Best Practices for Influenza

What is Influenza?
Influenza (flu) is a contagious respiratory illness caused by influenza virus. There are 2 types of flu virus (Type A and B), various subtypes and strains.

What are the serious risk factors for developing Influenza?
People age 65 and older are at high risk of developing serious complications from flu as the immune defense becomes weaker with increasing age. It is estimated that people 65 years old or older account for:

- 70-85% of seasonal-flu related deaths
- 50-70% of seasonal-flu related hospitalizations

How will a patient with Influenza typically present?
- Sudden onset of fever (can be absent), cough, sore throat, runny nose, body aches, headaches, chills, fatigue.
- The common cold is usually milder than the flu and are more likely associated with a runny nose.

What tests can be done on these patients to test for influenza?
- Molecular assays are superior to rapid influenza diagnostic tests.
- Rapid molecular assays detect influenza virus nucleic acids with high sensitivity and specificity (90-95%) and can yield results in 15-30 minutes.
- RT-PCR assays detect influenza viral RNA or nucleic acids with high sensitivity and specificity and can yield results in 45 minutes- several hours.
- Rapid Influenza Diagnostic Tests can detect influenza viral antigens in 10-15 minutes, with lower but moderate sensitivity (80%) and specificity (70%).

What is the best way to treat patients with Influenza?
- Vaccination and simple hygiene practices can help prevent influenza infection.
**Vaccination Tips:**

- The best way to prevent flu is to get vaccinated every year.
- Flu vaccines protect against the 3 or 4 strains of flu viruses that research suggests will be the most common.
  - CDC recommends getting vaccinated by the end of October.
  - It takes 2 weeks after vaccination for antibodies to develop.
  - Getting vaccinated later in the flu season can still be beneficial, even in January or later.
- AMDA Policy August 09, 2018: The Society for Post-Acute and Long-Term Care Medicine (the Society) supports mandatory annual influenza vaccination for all post-acute and long-term care HCP unless there is a medical contraindication.\(^1\)
- When compared with standard-dose vaccine, high-dose influenza (HD) vaccine can reduce risk of respiratory -related hospital admissions from nursing home residents aged 65 years and older.\(^2\)
- The use of HD influenza vaccine in long-stay NH residents reduced total health care expenditures for a net benefit despite HD being more expensive per dose.\(^3\)

**Hygiene Practices:**

- Cover your nose and mouth with sneezing and coughing.
- Wash hands.
- Avoid touching eyes nose and mouth.
- Clean and disinfect high touch surfaces.
- If sick, limit contact with others and stay home from work.
- For residents with high suspicion, place in droplet/contact isolation.

**Treatment:**

- Flu antiviral drugs work best when started within 48 hours of getting sick.
  - Starting them late can be helpful if the sick person is at high risk for complications or very ill.
  - Neuramidase inhibitor- oseltamivir or inhaled zanamivir.
    - Dose adjustment for CrCl.
    - No dose adjustment for age.
  - Treatment duration is 5 days, clinicians can consider longer with severe lower respiratory tract disease.

Sources: