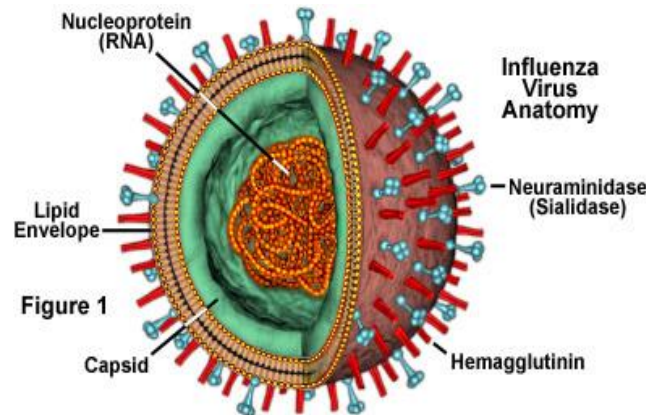




Practical Clinical Algorithm on Influenza Management



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1401



❖ Findings and data of research for whom **must check PCR**, and also for whom the **medical treatment** must be started is **controversial**.

❖ **Decision should be made according to:**

- Epidemiology ,
 - Type of Contact and its duration
 - Clinical manifestations,
 - Risk assessment (progression and complication),
 - Severity
 - Immunological status and
 - Local Resources
- ❖ So, according to the texts and our experience we suggest this algorithmic approach for ***evaluation, diagnosis, treatment and antiviral chemoprophylaxis of infants and children*** suspected for influenza.



Guideline on Influenza Management

Influenza-Like Illness (ILI)

2/4 of Fever > 38c, Rhinorrhoea, Cough
Sore Throat and Myalgia
During Influenza Season

YES

- Cohort PICU or ward admission
- Supportive care
- Infectious disease expert consult
- Send sample for Influenza PCR
- Start Oseltamivir² ASA possible

- Is there any of Red flags?¹[Guideline on Influenza Management](#)
- Severe Respiratory distress
- Severe clinical dehydration or clinical shock
- altered level of consciousness

NO

- Complete history and physical examination³
- Report case to health Authorities

Any of this criterion:

- <= 24-month
- History of Asthma or other chronic pulmonary disease (e.g. cystic fibrosis)
- Hemodynamically significant cardiac disease
- Immunosuppressive disorders or therapy
- Sickle cell anemia and other hemoglobinopathies
- Disease that necessitate longer aspirin therapy or salicylate containing medication
- Chronic renal dysfunction
- Metabolic disease
- Increased risk of Aspiration
- BMI >= 40

YES

- Send sample for Influenza PCR
- Start Oseltamivir as soon as possible
- PEP⁴

NO

No testing, No treatment⁵

points



Influenza-Like Illness (ILI)

Fever > 38c and Cough and/or Sore Throat During Influenza Season

- Is there any of Red flags?¹
- Severe Respiratory distress
- Severe clinical dehydration or clinical shock
- Altered conscious level

YES

- Cohort PICU or ward admission
- Supportive care
- Infectious disease expert consult

NO

- Complete history and physical examination³
- Report case to health Authorities

Red Flags:

➤ ***Severe respiratory distress:***

- Lower chest wall indrawing , sternal recession, grunting, or noisy breathing when calm.
- Tachypnea: Birth- 3m >60/min, 3m-1yr >50/min, 1-3yr >40/min, 3-6yr >35/min, 6-12yr >30, 12-18yr >20
- Oxygen saturation <=92% on pulse oximetry, breathing at air room
- Respiratory exhaustion or apneic episode (cyanosis as a >=20 second pause in breathing)
- PaO2/FiO2 ratio; ≤300 for ALI or ≤200 for ARDS

➤ ***Sever clinical dehydration or clinical shock:***

- Capillary refill time >2 second, reduced skin turgor, sunken eyes or fontanel

➤ ***Altered conscious level***

- Strikingly agitated or irritable, seizure, or floppy infant



Primary disease (e.g. cystic fibrosis)
 se
 pathies
 rapy or salicylate containing medication
 month or has medical condition that



Guideline on Influenza Management

Influenza-Like Illness (ILI)

Fever > 38c and Cough
and/or Sore Throat
During Influenza Season

- Is there any of Red flags?¹
- Severe Respiratory distress
- Severe clinical dehydration or clinical shock
- altered level of consciousness

YES

- Cohort PICU or ward admission
- Supportive care
- Infectious disease expert consult
- Send sample for Influenza PCR
- Start Oseltamivir² as soon as possible
- Post exposure prophylaxis

NO

- Complete history and physical examination³
- Report case to health Authorities

Diagnostic criterion:

2- Oseltamivir dosage:

Children ≥12 mo by body weight

- ≤15 kg : 30 mg, twice daily
- >15–23 kg: 45 mg, twice daily
- >23–40 kg: 60 mg, twice daily
- >40 kg and adult: 75 mg, twice daily

Infants 9–11 mon, 3.5 mg/kg/dose, twice daily

Term infants 0–8 mon, 3 mg/kg/dose, twice daily

Preterm Infant: (gestational age + chronological age):

- >40 wk postmenstrual age 3.0 mg/kg per dose, orally, twice daily,
- 38- 40 wk postmenstrual age 1.5 mg/kg per dose, orally, twice daily,
- <38 wk postmenstrual age: 1.0 mg/kg per dose, orally, twice daily,
- <28 wk (extremely preterm infants), please consult a pediatric infectious diseases physician.

- Send sample for Influenza PCR
- Start Oseltamivir as soon as possible
- Post exposure prophylaxis⁴

No testing, No treatment⁵



Influenza-Like Illness (ILI)

Fever > 38c and Cough
and/or Sore Throat
During Influenza Season

YES

NO

- Is there any of Red flags?¹
- Severe Respiratory distress [Guideline on Influenza Management](#)
- Severe clinical dehydration or clinical shock
- Altered level of consciousness

- Cohort PICU or ward admission
- Supportive care
- Antipyretic
- Hydration
- Oxygen
- Analgesic

- Complete history and physical examination³
- Monitor health

3- Influenza diagnosis symptoms and signs:

- A. Systemic (fever, headache, Anorexia, illness, myalgia)
- B. Respiratory (cough, rhinorrhea, sore throat, nasal stuffiness, hoarseness)
- C. GI (abdominal pain, diarrhea and vomiting)
- D. Signs (fever, conjunctival congestion, LAP)



Signs and symptoms in these specific age group:

- **Infant <= 3 month:** Sepsis like illness, apnea or cyanosis, severe irritability, tachypnea, moderate to severe dehydration, lethargy, protracted vomiting, severe diarrhea, floppiness.
- **3month to 5 year:** Loss of consciousness, abnormal behavior, worsening illness, protracted vomiting and sudden onset of anorexia, dizziness, or light headed ness, unable to take fluid, high grade fever more than 3 days, chills, decreased appetite, activity and fluid intake, chest or abdominal pain, asthma not respond to usual treatment.
- Consider influenza in any child with atypical CNS, Cardiopulmonary, gastrointestinal or renal symptoms.



predispose him or her to complain



Guideline on Influenza Management

1- Every hospitalized child with **sever or complicated** influenza infection **regardless of**

Vaccination , Even after 48 hrs,
Before receiving the test result ,

2- **High risk for** progression or being complicated in spite of severity

3- patients in **close contact** with infants **under 6** month old, or with **ID:**

should be treated with Oseltamivir.



No testing,

NO

- Increased risk of Aspiration
- BMI >=40

history and examination³
se to health

(cystic fibrosis)

containing

points



Guideline on Influenza Management

Influenza-Like Illness (ILI)

Fever > 38c and Cough
and/or Sore Throat
During Influenza Season

- YES
- Cohort PICU or ward admission
 - Supportive care
 - Infectious disease expert consult
 - Send sample for Influenza PCR
 - Start Oseltamivir² as soon as possible

- YES
- Send sample for Influenza PCR
 - Start Oseltamivir as soon as possible
 - Post exposure prophylaxis⁴

NO

No testing, No treatment⁵

4- Chemoprophylaxis can be considered in certain situations:

- In persons at high risk of influenza complications during the **first two weeks** following vaccination, after exposure to a person with influenza.
- People at high risk who cannot receive influenza vaccine due to a **contraindication**, after exposure to a person with influenza.
- People with severe immune deficiencies or others who might **not respond** to influenza vaccination, such as persons receiving immunosuppressive medications, after exposure ..
- For **family members and close contacts** of an infected person if at high risk .
- For children at high risk of complications and their family members and close contacts, as well as HCP, when influenza viruses circulating in the community are **not matched with seasonal influenza vaccine strains**.

➤ Note that,:

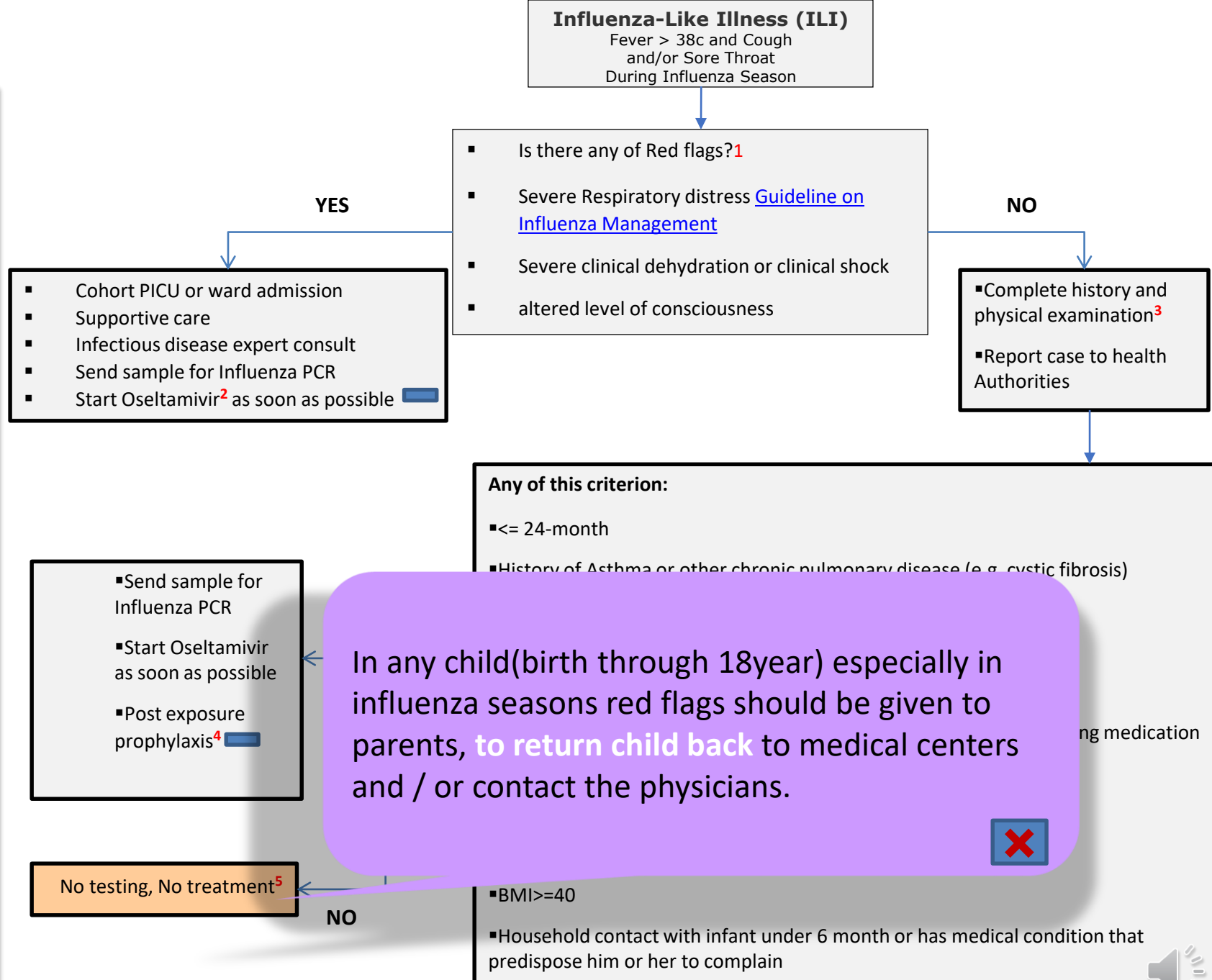
- Antiviral chemoprophylaxis is not recommended if more than **48 hours** have elapsed since the first exposure .
- Patients receiving antiviral chemoprophylaxis should be **encouraged to seek medical** evaluation as soon as they develop a febrile respiratory illness that might indicate influenza.

➤ Oseltamivir prophylaxis dosage for 7 days:

- Half of therapeutic dose (once a day)



Guideline on Influenza Management



Thank You

