EPPA
EXCELLENCE IN EMERGENCY MEDICINE

THE URGENCY ROOM

EPPA Clinical Guidelines ISSUED: DECEMBER 2017 ~ REVISED 2017

MANAGEMENT OF Influenza

This EPPA Clinical Guideline is intended to guide most, but not all, encounters involving influenza and should not replace clinical judgment; deviate from or adapt this guideline to meet the individual patient's needs.

Signs and Symptoms

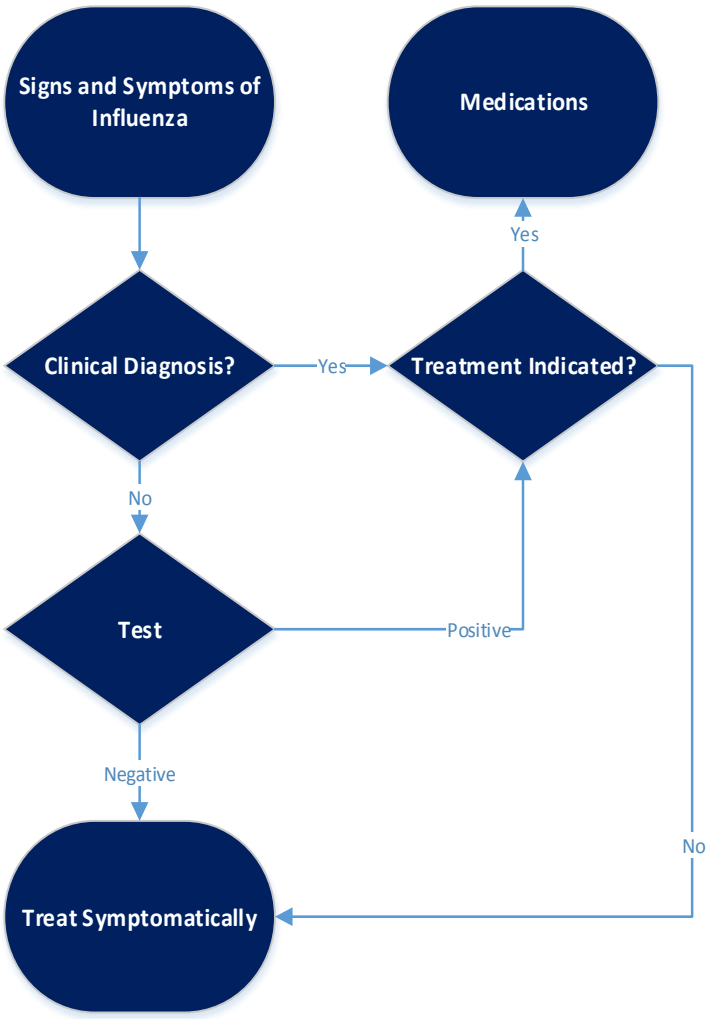
- Fever
- Headache
- Myalgia/malaise
- Respiratory symptoms of nonproductive cough, congestion, sore throat
- GI symptoms and higher fever more common in children
- Subtle symptoms more common in elderly

Clinical Diagnosis v Laboratory Testing

- Consider making clinical diagnosis particularly during outbreaks

Consider testing:

- During times other than outbreaks
- When the testing will influence treatment
- When there is a necessity to confirm diagnosis (but don't necessarily rely on the result considering the limitations of influenza testing)
- Immunocompromised patients



Medication Dosing

- Oseltamivir PO BID x five days, dose:
  - Adult 75mg (renal adjustment as needed)
  - 2wk-11mo 3mg/kg
  - 1-12 yo:
    - <15kg 30mg
    - 15-23kg 45mg
    - 23.1-40kg 60mg
    - >40kg 75mg

Treatment

Usually self-limited infection but some patient populations have increased risk of complications, indications for treatment are:

- Severe disease/those admitted to the hospital
- Children aged younger than 2 years;
- Adults aged 65 years and older;
- Persons with the following disorders:
  - chronic pulmonary (including asthma)
  - cardiovascular (except hypertension alone)
  - renal
  - hepatic
  - hematological (including sickle cell disease),
  - metabolic (including diabetes mellitus)
  - neurologic and neurodevelopment conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury);
- Persons with immunosuppression, including that caused by medications or by HIV infection;
- Women who are pregnant or postpartum (within 2 weeks after delivery);
- Persons aged younger than 19 years who are receiving long-term aspirin therapy;
- American Indians/Alaska Natives;
- Persons who are morbidly obese (i.e., BMI is 40 or greater); and
- Residents of nursing homes and other chronic-care facilities.

MANAGEMENT OF **Influenza**

References:

- Center for Disease Control and Prevention: Influenza (Flu). Accessed November 2017. https://www.cdc.gov/flu/

Influenza

- Acute Respiratory Illness caused by Influenza A or B virus
- Occurs in outbreaks, primarily in winter
- Transmitted by droplets from coughing or sneezing
- Incubation is 1-4 days (average 2 days)
- Viral shedding peaks at 24-48 hours, averages about 5 days, it is undetectable after 5-10 days in immunocompetent hosts.
- Duration of illness one week or more, improvement at 2-5 days.
- Pneumonia is the most important complication but also myositis, rhabdomyolysis, CNS (encephalitis, encephalopathy, transverse myelitis, aseptic meningitis, Guillain-Barre), cardiac (ischemia, myocarditis, pericarditis).

Risk Management

- Regardless of clinical v lab diagnosis, give due consideration to alternate cause (serious bacterial illnesses such as meningitis, pneumonia, etc.).

Rapid Influenza Testing and Epidemiology

- When community prevalence is HIGH, false negative tests are possible or a negative test has a low negative predictive value (which argues for making a clinical diagnosis or treatment decision when applicable during these times). A positive test is most likely to represent a true positive (high positive predictive value).
- When community prevalence is LOW, false positive tests are possible or a positive test has a low positive predictive value (which argues for due caution with attributing illness to influenza based on a positive test); consider a confirmatory test if important (PCR). A negative test is more likely to represent a true negative (high negative predictive value).

Other Influenza Testing Considerations

- PCR: PCR is higher sensitivity, but is still prone to false-negatives. It is also expensive.
- Viral culture and Serologic testing are generally not indicated.

Chemoprophylaxis

- Generally only recommended in institutional outbreaks or for those with severe immune deficiency/high risk.

Other Treatment Considerations

- Adamantanes (amantadine and rimantadine) are only effective against influenza A and have high rates of resistance so are generally not recommended.

Treatment of Not High Risk

- Treatment can be considered to shorten the duration of illness, a modest effect of hours to possibly day(s), if the patient is treated within initial 48 hours of illness. Consider however that increasing resistance to the available antivirals is a compelling reason NOT to prescribe to patients without high-risk features.