

Influenza Season 2009/2010 Long Term Care Facility /Nursing Home: What To Do and Why

Updated Sep 1, 2009: Watch for regular updates at www.flula.com or www.infectiousdisease.dhh.louisiana.gov or www.cdc.gov/h1n1flu/guidance because the situation changes rapidly

CLINICAL INFORMATION: DIAGNOSIS, TREATMENT

Suspect influenza:

- fever > 37.8° C [100° F] & (cough or sore throat) or
 - acute respiratory illness = recent onset of at least 2 of : rhinorrhea or nasal congestion, sore throat , cough, fever
- Five to fifteen percent (5-15%) of outpatient consultations are due to influenza.

Use **rapid influenza test** when it is important for treatment decisions, if not it is not so useful.

Assuming sensitivity=70%, specificity=95%, the predictive value of a positive test is 5% at the beginning and end of the season and 90% at the peak. The predictive value of a negative test is 75%.

Lab confirmation by RT-PCR is not useful to clinicians. Testing is available at private labs.

It takes several days to get the RT-PCR result but the therapeutic decision must be made immediately for anti-virals to be effective. It is very expensive.

Hospitalize only those who need hospital care.

Residence in a long term care facility is NOT a reason for hospitalization

Hospitalization is NOT for quarantine or diagnostics. In some epidemics, hospitals have been foci for spreading disease

Do not refuse admission of a case previously hospitalized

Careful infection control practices will keep the uninfected resident population from acquiring the infection

Hospitals beds are needed for acutely ill patient and not filled with convalescent patients because a LTCF is uncooperative.

Use **antivirals sparingly**. Antivirals are for **severe cases** and for **high risk cases and contacts**

Antivirals have little use for benign cases (shorten symptoms by a day)

Resistance to antivirals is spreading with increased use

If indicated, **antivirals must be used early**. Do not wait for lab test results to decide on the treatment.

Antivirals are most effective if used within 24 to 48 hrs of onset. Later in the disease, they lose their effectiveness.

High risk groups

- Younger than 5 years old and **older than 65 years**; Pregnant women
- Chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological -(including sickle cell disease), neurologic, neuromuscular, or metabolic disorders (including diabetes)
- Immunosuppression, (including high dose steroids, chemotherapy, HIV/AIDS, transplant)
- Younger than 19 years of age receiving long-term aspirin therapy

--Residents of nursing homes and other chronic-care facilities

Use neuraminidase inhibitors (NI)

(Oseltamivir/Tamiflu or Zanamivir/Relenza) for novel H1N1. Since most residents of LTCF are at high risk, most need treatment with NI

Novel H1N1 strains are now resistant to rimantadanes (amantadine and rimantadine).

Stay tuned for modified treatment or prophylaxis recommendations.

There are oseltamivir-resistant seasonal H1N1 influenza. Depending on relative frequency of seasonal and novel H1N1, zanamivir or a combination of oseltamivir and rimantadine or amantadine may be recommended

Duration of antiviral chemoprophylaxis post-exposure is 10 days after the last known exposure to novel (H1N1) influenza.

Duration for treatment of cases is 5 days.

CHEMOPROPHYLAXIS

Chemoprophylaxis only recommended for:

- Contact with high risk factors
- Health care personnel, public health workers, or first responders with unprotected close contact to a novel (H1N1) case (confirmed, probable, suspected)

A case's infectious period starts a day before onset and lasts up to 1 days after acute symptoms (fever) subsides

Blanket prophylaxis of large groups, of persons with questionable exposure (remote contact, outside the source infectious period) **are not recommended**. Avoid having staff and patients in the LTCF on continuous prophylaxis for weeks because of repeated exposures.

Abuse of antivirals will lead to resistance.

Prophylaxis "to be on the safe side" **is not recommended**

There is no safe side. Abuse of antivirals will lead to resistance.

INFECTION CONTROL for LTCF

Triage at the door: Anyone with respiratory symptoms should be asked to wear a surgical mask as soon as they enter a LTCF.

Most of the transmission is caused by those with respiratory symptoms.

Promote cough etiquette.

1-Cover your cough and sneeze in a tissue or your sleeve; not your hands; 2-Dispose of tissues safely, sanitize your hands after; 3-Keep a space separation of 3 to 6 ft between you and someone who coughs.

The main sources of viruses are symptomatic humans. Contaminated environment plays only a secondary role.

Promote hand hygiene:

- Use hand sanitizers
- Wash hands when soiled
- Avoid touching your eyes, nose, or mouth.

Acquiring the infection from the environment is done by the hands

Protect yourself: Droplet and contact precautions

- Wear a surgical or N95 mask* when closer than 3ft from a symptomatic person.
- Wear gloves when touching a patient or patient's area.
- Know what is clean, what is contaminated, keep them apart.

A simple surgical mask may not be as effective in preventing than the N95 mask. However the surgical mask is easier to tolerate for long periods of time.

*Stay tuned: CDC will update the mask recommendation October 1st

Airborne precautions for aerosol producing procedures

- N95 masks, fit testing, negative pressure, > 6 air exchanges
- Bronchoscopy, intubation, nebulization, suction

Droplet nuclei <5µm are produced during these procedures. They easily go through a surgical mask.

Isolation

- Mostly for symptomatic cases; Less important for contacts
- This isolation period is recommended whether or not antiviral medications are used.
- Monitor close contacts and isolate if symptomatic
- Keep symptomatic resident in their room or allow them out with following precautions:
 - Wear a mask when getting close to others (3-6ft)
 - Avoid joining others in enclosed and crowded places;
 - Keep safe distance from others (3-6ft)
- Cough etiquette and hand hygiene
- Closing facilities, canceling activities are last resort if other measures cannot be enforced

A case remains infectious until 1 day after fever subsides. A fever is defined as having a temperature of 100° Fahrenheit or 37.8° Celsius or greater. For health care workers it remains 1 day after acute symptoms subside or 7 days, whichever is longer.

Cohort

- Group together in separate aisles /rooms
- Use separate area in the cafeteria
- Carry out separate activities
- Keep distance at least 3-6 ft away between infected and healthy groups

Keeping infectious patients together makes it easier to prevent transmission to healthy people.
