



Seasonal Influenza (Flu)

Questions and Answers For Healthcare Providers

Contents

Vaccine	3
Testing.....	5
Surveillance.....	6
Antivirals	7
Infection Control	10

Vaccine

1. How effective has this season's influenza vaccine been in preventing influenza?

We expect preliminary national data regarding vaccine effectiveness of this season's influenza vaccines to be published in the CDC's January 11, 2013 Morbidity and Mortality Weekly Report.

Generally, when influenza vaccine strains and the influenza strains circulating in the community are well matched, influenza vaccines are approximately 60% effective in preventing all signs and symptoms of influenza, but effectiveness is higher in preventing serious illness, hospitalization and death. The efficacy of influenza vaccines varies from year to year because of changes in circulating influenza viruses and other factors. Effectiveness also varies with age, underlying conditions and prior vaccine experience. The effectiveness of flu vaccine among individuals who are healthy, young and have been vaccinated during previous seasons will be higher, offering roughly 70% to 90% protection against symptomatic influenza virus. Among individuals who are elderly, chronically ill and have not been vaccinated during previous seasons, influenza vaccination may provide roughly 40% - 60% protection against signs or symptoms of influenza, and roughly 70% - 80% protection from death.

2. Should unvaccinated individuals who have had the flu still be immunized?

Yes. Everyone who is at least six months of age should receive flu vaccine this season. It is particularly important for some people to be vaccinated. Those people include:

- People who are at high risk of developing serious complications like pneumonia if they get sick with the flu.
 - This includes:
 - People who have chronic or underlying medical conditions. The list of such conditions is long and includes asthma; diabetes; obesity; chronic lung, heart, and kidney diseases; immune compromise; and other diseases.
 - Pregnant women.
 - People 65 years and older.
- People who live with or care for others who are high risk of developing serious complications.
 - This includes household contacts and caregivers of people with chronic or underlying medical conditions.

3. Should patients who are acutely ill and have positive tests for influenza receive the vaccine during that period, and if not, should they receive it after the acute illness?

Unvaccinated patients ill with influenza should receive the flu vaccine as soon as they are well enough to receive it.

4. Also can you order influenza vaccine through the Wisconsin Immunization Registry?

No. Users of state-supplied vaccine can order influenza vaccine by sending an e-mail to Jackie Nelson at jackie.nelson@wi.gov and include:

- VFC pin number
 - presentation type
 - number of doses
 - contact phone number
- Presentation availability may be limited.

5. Can we give live attenuated influenza vaccine (LAIV; FluMist; MedImmune) to a person who is taking an influenza antiviral medication?

If a person is taking an influenza antiviral drug, you should not administer nasal-spray flu vaccine (LAIV) until 48 hours after the person took the last dose of the influenza antiviral medication. If a person takes antiviral drugs within 2 weeks of getting the nasal-spray flu vaccine, the person should be revaccinated. (The antiviral drugs will have killed the vaccine viruses that are supposed to stimulate the immune response against those viruses.) However, you can give inactivated influenza vaccine (TIV) to a person who is taking an influenza antiviral drug.

6. Does the higher dose vaccine produce a better immune response among adults aged 65 years and older?

Data from clinical trials comparing Fluzone to Fluzone High-Dose among persons aged 65 years or older indicate that a stronger immune response (i.e. higher antibody levels) occurs after vaccination with Fluzone High-Dose. Whether the improved immune response results in greater protection against influenza disease is not yet known. An ongoing study designed to compare the effectiveness of Fluzone High-Dose to Fluzone in preventing influenza is expected to be completed during 2014-2015.

Testing

7. Should Long Term Care facilities (LTCFs) continue to test residents for influenza? If not, at what point do you begin facility-wide treatment with antivirals?

LTCFs should test residents for influenza before deciding to treat/prophylax with an influenza antiviral medication. It is important to know the cause of respiratory illness in the facility before administering antivirals because influenza antivirals are not effective in treating respiratory illnesses caused by other viruses or infectious agents.

8. What is the reliability of the rapid influenza diagnostic tests (RIDT)?

During times of high influenza activity (such as the present) the likelihood that a positive RIDT represents a true positive infection is high (high positive predictive value), but the likelihood of having a false negative test is also greatest when influenza activity is high. Therefore, because of the [limited sensitivities and predictive values of RIDTs](#), negative results of RIDTs do not exclude influenza virus infection in patients with signs and symptoms suggestive of influenza.

9. If a patient presents with flu-like symptoms during this influenza outbreak, is any flu testing necessary?

Yes. Consider influenza diagnostic testing of patients who have clinical signs and symptoms that are compatible with influenza when results of influenza tests will change the clinical care of a patient or will influence the clinical management of other patients. (Settings in which testing is a frequent consideration include long term care facilities). Of note, initiation of influenza antiviral treatment, if clinically indicated, should not be delayed pending results of testing.

10. What is your suggestion for patients admitted to hospitals with "suspected" flu who have not been tested? When is it considered too late to obtain a specimen for testing?

Testing is encouraged for these patients within the first five days after illness onset.

Surveillance

11. What age groups are being affected by the current flu outbreak?

All age groups are affected. However, our current surveillance for influenza – associated hospitalizations identifies adults aged 65 years and older as the age group most affected with severe illness (about 63% of all patients hospitalized with influenza). Actual hospitalization rates are highest among persons aged 65 years and older and infants (aged less than 1 year).

12. Do outbreaks of influenza occurring in long term care facilities (LTCFs) need to be reported to the Division of Public Health?

Yes, outbreaks of influenza occurring in LTCFs must be reported to DPH.

13. Are diagnoses of influenza made on a clinical basis, but without testing, still reportable?

We encourage hospitalized patients to be tested for influenza. If no testing is done, the case is not reportable.

Antivirals

14. What should local health departments (LHDs) do if they run out of influenza antiviral medications?

If LHDs are out of influenza antivirals, they should contact the Wisconsin Division of Public Health using the email address DHSStockpile@wisconsin.gov.

15. For which ages is Tamiflu (oseltamivir) currently approved by the FDA?

The FDA has approved the expanded use of Tamiflu (oseltamivir) to treat children as young as two weeks old who have had symptoms of flu for less than two days. It is important to note that the drug is not approved for use in preventing influenza infection in this population. Note: the safety and efficacy of Tamiflu to treat influenza has not been established in children younger than two weeks old. For more information, visit:

www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm333205.htm

16. We have been hearing there is a shortage of Tamiflu and some providers are being told by pharmacists at multiple pharmacies that it is not available. What do you recommend if Tamiflu is not available?

Although the FDA is not listing Tamiflu (oseltamivir) as a drug in short supply, the Division of Public Health has asked that pharmacies increase their stocks of Tamiflu. Most pharmacies stock the amount they expect to use. Tamiflu needs to be administered within 48 hours of onset of symptoms. When people have been sick for three to four days or more before seeking antiviral treatment, Tamiflu is not prescribed. If Tamiflu or Relenza (zanamivir) is not available from local pharmacies and the medical distributor cannot provide timely resupply, facilities can request antiviral drugs from DPH using the email address DHSStockpile@wisconsin.gov.

17. How long does a person remain contagious after they begin Tamiflu treatment?

Results of clinical trials of the use of oseltamivir among patients with influenza demonstrate that oseltamivir-treated patients had a reduction in the duration of influenza virus shedding (58 hours for the combined treatment groups) when compared to patients who received a placebo (107 hours for the placebo group). Generally, most healthy adults may shed influenza virus (and be infectious to others) one day before symptoms develop and up to five to seven days after illness onset. Children may shed the virus for longer than seven days. Antiviral therapy, if started within 48 hours of symptom onset, typically may reduce the duration of viral shedding by one day.

18. If there is one positive case at a long term care facility, is it recommended to give Tamiflu to all residents, regardless of whether they are ill?

In Long Term Care facilities, having two or more confirmed cases triggers use of Tamiflu for all residents regardless of whether they are ill or have been vaccinated. In addition, all unvaccinated staff should receive Tamiflu.

19. We have already experienced an outbreak at our facility. Tamiflu was prescribed for all residents and for unvaccinated staff. At this point, it appears our outbreak is waning; however, it's early in the season. If we should experience another outbreak, would Tamiflu again be recommended?

Yes, it is appropriate to use Tamiflu if a second outbreak occurred.

20. Should hospitals supply antivirals to staff in contact with patients diagnosed with influenza, even if the staff has previously been vaccinated?

No, hospitals should not supply antivirals to staff in contact with patients diagnosed with influenza if the staff has previously been vaccinated.

21. Should outpatient providers in emergency department and clinic settings be testing all symptomatic patients for influenza? Should they then treat the patients with antivirals?

Testing should be selective. Relatively few patients will need to be tested. Please see the response to question 9 above. A patient should be treated if signs and symptoms are compatible with influenza and the patient has been symptomatic for less than 48 hours, particularly if the patient is in a high risk group.

22. When can a patient return to work/school after they have started taking an influenza antiviral?

CDC recommends that patients remain at home until at least 24 hours after the patient is afebrile (without the use of an antipyretic such as Tylenol) except to receive medical care or for another essential activity that no one else can do.

23. In small residential environments, should residents be treated prophylactically or only if they become symptomatic?

If there is a highly susceptible population (elderly or developmentally disabled), use the Long Term Care recommendations and prophylactically provide antivirals.

24. How many times can a person receive antiviral prophylaxis?

Antiviral prophylaxis should be used during each new outbreak.

Infection Control

25. What kind of isolation is appropriate for influenza in the hospital setting?

Isolation of patients hospitalized with influenza entails droplet precautions only. However, if the person has a respiratory illness and you don't know the cause, you might use contact and droplet precautions until and unless the agent is identified, because respiratory illnesses caused by different agents require different precautions (contact vs. droplet).

26. Does the roommate of a resident who has flu-like symptoms need to be kept on isolation also? Even if they have no symptoms of influenza?

The ill resident should be placed in a private room or, if not available, should be placed with a resident who also has or is suspected of having influenza. There is no recommendation to isolate asymptomatic residents, even those who are exposed. You can refer to the CDC guidelines at <http://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm> for more information.

27. How do we determine if a potential new resident with influenza is contagious (and for how long) when considering transfers of patients from a hospital to a Long Term Care or rehabilitation facility. How long would we want to wait before taking this new resident? If there are referrals for potential new admissions, should we be asking the hospital for influenza results if the potential resident has any respiratory symptoms? We want to be able to accept new patients from the hospital, but we also need to protect our current facility residents.

Long Term Care facilities should be able to receive hospitalized patients when it is clinically appropriate to discharge them from the hospital. Generally patients should not be kept in a hospital for infection control reasons only, particularly because currently many Wisconsin hospitals are at full capacity with influenza patients and need to discharge patients as soon as they are able to. The question is whether droplet precautions should continue in the nursing home, which depends on where the resident is during the course of his/her illness. CDC guidelines recommend droplet precautions for seven days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer.

Ideally residents with droplet precautions should be placed in private rooms. If that is not possible, the next best thing is to cohort the incoming resident with someone who also has laboratory-confirmed influenza (you must verify both residents have influenza, though, so other respiratory viruses aren't inadvertently spread). And if cohorting is not possible, then one should evaluate the clinical consequences of deferring admission versus housing the resident in a room with a roommate who

1/11/2013 1:50 PM

can remain several feet away from the infectious resident, and where use of a physical divider may also be considered.

28. When do you exclude visitors from coming into a hospital? What are your recommendations for visitors to the hospital during the peak of flu season? Do you have special recommendations for birthing centers?

Regarding visitors during flu season, the CDC seasonal influenza guidelines have a good section on managing visitors. Note that it is not recommended to exclude all visitors; rather it is a targeted approach. The guidelines can be found at <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm> Limit visitors for patients in isolation for influenza to persons who are necessary for the patient's emotional well-being and care. Visitors who have been in contact with the patient before and during hospitalization are a possible source of influenza for other patients, visitors, and staff.

For persons with acute respiratory symptoms, facilities should develop visitor restriction policies that consider the location of the patient being visited (e.g., oncology units) and circumstances, such as end-of-life situations, where exemptions to the restriction may be considered at the discretion of the facility. Regardless of the restriction policy, all visitors should follow precautions listed in the respiratory hygiene and cough etiquette section.

Visits to patients in isolation for influenza should be scheduled and controlled to allow for:

- Screening visitors for symptoms of acute respiratory illness before entering the hospital.
- Facilities should provide instruction, before visitors enter patients' rooms, on hand hygiene, limiting surfaces touched, and use of personal protective equipment (PPE), according to current facility policy, while in the patient's room.
- Visitors should not be present during aerosol-generating procedures.
- Visitors should be instructed to limit their movement within the facility.
- If consistent with facility policy, visitors can be advised to contact their healthcare provider for information about influenza vaccination.

29. If an employee has an ill child at home with a confirmed case of influenza, either A or B, should that employee be at work? If so, should the employee wear a mask?

It is not recommended to exclude health care workers (HCWs) who work in hospitals or LTCFs who have been exposed to influenza at home or in the community, nor is it

recommended that asymptomatic exposed HCWs wear a surgical mask at work. The recommendation is to vaccinate HCWs and exclude when sick.

30. Please address the use of droplet precautions in a residential assisted living facility. Can a gown be kept in a resident's room and be re-used by various staff who enter the room throughout the day? If so, how frequently should gowns be replaced?

Droplet precautions are certainly applicable in assisted living facilities, and caregivers should wear a surgical mask when in close contact with clients who have known or suspected influenza or other respiratory illnesses caused by agents that are transmitted similarly to influenza viruses. Droplet precautions do not entail wearing of gowns, however, unless they are used as a part of standard precautions. When gowns are used, they should be used once, and then either discarded or if re-usable, placed in a container to be laundered. There is no effective means to prevent contamination of clothing when putting on a used gown. Healthcare facilities may access the CDC isolation guidelines at <http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf> for more details on the various infection control precautions.

31. Should unvaccinated staff at a Long Term Care facility be offered prophylaxis?

Our recommendation is to treat those who are ill and give prophylaxis to all residents (regardless of vaccine status) and unvaccinated staff, when two or more influenza cases are confirmed (regardless of whether it meets the outbreak definition).

32. At what point is a Long Term Care facility safe to admit a hospitalized patient with influenza?

LTC facilities should be able to receive hospitalized patients once it is clinically appropriate to discharge them from the hospital. They should not be kept in a hospital for infection control reasons only, especially since many Wisconsin hospitals have many influenza patients and need to discharge patients as soon as they are able to. Droplet precautions should continue in the nursing home, depending on the resident's illness. CDC guidelines recommend droplet precautions for seven days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, and the fact that Tamiflu is being used does not change that.

If you need to manage the resident with droplet precautions, the ideal is to use a private room. If that is not possible, the next best thing is to cohort with someone who also has laboratory-confirmed influenza (need to verify both residents have influenza, though, so other respiratory viruses aren't inadvertently spread). And if

1/11/2013 1:50 PM

cohorting is not possible, then one should evaluate the clinical consequences of deferring admission versus housing the resident in a room with a roommate who can remain several feet away from the resident needing droplet precautions, and perhaps adding a physical barrier as well.

33. Will wearing a mask in the workplace prevent transmission of influenza virus?

It is unclear whether wearing a mask in the workplace helps prevent transmission of influenza, and there is not usually a recommendation to do so. Rather, recommendations are to be vaccinated, cover coughs and sneezes, practice frequent and good hand hygiene, and stay home when sick.

34. Are face shields necessary in droplet precautions if a mask is worn?

Face shields provide eye protection, which is not usually needed when observing droplet precautions. A surgical mask that covers the nose and mouth should be sufficient. However, as part of observing standard precautions with all patients, if splashes or sprays of blood/body fluids to the face are anticipated, then face shields or goggles should be worn to protect eyes.

35. When should school closing be considered?

There is little evidence to suggest that school closings help reduce transmission of influenza, so the decision to close schools should be based on whether staffing levels and student attendance are sufficient to convene classes and hold other activities.

36. How long does influenza virus remain viable on an inanimate object?

Influenza viruses may remain viable on surfaces and items for a few hours to several hours, however, the role of inanimate objects in transmission of influenza is unclear. Cleaning and disinfection of environmental surfaces and objects, especially those potentially contaminated with respiratory secretions, should occur as part of comprehensive influenza prevention strategies.

37. If a nursing home has an outbreak of influenza, when is it recommended they put admissions on hold and when is it appropriate to open admissions back up to the facility?

There are no set parameters for making these decisions, but in general, closure may be a consideration during widespread influenza transmission in the facility until transmission is under control and the incidence of new cases is decreasing. Several factors should be considered when making the decision to close a facility to new admissions. Issues such as staffing levels, the clinical effect of denying admission,

and the ability to minimize exposure risk to the incoming resident should be discussed together by medical, administrative and infection prevention staff.

38. Does antiviral treatment impact the number of days for droplet isolation?

Use of antivirals does not change the time period of isolation for persons with influenza.