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MDCHD

Miami-Dade County Health Department
Epi Monthly Report

Outbreak of Salmonellosis at an Acute Dialysis Unit of a Local Hospital, Miami-Dade, December 2010

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Inside this issue:

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Background

On 12/27/2010, the Miami-Dade County Health Department, Office of Epidemiology, Disease Control and Immunization Services (EDC-IS) received a call from the Infection Control Practitioner of a local hospital reported that a 55 year-old woman had with GI symptoms possibly related to a Christmas potluck luncheon at the Acute Dialysis Unit (ADU) of another local hospital. The patient was interviewed by phone where she described symptoms of profuse watery diarrhea (no blood), dehydration, abdominal pain and fever (102° F).

Methods

The ADU administrator was contacted and provided a list of the potluck attendees indicating the ill and non-ill. All attendees were adults. A questionnaire was developed to inquire about demographic, exposure and illness information. The demographic section included name, age, gender, and phone number. The exposure section included questions about time of eating the potluck luncheon at the ADU, as well as a fully-itemized list of food and drinks served. The illness section requested information about type, onset and duration of symptoms. The attendees were also asked whether they sought medical care for their symptoms, physician's name, whether they had been hospitalized, if laboratory tests were conducted, and whether anyone else in the household had become ill since the day of the potluck luncheon.

A case was defined as any person who ate at the potluck luncheon held on December 23, 2010 in the Acute Dialysis Unit at the local hospital and who presented with at least diarrhea or vomiting, or patients who presented with at least two of the following symptoms: nausea, abdominal pain, or fever. A control was defined as any person who ate at the potluck luncheon served at the same date and location as the cases who did not develop any of these symptoms.

A total of 28 staff members attended the luncheon. A case-control study with 17 cases and 7 controls was conducted. Four attendees could not be contacted. Data entry, processing and analysis were performed in EpiInfo 3.3.2.

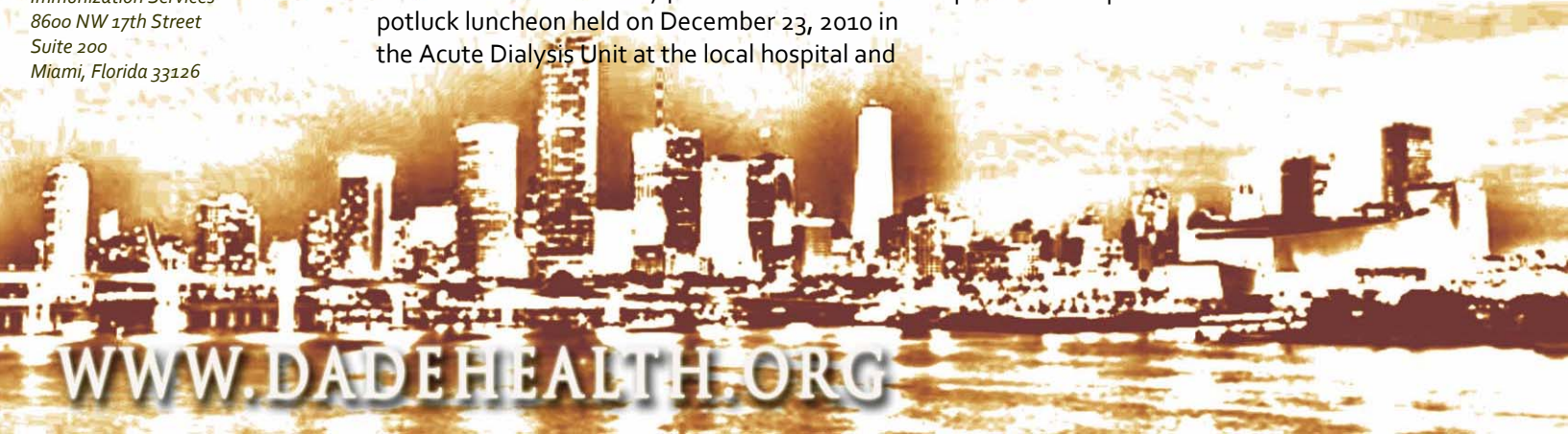
Results and Discussion

The median age of patients was 44 years (range: 25 to 55 years). The majority was female (64.7%, 11 of 17). The frequency of symptoms is shown in Table 1.

The median incubation period was 9 hours (range: 2 to 18 hours). All patients continued with symptoms at the time of the interview.

Sixteen patients (94.1%) sought medical care. In addition, 13 (76.5%) had a stool and/ or blood laboratory tests done. Six patients tested positive for Salmonella enteritidis, four of them group B, two were undetermined.

Table 2 shows the results of the food exposure analysis. The only two statistically significant exposures were pancit and ice.



Food preparation and handling

Table 3 shows the ingredients used to prepare the pancit (noodle dish).

The pancit was prepared at home by the wife of one of the attendees. During the phone interview she stated that a stock soup with 2 frozen chicken breasts was cooked for 90 minutes the night before the potluck luncheon was held. After the stock soup was cooled, it was stored in the refrigerator overnight.

Early the next morning (Thursday, December 23, 2010 at 5:00 am), the wife added carrots, green beans, cabbage, garlic, onions, red bell peppers and a chicken cube to the stock soup and cooked it for 45 minutes. After it was cooled, the wife put the pancit in an aluminum tray covered with aluminum foil at about 6:30 am. Her husband transported it for 1 hour from their home to the ADU and arrived at 9 am. He kept the tray with the pancit on a table at room temperature for the rest of the morning until lunch time when it was eaten.

Conclusions and Recommendations

There was ample opportunity during the holding time at room temperature (6:30 am –12:00 pm) of the pancit for any surviving Salmonella to multiply. Cross-contamination or introduction of the Salmonella after the cooking process is also possible. The ice was also significant leaving open the possibility that it could be the source of the outbreak, most likely by contamination at the event. In the preparation of cooked food, hot holding or rapid refrigeration are essential to prevent the proliferation of bacteria in the food.

Even though this outbreak occurred in a hospital, the food service there was not implicated since the food was provided by the attendees.

Table 2. Food items served at the potluck luncheon in the Acute Dialysis Unit at local hospital, 12/23/2010

Food / drink item	Odds ratio	Fisher's exact test (p-value)
Pancit (noodle dish)	**45**	**0.001**
Ice	**11**	**0.03**
Corn *souffle*	6.7	0.09
Pork	6.75	0.1
Meat patties	6.75	0.1
Potato salad	4.58	0.12
Coconut pastry	0.15	0.19
Water	3.57	0.19
Flan	3.2	0.22
Fried rice	2.5	0.41
Black beans	2.5	0.41
Apple pie	0.38	0.51
Guava pastry	1.85	0.54
Ice-cream cake	1.85	0.54
Fried chicken	1.36	0.57
Chicken wings	1.36	0.57
Rice with brown beans	1.18	0.6
Fruits	0.93	0.64
White rice	(Undefined)	(N/A)
Honey-breaded chicken	(Undefined)	(N/A)
Passion fruit mousse	(Undefined)	(N/A)
Muffins	(Undefined)	(N/A)
Ginger ale	(Undefined)	(N/A)
Iced tea	(Undefined)	(N/A)
Pepsi	(Undefined)	(N/A)
Coke	(Undefined)	(N/A)

(Undefined) – Cell with zero

Table 1. Frequency of symptoms among cases (N = 17)

Symptom	Number	(%)
Watery diarrhea	16	94.1
Bloody diarrhea	1	5.9
Vomiting	9	52.9
Nausea	10	58.8
Abdominal pain	17	100
Fever	16	94.1
Chills	16	94.1

Table 3. Ingredients used to prepare the *pancit*

Ingredients	Purchased at
Noodles	Filipino store
Shrimp	Filipino store
Carrots	Filipino store
Cabbage	Filipino store
Chicken cube	Filipino store
Chicken	Supermarket S
Green beans	Supermarket P
Garlic	Supermarket P
Onions	Supermarket P
Red bell pepper	Supermarket P

CDC celebrates World No Tobacco Day and releases new global data from 14 countries...

CDC celebrates World No Tobacco Day and releases new global data from 14 countries about warning labels on cigarette packages and smokers' interest in quitting because of the warning labels.

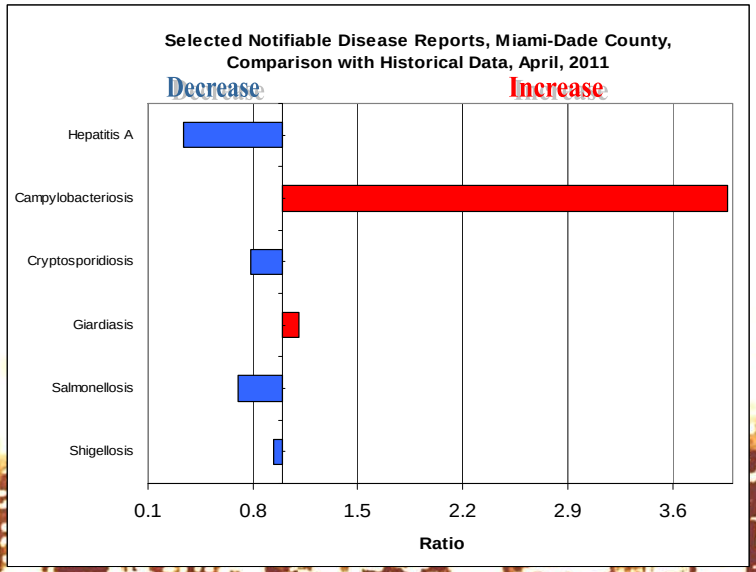
Tobacco use is the leading preventable cause of death worldwide. This year, globally more than 5 million people will die from heart attack, stroke, cancer, lung disease, or other illnesses related to tobacco use. An additional 600,000 people—more than a quarter of them children—will die from exposure to secondhand smoke.

New Global Data: To draw attention to the worldwide tobacco use epidemic and the adverse health consequences of tobacco use, WHO created World No Tobacco Day (WNDT) in 1987. WNTD is celebrated around the globe every year on May 31st. In conjunction with WNTD, CDC has released a new report regarding cigarette package warning labels and smokers' interest in quitting because of the warning labels. CDC used 2008–2010 data from the Global Adult Tobacco Surveys (GATS) conducted in 14 countries (including Bangladesh, Brazil, China, Egypt, India, Mexico, Philippines, Poland, the Russian Federation, Thailand, Turkey, Ukraine, Uruguay, and Viet Nam).

This report is the first to provide results for all 14 countries that participated in GATS. According to the report, all 14 countries had warning labels, and with few exceptions, most smokers (more than 90%) reported noticing a cigarette package warning.

Interactive Application: Concurrent with WNTD, CDC has also released a new interactive Web application—Global Tobacco Surveillance System Data, or GTSSData—that provides global tobacco-related data. Users can access information by specific survey, result type, indicator, or location (i.e., WHO region, country, or survey site). Information is presented in data tables and easily digestible fact sheets and country reports

http://www.cdc.gov/Features/WorldNoTobaccoDay/



TO REPORT ANY DISEASE AND FOR INFORMATION CALL:
Epidemiology, Disease Control & Immunization Services

Childhood Lead Poisoning Prevention Program 305-470-6877
Hepatitis 305-470-5536
Immunizations or outbreaks 305-470-5660
HIV/AIDS Program 305-470-6999
STD Program 305-325-3242
Tuberculosis Program 305- 575-5415
Immunization Service 305-470-5660
To make an appointment.....786-845-0550

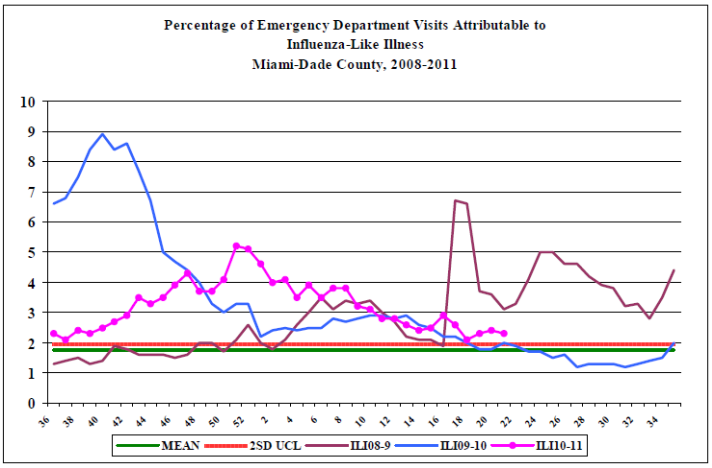
Miami-Dade County Health Department

EDC-IS Influenza/Respiratory Illness Surveillance Report

Week 21: 05/22/2011– 05/28/2011

Miami Dade County Health Department EDC-IS collects and analyzes weekly information on influenza activity in Miami-Dade County. On a daily basis, selected Miami-Dade County hospitals electronically transmit hospital emergency department data to the Miami-Dade County Health Department.

This data is then categorized into 10 distinct syndromes. The influenza-like illness (ILI) syndrome consists of fever with either cough or sore throat. It can also include a chief complaint of "flu". Each week, staff will determine the percentage of all emergency department visits that fall into the ILI category.



During this period, there were 20,941 ED visits; among them 478 (2.3%) were ILI. At the same week of last year, 2.0% of ED visits were ILI.

For more information, please contact **Erin O'Connell** at 305-470-5660.

PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

The Miami-Dade County Health Department NEEDS Influenza Sentinel Providers!!

Sentinel providers are key to the success of the Florida Department of Health's Influenza Surveillance System. Data reported by sentinel providers gives a picture of the influenza virus and ILI activity in the U.S. and Florida which can be used to guide prevention and control activities, vaccine strain selection, and patient care.

- Providers of any specialty, in any type of practice, are eligible to be sentinel providers.
- Most providers report that it takes **less than 30 minutes a week** to compile and report data on the total number of patients seen and the number of patients seen with influenza-like illness.
- Sentinel providers can submit specimens from a subset of patients to the state laboratory for virus isolation **free of charge**.

For more information, please contact **Erin O'Connell** at 305-470-5660.

About the Epi Monthly Report

The Epi Monthly Report is a publication of the Miami-Dade County Health Department, Epidemiology, Disease Control & Immunization Services, The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, contact Lizbeth Londoño at 305-470-6918.

Miami-Dade County Monthly Report
Select reportable Disease/Conditions
April 2011

Diseases/Conditions	2011 Current Month	2011 Year to Date	2010 Year to Date	2009 Year to Date
HIV/AIDS				
AIDS*	45	216	255	246
HIV	132	488	457	410
STD				
Infectious Syphilis	34	114	N/A	N/A
Chlamydia	761	2840	N/A	N/A
Gonorrhea	206	721	N/A	N/A
TB				
Tuberculosis**	10	35	53	N/A
Epidemiology, Disease Control & Immunization Services				
Epidemiology				
Campylobacteriosis	51	129	47	30
Ciguatera Poisoning	2	6	0	3
Cryptosporidiosis	1	6	2	6
Cyclosporiasis	0	0	0	0
Dengue Fever	0	3	2	2
E. coli, O157:H7	0	0	0	0
E. coli, Non-O157	0	0	0	0
Encephalitis (except WNV)	0	0	0	0
Encephalitis, West Nile Virus	0	0	0	0
Giardiasis, Acute	25	117	200	213
Influenza Novel Strain	0	0	17	0
Influenza, Pediatric Death	0	0	0	0
Legionellosis	1	8	2	4
Leptospirosis	0	0	0	0
Listeriosis	0	0	3	0
Lyme disease	0	0	0	0
Malaria	1	7	9	6
Meningitis (except aseptic)	0	0	0	0
Meningococcal Disease	2	4	9	10
Salmonellosis	28	91	86	114
Shigellosis	13	36	48	52
Streptococcus pneumoniae, Drug Resistant	12	36	81	45
Toxoplasmosis	0	0	1	0
Typhoid Fever	0	1	1	1
Vibriosis	0	1	0	0
West Nile Fever	0	0	0	0
Immunization Preventable Diseases				
Measles	0	0	0	0
Mumps	0	0	1	0
Pertussis	0	4	10	11
Rubella	0	0	0	0
Tetanus	0	0	0	0
Varicella	4	14	30	26
Hepatitis				
Hepatitis A	1	11	15	20
Hepatitis B (Acute)	0	1	9	4
Lead				
Lead Poisoning	12	43	77	44

*Data on AIDS are provisional at the county level and is subject to edit checks by state and federal agencies.
** Data on tuberculosis are provisional at the county level.