

## Emergency Department Chronic Obstructive Pulmonary Disease Adult Orders

Based on the Clinical Knowledge Topic Chronic Obstructive  
Pulmonary Disease Exacerbation, Adult – Emergency Department

Select orders by placing a (✓) in the associated box

Last Name	
First Name	
PHN#	MRN#
Birthdate ( <i>dd-Mon-yyyy</i> )	Physician

<b>Goals of Care</b>		
<b>Goals of Care Designation</b>		
<input type="checkbox"/> Patient has updated Goals of Care in green sleeve <input type="checkbox"/> Consider discussion now		
<b>Intravenous Fluids</b>		
<input type="checkbox"/> Intravenous Cannula - Insert <input type="checkbox"/> Saline lock IV, flush with 2 to 5 mL 0.9% sodium chloride every 12 hours IV Maintenance: <ul style="list-style-type: none"> <li><input type="checkbox"/> 0.9% NaCl infusion at _____ mL/hour, reassess after 4 hours</li> <li><input type="checkbox"/> lactated ringers infusion at _____ mL/hour, reassess after 4 hours</li> </ul> IV Bolus: <ul style="list-style-type: none"> <li><input type="checkbox"/> 0.9% NaCl _____ mL over _____ hour(s)</li> <li><input type="checkbox"/> lactated ringers _____ mL over _____ hour(s)</li> </ul>		
<b>Laboratory Investigations</b>		
<b>Hematology</b>		
<input type="checkbox"/> Complete Blood Count (CBC) <input type="checkbox"/> D-dimer <input type="checkbox"/> PT INR		
<b>Chemistry</b>		
<input type="checkbox"/> Electrolytes (Na, K, Cl, CO2) <input type="checkbox"/> Creatinine <input type="checkbox"/> Magnesium (Mg) <input type="checkbox"/> Calcium (Ca) <input type="checkbox"/> BNP / NT-ProBNP	<input type="checkbox"/> Glucose <input type="checkbox"/> Urea <input type="checkbox"/> Phosphate <input type="checkbox"/> Troponin	
<b>Blood Gases</b>		
<input type="checkbox"/> Blood Gas Arterial ( <i>consider for query CO2 retention</i> ) <input type="checkbox"/> Blood Gas Venous ( <i>venous blood gas pH correlates well with arterial blood gas values but absolute pCO2 and pO2 levels do not</i> )		
<b>Microbiology</b>		
<input type="checkbox"/> Sputum Bacterial Culture ( <i>may be considered in antibiotic failure</i> ) <input type="checkbox"/> Blood Culture – Adult ( <i>consider for patients with signs of sepsis</i> )		
<b>Urine Tests</b>		
<input type="checkbox"/> Urinalysis <input type="checkbox"/> Urine Bacterial Culture		
<b>Other Labs</b> ( <i>based on presentation needs of the patient</i> )		
<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____		
<b>Prescriber Signature</b>	<b>Date</b> ( <i>dd-Mon-yyyy</i> )	<b>Time</b> ( <i>hhmm</i> )

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Diagnostic Imaging		
<input type="checkbox"/>	Chest X-Ray 2 projections ( <i>posterior-anterior &amp; lateral</i> ) <i>(chest x-ray usually indicated unless recently performed to rule out pneumonia, CHF, pneumothorax, etc.)</i>	
<input type="checkbox"/>	Chest X-Ray 1 projection: Portable ( <i>posterior-anterior</i> )	
<input type="checkbox"/>	Ultrasound Thoracentesis plus/minus Chest Tube Insertion	
<input type="checkbox"/>	CT Chest Enhanced	
Other Investigations		
<input type="checkbox"/>	Electrocardiogram - 12 Lead ( <i>ECG</i> )	
Medications		
<i>Nebulizers should be reserved for patients known to be unresponsive to inhaler/MDIs or who are unable to use. Choose <b>ONE option</b> from <b>each</b> section below, if <b>applicable</b>.</i>		
Choose one (if applicable) →	<b>salbutamol</b> <input type="checkbox"/> salbutamol inhaler 4 puffs +/- spacer every 20 minutes x 3 doses, then reassess <i>For salbutamol nebulized solution, recommended dosage is 2.5 mg or 5 mg.</i> <input type="checkbox"/> salbutamol neb solution _____ mg via nebulizer every 20 minutes x 3 doses, then reassess <input type="checkbox"/> salbutamol neb solution _____ mg via nebulizer continuously x 1 hour, then reassess	
	<b>ipratropium</b> <input type="checkbox"/> ipratropium inhaler 4 puffs +/- spacer every 20 minutes x 3 doses, then reassess <i>For ipratropium nebulized solution, recommended dosage is 250 micrograms or 500 micrograms.</i> <input type="checkbox"/> ipratropium neb solution _____ micrograms via nebulizer every 20 minutes x 3 doses, then reassess <input type="checkbox"/> ipratropium neb solution _____ micrograms via nebulizer continuously x 1 hour, then reassess	
	<input type="checkbox"/> predniSONE 50 mg PO once ( <i>recommended as decreases need for intubation, shortens length of hospital admission, and patients discharged on 7 to 10 days of corticosteroids have fewer relapses and significantly improved pulmonary function at ten days</i> )  <b>If patient unable to tolerate oral steroid:</b> <input type="checkbox"/> methylPREDNISolone Na succinate 40 mg IV in 100 mL of 0.9% NaCl infusion once, infuse over 20 minutes	
Prescriber Signature	Date (dd-Mon-yyyy)	Time (h:mm)

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### Antibiotics

Consider use based on Anthonisen criteria:

- increased dyspnea over baseline,
- increased sputum volume,
- increased sputum purulence (thickness).

Antibiotics benefit patients with 2 or 3 criteria.

**Note:** A 5 to 7 day course of antibiotics is as effective as 10 to 14 days.

If less than 4 exacerbations/year (**choose one**):



- amoxicillin 1000 mg PO now **AND THEN**  
amoxicillin 1000 mg PO TID for \_\_\_\_ days
- doxycycline 200 mg PO now **AND THEN**  
doxycycline 100 mg PO BID for \_\_\_\_ days
- sulfamethoxazole 800 mg/trimethoprim 160  
mg PO now **AND THEN** sulfamethoxazole  
800 mg/trimethoprim 160 mg PO BID  
for \_\_\_\_ days

**OR**

If greater than or equal to 4 exacerbations/year **OR**  
failure of first line agents **OR** received antibiotics in  
the last 3 months (*always switch class of antibiotics*)  
(**choose one**):



- amoxicillin/clavulanate 875 mg PO now **AND THEN**  
amoxicillin/clavulanate 875 mg PO BID  
for \_\_\_\_ days
- cefUROXime 500 mg now **AND THEN** cefUROXime  
500 mg BID for \_\_\_\_ days
- levofloxacin 750 mg PO now **AND THEN**  
levofloxacin 750 mg PO daily for \_\_\_\_ days

### Antibiotic Alternatives

**If beta lactam allergic, consider levofloxacin, as listed above, OR one of the following macrolides:**

- clarithromycin ER 1000 mg PO now **AND THEN** clarithromycin ER 1000 mg PO daily for \_\_\_\_ days
- clarithromycin 500 mg PO now **AND THEN** clarithromycin 500 mg PO BID for \_\_\_\_ days

**If known or suspected Pseudomonas add:**

- ciprofloxacin 750 mg PO now **AND THEN** ciprofloxacin 750 mg PO BID for \_\_\_\_ days

### Other Medications

- \_\_\_\_\_
- \_\_\_\_\_

**Prescriber Signature**

Date (dd-Mon-yyyy)

Time (hhmm)



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**Ventilation**

**Non-Invasive Ventilation**

Contraindications:

- too drowsy
- inability to understand due to dementia or language barrier
- unable to protect airway (*impaired cough or swallowing*)

Indications:

- respiratory acidosis (*arterial pH less than 7.35 and/or PaCO<sub>2</sub> greater than or equal to 6.0 kPa, 45 mmHg*)
- severe dyspnea with clinical signs suggestive of respiratory muscle fatigue
- increased work of breathing (*RR greater than 25/min*)
- use of respiratory accessory muscles, paradoxical motion of the abdomen, or retraction of the intercostal spaces.

- Bi-PAP
- C-PAP (*consider only when bi-PAP unavailable*)

**Invasive Ventilation**

*If all other interventions have failed, AND the goals of care have been reviewed, intubate patient.*

- Intubation

**Patient Care**

**Respiratory Care**

- O<sub>2</sub> Therapy: Titrate to maintain O<sub>2</sub> saturation of \_\_\_\_\_ %
- Notify physician if O<sub>2</sub> flow required to be increased by greater than 2 L to maintain the same level of oxygenation or if there is a progressive increase in the work of breathing

**Vital Signs**

- Vital Signs as per Provincial Assessment and Reassessment of Patients Guideline

**Activity**

- Bedrest
- Activity as Tolerated
- Other Activity: \_\_\_\_\_

**Safety and Precautions**

- Soft physical restraints
- Isolation (*Consider if influenza like illness (ILI) is positive or suspected tuberculosis*)

**Diet/Nutrition**

- NPO
- Regular Diet
- NPO: May Take Meds
- Other Diet: \_\_\_\_\_

**Other Orders**

- \_\_\_\_\_
- \_\_\_\_\_

<b>Prescriber Signature</b>	<b>Date (dd-Mon-yyyy)</b>	<b>Time (hmm)</b>
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