



2020 – 21 Influenza Season Initial Report

Annual Disclaimer: These emails come from a physician with a strong interest in influenza for about 30 years. As much as possible, information is evidence-based, though not every situation has been studied. Advice is primarily targeting at nursing home populations, though much of it is also appropriate for others. Some vaccinated people – especially frail seniors - still get infected and may die while some who don't get vaccinated may be exposed and not get the flu or show symptoms. **Bottom line** - use the advice to the extent you wish and make your own decisions.

Let me know if you would rather not receive these emails or if you have individual questions or suggestions.

Attached are the following:

- a one-page worksheet to follow as a guide for recognition, diagnosis, treatment and prophylaxis of influenza
- CDC "Vaccine Information Statements" (VIS) in several different languages that **you must provide to patients or decision-makers** before vaccinating

This year's biggest takeaway messages:

1. With Covid lurking, aiming for 100% vaccination of staff and residents is the target.
2. Influenza A:H3N2 is always the worst of the influenza viruses for our patients. This year's H3N2 strain is a new one, so there will be no immunity to it, ie, we could be in for a bad flu season...
3. **In 2020, there is no excuse not to choose a HIGH DOSE or ADJUVANT VACCINE in persons >65 where these vaccines improve outcomes and decrease hospitalizations.**
4. Start vaccinating staff whenever you receive the vaccine.
5. **Unless we have an early outbreak, I would vaccinate LTC patients between mid-November and early December.** If influenza hits the US early, we (in Colorado) almost always have several weeks head start to vaccinate (this occurs only about once every 6-8 years).
6. Rehab patients should be vaccinated before discharged if they did not get it in the hospital.
7. Egg allergy is **NOT** a contraindication. In 2020, it is hard to find legitimate contraindications.
8. Remember: **Quadrivalent** means 4 virus *strains*, and **High-Dose** means 4 times as much *antigen*.
9. **Make sure to properly refrigerate vaccine.** Don't let it warm up prior to use (*see below*).

Overview of what to expect and what is new

Three of this year's 4 vaccine strains are new. The vaccine has A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09, A/Hong Kong/2671/2019 (H3N2), B/Washington/02/2019 (Victoria lineage) and B/Phuket/3073/2013 (Yamagata lineage).

While having multiple new strains in the vaccine typically leads to a worse than normal season, Covid-19 may be playing a nonspecific role to dampen flu season, (e.g., social distancing, isolating, masks). The CDC projects this to be a mild season for influenza. Sadly, this could also be due to many of the most vulnerable for complications having been stripped away by Covid. So whether it is mild because of Covid or bad because of the many new strains is anyone's guess.

Except in immunocompromised persons and elderly, influenza is generally preventable if everyone were vaccinated as per CDC recommendations to vaccinate everyone >6 months old. Tragically, people still find or invent excuses not to be vaccinated, becoming carriers instead. *Choosing* not to be vaccinated is usually a selfish choice based on unfounded fears/myths. Most people respond to vaccine, though only about 1 in 4 elderly develop protective antibodies to standard-dose vaccine (about 50% after High Dose or Adjuvant vaccine), emphasizing why it is so important to vaccinate everyone.

Young people seldom die from flu, though they acquire it and spread it to family, friends, coworkers and others. Since they usually aren't incapacitated or very ill, they go to school or work, compounding the problem.

Each year, 36,000–55,000 persons die of flu in the US, >90% of whom are >65. During an average SNF outbreak, 1/3 of patients and ¼ of staff develop an influenza-like illness, and >5% of infected patients die. The financial impact is huge as we pay for prophylaxis / treatment that may have been averted through vaccinations. Prophylaxis may cost thousands in addition to stopping admissions and increasing likelihood that resistance to antivirals will get worse. If **every** person is vaccinated... chances are minimal an outbreak would occur.

Colorado LTC Influenza Vaccination Rules

In Colorado, the Influenza Vaccination Rules for LTC (Chapter II: General Licensure Standards) require vaccination of >90% of “employees” by December 31. “Employees” are any persons with a financial tie to the facility, including staff, providers, vendors, lab...

In addition to vaccination, facilities must also:

- have defined procedures to prevent spread of influenza from its unvaccinated healthcare workers;
- maintain supporting documentation for 3 years that may be examined by CDPHE during an audit;
- report to CDPHE the percentage of employees vaccinated by December 31 (report due in the Spring)

Though Health Department rules don't apply to visitors / volunteers, since these persons are often the source of outbreaks in facilities, educational efforts and broader vaccination programs targeting this group are highly recommended.

Details are available at: http://www.cdphe.state.co.us/regulations/healthfacilities/6CCR1011-1ChIIGeneralLicensureEFF_03302012.pdf

Vaccines

[Hopefully you remembered to order your vaccine.](#) *If not, get it ordered!* There are many vaccine choices available, but you need only concern yourself with 2...

STAFF AND PERSONS <65: Quadrivalent vaccine containing the above constituent antigens

RESIDENTS >65: Choose either **HIGH DOSE** or **ADJUVANT**, **but choose one of them.** Medicare and Medicare Advantage Plans reimburse at a higher rate to cover additional costs. You should break even financially.

Remember that egg allergy is not a reason not to be vaccinated. Contact me if there are questions about this.

Proper Refrigeration

The CDC Vaccine Storage and Handling Toolkit was distributed in 2019. This includes guidelines for appropriately refrigerating and monitoring vaccine storage that could be surveyed to at this point.

One item not explicitly covered in the guidelines may be a major/very common problem. We keep vaccines refrigerated as required, but when administering them, we take a batch from the refrigerator, put them on a cart and go down a hallway to vaccinate patients. By the 2nd or 3rd patient, vaccines have been at room temperature for 5-10 minutes and probably inert.

Try bringing patients and staff to the refrigerator to vaccinate them... or... prep patients and having supplies ready in each room, then take 1 vaccine at a time and administer it. Just don't take more than 2-3 minutes to finish *and don't carry it in the palm of your warm hand!*

What about consents?

Vaccination consents are not required and are, in fact, discouraged, but many facilities and liability carriers still prefer to use them. Under Federal Regulations what is required is:

- Provision of information / education about Influenza Vaccination. Although you can augment the CDC information, providing the Vaccine Information Statement (VIS) is required. These can be found in many languages on the CDC Website. I have attached several in languages commonly seen in our facilities
- Patients or their responsible parties have a right to refuse to be vaccinated.

This is not the same as a consent. You should provide the VIS and any other education you like while informing them well in advance of the date you will be vaccinating patients. Unless they specifically request that the vaccination *not* be given, this should be interpreted as agreeing to vaccination.

CMS encourages facilities to have vaccination as a standing order rather than annually trying to get specific flu vaccine orders for every patient.

What about rapid testing?

Rapid testing before influenza actually arrives may show positives for Influenza B (*active at a low rate year round*) or have false positives outnumbering true positives, so... don't start testing until there is activity identified in the community.

When flu season actually gets here, my perpetual advice is to **be clinicians** and treat presumptively patients who present with typical clinical signs and symptoms compatible with influenza (*rapid onset of nonproductive cough and/or sudden high fever*) **during flu season**, but to be more cautious and err on the side of more rigorous testing (using RT-PCR) when it is an index case or is not during '*flu season*'. If it is flu season and numerous persons get typical flu symptoms in a short period of time, assume it is influenza and institute appropriate treatment actions without waiting for testing. Of course, the overlap with Covid will make this a particularly intriguing season to discern between the 2 competing respiratory viruses and all the other potential viral, bacterial and medical causes of cough, fever and vague maladies.

Do NOT start antibiotics unless you actually document that they have bacterial pneumonia! Follow McGeer Criteria for Lower Respiratory Tract Infections before using antibiotics. I have attached a summary of these for your convenience.

What do you need to know about the antivirals and when to use them?

Both Influenza A and B are resistant to the Adamantines (Rimantadine / Amantadine). There is mounting resistance to Tamiflu (*overuse!*) especially for the H1N1 variant. I recommend using Neuraminidase Inhibitors for both A (H3N2) and A (H1N1) outbreaks in a judicious manner unless new information emerges.

Remember – these agents **do not kill the virus**, they only interfere with its local spread, so they should **not** be viewed as an alternative to vaccination and are not likely to be effective if not given within the first 48 hours of symptom onset.

Good luck! I'll provide updates as conditions evolve or new information is available!

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