



وزارة الصحة  
Ministry of Health

# Seasonal Influenza Therapeutic Protocol

(Version 1.0)

**Aim and scope:**

To provide guidance on the safe and cost effectiveness treatment of seasonal influenza and standardize practice among healthcare facilities

**Targeted end user:**

This protocol is intended to be used by physicians, pharmacists, nurses, and other healthcare providers who are working in hospitals and primary health care centers

**Targeted population:**

Patient with suspected or confirmed seasonal influenza

**Method of evidence review:**

Review of best practice guidelines and expert opinion

**Review cycle:**

This protocol will be updated every year or when new evidence arises and reflected on international guidelines. Please note that therapy recommendations in the guidance are according to MOH formulary and registered medications in Saudi Arabia.

**Disclaimer:**

This guidance should be used to assist the healthcare worker practitioners to select the best available antiviral therapy during management of seasonal influenza according to the international evidence and is not intended to replace clinical judgment.

**Test for influenza**

Please refer to public health guidelines for seasonal influenza in Saudi Arabia

## Management of Seasonal Influenza

### Indications for treatment

**Antiviral therapy is recommended** for individuals with suspected or confirmed influenza infection and who have any of the following, irrespective of influenza vaccination status:

- Patients hospitalized with influenza, regardless of illness duration prior to hospitalization
- Outpatients with severe or progressive illness
- Outpatients who are at **high risk** of influenza complications including:
  - Adults  $\geq 65$  years of age
  - Females who are pregnant or up to 2 weeks postpartum
  - Residents of long-term care facilities
  - People with medical conditions including: asthma, neurologic and neurodevelopmental conditions (including disorders of the brain, spinal cord, peripheral nerve and muscles such as cerebral palsy, epilepsy, stroke, intellectual disability, moderate-to-severe developmental delay, muscular dystrophy, and spinal cord injury), Chronic lung disease (e.g., chronic obstructive pulmonary disease, cystic fibrosis), heart disease (e.g., congenital heart disease, congestive heart failure, coronary artery disease), blood disorders (e.g., sickle cell disease), endocrine disorders (e.g., diabetes mellitus), kidney disorders, liver disorders, metabolic disorders (e.g., inherited metabolic disorders and mitochondrial disorders), immunocompromised patients (e.g., HIV, AIDS, cancer, receiving chemotherapy or radiation therapy, or on chronic glucocorticoids)
  - People with Class III obesity (body mass index [BMI]  $\geq 40$  or  $\geq 140\%$  of the 95<sup>th</sup> percentile value)
  - Children younger than 2 years
  - People younger than 19 years old who are receiving long-term aspirin- or salicylate-containing medications

### Therapy:

- Antiviral therapy is most likely to provide benefit when initiated within the **first 48 hours of illness**
- Treatment should **not** be delayed while awaiting the results of diagnostic testing if clinical diagnoses has been made, nor should it be withheld in patients with indications for therapy who present  $>48$  hours after the onset of symptoms, particularly among patients requiring hospitalization

Antiviral drug	Children	Adult	Duration
Oseltamivir (orally)	<p><b>If younger than 1 yr old:</b> 3 mg/kg/dose twice daily</p> <p><b>If 1 yr or older, dose varies by child's weight:</b> 15 kg or less, the dose is 30 mg <b>twice</b> a day &gt;15 to 23 kg, the dose is 45 mg <b>twice</b> a day &gt;23 to 40 kg, the dose is 60 mg <b>twice</b> a day &gt;40 kg, the dose is 75 mg <b>twice</b> a day</p> <p><b>Renal Dose adjustment</b> <b>Intermittent hemodialysis (IHD):</b> Fixed dosing: ≤15 kg: 7.5 mg after each hemodialysis session. &gt;15 kg to ≤23 kg: 10 mg after each hemodialysis session. &gt;23 kg to ≤40 kg: 15 mg after each hemodialysis session. &gt;40 kg: 30 mg after each hemodialysis session.</p>	<p>75 mg twice daily</p> <p><b>Renal Dose adjustment</b> <b>Clcr: 61 to 90 mL/min:</b> 75 mg once daily <b>Clcr: 31 to 60 mL/min:</b> 30 mg once daily <b>Clcr: 11 to 30 mL/min:</b> 30 mg every other day <b>ESRD Patients on Hemodialysis</b> <b>Clcr ≤10 mL/min:</b> 30 mg after alternate hemodialysis cycles <b>ESRD Patients on Continuous Ambulatory Peritoneal Dialysis</b> <b>Clcr ≤10 mL/min:</b> 30 mg once weekly immediately after dialysis exchange</p>	<p>5 days</p> <p>Longer daily dosing considered for patients who remain severely ill after 5 days of treatment</p>

Consideration: Clinicians should investigate and empirically treat bacterial coinfection **only** for the following patients:

- In patients with suspected or laboratory-confirmed influenza who present initially with severe disease (extensive pneumonia, respiratory failure, hypotension, and fever)
- In patients who deteriorate after initial improvement, particularly in those treated with oseltamivir
- In patients who fail to improve after 3–5 days of oseltamivir therapy

#### References:

- Timothy M. Uyeki, Henry H. Bernstein. Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza. Clinical Infectious Diseases. 2019;68(6):e1–47
- <https://www.cdc.gov/flu/professionals/antivirals/index.htm>