

Seasonal and Novel H1N1 (Swine) Flu vaccine update
From: NorthShore University HealthSystem (NorthShore) Infection Control
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Seasonal flu vaccine

- Seasonal flu vaccine will not protect against Novel H1N1 flu. While we are now having considerable Novel H1N1 activity, we are seeing very little seasonal flu, and don't expect to see much until approximately December. **Thus, while it is sensible to vaccinate patients now if vaccine is available, it is not critical to do so.**
- This season, manufacturers have struggled to produce both seasonal and Novel H1N1 flu vaccines. As a result, NorthShore has not received about half of its seasonal flu vaccine order right now. We do anticipate receiving our full order before the months when we expect to see heavy seasonal flu activity (i.e. December onward) but we don't have an ETA yet. As a result, you may find yourself in the position of needing to tell patients that they have to come back later to receive their vaccine.
- As a reminder, seasonal flu vaccine is recommended for:
 - Household contacts of children aged <6 months
 - All children aged 6 months through 18 years
 - Everyone aged 50 and over
 - Pregnant women
 - Everyone else who
 - has close contact with young children or the elderly
 - has chronic disease (including diabetes)
 - plans to be pregnant this flu season
 - is a health care worker
- Contraindications to **any** flu vaccine (seasonal or Novel H1N1, live attenuated or inactivated), are:
 - severe egg allergy
 - allergy to vaccine in the past
 - recent Guillain Barré Syndrome

Novel H1N1 (Swine flu) vaccine

- The FDA has approved the Novel H1N1 flu vaccine from several manufacturers.
- Because immune response has been robust, only a single dose is needed for individuals aged 10 and up. **Younger children will need two doses**, separated by a month if possible, three weeks otherwise.
- The vaccine is likely protective by 10 days following vaccination.
- Novel H1N1 vaccine, much like seasonal flu vaccine, will be available in single-dose formulations, which do not contain thimerosal, as well as in multi-dose formulations which do. The CDC, FDA, NIH, Institute of Medicine, the Advisory Committee on Immunization Practices (ACIP), and the American Academy of Pediatrics (AAP) have reviewed the published research on the potential linkage between thimerosal and autism. **All have concluded that thimerosal is a safe product to use in vaccines.** Concern about thimerosal is **not** a reason to hold off on giving a patient Novel H1N1 flu vaccine.

- The first batch of Novel H1N1 vaccine is expected to be shipped to NorthShore sometime this month (October).
- Vaccine rollout will be logistically complex, and we hope that physicians and patients bear with us through this process, particularly as there will be initial uncertainties about the exact timing of vaccine arrival and available quantities.
- When Novel H1N1 vaccine arrives, our first priority will be to immunize health care workers who have frequent contact with at-risk patients. We will then provide vaccine to all other health care workers, and provide it to primary care physicians for the purpose of vaccinating patients. Because we may not have sufficient vaccine for all patients right away, we plan to vaccinate patients according to the triage (“tier”) system developed by the CDC (see **Figure** below).
- To help physicians know which patients they can vaccinate when, we are working on developing solutions within Epic. We will provide you with more information as it becomes available.
- We will stay in communication to update you on the details of vaccine delivery as we have more information.
- While we expect that most Novel H1N1 flu vaccine we receive will be of the “inactivated” variety (i.e. injectable), **the first batch you receive may be a live attenuated influenza virus (LAIV)**. This vaccine is administered as a nasal spray. A recently published study suggests that in adults, the LAIV *seasonal* flu vaccine may only have about half the efficacy of the inactivated (injectable) vaccine. There are theoretical reasons to suspect that these data may not apply to children or to LAIV *Novel H1N1* flu vaccine.
- Contraindications of the LAIV (**in addition to those listed above for any flu vaccine**):
 - age < 2 or > 49
 - Pregnancy
 - Chronic disease that places a patient at high risk for severe flu infection (e.g. immunocompromise, asthma, chronic heart disease)
 - Chronic aspirin therapy (in children)
 - Close contact with **severely** immunocompromised patients when those patients need protective isolation (e.g. bone marrow transplant patients)
- Of note, close contact with infants is **not** a contraindication to LAIV
- Any health care provider can administer LAIV **without** mask and gloves, even if they have contraindications to receiving it themselves.
- Vaccine information statements are included with this advisory

Other issues

- Remember to continue to administer the 23-valent pneumococcal polysaccharide vaccine (PneumoVax) to patients for whom it is indicated (namely everyone aged ≥ 65 and patients aged 2-64 with comorbidities such as immunocompromise, heart or lung disease including asthma, diabetes). **This is important to do because severe pneumococcal pneumonia can occur following influenza infection.** A recent CDC study found that about a third of patients who died of Novel H1N1 had secondary bacterial infections, and these were often caused by *S. pneumoniae*.

Novel H1N1 Toolkit

- In an effort to optimize communication, we have created a website for NorthShore staff and affiliate physicians. All physician updates will be posted to this website for your reference, as will other advisories related to vaccination, employee health, and other issues as they arise. There are also links to relevant CDC pages. This can be accessed in two ways:
 - From the Pulse (intranet) homepage, by selecting “NorthShore Influenza Toolkit” from the left-hand column.
 - On the internet, at www.northshore.org/flu

Figure. Novel H1N1 flu vaccine priority system.

