FLORIDA DEPARTMENT OF HEALTH NASSAU COUNTY

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EPIGRAM

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Florida
Department of Health
Nassau County
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CALIFORNIA MEASLES OUTBREAK

On January 5, 2015, the California Department of Public Health (CDPH) was notified of a suspected case of measles in a hospitalized unvaccinated child. The only identifiable risk factor for the child was travel history to two Disney theme parks in Orange County, California. On the same day, CDPH received additional reports of suspect measles cases in both California and Utah residents, all of whom visited the southern California Disney theme parks during the same time period. As of February 11, 2014 a total of 125 confirmed measles cases have been reported in U.S. residents connected to this outbreak.

Pic. 1 Disneyland, California

Of the 125 total cases, 110 have been California residents. Of the California residents, 35% visited one or both of the Disney theme parks during the same time period as the first reported cases, 34% have an unknown exposure source, and 31% are secondary cases. As for the case patients' vaccination status, 45% were unvaccinated, 5% had one dose of measles containing vaccine, 6% had two doses, and 1% had three doses; the remaining 43% of case patients had unknown or undocumented vaccination status. Of the case patients who were unvaccinated, 24% were too young to be vaccinated and 67% were intentionally unvaccinated due to personal beliefs. Case patients' ages range from 6 weeks to 70 years, with the median age being 22.

Genotyping of specimens collected from case patients reveal that the measles virus involved in this outbreak is genetically identical to the virus implicated in a large ongoing outbreak of measles in the Philippines. Therefore, it is likely that travelers entering or returning from the measles endemic country brought the disease into the U.S., infecting susceptible populations. Similarly, the large 2014 outbreak of measles among unvaccinated Amish communities of Ohio was the result of travelers returning from the Philippines, further illustrating the role of international travel in the re-emergence of measles in the U.S.

In 2000, the CDC declared that endemic transmission of the measles virus had been eliminated in the U.S. This was largely due to high levels of immunization with the measles, mumps, (cont. pg. 2)

DISEASE REPORTING

Phone: (904) 548-1800

Confidential Fax Line:
(904) 277-7286

After Hours Lines:
(866) 535-0420 (toll free)

Bureau of Epidemiology
24 Hour Reporting Line:
(850) 245-4401

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FLORIDA DEPARTMENT OF HEALTH NASSAU COUNTY CLINIC SITES

Fernandina Beach Clinic
1620 Nectarine Street
Fernandina Beach, FL 32034
(904) 548-1860

Callahan Clinic
208 Mickler Street
Callahan, FL 32011
(904) 879-2306

Yulee Clinic
528 Page's Dairy Road
Yulee, FL 32097
(904) 548-1880

Hilliard Clinic
37203 Pecan Street
Hilliard, FL 32046
(904) 845-5761

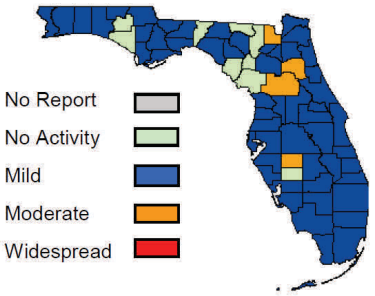
And rubella vaccine (MMR). **The Florida Department of Health in Nassau County encourages the medical community to educate and advocate for the vaccination of susceptible populations within our community.** To assist members of the medical community in identifying potential cases of measles, an algorithm developed by the Florida Department of Health has been included in this month's issue of the Epigram (see pg. 4). As always, upon suspicion of disease, isolate the patient and inform FDOH-Nassau epidemiology staff immediately. *(Data courtesy of the CDC)*

Influenza Surveillance Update

National influenza activity:

- Influenza activity is elevated nationally.
- The Centers for Disease Control and Prevention (CDC) has identified an antigenically drifted influenza A (H3N2) strain circulating nationally and in Florida that is different from the strain of influenza A (H3N2) contained in the current 2014-15 influenza vaccine formulations.
- **The CDC recommends the use of neuraminidase inhibitor antiviral medications, when indicated, for treatment and prevention to influenza, as an adjunct to vaccination. More information can be found here: http://www.floridahealth.gov/diseases-and-conditions/influenza/_documents/Other/influenza-letter-for-health-care-providers.pdf.**

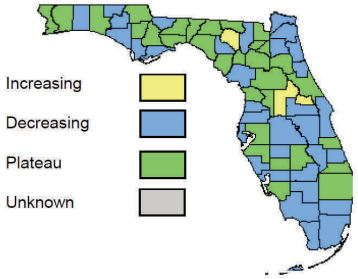
Weekly County Influenza Activity Level
Week 6, 2015



Four counties reported moderate influenza activity.

- **The CDC indicates that antiviral medications are underutilized; one study estimates antivirals were only used one out of five times where their use would be recommended.**

Weekly County Influenza Activity Trend
for Week 6 Reported by 11:30 a.m. February 18, 2015



Three counties reported increasing influenza and ILI activity.

State Influenza and influenza-like illness (ILI) activity:

- **Flu activity is declining with only regional activity throughout the state. Data suggest that the season peaked in week 52.**
- **Visits for ILI to emergency departments (ED) have declined in recent weeks and are now at levels seen in previous years at this time. Visits are highest in children <5 and those 65 and over.**
- **In Florida, the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) in recent weeks has been influenza A (H3).** In the past week, 10 of 30 (33.3%) specimens submitted for influenza testing at BPHL were PCR positive for seasonal strains of influenza: five were positive for influenza A (H3), one was influenza A not yet subtyped, two were influenza B Yamagata lineage, one was influenza B Victoria lineage and one was influenza B not yet subtyped.
- Four outbreaks of influenza (two or more cases of influenza or ILI in a specific setting) were reported in week 6.
- Seasons, like this one, where influenza A (H3) is the predominantly circulating strain are typically associated with higher morbidity and mortality particularly in the 65+ age group**. The number of pneumonia and influenza (P&I) associated deaths are similar to levels seen during previous years at this time.** Increases in deaths at this point in the season are expected during severe flu years where vaccine effectiveness is reduced. **No pediatric influenza-associated deaths were reported in week 6.**

FDOH-Nassau Health Bulletins, Advisories and Alerts Issued

Alerts:

- CDC Health Alert Network - U.S. Multi-state Measles Outbreak, December 2014-January 2015. January 26, 2015. CDC

Advisories:

- FDOH - Measles Awareness: A Letter to Healthcare Providers. February 4, 2015. Florida Department of Health

For additional information regarding bulletins, advisories and alerts visit our website or the Department of Health's Online Newsroom at: http:// www.nassau.floridahealth.gov *and* http://newsroom.doh.state.fl.us

January 2015: Reported Cases in Nassau County

Confirmed, Probable, Suspect, Unkown Cases of Multiple Diseases with Report Date 01/01/2015 to 01/31/2015 with Three-Year Period Comparison for Nassau County

	Selection Date 01/01/15 - 01/31/15		Comparison Date 1 01/01/14 - 01/31/14		Comparison Date 2 01/01/13 - 01/31/13		Comparison Date 3 01/01/12 - 01/31/12	
Disease Name	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent
County: NASSAU								
Campylobacteriosis	2	18.18	0	0.00	1	10.00	0	0.00
Carbon Monoxide Poisoning		0.00	0	0.00	1	10.00	0	0.00
Dengue Fever		0.00	1	10.00	0	0.00	0	0.00
Giardiasis, Acute		0.00	0	0.00	0	0.00	1	25.00
Haemophilus influenzae Invasive Disease		0.00	0	0.00	1	10.00	0	0.00
Hepatitis B, Chronic	1	9.09	1	10.00	0	0.00	0	0.00
Hepatitis C, Chronic	8	72.73	4	40.00	4	40.00	1	25.00
Meningitis, Bacterial or Mycotic		0.00	0	0.00	1	10.00	0	0.00
Rabies, Animal		0.00	0	0.00	1	10.00	1	25.00
Rabies, Possible Exposure		0.00	2	20.00	0	0.00	1	25.00
Salmonellosis		0.00	2	20.00	0	0.00	0	0.00
Varicella (Chickenpox)		0.00	0	0.00	1	10.00	0	0.00
TOTAL:	**11**	100.00	**10**	100.00	**10**	100.00	**4**	100.00
STATEWIDE TOTAL								
Campylobacteriosis	250	7.10	224	6.45	148	4.92	255	9.39
Carbon Monoxide Poisoning	20	0.57	18	0.52	4	0.13	9	0.33
Dengue Fever	4	0.11	15	0.43	21	0.70	4	0.15
Giardiasis, Acute	72	2.05	81	2.33	98	3.26	76	2.80
Haemophilus influenzae Invasive Disease	22	0.63	35	1.01	25	0.83	18	0.66
Hepatitis B, Chronic	458	13.02	343	9.88	381	12.66	268	9.87
Hepatitis C, Chronic	2025	57.54	2153	61.99	1729	57.46	1512	55.67
Meningitis, Bacterial or Mycotic	12	0.34	13	0.37	15	0.50	20	0.74
Rabies, Animal	8	0.23	7	0.20	10	0.33	9	0.33
Rabies, Possible Exposure	270	7.67	185	5.33	194	6.45	153	5.63
Salmonellosis	322	9.15	357	10.28	319	10.60	304	11.19
Varicella (Chickenpox)	56	1.59	42	1.21	65	2.16	88	3.24
TOTAL:	**3519**	100.00	**3473**	100.00	**3009**	100.00	**2716**	100.00

Measles: Identification and Management of Suspected Cases

(Version 1.0, February, 13 2015 – Please note this interim guidance is subject to change.)

Do You Suspect Measles?

- Febrile rash illness, **AND**
- Risk factors for measles (history of international travel, contact with travelers or links to a known outbreak or case, or no or unknown vaccine or immunity).
- **Note** that one dose of measles vaccine is about 93% effective at preventing measles

Minimize Risk of Transmission

- Measles is a highly infectious airborne illness.
- Identify febrile rash illnesses prior to, or immediately upon, arrival to expedite evaluation in a private room and minimize patient exposures.
  - Have the patient avoid the waiting room (use a side/back entrance).
  - Have the patient wear a surgical mask.
  - Conduct patient evaluation in a room that can be left vacant for at least 2 hours after the patient's visit.

Does the patient meet the measles clinical case definition?

An illness with **BOTH** a generalized descending maculopapular rash **AND** a fever (at least 101°F) during the illness.

AND at least one of the following:

- Cough
- Coryza
- Conjunctivitis
- Koplik spots (may not be present).

NO →

Manage as clinically indicated

Consider differential diagnoses: human parvovirus B19, enterovirus, HIV, adenovirus or arbovirus infection, roseola infantum, scarlet fever, drug reaction, Kawasaki disease, rubella.

YES ↓

Call Immediately

Call the County Health Department 24/7 (www.floridahealth.gov/CHDEpiContact) or Bureau of Epidemiology (850-245-4401)

Laboratory Testing

- Nasopharyngeal (NP) or oropharyngeal (OP) swab* in universal viral transport media for measles RT-PCR

AND

- Urine* in a sterile cup for measles RT-PCR**

AND

- Serum for measles specific IgG and IgM***

* **Preferred specimens**

**Measles RT-PCR is not available at commercial laboratories and is available at the Bureau of Public Health Laboratories, after prior authorization by the County Health Department.

*** Serum specimens should be collected ≥72 hours after rash onset. In a vaccinated patient, a negative measles IgM does NOT exclude measles, RT-PCR is preferred.

Suspect Case Management

- Isolate patient immediately
- Exclude from childcare/ school/workplace for at least 4 days after the onset of rash.
- Reassess isolation based on diagnosis.
- Provide supportive treatment and treatment of complications.

Positive test OR high suspicion for active measles infection after public health consultation?

- Manage as clinically indicated.
- Notify receiving facilities of diagnosis.
- Identify patients and staff that shared the same airspace with the case, up to 2 hours later.
- Determine immune status of these contacts.
- Provide vaccine within 3 days or immunoglobulin within 6 days of exposure.
- Exclude healthcare staff without evidence of immunity from day 5 through day 21 following the exposure, regardless of post-exposure prophylaxis.

Immunization is the key to prevention

- Review the measles vaccination/immunity status of patients and staff at your practice.
- See Centers for Disease Control and Prevention vaccination recommendations http://www.cdc.gov/vaccines

Further Questions?

Contact your County Health Department 24/7 (www.floridahealth.gov/CHDEpiContact) or Bureau of Epidemiology (850-245-4401).

www.cdc.gov/measles