**Influenza Surveillance**

**County influenza and influenza-like illness (ILI) activity**

Nassau County reported moderate influenza activity for the first time this influenza season in week 6 (February 3-9). Multiple influenza A outbreaks were reported in Nassau County schools during week 6, and the Florida Department of Health in Nassau County (DOH-Nassau) is working with the schools to prevent spread of illness among students and staff. In week 6, 4.79% of emergency department visits by Nassau County residents were for ILI, which is higher than the levels observed at this time in the 2015-16 and 2016-17 influenza seasons (Fig. 1).

![Nassau County Resident Emergency Department Visits for ILI by Flu Season](image)

**Figure 1.** Emergency department visits for ILI by Nassau County residents, 2015-2019. Data source: Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)

**State influenza and ILI activity**

- ILI activity increased statewide in week 6 and was above peak activity levels observed during the 2016-17 and 2015-16 seasons.
- Most counties reported mild influenza activity for week 6, but 22 counties reported moderate...
activity and one county reported elevated influenza activity (Fig. 2).

- An increase in the number of influenza and ILI outbreaks reported was observed in week 6. A total of 115 influenza or ILI outbreaks have been reported so far this influenza season, 27 of which were reported in week 6. Of the 27 outbreaks reported in week 6, 19 had laboratory evidence of influenza and eight were ILI.

- One new influenza-associated pediatric death was reported in week 6 in an unvaccinated child with no underlying medical conditions. A total of three influenza-associated pediatric deaths have been reported in Florida so far this season, all in unvaccinated children.

- Influenza A 2009 (H1N1) remains the most common influenza subtype detected at the Bureau of Public Health Laboratories (BPHL) so far this influenza season, but there has been an increase in the number of influenza-positive specimens subtyped as influenza A (H3) in recent weeks. Mid-season changes in predominantly circulating strains have been observed in past seasons in Florida.

**County Influenza Activity Maps**

Figure 2. The majority of counties reported mild activity for week 6. Most counties reported increasing influenza activity for week 6.

**National Influenza Activity**

- The proportion of people seeing their health care provider for ILI increased to 4.8% in week 6, which is the highest ILI has been so far this flu season.

- The proportion of deaths attributed to pneumonia and influenza (P&I) was 7.0% during week 5. This is below the epidemic threshold of 7.3%. P&I has been at or above threshold for three weeks this season.

- Six influenza-associated pediatric deaths were reported to the Centers for Disease Control and Prevention (CDC) during week 6. A total of 34 influenza-associated pediatric deaths have been reported for the 2018-19 season.

- The percentage of respiratory specimens testing positive for influenza viruses during week 6 was 24.6%, an increase from 22.8% the previous week. This is the highest proportion of specimens testing positive for influenza viruses so far this season.

- During week 6, 98.4% of the influenza-positive tests reported to CDC by public health laboratories were influenza A viruses and 1.6% were influenza B viruses. Of the influenza A viruses that were subtyped, 35.5% were influenza A (H3N2) and 64.5% were influenza A 2009 (H1N1).

- The vast majority (>99%) of influenza viruses tested showed susceptibility to oseltamivir, zanamivir, and peramivir. So far this season, two (0.2%) influenza A 2009 (H1N1) viruses showed highly reduced inhibition by oseltamivir and peramivir and an additional two (0.2%) showed reduced inhibition by oseltamivir. All influenza viruses tested showed susceptibility to zanamivir.

1Florida Department of Health. Florida Flu Review. www.floridahealth.gov/floridaflu

Disease/condition counts for 2017 and before are final. Disease/condition counts for 2018 and 2019 are preliminary and will change.
DISEASE SPOTLIGHT: MEASLES

Disease Overview

Measles is an acute vaccine-preventable viral illness characterized by a generalized maculopapular rash, fever, and one or more of the following: cough, coryza, and conjunctivitis. The measles prodrome typically lasts 2-4 days (range 1-7 days) before the onset of rash and begins with fever and malaise followed by conjunctivitis, coryza, cough, photophobia, and/or Koplik’s spots. Koplik’s spots are pathognomonic but uncommonly observed and are seen as bluish-white specks on a rose-red background on the buccal mucosa. The rash typically begins along the hairline, followed by the neck, and spreads downwards over the course of about three days to reach the hands and feet (Fig. 3). The rash typically lasts 5-6 days and fades in the order it appeared. Complications of measles can include otitis media (7%), pneumonia (6%), and encephalitis (0.1%). Children less than 5 years of age and adults over 20 years of age most commonly develop complications of measles.

Measles virus is spread from person to person by inhalation of respiratory droplets or when infectious nasopharyngeal secretions come into contact with the mucous membranes of a susceptible person. Measles virus remains infectious in the air or on surfaces for up to two hours. It is one of the most contagious of all infectious diseases, with a greater than 90% attack rate among susceptible close contacts. The incubation period for measles ranges from 7-21 days with an average of 14 days. Measles is most communicable from the onset of symptoms through the first four days of rash.

Surveillance

It has been over 20 years since a measles case was reported in a Nassau County resident. Even though measles has been eliminated in the United States since 2000, cases occur every year, mostly among unvaccinated individuals. Due to generally high vaccination rates, measles in Florida occurs nearly every year but is rare and is most often associated with international travel. From 2010 through 2017, fewer than 10 measles cases were reported every year in Florida. However, in 2018 15 measles cases were reported in Florida residents and four visitors with measles spent time in Florida while infectious.

From January 1 to February 14, 2019, 127 cases of measles have been confirmed in 10 U.S. states (Fig. 4). The states that have reported measles cases to CDC so far in 2019 are California, Colorado, Connecticut, Georgia, Illinois, Kentucky, New York, Oregon, Texas, and Washington. Five measles outbreaks (defined as three or more cases) have been reported in 2019, linked to travelers who brought measles back from other counties where large measles outbreaks are occurring. The jurisdictions reporting measles outbreaks so far in 2019 are Rockland County, NY; Monroe County, NY; New York City; Washington and Texas. Measles is still a common disease in many countries, and CDC has issued travel notices for several countries with ongoing risk of measles. As of February 20, these countries include Israel, Ukraine, Kazakhstan, Moldova, Colombia, Brazil, Democratic Republic of the Congo, England, France, Greece, Italy, Indonesia, Philippines, Romania, and Serbia. For a complete up-to-date list of CDC travel notices, visit https://wwwnc.cdc.gov/travel/notices/.
Disease Prevention & Reporting

Routine immunization with the measles, mumps, and rubella (MMR) vaccine is recommended during childhood; the first dose of MMR is recommended at 12-15 months of age, with a second dose recommended at 4-6 years. Two doses of MMR vaccine are also recommended for students attending college and other post-high school institutions, international travelers, and health care personnel. Persons born in 1957 or later should receive at least one dose of MMR if they do not have evidence of immunity to these three diseases. Approximately 95-98% of susceptible persons develop measles antibodies after a single dose of vaccine. After two doses of vaccine, 99% of persons develop serologic evidence of measles immunity.

Laboratories and physicians are required to report measles immediately upon initial suspicion or laboratory test order, 24/7 by phone to DOH-Nassau at 904-875-6100. Reports should not be delayed for final laboratory confirmation. DOH-Nassau begins investigation into suspected measles cases immediately by facilitating transport of specimens as soon as possible to the Florida Department of Health Bureau of Public Health Laboratories to confirm the diagnosis, isolating the infected person until four days after rash onset (unless the diagnosis is ruled out), identifying all potential sites of transmission and known contacts of the person with measles during the period of communicability, and making appropriate recommendations for post-exposure prophylaxis, exclusion, and illness monitoring to susceptible contacts, or contacts that have exposures in high-risk settings and do not have evidence of immunity.

For more information, visit: https://www.cdc.gov/measles/index.html.

---

UPCOMING EVENTS & TRAININGS

The Florida Department of Health Immunization Section would like to share information about an recent webinar, *Perspective on Oropharyngeal Cancer: Scientific Overview, Clinical Expertise, and Personal Experience*. The webinar was held on Wednesday, February 13, 2:00 p.m.–3:00 p.m. EST. Every year, over 33,000 men and women are diagnosed with a cancer caused by HPV. While cervical cancer is the most well-known cancer that is caused by HPV, there are five other types of cancers that can develop from HPV. Oropharyngeal cancer has recently surpassed cervical cancer as the most common cancer caused by HPV, accounting for nearly 13,000 cases every year in the United States. To listen to the webinar visit https://register.gotowebinar.com/register/6324188968389429004.

The Suwannee River Area Health Education Center (SRAHEC) has three free enduring trainings available for medical professionals to learn more about the HPV vaccine and its benefits as a cancer preventer. Free CE/CME is available for participation in these programs.

- **Ask Me About HPV**: This program offers an overview of HPV, the vaccine and recommendation strategies for parents. It also includes a video depicting the experience of a patient with HPV-caused cervical cancer. CE only, 1 hour. http://bit.ly/2Uku8H5
- **HPV and Cervical Cancer**: This program discusses the epidemiology of cervical cancer and how the HPV vaccine can end this deadly disease for women. CE/CME, 1 hour. http://bit.ly/2FN3LWR
- **You are the Key to HPV Cancer Prevention**: This program uses the same objectives as “Ask Me About HPV”, but is geared towards physicians and offers a more clinical perspective on the vaccine and its benefits as a cancer preventer. CME only, 30 minutes. http://bit.ly/2CJWk2L
## JANUARY 2019: REPORTED CASES IN NASSAU COUNTY

Confirmed, probable, suspect cases of reportable diseases of frequent occurrence with report date 01/01/19 to 01/31/19 with three-year period comparison for Nassau County and Florida

<table>
<thead>
<tr>
<th>Disease/Condition</th>
<th>Nassau County</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January 2019</td>
<td>January 2019</td>
</tr>
<tr>
<td></td>
<td>Average, 2016-2018</td>
<td>Average, 2016-2018</td>
</tr>
</tbody>
</table>

- Arsenic Poisoning: 0 cases in Nassau County, 0 cases in Florida
- Campylobacteriosis: 0 cases in Nassau County, 0 cases in Florida
- Carbon Monoxide Poisoning: 0 cases in Nassau County, 0 cases in Florida
- Chlamydia (excluding Neonatal Conjunctivitis): 15 cases in Nassau County, 8053 cases in Florida
- Ciguatera Fish Poisoning: 0 cases in Nassau County, 8 cases in Florida
- Creutzfeldt-Jakob Disease (CJD): 0 cases in Nassau County, 1 case in Florida
- Cryptosporidiosis: 0 cases in Nassau County, 52 cases in Florida
- Cyclosporiasis: 0 cases in Nassau County, 1 case in Florida
- Dengue Fever: 0 cases in Nassau County, 17 cases in Florida
- Ehrlichiosis: 0 cases in Nassau County, 0 cases in Florida
- Escherichia coli, Shiga Toxin-Producing (STEC) Infection: 0 cases in Nassau County, 57 cases in Florida
- Giardiasis, Acute: 0 cases in Nassau County, 83 cases in Florida
- Gonorrhea (excluding Neonatal Conjunctivitis): 4 cases in Nassau County, 2472 cases in Florida
- Haemophilus influenzae (invasive disease in children <5 Years Old): 0 cases in Nassau County, 1 case in Florida
- Hepatitis A: 0 cases in Nassau County, 190 cases in Florida
- Hepatitis B, Acute: 1 case in Nassau County, 50 cases in Florida
- Hepatitis B, Chronic: 2 cases in Nassau County, 369 cases in Florida
- Hepatitis B, Pregnant Women: 0 cases in Nassau County, 29 cases in Florida
- Hepatitis C, Acute: 0 cases in Nassau County, 11 cases in Florida
- Hepatitis C, Chronic (including Perinatal): 10 cases in Nassau County, 1769 cases in Florida
- Lead Poisoning Cases in Children <6 Years Old: 0 cases in Nassau County, 80 cases in Florida
- Lead Poisoning Cases in Those ≥6 Years Old: 1 case in Nassau County, 83 cases in Florida
- Legionellosis: 0 cases in Nassau County, 57 cases in Florida
- Listeriosis: 0 cases in Nassau County, 3 cases in Florida
- Lyme Disease: 0 cases in Nassau County, 8 cases in Florida
- Malaria: 0 cases in Nassau County, 0 cases in Florida
- Meningitis, Bacterial or Myotic (excluding Neisseria meningitidis): 0 cases in Nassau County, 4 cases in Florida
- Pertussis: 0 cases in Nassau County, 33 cases in Florida
- Pesticide-Related Illness and Injury, Acute: 0 cases in Nassau County, 2 cases in Florida
- Rabies, Animal: 1 case in Nassau County, 13 cases in Florida
- Rabies, Possible Exposure: 3 cases in Nassau County, 344 cases in Florida
- Salmonellosis: 2 cases in Nassau County, 352 cases in Florida
- Shigellosis: 0 cases in Nassau County, 139 cases in Florida
- Streptococcus pneumoniae Invasive Disease, Drug-Resistant: 0 cases in Nassau County, 26 cases in Florida
- Streptococcus pneumoniae Invasive Disease, Drug-Susceptible: 0 cases in Nassau County, 44 cases in Florida
- Syphilis (excluding Congenital): 0 cases in Nassau County, 528 cases in Florida
- Syphilis, Congenital: 0 cases in Nassau County, 4 cases in Florida
- Varicella (Chickenpox): 0 cases in Nassau County, 85 cases in Florida
- Vibrio (excluding Cholera): 0 cases in Nassau County, 16 cases in Florida
- Zika Virus Disease and Infection: 0 cases in Nassau County, 9 cases in Florida

### Table 1

Confirmed, probable, and suspect case counts for reportable diseases and conditions in Nassau County and Florida in January 2019.

Disease/condition counts for 2017 and before are final. Disease/condition counts for 2018 and 2019 are preliminary and will change.
Health Bulletins, Advisories & Alerts

Press Releases & Public Information

For additional information regarding press releases visit the DOH-Nassau website or Department of Health Online Newsroom at: http://nassau.floridahealth.gov/ and http://www.floridahealth.gov/newsroom/

✦ Press Release 01/02/19: Health Officials Urge Residents to Avoid Contact with Wild and Stray Animals
✦ Press Release 01/17/19: Partnership for a Healthier Nassau to Unveil New “Community Health Improvement Plan”
✦ Press Release 01/22/19: Health Officials Issue Rabies Alert

Keep Sick at Home

**IF YOU CAUGHT THE FLU, NO WORK OR SCHOOL FOR YOU!**

You may have the flu if:

✦ In addition to coughing or sneezing, you’re suffering from a fever, headache, chills, or body aches.
✦ It came on suddenly.

The flu is most contagious early in the illness.

✦ If you believe you’re coming down with the flu, go home and stay home.
✦ Keep your hands clean, and coughs and sneezes covered.
✦ Consider seeing your doctor.

Prevent the flu— it’s in your hands!

✦ Wash your hands often with soap and water. If you don’t have soap and water, use an alcohol-based hand sanitizer.
✦ Don’t touch or shake hands with people who are sick.
✦ Clean and disinfect frequently touched surfaces.
✦ Cover your mouth and nose with a tissue when you cough or sneeze. If you don’t have a tissue, cough or sneeze into your upper elbow, not your hands.
✦ Stay home when you’re sick, and keep your children home when they’re sick.
✦ It’s not too late to get your flu vaccine. People who have not yet been vaccinated for the 2018-19 season should do so as soon as possible.


Keep Vaccine Between You & Disease
### Hepatitis A Virus (HAV)
**Alert for Health Care Providers**

**Protect**

<table>
<thead>
<tr>
<th>Vaccinate high-risk patients.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The HAV vaccine is given as 2 shots, 6 months apart. Patients will need both shots for the vaccine to work long-term.</td>
</tr>
</tbody>
</table>

**Is Your Patient at High Risk for HAV?**

<table>
<thead>
<tr>
<th>At-risk people:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Are in close contact, care for or live with someone who has HAV.</td>
</tr>
<tr>
<td>- Use injection or non-injection drugs.</td>
</tr>
<tr>
<td>- Are homeless or in temporary housing.</td>
</tr>
<tr>
<td>- Have recently been incarcerated.</td>
</tr>
<tr>
<td>- Are men who have had sex with other men.</td>
</tr>
<tr>
<td>- Have recently visited a country where HAV is common.</td>
</tr>
<tr>
<td>- Are having sex with someone who has HAV.</td>
</tr>
</tbody>
</table>

**Symptoms:**

- Stomach pain
- Nausea and vomiting
- Jaundice
- Diarrhea
- Loss of appetite
- Joint pain
- Pale or clay colored stool
- Fever
- Tired
- Dark-colored urine

**Diagnosis** is with confirmation of a serum IGM test. Report HAV cases to your CHD.

**Treatment** is supportive.

**Prevention** is through vaccination of at-risk individuals.

### Educate Patients

**HAV:**

- Spreads person-to-person from ingesting small amounts of fecal matter from a person with HAV.
- Sexual activity can spread HAV
- People who are sick with HAV should avoid sexual contact.
- People who are at-risk should get vaccinated.

**Wash hands with soap and warm water for at least 20 seconds:**

**BEFORE THEY**

- Prepare food, or work with food that isn’t already packaged.

**AFTER THEY**

- Use the restroom.
- Change a diaper.
- Cough, sneeze or use a handkerchief or tissue.

**Do not:**

- SHARE Towels, toothbrushes or eating utensils.
- TOUCH Food, drinks, drugs or cigarettes that have been handled by a person with HAV.

**ALCOHOL-BASED HAND SANITIZERS DON’T KILL HAV GERMS!**

Share the need for vaccination with anyone you know who might be at risk.

### Have questions? Like to learn more?

**Contact the Florida Department of Health in Nassau County:**
(904) 875-6100

**Learn more:**
FloridaHealth.gov/hepa
CDC.gov/Hepatitis,
Immunize.org/Hepatitis-A