



- **Definition/etiology:**

- It is a systemic viral illness which is caused (mainly) by influenza A or B infections.

Influenza A and B	Cause seasonal epidemics of the disease
Influenza A (only)	Causes pandemics
Influenza C	Detected less frequently and causes mild infection
Influenza D	Affects animals mainly

- They are transmitted through respiratory droplets.
- Incubation period of influenza A: 2-7 days.
- Infectious period of influenza A:
 - ✓ Starts 24-48 hours before the illness.
 - ✓ Peaks during symptomatic period.
 - ✓ Shedding of the virus is ceased after 6-7 days from onset of symptoms.

- **Clinical manifestations:**

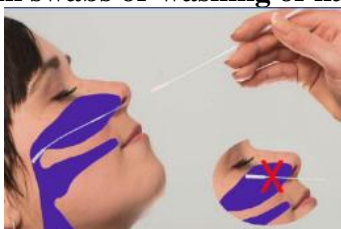
- Systemic manifestations: low-grade fever, fatigue, myalgias and headache.
- Upper respiratory symptoms: rhinorrhea, non-productive cough and sore throat.

- **Complications:**

- High risk group for complications:
 - ✓ Children < 5 years of age.
 - ✓ Elderly ≥ 65 years.
 - ✓ Pregnant women.
 - ✓ Morbid obesity.
 - ✓ Immunosuppression.
 - ✓ Individuals with chronic medical conditions (pulmonary, cardiovascular, SCD and DM).
- What are the complications of influenza?
 - ✓ Pneumonia (major complication) which is classified as primary viral pneumonia or secondary bacterial pneumonia (Staphylococcal/Streptococcal).
 - ✓ Acute Respiratory Distress Syndrome (ARDS).
 - ✓ Cardiac complications: myocarditis and pericarditis
 - ✓ Otitis media and croup (common in pediatrics).
 - ✓ Myositis, rhabdomyolysis with myoglobinuria and associated renal failure.
 - ✓ Central nervous system involvement: encephalitis, transverse myelitis and aseptic meningitis.

- **Diagnosis:**

- Rapid antigen detection from swabs or washing of nasopharyngeal secretions.



- **Treatment:**

- Symptomatic treatment (for all patients): acetaminophen, anti-tussives and hydration.
- Specific treatment (for high-risk group): oseltamivir and zanamivir. They must be given within 48 hours after the onset of symptoms to be effective (shortening symptoms by 1-3 days and decreasing the risk of transmission).

- **Influenza vaccine:**

- It is recommended annually in general population.
- It is contraindicated in patients with severe allergy to eggs because this can result in anaphylaxis.