



**April 2010**

## **In This Issue**

- Norovirus Foodborne Outbreak at a Steakhouse January 2010, Pinellas County
- County Influenza Activity Reporting: Before and After 2009 H1N1
- Florida Year-to-Date Mosquito-Borne Disease Summary
- Recently Published
- Reportable Diseases in Florida: March 2010
- Upcoming Events
- This Month on EpiCom

## **Norovirus Foodborne Outbreak at a Steakhouse, January 2010, Pinellas County**

*JoAnne Tellado, M.P.H., Sue Heller, R.N., B.S.N., Patricia Borkowski, R.N., Caroline Wieland, M.P.H., Gary Frank, B.S., and Mike Friedman, M.P.H.*

### **Introduction and Background**

On February 2, 2010, the Pinellas County Health Department (CHD) was notified of a possible foodborne illness outbreak. Early information indicated that several people who attended a golf club group dinner at a steakhouse within the county on January 28, 2010 later experienced gastrointestinal illness. The predominant symptoms reported were diarrhea, nausea, vomiting, and abdominal pain. The dinner attendees had ordered from a predetermined menu consisting of a variety of items.

### **Methodology**

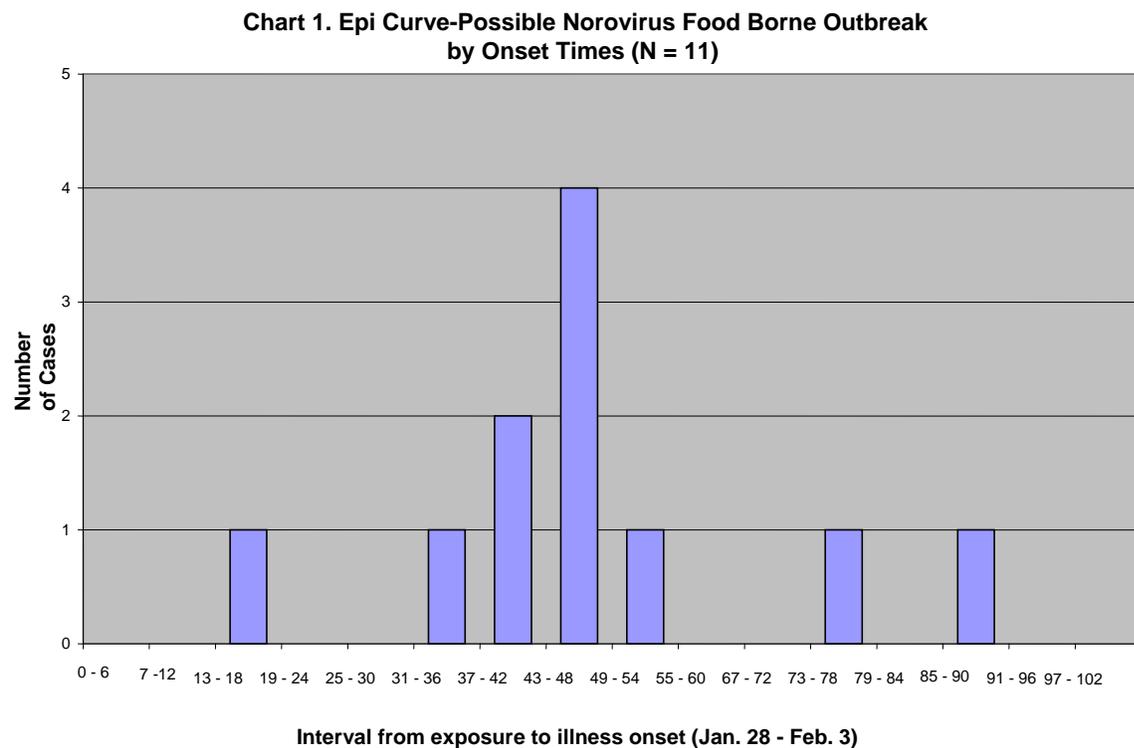
The Pinellas CHD Environmental and Disease Control Divisions began an investigation on the outbreak immediately upon notification. A joint environmental field investigation was performed by the Department of Business and Professional Regulation (DBPR), Division of Hotels and Restaurants, and Pinellas CHD Environmental Health & Preparedness (EH&P) on February 3, 2010. At this time, available food items left over from the dinner (salad dressing and meatloaf) were collected from the restaurant for possible laboratory testing. A listing of the 73 dinner attendees was obtained, as well as a list of food items available to the party. A standard questionnaire, including food and medical history, was prepared and administered over the telephone. Resulting data was analyzed using Epi Info statistical software. A case was defined as anyone who ate dinner as part of the golf club group on January 28, 2010 and reported the onset of diarrhea and/or additional symptoms between January 29, 2010 and February 3, 2010. A control was defined as a person who attended the dinner, ate, and did not become ill. Eight

enteric and norovirus specimens were obtained from the identified cases and submitted to the Florida Department of Health (FDOH) Bureau of Laboratories (BOL), Tampa.

## Results

Forty-five individuals completed the questionnaire and five denied eating at the restaurant. The age of those who attended the dinner ranged from 43- to 82-years-old, with a mean age of 68 (N=39). Of those interviewed, 48.9% were female and 51.1% were male. Fourteen people reported becoming ill following the suspected meal on January 28, 2010. Eleven of the 14 met the case definition for this outbreak. The onset of symptoms ranged from 16.75 hours to 90.5 hours after meal consumption. The mean onset of the symptoms was 48.5 hours. (See Chart 1.)

The reported symptoms were: abdominal pain (71.4%), diarrhea (85.7%), vomiting (78.5%), fever (14.2%), headache (35.7%), muscle ache (14.2%), nausea (78.5%), and other, non-specific (28.5%). There were no reports of hospitalization or physician care. The eight specimens were sent to the State laboratory on January 9, 2010; seven tested positive for Norovirus G2.



Results from the case-control study indicated that several of the food items served were consumed by a majority of the ill persons. Furthermore, epidemiological data indicated that the foods with the greatest odds ratios (OR) were prime rib (OR = 3.95), bread (OR = 3.00), chicken (OR = 2.89), water with lemon (OR = 2.89), and dipping oil (OR = 2.50). However, none of these were statistically significant as the p-values for each were greater than 0.05. A table shows the OR for each food and beverage identified on the questionnaire. (See Table 1.)

The environmental field investigation on February 3, 2010 identified several critical deficiencies, such as personal hygiene deficiencies, food handling/preparation problems, and potential cross-contamination issues. Personal hygiene deficiencies that were observed included a lack of hand washing after touching body parts and subsequently preparing foods, a hand washing sink inadequately supplied with paper towels, no hair restraints, and open beverage containers in food preparation areas. Food handling/preparation problems included improper re-heating of potentially hazardous foods, storage of potentially hazardous foods at improper temperatures, and food containers on the floor of the walk-in cooler. Potential cross-contamination issues were also identified with uncovered foods in cold storage. No ill food workers were identified by the restaurant's management staff.

The available food items that were served at the dinner in question were delivered to the FDOH BOL, Tampa on February 12, 2010. A microbiological report indicated that elevated levels of fecal coliform, 43 MPN/g (MPN=most probable number), were detected in the meatloaf. The salad dressing was negative for fecal coliform.

**Table 1: Food Specific Odds Ratio**

Food/ Beverage	Ate/Drank		Did Not Eat/Drink		Odds Ratio*
	ill (a)	Well (b)	ill (a)	Well (b)	
Meat Loaf	3	10	11	21	0.57
Roast Beef	0	1	14	30	0.00
Chicken	5	5	9	26	2.89
Prime Rib	3	2	11	29	3.95
Ribs	2	7	12	24	0.57
Fish	2	2	12	29	2.42
Other	0	1	14	30	0.00
Salad	11	26	3	5	0.71
w/ Vinaigrette	9	13	5	18	2.49
w/ Ranch	0	6	14	25	0.00
w/ Bleu Cheese	2	4	12	27	1.13
Water w/ lemon	5	5	9	26	2.89
Water w/o lemon	4	7	10	24	1.37
Beer	1	8	13	23	0.24
Wine	4	5	10	26	2.08
Liquor	0	7	14	24	0.00
Iced Tea	0	3	14	28	0.00
Mashed Potato	2	4	12	27	1.13
Baked Potato	3	7	11	24	0.94
Sour Cream	0	5	14	26	0.00
Butter	2	2	12	29	2.42
Soup	0	1	14	30	0.00
Bread**	14	28	0.5	3	3.00
Dipping Oil	13	26	1	5	2.50
Dessert	4	8	10	23	1.15

\*None of the Odds Ratios were statistically significant at a level of 0.05

\*\* .5 was added to the 'did not eat, ill' column for calculation purposes

## Conclusions and Recommendations

This norovirus outbreak appears to be associated with attendance at a group dinner held on January 28, 2010 in Pinellas County. The onset of illness was chronologically clustered indicating a common source exposure. This was the only common gathering for this group of people where food and drink were served. In addition to several specimens testing positive for norovirus G2, the incubation period and symptoms confirmed an etiology of norovirus. Epidemiological analysis identified several food items with high odds ratios; however, samples could not be obtained for testing. Samples of the cooked meatloaf were collected for testing and were found to be positive for fecal coliform. The evidence of cross contamination, both bacterial and viral, indicates the food was contaminated after being cooked. Furthermore, personal hygiene of the staff and subsequent food handling procedures most likely contributed to the contamination of food products. Even though no ill food workers were identified in this investigation, there may have been an asymptomatic worker who contributed to the transmission.

Recommendations to prevent future foodborne illness include food service employee training in good personal hygiene procedures and proper food handling. Ensuring the hand-washing sink is properly supplied with soap and paper towels, as well as practicing quality hand washing can reduce the spread of norovirus. Furthermore, preventive health and safety procedures can be addressed during routine regulatory inspections and educational seminars.

*JoAnne Tellado is a FL-EIS Fellow with the Bureau of Epidemiology and is located in the Pinellas County Health Department. Ms. Tellado can be contacted at 727.824.6900, ext 11448 or by email at [JoAnne\\_Tellado@doh.state.fl.us](mailto:JoAnne_Tellado@doh.state.fl.us). Sue Heller is an Epidemiology Nursing Program Specialist for the Pinellas County Health Department. Ms. Heller can be contacted at 727.507.4336, ext 1365 or [Sue\\_Heller@doh.state.fl.us](mailto:Sue_Heller@doh.state.fl.us). Patricia Borkowski is a Senior Community Health Nurse for the Pinellas County Health Department. Ms. Borkowski can be contacted at 727.469.5800, ext 140 or by email [Patricia\\_Borkowski@doh.state.fl.us](mailto:Patricia_Borkowski@doh.state.fl.us). Caroline Wieland is the Surveillance Epidemiologist located at the Pinellas County Health Department. Ms. Wieland can be contacted at 727.824.6900, ext 11479 or by email at [Caroline\\_Wieland@doh.state.fl.us](mailto:Caroline_Wieland@doh.state.fl.us). Gary Frank is the Foodborne Illness Coordinator for the Pinellas County Health Department. Mr. Frank can be contacted at 727.507.4336, ext 1367 or by email at [Gary\\_Frank@doh.state.fl.us](mailto:Gary_Frank@doh.state.fl.us). Mike Friedman is a Regional Environmental Epidemiologist with Florida Department of Health, Bureau of Environmental Public Health Medicine. Mr. Friedman can be contacted at 727.816.1240 or by email at [Mike\\_Friedman@doh.state.fl.us](mailto:Mike_Friedman@doh.state.fl.us).*

## County Influenza Activity Reporting: Before and After 2009 H1N1

*Colin Malone, M.P.H.*

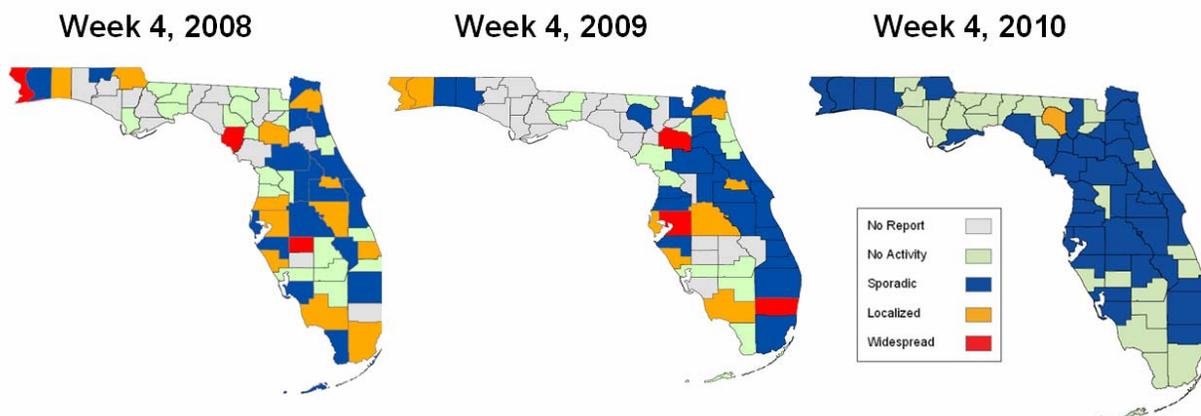
### Background

Since the fall of 2004, the Bureau of Epidemiology (BOE) has requested that County Influenza Coordinators report their county's influenza activity level weekly during flu season (September – March). Coordinators are asked to use a set of definitions to place their county's influenza activity into one of four categories: no activity, sporadic, localized, and widespread activity. In May 2009, the burgeoning H1N1 influenza A pandemic led BOE to create a system designed to be a more accurate, comprehensive, and standardized method to characterize each county's influenza activity. This new system requires county influenza coordinators to electronically submit data

regarding influenza laboratory results, influenza outbreaks, influenza activity as captured by local surveillance systems, and other related measures. These data are combined using a formula developed by BOE, which calculates an influenza activity level. There are additional questions included in the questionnaire related to absenteeism data, setting specific influenza activity, and influenza trend interpretation. These data elements are not used to calculate the overall influenza activity code, but rather to give context to the code and other reported data. The four new categories for activity are: no activity, mild, moderate, and widespread. The new system is called the “New” County Flu Activity Code, to contrast with the “old” influenza activity code. Both systems were used concurrently from November 2009 to the present. County health departments were given their activity level values for the new code, but they weren’t distributed as part of the influenza surveillance report.

In early 2010, influenza activity reported in Florida had declined substantially from the highs seen in fall 2009 and influenza activity levels reported into the old influenza code were much lower than in previous years, as shown in Figure 1.

**Figure 1: Influenza activity reports from Week 4 for 2008, 2009, and 2010, by county**



Because of the unprecedented nature of the fall 2009 H1N1 pandemic, and the steep decline in activity reported during the traditional peak of influenza season, BOE decided to survey County Influenza Coordinators. A short survey was used to gather data on the coordinators’ perceptions of how influenza activity in their counties during the 2009-2010 winter season compared to previous influenza seasons, and whether their perspective on flu activity reporting changed based on their 2009 experience. Additionally, BOE used the survey to elicit feedback and suggestions about the accuracy of the New County Flu Code during the 2009-10 H1N1 season.

## Methods

The questionnaire was distributed to County Health Department Directors and County Influenza Coordinators through email. It included the following questions:

1. How does the level of influenza activity during this current winter influenza season (since mid-January) compare to previous influenza seasons at this time?
2. How did the level of influenza activity during the fall 2009 H1N1 season compare to previous winter influenza seasons?

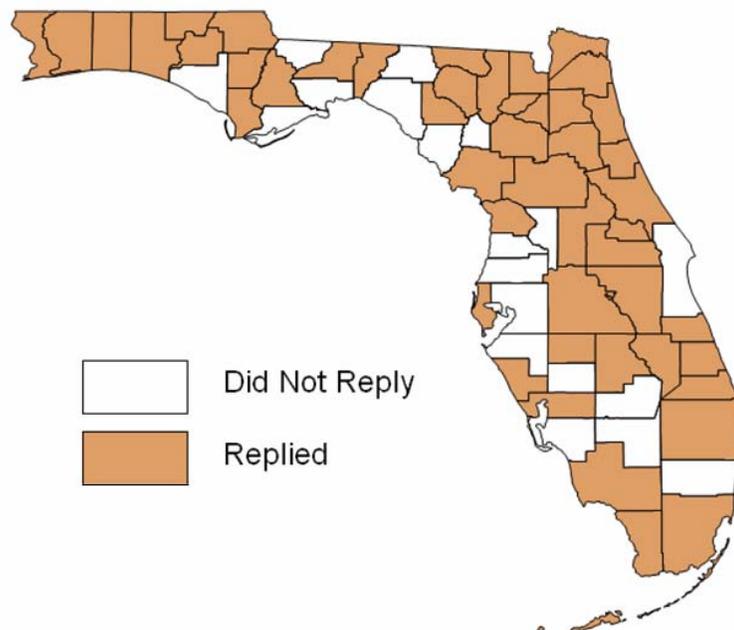
3. If you are seeing influenza or ILI activity during the current winter season, in what populations and settings is most of the activity occurring? How does this compare to the fall H1N1 season? To previous winter influenza seasons?
4. Has the experience of the fall H1N1 season changed how you gauge influenza activity in your county? If so, how?
5. Do you think that results from the New County Flu Activity Code accurately reflect the level of influenza activity in your county? If not, why not? Please provide any suggestions for improving the accuracy of the New County Flu Code.
6. If you have any other suggestions or comments relating to influenza activity reporting in your county, please note them here.

County Influenza Coordinators were asked to respond via email. In some cases, follow-up emails were sent asking coordinators to clarify or expand upon their responses.

## Results

Forty-eight (71.6%) of Florida counties responded to the survey. The open-ended nature of the survey elicited a variety of responses, from simple one- or two-word answers to extended analyses, including figures and tables. Figure 2 shows the counties' response.

**Figure 2: Response to Flu Activity Survey by County**



When asked to compare activity levels seen in winter 2010 to previous winter influenza seasons, 25 counties (52.1% of respondents) reported that activity was lower than in previous years; 15 (31.3%) reported activity similar to previous years; and 5 (10.4%) reported higher activity than previous influenza seasons. When comparing activity during the fall 2009 season to previous winter influenza seasons, 31 counties (64.6%) responded that activity during fall 2009 was higher than a normal winter season. Twelve (25.0%) reported that fall activity was the same as in a normal flu season, and two (4.2%) reported that fall activity was lower than a normal season.

Many responses to Question 3, on populations affected by flu, were incomplete. Fifteen counties (31.3%) reported that younger age groups were disproportionately affected by H1N1 during both the fall and winter seasons, compared to older age groups during normal flu seasons. Seven counties (14.6%) indicated that activity was so sporadic in their counties during the winter 2010 season that no one population or setting could be indicated as experiencing higher influenza activity.

Twenty counties (41.7% of respondents) said that the experience of the H1N1 pandemic did not affect how they assessed influenza activity in their county. When asked to elaborate, most counties who answered 'no' said that they always followed the activity level definitions, and that H1N1 had not changed that. Twenty-four counties (50.0%) indicated that their judgment of influenza activity in the old flu code did change as a result of 2009 H1N1. The most common reason given behind this change was the addition of new surveillance systems by counties, such as sentinel data, lab results, and absenteeism data. Counties also indicated that increased active surveillance, as well as more cooperation from reporting partners due to the high profile of H1N1, added to their ability to assess influenza activity compared to years past. Three counties responded that although their tools for assessing influenza activity did not change, the experience of having such high influenza activity so early in the season, as well as the heightened public attention surrounding influenza, may cause them to be more careful about reporting increases or decreases in activity than in previous seasons.

When asked about the accuracy of the New County Flu Code, 39 counties (81.3%) responded that they considered the results from the new code to be an accurate reflection of influenza in their county. Respondents who expanded on their answer indicated that they thought that the New County Flu Code was less subjective than the old activity code. Seven counties (14.5%) did not believe the results from the New County Flu Code accurately represented their county's activity. The most common explanation among these respondents was that the limited number of sentinel sites or poor quality of sentinel reporting in their county was causing the New County Flu Code to give an incorrect activity level. Counties also indicated that the formula and activity level definitions used in the New County Flu Code were unavailable or unclear. The remainder of counties did not respond.

## **Discussion**

A large number of counties indicated that the experience of 2009 H1N1 influenza had changed how they gauge influenza activity in their county. Most of these counties said that the changes resulted from expanded surveillance and were therefore more accurate than previous reports. A slight majority of the counties indicated that the winter 2010 H1N1 season was a milder-than-normal season, and a majority said that the fall 2009 season was a relatively severe season. These observations match the results from the county influenza reporting. Since many counties indicate that their surveillance has changed for the better, one conclusion would be that the low activity levels reported in the winter 2010 season were accurate. Although there is no indication that this expanded surveillance activity caused counties to be more likely to report higher or lower activity, it makes it more difficult to compare activity levels from 2009 – 2010 to previous influenza seasons. It is possible that a system such as the New County Flu Code can make activity levels more standardized and less subjective across counties and between influenza seasons. The majority of counties indicated that the New County Flu Code was accurate. Although support was not universal, this survey shows that the New County Flu Code was generally well-received. After the end of the 2009 –2010 influenza season (Week 20, 2010), BOE will undertake a comprehensive study to determine the validity of the New County Flu Code. Several counties

gave suggestions for improving the New County Flu Code, and these suggestions, as well as the positive and negative comments regarding its accuracy, will be reviewed and discussed during this validation process.

### **Limitations**

Although the majority of counties replied to the survey, the lack of response from some counties could affect the results of this study. Because survey questions were open-ended, interpretation of answers was necessary, and it is possible that county views could be misinterpreted. This survey asked for the opinions of County Influenza Coordinators, and cannot be construed as a statistical validation of the county flu reporting process.

*Colin Malone is an influenza surveillance epidemiologist in the Bureau of Epidemiology. Mr. Malone can be contacted at 850.245.4444, ext 2403 or by email at [Colin\\_Malone@doh.state.fl.us](mailto:Colin_Malone@doh.state.fl.us).*

## **Florida Year-to-Date Mosquito-Borne Disease Summary Through April 12, 2010**

*Elizabeth Radke, M.P.H., Kristina Weis, Ph.D., Danielle Stanek, D.V.M., Carina Blackmore, D.V.M., Ph.D.*



During the period from January 1 through April 12, 2010, the following arboviral activity was recorded in Florida:

### **Eastern Equine Encephalitis Virus (EEEV) Activity**

Positive samples were obtained from six sentinel chickens and four live wild birds in five counties.

### **West Nile Virus (WNV) Activity**

Positive samples were obtained from 22 sentinel chickens in five counties.

### **St. Louis Encephalitis Virus (SLEV) Activity**

No activity reported in 2010.

### **Highlands J Virus (HJV) Activity**

No activity reported in 2010.

### **California Encephalitis Group Viruses (CEV) Activity**

No activity reported in 2010.

### **Dengue Virus (DENV)**

Eleven imported cases with onset in 2010 in Florida residents were reported from the following counties: Broward (2), Hillsborough (2), Miami-Dade (2), Orange, Osceola, Pasco, Pinellas, and Seminole. Places of origin include Columbia (2), Costa Rica, Dominican Republic, Haiti (4), Jamaica, the Philippines, and Venezuela.

## Malaria

Twenty-nine imported cases of malaria with onset in 2010 were reported in Florida residents from the following counties: Broward (6), Citrus, Duval, Escambia, Hillsborough (2), Miami-Dade (8), Orange (4), Osceola, Palm Beach (3), Polk, Seminole, Volusia, and Wakulla. Places of origin included Angola, Ghana, Guyana, Haiti (19), Honduras (3), Nigeria (2), Uganda, and West Africa. Twenty-five (86%) were diagnosed with *Plasmodium falciparum* and four (12%) with *Plasmodium vivax*.

## Dead Bird Reports

The Fish and Wildlife Conservation Commission (FWC) collects reports of dead birds, which can be an indication of arbovirus circulation in an area. Since January 1, 2010, 87 reports representing a total of 303 dead birds (1 crow, 3 jays, 16 raptors, 283 others) have been received from 33 of Florida's 67 counties. Please note that FWC collects reports of birds that have died from a variety of causes, not only arboviruses. Dead birds should be reported to [www.myfwc.com/bird/](http://www.myfwc.com/bird/).

See the following web site for more information

<http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html>.

*Elizabeth Radke is the Arthropod-borne Disease Surveillance Coordinator with the Bureau of Environmental Public Health Medicine. Ms. Radke can be contacted at 850.245.4444, ext 2437 or by email at [Elizabeth.Radke@doh.state.fl.us](mailto:Elizabeth.Radke@doh.state.fl.us). Dr. Kristina Weis is the CDC/CSTE Applied Epidemiology Fellow with the Bureau of Environmental Public Health Medicine. Dr. Weis can be contacted at 850.245.4444, ext 2016 or by email at [Kristina.Weis@doh.state.fl.us](mailto:Kristina.Weis@doh.state.fl.us). Dr. Danielle Stanek is a medical epidemiologist with the Bureau of Environmental Public Health Medicine. Dr. Stanek can be contacted at 850.245.4117 or by email at [Danielle.Stanek@doh.state.fl.us](mailto:Danielle.Stanek@doh.state.fl.us). Dr. Carina Blackmore is the State Public Health Veterinarian and the Chief of the Bureau of Environmental Public Health Medicine. Dr. Blackmore can be contacted at 850.245.4732 or by email at [Carina.Blackmore@doh.state.fl.us](mailto:Carina.Blackmore@doh.state.fl.us). The Bureau of Environmental Public Health Medicine is part of the Division of Environmental Health, Florida Department of Health.*

## Recently Published

Siston AM, Rasmussen SA, Honein MA; et al. (Doyle T) (Additional acknowledged contributors: Hamilton J, Goodin K, Eisenstein, L): Pandemic 2009 Influenza A (H1N1) Virus Illness Among Pregnant Women. *JAMA*. 2010;303(15):1517-1525

Dietz N, Westphal L, Arheart KL, Lee DJ, Huang Y, Sly DF, Davila E: Changes in Youth Cigarette Use Following the Dismantling of a Tobacco Control Program in Florida. *Preventing Chronic Disease* 2010;7(3). [http://www.cdc.gov/pcd/issues/2010/may/09\\_0157.htm](http://www.cdc.gov/pcd/issues/2010/may/09_0157.htm).

# Reportable Diseases in Florida

Up-to-date information about the occurrence of reportable diseases in Florida, based on the Merlin surveillance information system, is available at the following site: <http://www.floridacharts.com/merlin/freqrpt.asp>. Counts can be displayed by disease, diagnosis status, county, age group, gender, or time period.

## Monthly Notifiable Disease Data

Table 1. Provisional Cases\* of Selected Notifiable Diseases, Florida, March 1-31, 2010

Disease Category	Month				Cumulative (YTD)	
	2010	2009	Mean <sup>†</sup>	Median <sup>‡</sup>	2010	2009
<b>A. Vaccine Preventable Diseases</b>						
Diphtheria	0	0	0	0	0	0
Measles	0	0	0.2	1	0	1
Mumps	1	1	1.2	1	2	4
Pertussis	15	51	27.2	21	46	104
Poliomyelitis	0	0	0	0	0	0
Rubella	0	0	0	0	0	0
Smallpox	0	0	0	0	0	0
Tetanus	2	0	0.2	1	3	0
Varicella	117	199	N/A	N/A	261	448
<b>B. CNS Diseases &amp; Bacteremias</b>						
Creutzfeldt-Jakob Disease	0	2	1.8	2	2	6
<i>H. Influenzae</i> (invasive)	18	29	15.2	4	44	71
in those ≤5	4	5	7.0	6	6	9
Listeriosis	1	0	3.0	3	10	1
Meningitis (bacterial, cryptococcal, mycotic)	22	30	1.4	8	32	27
Meningococcal Disease	9	13	10.2	12	24	24
<i>Staphylococcus aureus</i> (VISA, VRSA)	0	2	0.4	2	0	2
Streptococcal Disease, Group A, Invasive	22	34	25.4	29	38	53
<i>Streptococcus pneumoniae</i> (invasive disease)						
Drug resistant	157	121	95.0	96	333	325
Drug susceptible	125	94	77.0	72	261	268
<b>C. Enteric Infections</b>						
Campylobacteriosis	81	64	69.0	65	215	218
Cholera	0	0	0	0	0	0
Cryptosporidiosis	27	17	22.2	23	81	65
Cyclospora	5	0	1.2	1	9	9
<i>Escherichia coli</i> , Shiga-toxin producing (STEC)**	26	10	2.0	5	40	36
Giardiasis	172	177	102.6	91	424	494
Hemolytic Uremic Syndrome	2	1	1.4	1	3	1
Salmonellosis	257	235	227.8	229	837	753
Shigellosis	56	21	86.6	65	137	103
Typhoid Fever	1	0	0.8	1	5	2
<b>D. Viral Hepatitis</b>						
Hepatitis A	10	20	18.4	20	35	57
Hepatitis B, Acute	19	38	35.8	38	68	93
Hepatitis C, Acute	12	6	5.2	6	26	8
Hepatitis +HBsAg in pregnant women	44	72	53.4	53	119	174
Hepatitis D, E, G	0	0	0	0	1	2

\* Confirmed and probable cases based on date of report as reported in Merlin  
Incidence data for 2010 is provisional, data for 2009 will be finalized on April 1, 2010

† Mean of the same month in the previous five years

‡ Median for the same month in the previous five years

\*\* Includes *E. coli* O157:H7; shiga-toxin positive, serogroup non-O157; and shiga-toxin positive, not serogrouped

†† Includes neuroinvasive and non-neuroinvasive

N/A indicates that no historical data is available to calculate mean and median

Table 1. (cont.) Provisional Cases\* of Selected Notifiable Diseases, Florida, March 1-31, 2010

Disease Category	Month				Cumulative (YTD)	
	2010	2009	Mean <sup>†</sup>	Median <sup>¶</sup>	2010	2009
<b>F. Vector Borne, Zoonoses</b>						
Dengue	3	0	1.4	2	11	9
Eastern Equine Encephalitis <sup>††</sup>	0	0	0	0	0	0
Ehrlichiosis/Anaplasmosis	0	1	0.2	1	1	2
Leptospirosis	0	0	0	0	0	0
Lyme Disease	7	1	2.2	3	17	12
Malaria	11	9	4.4	3	34	24
Plague	0	0	0	0	0	0
Psittacosis	0	0	0.2	1	0	0
Q Fever (acute and chronic)	0	1	0.2	1	0	1
Rabies, Animal	12	15	11.2	8	33	51
Rabies (possible exposure)	154	143	111.2	107	460	371
Rocky Mountain Spotted Fever	4	0	1.2	2	4	1
St. Louis Encephalitis <sup>††</sup>	0	0	0	0	0	0
Toxoplasmosis	0	0	0.2	1	2	1
Trichinellosis	0	0	0	0	0	0
Tularemia	0	0	0	0	0	0
Typhus Fever (epidemic and endemic)	0	0	0	0	0	0
Venezuelan Equine Encephalitis <sup>††</sup>	0	0	0	0	0	0
West Nile Virus <sup>††</sup>	0	0	0	0	0	0
Western Equine Encephalitis <sup>††</sup>	0	0	0	0	0	0
Yellow Fever	0	0	0	0	0	0
<b>G. Others</b>						
Anthrax	0	0	0	0	0	0
Botulism-Foodborne	0	0	0	0	0	1
Botulism-Infant	0	0	0	0	0	0
Brucellosis	1	0	0.4	1	5	1
Glanders	0	0	0	0	0	0
Hansen's Disease (Leprosy)	2	0	0	0	2	1
Hantavirus Infection	0	0	0	0	0	0
Legionella	10	16	12.8	13	33	38
Melioidosis	0	0	0	0	0	0
Vibriosis	0	4	5.4	6	3	11

\* Confirmed and probable cases based on date of report as reported in Merlin

Incidence data for 2010 is provisional, data for 2009 will be finalized on April 1, 2010

† Mean of the same month in the previous five years

¶ Median for the same month in the previous five years

†† Includes neuroinvasive and non-neuroinvasive

N/A indicates that no historical data is available to calculate mean and median

Note: The 2010 and 2009 case counts are provisional and are subject to change until the database closes. Cases may be deleted, added, or have their case classification changed based on new information and therefore the monthly tables should not be added to obtain a year to date number.

**Please refer any questions regarding the data presented in these tables to Kate Goodin at [Kate\\_Goodin@doh.state.fl.us](mailto:Kate_Goodin@doh.state.fl.us) or 850.245.4444 Ext. 2440.**

## Upcoming Events

### Bureau of Epidemiology Monthly Grand Rounds

Date: Last Tuesday of each month

Time: 10 a.m.-11 a.m., E.T.

Location: Building 2585, Room 310A

Dial-In Number: 877.646.8762 (password: Grand Rounds)

May 25, 2010: “Diabetes Self-Management Education: Does More Matter?” presented by Tammie Johnson, M.P.H, Dr. P.H.

## This Month on EpiCom

*Christie Luce*



EpiCom is located within the Florida Department of Health’s Emergency Notification System (FDENS). The Bureau of Epidemiology encourages *Epi Update* readers to register on the EpiCom system by emailing the Florida Department of Health Emergency Notification System Helpdesk at [FDENS-help@doh.state.fl.us](mailto:FDENS-help@doh.state.fl.us). Users are invited to contribute appropriate public health observations related to any suspicious or unusual occurrences or circumstances through the system. EpiCom is the primary method of communication between the Bureau of Epidemiology and other state medical and public health agencies during emergency situations. The following are titles from selected recent postings:

- Hepatitis A among evacuees of the Haiti earthquake, Miami-Dade County
- Hepatitis A outbreak in youth mission group, Orange County
- Influenza A outbreak at a correctional detention center, 3/18, Miami-Dade County
- Gastrointestinal illness (GI) outbreak, St. Johns County
- GI outbreak #13, local private school, 3/19, Miami-Dade County
- GI outbreak #14, nursing home, 3/19, Miami-Dade County
- Suspected foodborne GI illnesses at a local restaurant, Alachua County
- Detecting a GI cluster in a household through a routine review of ESSENCE, Pinellas County
- CDC Health Alert: recommendation to temporarily suspend usage of GlaxoSmithKline Rotarix (Rotavirus)
- Bacterial meningitis, Lake and Orange counties
- Meningococcal disease, Miami-Dade County
- GI illness of unknown etiology at residential facility, Osceola County
- GI outbreak in a child care facility, Nassau County
- GI outbreaks at two Skilled Nursing Facilities (SNF), Seminole County
- GI outbreak investigations at an Adult Living Facility (ALF) and a SNF, Marion County
- GI outbreak, Lake County
- *Salmonella* Montevideo PFGE cluster investigation, Orange County
- GI outbreaks at four ALFs, 3/24-3/31, Seminole County
- GI illness at a SNF, Citrus County
- GI illness reported by a daycare facility, Nassau County
- Influenza H1N1 death in an unimmunized woman, Marion County

- Second rabies alert, Duval County
- Death associated with H1N1 influenza in an unvaccinated man, Hillsborough County
- Suspected Norovirus outbreak in a SNF, Hillsborough County
- Imported malaria, Duval County
- Fifth disease outbreak, Hillsborough County
- Bacterial meningitis, Brevard County
- GI outbreak # 16 in a local detention center, Miami-Dade County
- Bacterial meningitis (suspected Meningococcal), Miami-Dade County
- GI outbreak in an ALF, Duval County
- Meningococcal disease, Duval County
- Co-infection of *Shigella* and Norovirus in daycare children, Duval County
- Death with 2009 H1N1 influenza in an unimmunized high-risk adult, Volusia County
- GI illness in a Hospital, Miami-Dade
- GI illness reported in two Long Term Care (LTC) facilities, Hillsborough County
- H1N1 hospitalization and recovery of resident, 3/10, Walton County
- Suspected Norovirus outbreak at an ALF, Broward County
- 2009 H1N1 hospitalization, 3/14, Escambia County
- Nursing rehab center outbreak, Pasco County
- Summary of GI outbreaks, January – March 2010, Collier County
- Meningococcal disease, Miami-Dade
- *Salmonella* outbreak related to an unlicensed caterer, Broward County
- GI illness in three healthcare facilities near each other, Indian River County
- Foodborne outbreak associated with a birthday party, Broward County
- Death with Meningococcal disease (second of 2010), Miami-Dade County

**Christie Luce is the Surveillance Systems Administrator for the Bureau of Epidemiology. Ms. Luce can be contacted at 850.245.4418 or by email at [Christie.Luce@doh.state.fl.us](mailto:Christie.Luce@doh.state.fl.us).**

Epi Update is the peer-reviewed journal of the Florida Department of Health, Bureau of Epidemiology and is published monthly on the Internet. Current and past issues of Epi Update are available online: [http://www.doh.state.fl.us/disease\\_ctrl/epi/Epi\\_Updates/index.html](http://www.doh.state.fl.us/disease_ctrl/epi/Epi_Updates/index.html). The current issue of Epi Update is available online at [http://www.doh.state.fl.us/disease\\_ctrl/epi/Epi\\_Updates/2010/April2010EpiUpdate.pdf](http://www.doh.state.fl.us/disease_ctrl/epi/Epi_Updates/2010/April2010EpiUpdate.pdf).

For submission guidelines or questions regarding Epi Update, please contact Leesa Gibson at 850.245.4409 or by email at [Leesa.Gibson@doh.state.fl.us](mailto:Leesa.Gibson@doh.state.fl.us).

