Influenza Season 2015-16

CDC has reported severe influenza related illness in young to middle aged adults with influenza A(H1N1)pdm09 virus. This virus caused pandemic flu in 2009. Severe illness has been reported in infected patients, some of whom required intensive care unit (ICU) admission; fatalities have been reported. Most of these patients were unvaccinated.

Other influenza virus in circulation are influenza A(H3N2), and influenza B virus.

All available vaccine formulations this season contain A(H3N2), A(H1N1)pdm09, and B virus strains, and will likely be protective.
Clinicians:

* Should get vaccinated. Note that those members of the medical staff who do not provide evidence of vaccination within 72 hours of State declaration of flu season will be suspended. Badge access and EPIC access will be turned off.

* Encourage patients to get vaccinated

* Maintain high index of suspicion for influenza and

  o Treat high risk patients with influenza like illness while waiting for confirmatory tests

  o High risk individuals include:

    * Hospitalized

    * Severe complicated or progressive illness

    * children aged younger than 2 years;

    * adults aged 65 years and older;

    * persons with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopmental conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury);

    * persons with immunosuppression, including that caused by medications or by HIV infection;

    * women who are pregnant or postpartum (within 2 weeks after delivery);

    * persons aged younger than 19 years who are receiving long-term aspirin therapy;

    * American Indians/Alaska Natives;
*persons who are morbidly obese (i.e., body-mass index is equal to or greater than 40); and residents of nursing homes and other chronic-care facilities.

*Treatment includes oral oseltamivir, inhaled zanamivir, or intravenous peramivir

CDC Reference http://emergency.cdc.gov/han/han00387.asp

Contact:
Waleed Javaid, MD Hospital Epidemiologist Downtown Campus
Mitchell Brodey, MD Hospital Epidemiologist Community Campus

Zika Virus Disease

Zika is a single stranded RNA virus, in the Genus Flavivirus, related closely to Dengue, Yellow Fever and West Nile virus. It is transmitted primarily by Aedes species mosquitoes.

Disease is usually mild and is characterized by fevers, maculopapular rash, arthralgia, conjunctivitis, myalgia and headaches.

Vectors:
Aedes species mosquitoes:
- *Ae aegypti*: more efficient vectors for humans
- *Ae albopictus*: found in some parts of NYS but **NOT** yet detected in Upstate NY area
Aedes albopictus has been found in NYS

**Aedes albopictus**

Mosquitoes: Known Geographic Distribution in NYS


**Transmission:**
- Mosquito Bite: most common. Uninfected humans + primates
- Maternal-fetal: Intrauterine, perinatal
- Sexual

**Incubation Period:**
3-12 days

**Directions for providers:**

Health care providers should ask all pregnant women about recent travel. Women who traveled to an area with ongoing Zika virus transmission (see attached map) during pregnancy should be evaluated for Zika virus infection and tested in accordance with CDC Interim Guidance - (see attached figure).
Pregnant woman reports clinical illness consistent with Zika virus disease during or within 2 weeks of travel.

Test for Zika virus infection.

Positive or inconclusive test for Zika virus infection:
- Fetal ultrasound to detect microcephaly or intracranial calcifications
- Offer amniocentesis for Zika virus testing

Negative test(s) for Zika virus infection:
- Fetal ultrasound to detect microcephaly or intracranial calcifications
  - Either finding present
  - No findings present
- Consider amniocentesis for Zika virus testing

Pregnant woman does NOT report clinical illness consistent with Zika virus disease during or within 2 weeks of travel.

Fetal ultrasound to detect microcephaly or intracranial calcifications:
- Either finding present
- No findings present

Test pregnant woman for Zika virus infection:
- Consider amniocentesis for Zika virus testing
- Consider serial ultrasounds to detect development of microcephaly or intracranial calcifications
  - Either finding develops

Alerts:
- **Alert**: Highest priority emergency communication; warrants immediate action or attention by the recipient.
- **High Advisory**: High priority does not warrant immediate action but recipients should be aware.
- **Advisory**: Provides very important information for a specific incident or situation that does not require immediate action.
- **Updates to Alerts and Advisories**: Provides updated information regarding an incident or situation unlikely to require immediate action.
- **Informational Message**: Provides timely information, important for review or serves as a reminder for an action that should be taken.
Testing:

If the testing is required, contact the local health department prior to sending the specimen. Consider infectious disease consult in these cases. Local microbiology lab should be also informed prior to submitting the specimen to the laboratory. We also suggest checking for Dengue and Chikungunya.

NYDOH requires the following form to be filled.

http://www.wadsworth.org/divisions/infdis/DOH-4463_060209.pdf

Interim Guidelines for Pregnant women:

If at all possible, travel to endemic area should be avoided. For further reference please review the link below:

http://www.cdc.gov/mmwr/volumes/65/wr/mm6502e1.htm

Interim Guidelines for evaluation and testing of infants with possible Congenital Zika infection:

For further reference please review the link below:

http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e3.htm

Slides from 2/2/16 Talk by Dr. Zucker – NYSDOH Commissioner of Health

For any further questions please contact:

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Chief of Infectious Diseases  
Mark Polhemus, MD  
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Hospital Epidemiologist

Downtown Campus  
Community Campus
The Core Laboratory at Upstate Medical University Downtown campus will offer serum cystatin C level with an estimated GFR, starting February 2, 2016.

Background:
Cystatin C is a small cysteine proteinase inhibitor that is produced by all nucleated cells and filtered freely in the glomeruli. Similarly to creatinine, elevated serum cystatin C levels indicate decreased GFR.

Serum creatinine remains the primary assay for initial assessment of the GFR. However, in certain circumstances cystatin C is a more reliable marker of GFR (Ref.1), as it is not affected by body mass, diet, drugs, infections, or inflammation. However, uncontrolled hyperthyroidism, rapid cell turnover and steroid therapy are reported to increase its serum level, independent of kidney function.

In a recent meta-analysis, cystatin C-based eGFR was a better predictor of clinical outcomes, including death from any cause, death from cardiovascular causes and end-stage renal disease (Ref.2).

The estimated GFR will be calculated by the 2012 CKD-EPI cystatin C equation for patients between 18-90 years-of-age. The calculation does not require ethnic data. Numeric values are reported up to 120 mL/min/1.73 m².

\[
eGFR = 133 \times \min(S_{cyt}/0.8, 1)^{0.99} \times \max(S_{cyt}/0.8, 1)^{1.154} \times 0.996^{\text{APB}} \times 0.932 \quad \text{[if female]}
\]

Useful:
- In obese or malnourished patients, in children and in the elderly
- To validate the diagnosis of chronic kidney disease with an eGFRcreat 45-59 mL/min/1.73 m² and without albuminuria/other markers of kidney disease
- When precision is required for dosing (due to narrow therapeutic or toxic range) and/or estimates may be unreliable with creatinine (e.g., due to low muscle mass)

Method:
Particle-enhanced immunoturbidimetric assay, traceable to an international reference standard, by Roche.

Performed:
24/7

Turn-around Time:
STAT: 90 minutes
Routine: 4 hours

Reference Ranges:
Serum Cystatin C:

- 0-3 months: 0.81–2.32 mg/L
- 4-11 months: 0.65–1.49
- 1-50 years: 0.50–1.25
- >50 years: 0.64–1.44

eGFRcyt:
- >60 mL/min/1.73 m²

References:
Outstanding Physician Comments

Each week we receive written comments from our patients regarding the care we provide within the Hospital. Below are this week’s comments from grateful patients receiving care on the units and clinics at Upstate:

Outpatient

**Medicine Subspecialties** – Dr. Neupane is a great doctor.

**University Geriatricians** - Dr. Bishop is everything I need and believe a doctor should be.

**Surgery – Harrison Center** – Dr. Dolinak is very upbeat and straightforward with the medical information; brings out a positive attitude.

Dr. Hassan is very kind, caring and respectful doctor. He always gives me excellent care when I get sick.

**Upstate Urology** – Dr. Trussell makes me feel very comfortable; takes the time to explain things; a very caring individual. Can’t say enough good things about him.

Dr. Vourganti is an outstanding physician. He is a skilled and very caring doctor. He has my complete trust and I would recommend him to any one needing bladder surgery.

**Transplant Center** – Dr. Agarwal was very informative.

**Emergency Department** – Dr. Sharma really took the time to listen to me!

Dr. DeLaney was awesome!

Dr. DeLaney made us feel comfortable and well cared for. He was caring and kind as well as thorough, an excellent asset to any team.

**ENT** – Dr. Kelley explained any questions I had thoroughly and in a language I could understand.

**University Cardiology** – Dr. Liu greets me in a very formal way; wants to know how my health is and any drastic changes. I have complete confidence in him.

Dr. Carhart is very professional.

Dr. Szombathy is very caring. He is very knowledgeable about all aspects of health; not just heart issues.
Upstate Pediatrics – Just want to thank Dr. Schurman and Dr. Kresel for their services. They seem to genuinely care for my two children! Dr. Kresel made time in her schedule to see us on an urgent matter; not once but twice! We really appreciated her time. She was very caring and helpful. We also feel the same about Dr. Schurman.

Neurology – Dr. Sanders is a kind and caring person. Dr. Sanders is caring and compassionate.

Joslin – Dr. Feuerstein treats you and talks to you like a real person and a friend.

Surgery UH – Dr. Ali is very friendly and attentive.

Neurology – Dr. Sanders is a kind and caring person.

Inpatient
10G – Dr. Albert and Dr. Sitaraman are excellent physicians!
61 – Dr. Frechette has a lot of respect for patients.
9E – Dr. Krishnamurthy, Dr. Seuny Shin and Dr. Adham were so good in helping me.
7A – Dr. Tallarico really cares.

I would give Dr. Kistler a higher rating if you had one.