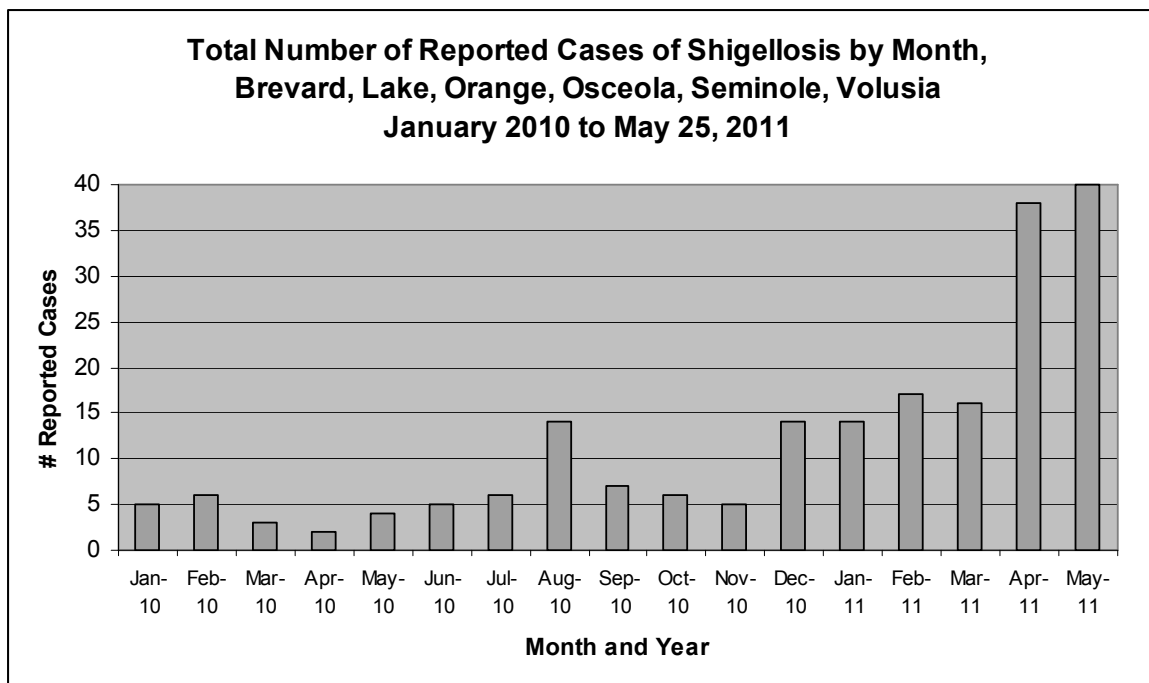
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Seminole County Health Department
WWW.SEMINOLECOHEALTH.COM

Recent Increase in Central Florida Shigellosis Cases

FIGURE 1



Shigellosis is a diarrheal disease caused by gram-negative bacteria within the genus *Shigella*. Other signs and symptoms of the disease include fever, nausea, abdominal cramps, and mucoid stools with or without blood. As few as 10 to 100 organisms are sufficient for infection, depending on the species of *Shigella*. Incidence is typically higher among children under 5 years of age, and consequently outbreaks are commonly associated with childcare settings, where cases can include attendees, caregivers, and household contacts.

An unexpected recent increase in reported cases of shigellosis is affecting several counties adjacent or near to Seminole County, as shown in Figure 1 above. No cases have been reported in 2011 in Seminole County as of May 25, while provisional rates in nearby counties range from 0.72/100,000 in Osceola County to 6.78/100,000 in Orange County. Total year to date case counts for May for the years 2006 to 2011 for the counties of Brevard, Lake, Orange, Osceola, Seminole, and Volusia are shown in Table 1.

Also in this issue:

- 2009 H1N1 Surveillance Summary, Part Two
- Monthly Reportable Disease Table

Year	2006	2007	2008	2009	2010	2011, to May 25
Cases reported through the end of May for each year	95	127	117	11	20	119

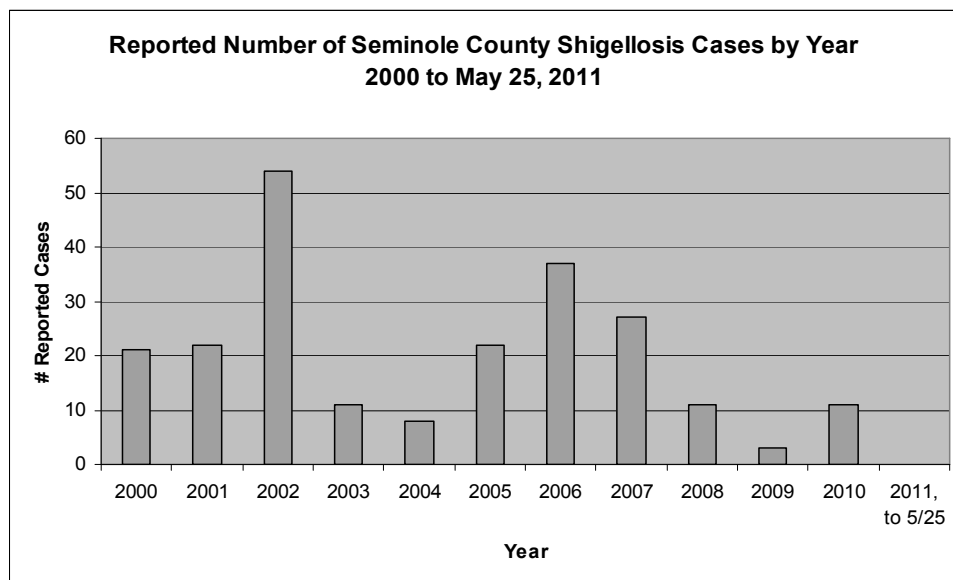
Table 1. Total cumulative number of reported cases of shigellosis through May of each year (or through May 25, for 2011) for Brevard, Lake, Orange, Osceola, Seminole, and Volusia.

Figure 2 shows the total number of reported cases in those counties by year from 2000 to 2011, as of May 25; Figure 3 shows the number of reported cases in Seminole County for the same time period.

FIGURE 2



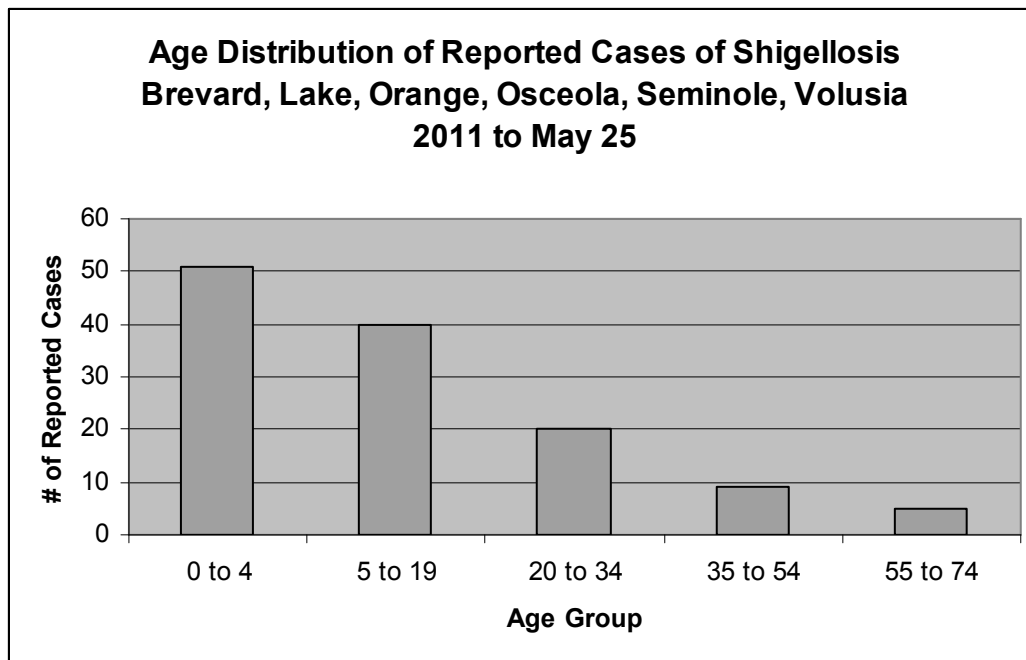
FIGURE 3



The age distribution among cases reported in 2011 through 2011 is shown in Figure 4. The majority of 2011 cases within the six county area have occurred in Orange County, and the majority of those cases have been found in child care and school aged children (<http://www.orchd.com/absolutenm/templates/news.aspx?articleid=235&zoneid=1>, accessed May 25, 2011). Any child with a diarrheal illness should not attend day-

care or school until 24 hours after symptoms have resolved. Patients with confirmed shigellosis cases and who attend or work in sensitive situations (e.g., childcare attendees and workers, food handlers, and health-care workers) are required to have two negative stool test results before returning to those settings.

Figure 4



Summary of 2009 H1N1 Influenza A Surveillance (Part Two)

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(from the March 2011 Florida Department of Health "Epi Update")

Continued from the May 2011 issue of Epi-Gazette:

In addition to reporting infection with novel or pandemic strains of influenza, pediatric mortality due to all strains of influenza is reportable in Florida. In 2009, there were 13 deaths in children under age 18 from laboratory-confirmed influenza. The case definition for pediatric influenza mortality is different from the case definition that was adopted for 2009 influenza A H1N1. Pediatric influenza mortality cases are only reported after influenza is determined to be a main or directly contributing cause of death, as opposed to 2009 influenza A H1N1 deaths.

The extended information collected through the Merlin Outbreak Module made it possible to analyze novel H1N1 cases on a regular basis using a number of different variables. Among the analyses performed were studies on occupational risk of H1N1 infection, associations between age, race, ethnicity, and 2009 H1N1 infection, and the risk of severe H1N1 infection in pregnant women. Results from some of these analyses are published in the Florida Department of Health Bureau of Epidemiology's monthly newsletter, *Epi Update*, including:

- Race, Ethnicity, and Severe H1N1 Illness in Florida, 2009
http://www.doh.state.fl.us/disease_ctrl/epi/Epi_Updates/2010/January2010EpiUpdate.pdf
- Are Florida Healthcare Workers at Increased Risk of 2009 Influenza A H1N1 Infection?
http://www.doh.state.fl.us/disease_ctrl/epi/November2009EpiUpdate.pdf

After the case reporting guidelines were changed to no longer require reporting of every case, surveillance systems other than notifiable disease reporting became even more important. In the absence of individual case reports for all Floridians with 2009 H1N1, each system contributed to a larger overall view of influenza activity.

(Continued on page 5)

Thank You For Your Participation!

The Epidemiology Program would like to thank the following healthcare providers for their diligence in timely reporting from Florida's "List of Reportable Diseases/Conditions":

Joanne Barnett, RN, Central Florida Regional Hospital
Veronica Butler, RN, Florida Hospital, Altamonte and Apopka
Sandra Delahoz, RN, South Seminole Hospital

For more information about Florida's List of Reportable Diseases/Conditions, please contact Gregory Danyluk, PhD at 407-665-3266.

Selected Diseases/Conditions Reported to the Seminole County Health Department	2011 through Week 17	2010 through Week 17	2009 through Week 17	2008–2010 Average through Week 17
AIDS*	13	22	26	19.7
Animal Bite to Humans**	3	6	14	8.0
Animal Rabies	2	2	4	2.3
Campylobacteriosis	12	3	3	2.7
Chlamydia	530	407	352	388.0
Cryptosporidiosis	1	2	2	1.7
Cyclosporiasis	0	0	1	0.3
Dengue	0	0	0	0.0
<i>E. coli Shiga toxin-producing</i>	2	0	0	0.3
Giardiasis	3	12	6	8.3
Gonorrhea	51	116	104	118.7
<i>Haemophilus influenzae (invasive)</i>	2	0	0	0.0
Hepatitis A	1	0	3	1.3
Hepatitis B (acute and chronic)	20	26	22	23.7
Hepatitis C (acute and chronic)	103	94	82	93.0
Hepatitis B in Pregnant Woman	4	4	3	4.3
HIV*	22	19	26	27.0
Lead poisoning	1	2	1	1.3
Legionellosis	0	0	2	1.7
Lyme Disease	2	0	2	0.7
Meningococcal Disease	0	0	0	0.0
Pertussis	1	1	0	0.3
Salmonellosis	17	16	17	15.7
Shigellosis	0	3	0	2.3
<i>S. pneumoniae – drug resistant</i>	3	8	2	5.7
Syphilis	11	7	25	16.7
Tuberculosis	4	4	3	3.3
Varicella	11	17	7	11.0

* HIV data includes those cases that have converted to AIDS. These HIV cases cannot be added with AIDS cases to get combined totals since the categories are not mutually exclusive. Current AIDS/HIV data are provisional at the county level.

** Animal bite to humans by a potentially rabid animal resulting in a county health department or state health office recommendation for post-exposure prophylaxis (PEP), or a bite by a non-human primate.

Reported cases of diseases/conditions in **Bold** are >10% higher than the previous three year average for the same time period.

(Continued from page 3)

Bureau of Laboratories (BOL) Viral Strain Surveillance

Figure 5 shows BOL influenza surveillance data for 2009. In the early months of 2009, the majority of influenza-positive isolates tested by the BOL were influenza B, although a substantial proportion tested positive for other strains such as seasonal influenza A H1. When the BOL was first able to test for the novel virus in week 17, the number of influenza laboratory submissions increased dramatically. During the early part of the pandemic, BOL was the only location in the state where testing to confirm 2009 influenza A H1N1 could be conducted, as no private laboratory had the appropriate reagents and testing capability. In April and May, the majority of the positive influenza results from the BOL were for other influenza types. Similar to the Merlin case data from Figures 1 and 2, there is a large peak around week 28, followed by a decrease when reporting guidelines were changed, then a sustained number of positive specimens over the late summer and early fall. This later peak (~weeks 35-43) coincides with the true peak in 2009 influenza A H1N1 activity. During the fall and winter of 2009, the new H1N1 virus predominated among influenza-positive laboratory submissions, with very few specimens testing positive for any other influenza viruses. Specimen submission and the total number of positive specimens declined after week 26 even though other influenza surveillance mechanisms showed that the virus was in wide circulation. The decreased number of submissions and positives most likely reflects the testing and treatment guidance that was issued during that period; namely that the vast majority of cases with influenza-like illness were infected with 2009 influenza A H1N1 and should be treated as such before, or in the absence of, positive test results. BOL specimen submission was limited to testing associated with a death, a patient with severe life threatening illness, outbreaks in defined settings, or if resistance to antivirals was suspected. In addition, laboratory testing to confirm 2009 influenza A H1N1 strain became available in the private sector. BOL laboratory surveillance data were extremely helpful in developing influenza treatment and testing guidance during the course of the pandemic.

Figure 5. Cumulative Laboratory-Confirmed Novel H1N1 Hospitalization Rate and Cumulative Hospitalizations in Reported Novel H1N1 Cases by Age Group through Week 52, 2009

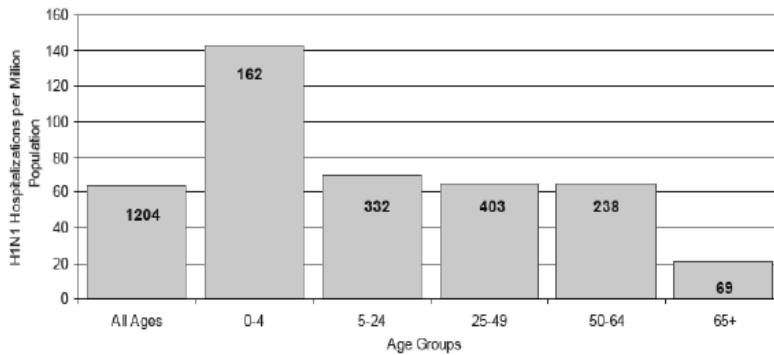
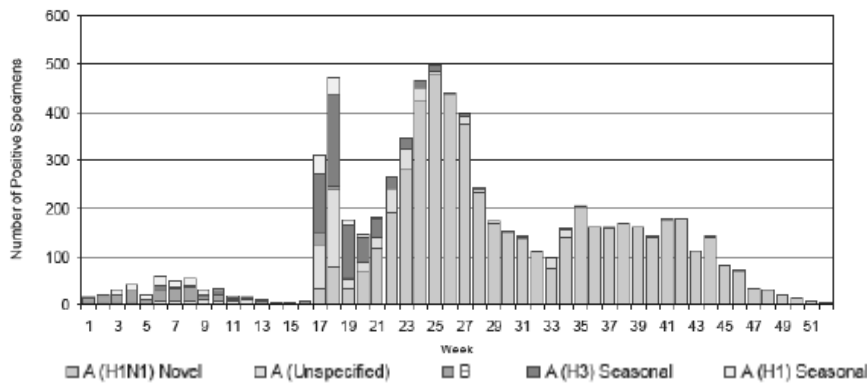


Figure 6. Number of Influenza-Positive Specimens Tested by the Florida Bureau of Laboratories (BOL) by Subtype by Lab Event Date* Week 1-52, 2009



To be continued in the July 2011 issue of Epi-Gazette

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